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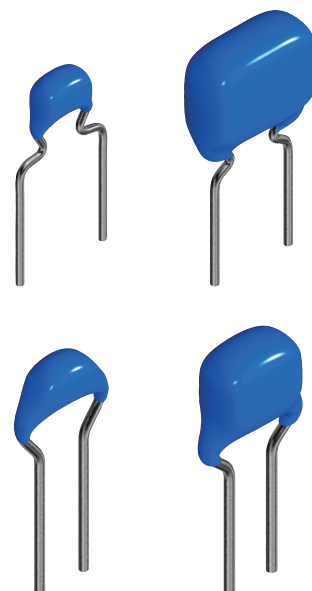
# MLCC with dipped radial lead

(Halogen-free, commercial grade)

## FG series

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|       |            |                                                                                                                       |
|-------|------------|-----------------------------------------------------------------------------------------------------------------------|
| Type: | Lead pitch | 5.0 mm                                                                                                                |
|       |            | FG28 [4.0x5.5mm]<br>FG24 [4.5x5.5mm]<br>FG26 [5.5x6.0mm]<br>FG20 [5.5x7.0mm]<br>FG22 [7.5x8.5mm]<br>FG23 [8.5x11.0mm] |
|       | Lead pitch | 2.5 mm                                                                                                                |
|       |            | FG18 [4.0x5.5mm]<br>FG14 [4.5x5.5mm]<br>FG16 [5.5x6.0mm]<br>FG11 [5.5x7.0mm]                                          |



## REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

### SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products

### REMINDERS

1. The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- |                                                                                      |                                                                              |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| (1) Aerospace/aviation equipment                                                     | (7) Transportation control equipment                                         |
| (2) Transportation equipment (cars, electric trains, ships, etc.)                    | (8) Public information-processing equipment                                  |
| (3) Medical equipment (excepting Pharmaceutical Affairs Law classification Class1,2) | (9) Military equipment                                                       |
| (4) Power-generation control equipment                                               | (10) Electric heating apparatus, burning equipment                           |
| (5) Atomic energy-related equipment                                                  | (11) Disaster prevention/crime prevention equipment                          |
| (6) Seabed equipment                                                                 | (12) Safety equipment                                                        |
|                                                                                      | (13) Other applications that are not considered general-purpose applications |

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

2. We may modify products or discontinue production of a product listed in this catalog without prior notification.
3. We provide "Delivery Specification" that explain precautions for the specifications and safety of each product listed in this catalog. We strongly recommend that you exchange these delivery specifications with customers that use one of these products.
4. If you plan to export a product listed in this catalog, keep in mind that it may be a restricted item according to the "Foreign Exchange and Foreign Trade Control Law". In such cases, it is necessary to acquire export permission in harmony with this law.
5. Any reproduction or transferring of the contents of this catalog is prohibited without prior permission from our company.
6. We are not responsible for problems that occur related to the intellectual property rights or other rights of our company or a third party when you use a product listed in this catalog. We do not grant license of these rights.
7. This catalog only applies to products purchased through our company or one of our company's official agencies. This catalog does not apply to products that are purchased through other third parties.

# MLCC with dipped radial lead

Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

## Overview of the FG series

### FEATURES

- Voltage rating of 10V to 630V with capacitance range of 1pF to 47μF

### APPLICATION

- Noise reduction measures for various motors
- Bypass capacitors and smoothing capacitors for switching power sources, etc.
- Snubber circuits
- PFC input filters

### PART NUMBER CONSTRUCTION

| FG          | 2               | 8                                                                                                                    | C0G                                                                 | 1H                                                                       | 010                                     | C                                                  | □□□           | □                  |
|-------------|-----------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------|---------------|--------------------|
| Series name | Lead pitch (mm) | LxWxT Dimensions (mm)                                                                                                | Capacitance temperature characteristics                             | Rated voltage (V)                                                        | Nominal capacitance (pF)                | Capacitance tolerance                              | Internal code | Packaging style    |
|             | 1 2.5<br>2 5.0  | 8 4.0x5.5x2.5<br>4 4.5x5.5x3.0<br>6 5.5x6.0x3.5<br>0 5.5x7.0x4.0<br>1 5.5x7.0x4.0<br>2 7.5x8.5x4.5<br>3 8.5x11.0x5.5 | C0G 0±30ppm/°C<br>X5R ±15%<br>X7R ±15%<br>X7S ±22%<br>X7T +22, -33% | 1A 10<br>1C 16<br>1E 25<br>1H 50<br>2A 100<br>2E 250<br>2W 450<br>2J 630 | 010 1<br>100 10<br>101 100<br>102 1,000 | C ±0.25pF<br>D ±0.5pF<br>J ±5%<br>K ±10%<br>M ±20% |               | 0 Bulk<br>6 Taping |

### OPERATING TEMPERATURE RANGE

| Capacitance temperature characteristics | Temperature range*         |                            |
|-----------------------------------------|----------------------------|----------------------------|
|                                         | Operating temperature (°C) | Storage temperature** (°C) |
| C0G, X7R, X7S, X7T                      | -55 to +125                | -55 to +125                |
| X5R                                     | -55 to +85                 | -55 to +85                 |

\* The maximum operating temperature includes capacitor self-generated heat of up to 20°C.

\*\* The storage temperature range is for after the assembly.

○ RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/en/environment/rohs/index.html>

○ Halogen-free: indicates that Cl content is less than 900ppm, Br content is less than 900ppm, and that the total Cl and Br content is less than 1500ppm.

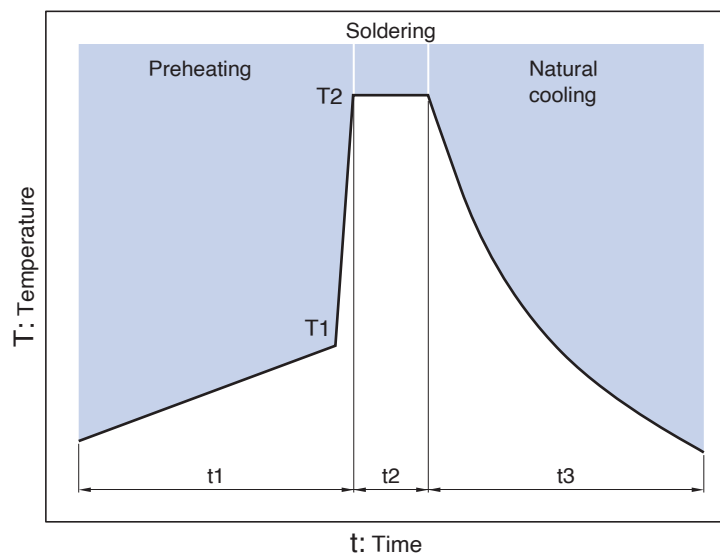
Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.  
Please note that the contents may change without any prior notice due to reasons such as upgrading.

# Overview of the FG series

## PACKAGE QUANTITY

| Type | Package quantity      |                     |
|------|-----------------------|---------------------|
|      | Taping (pieces / box) | Bulk (pieces / bag) |
| FG28 | 2000                  | 500                 |
| FG24 | 2000                  | 500                 |
| FG26 | 2000                  | 500                 |
| FG20 | 1500                  | 500                 |
| FG22 | 1000                  | 500                 |
| FG23 | 1000                  | 200                 |
| FG18 | 2000                  | 500                 |
| FG14 | 2000                  | 500                 |
| FG16 | 2000                  | 500                 |
| FG11 | 1500                  | 500                 |

## RECOMMENDED FLOW PROFILE



| Preheating |           | Peak      |            | Natural cooling |
|------------|-----------|-----------|------------|-----------------|
| Temp.      | Time      | Temp.     | Time       | Time            |
| <b>T1</b>  | <b>t1</b> | <b>T2</b> | <b>t2</b>  | <b>t3</b>       |
| 110°C min. | Over 60s. | 260°C     | Within 5s. | Over 60s.       |

## MLCC with dipped radial lead

Product compatible with RoHS directive  
Halogen-free

Halogen-free, commercial grade

## Capacitance range chart

## FG28 type

| Capacitance |      | COG          |              |             | X7R          |             | X7S          |
|-------------|------|--------------|--------------|-------------|--------------|-------------|--------------|
| (pF)        | Code | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 2A<br>(100V) | 1H<br>(50V) | 2A<br>(100V) |
| 1           | 010  |              |              |             |              |             |              |
| 1.5         | 1R5  |              |              |             |              |             |              |
| 2           | 020  |              |              |             |              |             |              |
| 2.2         | 2R2  |              |              |             |              |             |              |
| 3           | 030  |              |              |             |              |             |              |
| 3.3         | 3R3  |              |              |             |              |             |              |
| 4           | 040  |              |              |             |              |             |              |
| 4.7         | 4R7  |              |              |             |              |             |              |
| 5           | 050  |              |              |             |              |             |              |
| 6           | 060  |              |              |             |              |             |              |
| 6.8         | 6R8  |              |              |             |              |             |              |
| 7           | 070  |              |              |             |              |             |              |
| 8           | 080  |              |              |             |              |             |              |
| 9           | 090  |              |              |             |              |             |              |
| 10          | 100  |              |              |             |              |             |              |
| 12          | 120  |              |              |             |              |             |              |
| 15          | 150  |              |              |             |              |             |              |
| 18          | 180  |              |              |             |              |             |              |
| 22          | 220  |              |              |             |              |             |              |
| 27          | 270  |              |              |             |              |             |              |
| 33          | 330  |              |              |             |              |             |              |
| 39          | 390  |              |              |             |              |             |              |
| 47          | 470  |              |              |             |              |             |              |
| 56          | 560  |              |              |             |              |             |              |
| 68          | 680  |              |              |             |              |             |              |
| 82          | 820  |              |              |             |              |             |              |
| 100         | 101  |              |              |             |              |             |              |
| 120         | 121  |              |              |             |              |             |              |
| 150         | 151  |              |              |             |              |             |              |
| 180         | 181  |              |              |             |              |             |              |
| 220         | 221  |              |              |             |              |             |              |
| 270         | 271  |              |              |             |              |             |              |
| 330         | 331  |              |              |             |              |             |              |
| 390         | 391  |              |              |             |              |             |              |
| 470         | 471  |              |              |             |              |             |              |
| 560         | 561  |              |              |             |              |             |              |
| 680         | 681  |              |              |             |              |             |              |
| 820         | 821  |              |              |             |              |             |              |
| 1,000       | 102  |              |              |             |              |             |              |
| 1,200       | 122  |              |              |             |              |             |              |
| 1,500       | 152  |              |              |             |              |             |              |
| 1,800       | 182  |              |              |             |              |             |              |
| 2,200       | 222  |              |              |             |              |             |              |
| 2,700       | 272  |              |              |             |              |             |              |
| 3,300       | 332  |              |              |             |              |             |              |
| 3,900       | 392  |              |              |             |              |             |              |
| 4,700       | 472  |              |              |             |              |             |              |
| 5,600       | 562  |              |              |             |              |             |              |
| 6,800       | 682  |              |              |             |              |             |              |
| 8,200       | 822  |              |              |             |              |             |              |
| 10,000      | 103  |              |              |             |              |             |              |
| 15,000      | 153  |              |              |             |              |             |              |
| 22,000      | 223  |              |              |             |              |             |              |
| 33,000      | 333  |              |              |             |              |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

# MLCC with dipped radial lead

## Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

### Capacitance range chart

### FG28 type

| Capacitance |      | X5R         |             | X7R         |             |             | X7S          |
|-------------|------|-------------|-------------|-------------|-------------|-------------|--------------|
| (pF)        | Code | 1H<br>(50V) | 1E<br>(25V) | 1H<br>(50V) | 1E<br>(25V) | 1A<br>(10V) | 2A<br>(100V) |
| 47,000      | 473  |             |             |             |             |             |              |
| 68,000      | 683  |             |             |             |             |             |              |
| 100,000     | 104  |             |             |             |             |             |              |
| 150,000     | 154  |             |             |             |             |             |              |
| 220,000     | 224  |             |             |             |             |             |              |
| 330,000     | 334  |             |             |             |             |             |              |
| 470,000     | 474  |             |             |             |             |             |              |
| 680,000     | 684  |             |             |             |             |             |              |
| 1,000,000   | 105  |             |             |             |             |             |              |
| 1,500,000   | 155  |             |             |             |             |             |              |
| 1,800,000   | 185  |             |             |             |             |             |              |
| 2,200,000   | 225  |             |             |             |             |             |              |
| 2,700,000   | 275  |             |             |             |             |             |              |
| 3,300,000   | 335  |             |             |             |             |             |              |
| 3,900,000   | 395  |             |             |             |             |             |              |
| 4,700,000   | 475  |             |             |             |             |             |              |
| 5,600,000   | 565  |             |             |             |             |             |              |
| 6,800,000   | 685  |             |             |             |             |             |              |
| 10,000,000  | 106  |             |             |             |             |             |              |

Background gray: These products are not recommended for new designs.

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## MLCC with dipped radial lead

Product compatible with RoHS directive

Halogen-free, commercial grade

Halogen-free

## Capacitance range chart

## FG24 type

| Capacitance |      | COG          |              |              |             | X5R         |             | X7R          |              |             |             |             |             | X7S          | X7T          |
|-------------|------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|--------------|
| (pF)        | Code | 2W<br>(450V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1H<br>(50V) | 1E<br>(25V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 1C<br>(16V) | 1A<br>(10V) | 2A<br>(100V) | 2E<br>(250V) |
| 100         | 101  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 120         | 121  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 150         | 151  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 180         | 181  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 220         | 221  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 270         | 271  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 330         | 331  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 390         | 391  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 470         | 471  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 560         | 561  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 680         | 681  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 820         | 821  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,000       | 102  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,200       | 122  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,500       | 152  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,800       | 182  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 2,200       | 222  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 2,700       | 272  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 3,300       | 332  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 3,900       | 392  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 4,700       | 472  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 5,600       | 562  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 6,800       | 682  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 8,200       | 822  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 10,000      | 103  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 15,000      | 153  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 22,000      | 223  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 33,000      | 333  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 47,000      | 473  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 68,000      | 683  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 100,000     | 104  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 150,000     | 154  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 220,000     | 224  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 330,000     | 334  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 470,000     | 474  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 680,000     | 684  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,000,000   | 105  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 1,500,000   | 155  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 2,200,000   | 225  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 3,300,000   | 335  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 4,700,000   | 475  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 6,800,000   | 685  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 10,000,000  | 106  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |
| 15,000,000  | 156  |              |              |              |             |             |             |              |              |             |             |             |             |              |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

## MLCC with dipped radial lead

Product compatible with RoHS directive  
Halogen-free

Halogen-free, commercial grade

## Capacitance range chart

## FG26 type

| Capacitance |      | COG          |              |              |              |             | X5R         |             | X7R          |              |              |             |             | X7S          | X7T          |
|-------------|------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|
| (pF)        | Code | 2J<br>(630V) | 2W<br>(450V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1H<br>(50V) | 1E<br>(25V) | 2J<br>(630V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 2A<br>(100V) | 2E<br>(250V) |
| 100         | 101  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 120         | 121  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 150         | 151  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 180         | 181  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 220         | 221  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 270         | 271  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 330         | 331  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 390         | 391  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 470         | 471  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 560         | 561  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 680         | 681  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 820         | 821  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,000       | 102  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,200       | 122  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,500       | 152  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,800       | 182  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 2,200       | 222  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 2,700       | 272  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 3,300       | 332  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 3,900       | 392  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 4,700       | 472  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 5,600       | 562  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 6,800       | 682  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 8,200       | 822  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 10,000      | 103  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 15,000      | 153  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 22,000      | 223  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 33,000      | 333  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 47,000      | 473  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 68,000      | 683  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 100,000     | 104  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 150,000     | 154  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 220,000     | 224  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 330,000     | 334  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 470,000     | 474  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 680,000     | 684  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,000,000   | 105  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 1,500,000   | 155  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 2,200,000   | 225  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 3,300,000   | 335  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 4,700,000   | 475  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 6,800,000   | 685  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 10,000,000  | 106  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 15,000,000  | 156  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 22,000,000  | 226  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 33,000,000  | 336  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |
| 47,000,000  | 476  |              |              |              |              |             |             |             |              |              |              |             |             |              |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

# MLCC with dipped radial lead

## Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

### Capacitance range chart

### FG20 type

| Capacitance |      | COG          |              |              |              | X7R          |              |              |             |             |             | X7S          |             | X7T          |
|-------------|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|
| (pF)        | Code | 2J<br>(630V) | 2W<br>(450V) | 2E<br>(250V) | 2A<br>(100V) | 2J<br>(630V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 1C<br>(16V) | 2A<br>(100V) | 1H<br>(50V) | 2E<br>(250V) |
| 15,000      | 153  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 22,000      | 223  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 33,000      | 333  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 47,000      | 473  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 68,000      | 683  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 100,000     | 104  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 150,000     | 154  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 220,000     | 224  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 330,000     | 334  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 470,000     | 474  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 680,000     | 684  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 1,000,000   | 105  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 1,500,000   | 155  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 2,200,000   | 225  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 3,300,000   | 335  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 4,700,000   | 475  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 6,800,000   | 685  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 10,000,000  | 106  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 15,000,000  | 156  |              |              |              |              |              |              |              |             |             |             |              |             |              |
| 22,000,000  | 226  |              |              |              |              |              |              |              |             |             |             |              |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

## MLCC with dipped radial lead

Product compatible with RoHS directive  
Halogen-free

Halogen-free, commercial grade

## Capacitance range chart

## FG22 type

| Capacitance |      | COG          |              |              |              |             | X5R         |             | X7R          |              |              |             |             |             | X7T          |
|-------------|------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|
| (pF)        | Code | 2J<br>(630V) | 2W<br>(450V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1C<br>(16V) | 1A<br>(10V) | 2J<br>(100V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 1C<br>(16V) | 2E<br>(250V) |
| 47,000      | 473  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 68,000      | 683  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 100,000     | 104  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 150,000     | 154  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 220,000     | 224  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 330,000     | 334  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 470,000     | 474  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 680,000     | 684  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 1,000,000   | 105  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 1,500,000   | 155  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 2,200,000   | 225  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 3,300,000   | 335  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 4,700,000   | 475  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 6,800,000   | 685  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 10,000,000  | 106  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 15,000,000  | 156  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 22,000,000  | 226  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 33,000,000  | 336  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |
| 47,000,000  | 476  |              |              |              |              |             |             |             |              |              |              |             |             |             |              |

 Background gray: These products are not recommended for new designs.

 Click the charts for details.

 For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

## Capacitance range chart

## FG23 type

| Capacitance |      | COG          |              |              |              | X7R          |              |              |             |             |             | X7S          | X7T          |
|-------------|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|
| (pF)        | Code | 2J<br>(630V) | 2W<br>(450V) | 2E<br>(250V) | 2A<br>(100V) | 2J<br>(630V) | 2E<br>(250V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 1C<br>(16V) | 2A<br>(100V) | 2E<br>(250V) |
| 68,000      | 683  |              |              |              |              |              |              |              |             |             |             |              |              |
| 100,000     | 104  |              |              |              |              |              |              |              |             |             |             |              |              |
| 150,000     | 154  |              |              |              |              |              |              |              |             |             |             |              |              |
| 220,000     | 224  |              |              |              |              |              |              |              |             |             |             |              |              |
| 330,000     | 334  |              |              |              |              |              |              |              |             |             |             |              |              |
| 470,000     | 474  |              |              |              |              |              |              |              |             |             |             |              |              |
| 680,000     | 684  |              |              |              |              |              |              |              |             |             |             |              |              |
| 1,000,000   | 105  |              |              |              |              |              |              |              |             |             |             |              |              |
| 1,500,000   | 155  |              |              |              |              |              |              |              |             |             |             |              |              |
| 2,200,000   | 225  |              |              |              |              |              |              |              |             |             |             |              |              |
| 3,300,000   | 335  |              |              |              |              |              |              |              |             |             |             |              |              |
| 4,700,000   | 475  |              |              |              |              |              |              |              |             |             |             |              |              |
| 6,800,000   | 685  |              |              |              |              |              |              |              |             |             |             |              |              |
| 10,000,000  | 106  |              |              |              |              |              |              |              |             |             |             |              |              |
| 15,000,000  | 156  |              |              |              |              |              |              |              |             |             |             |              |              |
| 22,000,000  | 226  |              |              |              |              |              |              |              |             |             |             |              |              |
| 33,000,000  | 336  |              |              |              |              |              |              |              |             |             |             |              |              |
| 47,000,000  | 476  |              |              |              |              |              |              |              |             |             |             |              |              |

 Background gray: These products are not recommended for new designs.

 Click the charts for details.

 For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

## MLCC with dipped radial lead

Product compatible with RoHS directive  
Halogen-free

Halogen-free, commercial grade

## Capacitance range chart

## FG18 type

| Capacitance |      | COG          |             | X7R          |             | X7S          |
|-------------|------|--------------|-------------|--------------|-------------|--------------|
| (pF)        | Code | 2A<br>(100V) | 1H<br>(50V) | 2A<br>(100V) | 1H<br>(50V) | 2A<br>(100V) |
| 1           | 010  |              |             |              |             |              |
| 1.5         | 1R5  |              |             |              |             |              |
| 2           | 020  |              |             |              |             |              |
| 2.2         | 2R2  |              |             |              |             |              |
| 3           | 030  |              |             |              |             |              |
| 3.3         | 3R3  |              |             |              |             |              |
| 4           | 040  |              |             |              |             |              |
| 4.7         | 4R7  |              |             |              |             |              |
| 5           | 050  |              |             |              |             |              |
| 6           | 060  |              |             |              |             |              |
| 6.8         | 6R8  |              |             |              |             |              |
| 7           | 070  |              |             |              |             |              |
| 8           | 080  |              |             |              |             |              |
| 9           | 090  |              |             |              |             |              |
| 10          | 100  |              |             |              |             |              |
| 12          | 120  |              |             |              |             |              |
| 15          | 150  |              |             |              |             |              |
| 18          | 180  |              |             |              |             |              |
| 22          | 220  |              |             |              |             |              |
| 27          | 270  |              |             |              |             |              |
| 33          | 330  |              |             |              |             |              |
| 39          | 390  |              |             |              |             |              |
| 47          | 470  |              |             |              |             |              |
| 56          | 560  |              |             |              |             |              |
| 68          | 680  |              |             |              |             |              |
| 82          | 820  |              |             |              |             |              |
| 100         | 101  |              |             |              |             |              |
| 120         | 121  |              |             |              |             |              |
| 150         | 151  |              |             |              |             |              |
| 180         | 181  |              |             |              |             |              |
| 220         | 221  |              |             |              |             |              |
| 270         | 271  |              |             |              |             |              |
| 330         | 331  |              |             |              |             |              |
| 390         | 391  |              |             |              |             |              |
| 470         | 471  |              |             |              |             |              |
| 560         | 561  |              |             |              |             |              |
| 680         | 681  |              |             |              |             |              |
| 820         | 821  |              |             |              |             |              |
| 1,000       | 102  |              |             |              |             |              |
| 1,200       | 122  |              |             |              |             |              |
| 1,500       | 152  |              |             |              |             |              |
| 1,800       | 182  |              |             |              |             |              |
| 2,200       | 222  |              |             |              |             |              |
| 2,700       | 272  |              |             |              |             |              |
| 3,300       | 332  |              |             |              |             |              |
| 3,900       | 392  |              |             |              |             |              |
| 4,700       | 472  |              |             |              |             |              |
| 5,600       | 562  |              |             |              |             |              |
| 6,800       | 682  |              |             |              |             |              |
| 8,200       | 822  |              |             |              |             |              |
| 10,000      | 103  |              |             |              |             |              |
| 15,000      | 153  |              |             |              |             |              |
| 22,000      | 223  |              |             |              |             |              |
| 33,000      | 333  |              |             |              |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

# MLCC with dipped radial lead

## Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

### Capacitance range chart

### FG18 type

| Capacitance |      | X5R         |             | X7R         |             |             | X7S          |
|-------------|------|-------------|-------------|-------------|-------------|-------------|--------------|
| (pF)        | Code | 1H<br>(50V) | 1E<br>(25V) | 1H<br>(50V) | 1E<br>(25V) | 1A<br>(10V) | 2A<br>(100V) |
| 47,000      | 473  |             |             |             |             |             |              |
| 68,000      | 683  |             |             |             |             |             |              |
| 100,000     | 104  |             |             |             |             |             |              |
| 150,000     | 154  |             |             |             |             |             |              |
| 220,000     | 224  |             |             |             |             |             |              |
| 330,000     | 334  |             |             |             |             |             |              |
| 470,000     | 474  |             |             |             |             |             |              |
| 680,000     | 684  |             |             |             |             |             |              |
| 1,000,000   | 105  |             |             |             |             |             |              |
| 1,500,000   | 155  |             |             |             |             |             |              |
| 1,800,000   | 185  |             |             |             |             |             |              |
| 2,200,000   | 225  |             |             |             |             |             |              |
| 2,700,000   | 275  |             |             |             |             |             |              |
| 3,300,000   | 335  |             |             |             |             |             |              |
| 3,900,000   | 395  |             |             |             |             |             |              |
| 4,700,000   | 475  |             |             |             |             |             |              |
| 5,600,000   | 565  |             |             |             |             |             |              |
| 6,800,000   | 685  |             |             |             |             |             |              |
| 10,000,000  | 106  |             |             |             |             |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

## MLCC with dipped radial lead

Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

## Capacitance range chart

## FG14 type

| Capacitance |      | COG          |             | X5R         |             | X7R          |             |             | X7S          |
|-------------|------|--------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|
| (pF)        | Code | 2A<br>(100V) | 1H<br>(50V) | 1H<br>(50V) | 1E<br>(25V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 2A<br>(100V) |
| 3,900       | 392  |              |             |             |             |              |             |             |              |
| 4,700       | 472  |              |             |             |             |              |             |             |              |
| 5,600       | 562  |              |             |             |             |              |             |             |              |
| 6,800       | 682  |              |             |             |             |              |             |             |              |
| 8,200       | 822  |              |             |             |             |              |             |             |              |
| 10,000      | 103  |              |             |             |             |              |             |             |              |
| 15,000      | 153  |              |             |             |             |              |             |             |              |
| 22,000      | 223  |              |             |             |             |              |             |             |              |
| 33,000      | 333  |              |             |             |             |              |             |             |              |
| 47,000      | 473  |              |             |             |             |              |             |             |              |
| 68,000      | 683  |              |             |             |             |              |             |             |              |
| 100,000     | 104  |              |             |             |             |              |             |             |              |
| 150,000     | 154  |              |             |             |             |              |             |             |              |
| 220,000     | 224  |              |             |             |             |              |             |             |              |
| 330,000     | 334  |              |             |             |             |              |             |             |              |
| 470,000     | 474  |              |             |             |             |              |             |             |              |
| 680,000     | 684  |              |             |             |             |              |             |             |              |
| 1,000,000   | 105  |              |             |             |             |              |             |             |              |
| 1,500,000   | 155  |              |             |             |             |              |             |             |              |
| 2,200,000   | 225  |              |             |             |             |              |             |             |              |
| 3,300,000   | 335  |              |             |             |             |              |             |             |              |
| 4,700,000   | 475  |              |             |             |             |              |             |             |              |
| 6,800,000   | 685  |              |             |             |             |              |             |             |              |
| 10,000,000  | 106  |              |             |             |             |              |             |             |              |
| 15,000,000  | 156  |              |             |             |             |              |             |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

# MLCC with dipped radial lead

## Halogen-free, commercial grade

Product compatible with RoHS directive  
Halogen-free

### Capacitance range chart

### FG16 type

| Capacitance |      | COG          |             | X5R         |             | X7R          |             |             | X7S          |
|-------------|------|--------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|
| (pF)        | Code | 2A<br>(100V) | 1H<br>(50V) | 1H<br>(50V) | 1E<br>(25V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 2A<br>(100V) |
| 15,000      | 153  |              |             |             |             |              |             |             |              |
| 22,000      | 223  |              |             |             |             |              |             |             |              |
| 33,000      | 333  |              |             |             |             |              |             |             |              |
| 47,000      | 473  |              |             |             |             |              |             |             |              |
| 68,000      | 683  |              |             |             |             |              |             |             |              |
| 100,000     | 104  |              |             |             |             |              |             |             |              |
| 150,000     | 154  |              |             |             |             |              |             |             |              |
| 220,000     | 224  |              |             |             |             |              |             |             |              |
| 330,000     | 334  |              |             |             |             |              |             |             |              |
| 470,000     | 474  |              |             |             |             |              |             |             |              |
| 680,000     | 684  |              |             |             |             |              |             |             |              |
| 1,000,000   | 105  |              |             |             |             |              |             |             |              |
| 1,500,000   | 155  |              |             |             |             |              |             |             |              |
| 2,200,000   | 225  |              |             |             |             |              |             |             |              |
| 3,300,000   | 335  |              |             |             |             |              |             |             |              |
| 4,700,000   | 475  |              |             |             |             |              |             |             |              |
| 6,800,000   | 685  |              |             |             |             |              |             |             |              |
| 10,000,000  | 106  |              |             |             |             |              |             |             |              |
| 1,500,000   | 156  |              |             |             |             |              |             |             |              |
| 2,200,000   | 225  |              |             |             |             |              |             |             |              |
| 33,000,000  | 336  |              |             |             |             |              |             |             |              |

Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

### Capacitance range chart

### FG11 type

| Capacitance |      | COG          |              | X7R         |             |             |              | X7S         |  |
|-------------|------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--|
| (pF)        | Code | 2A<br>(100V) | 2A<br>(100V) | 1H<br>(50V) | 1E<br>(25V) | 1C<br>(16V) | 2A<br>(100V) | 1H<br>(50V) |  |
| 47,000      | 473  |              |              |             |             |             |              |             |  |
| 68,000      | 683  |              |              |             |             |             |              |             |  |
| 100,000     | 104  |              |              |             |             |             |              |             |  |
| 150,000     | 154  |              |              |             |             |             |              |             |  |
| 220,000     | 224  |              |              |             |             |             |              |             |  |
| 330,000     | 334  |              |              |             |             |             |              |             |  |
| 470,000     | 474  |              |              |             |             |             |              |             |  |
| 680,000     | 684  |              |              |             |             |             |              |             |  |
| 1,000,000   | 105  |              |              |             |             |             |              |             |  |
| 1,500,000   | 155  |              |              |             |             |             |              |             |  |
| 2,200,000   | 225  |              |              |             |             |             |              |             |  |
| 3,300,000   | 335  |              |              |             |             |             |              |             |  |
| 4,700,000   | 475  |              |              |             |             |             |              |             |  |
| 6,800,000   | 685  |              |              |             |             |             |              |             |  |
| 10,000,000  | 106  |              |              |             |             |             |              |             |  |
| 15,000,000  | 156  |              |              |             |             |             |              |             |  |
| 22,000,000  | 226  |              |              |             |             |             |              |             |  |

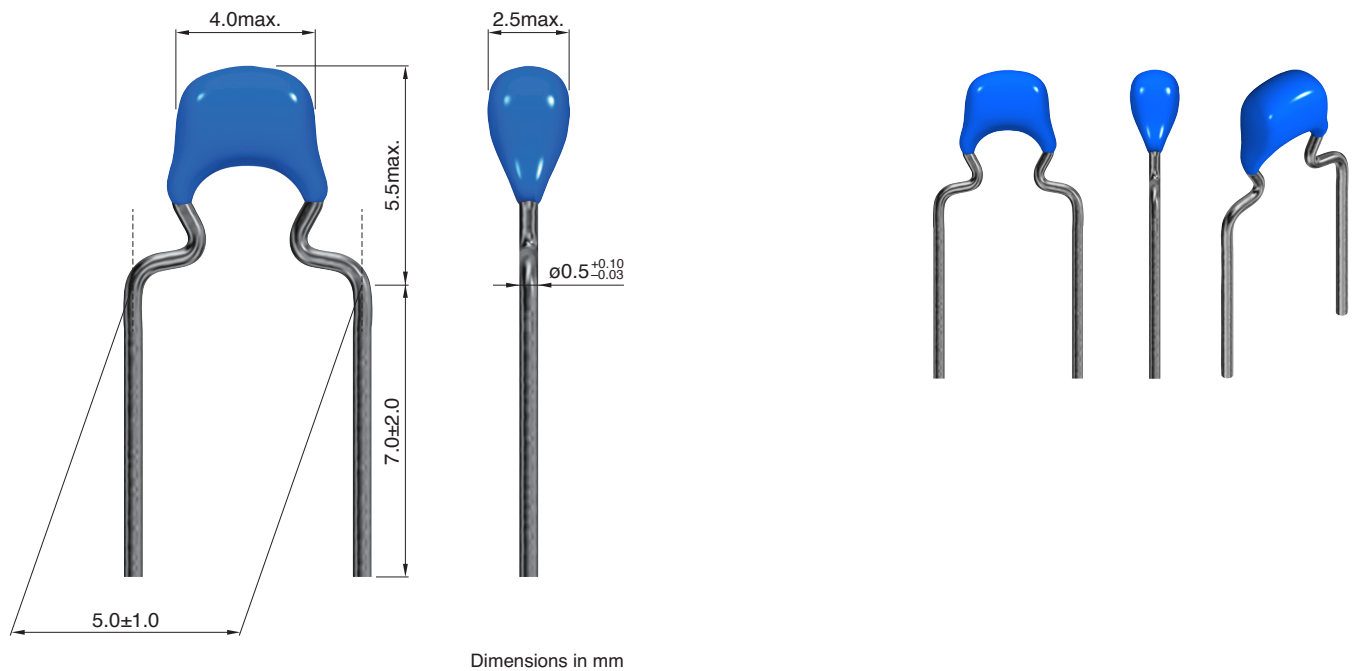
Background gray: These products are not recommended for new designs.

Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 16 and after.

# FG28 type

## ■ SHAPE & DIMENSIONS



# FG28 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 1.0pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H010CNT00</a> | <a href="#">FG28C0G1H010CNT06</a> |
| C0G                         | 1.5pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H1R5CNT00</a> | <a href="#">FG28C0G1H1R5CNT06</a> |
| C0G                         | 2.0pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H020CNT00</a> | <a href="#">FG28C0G1H020CNT06</a> |
| C0G                         | 2.2pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H2R2CNT00</a> | <a href="#">FG28C0G1H2R2CNT06</a> |
| C0G                         | 3.0pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H030CNT00</a> | <a href="#">FG28C0G1H030CNT06</a> |
| C0G                         | 3.3pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H3R3CNT00</a> | <a href="#">FG28C0G1H3R3CNT06</a> |
| C0G                         | 4.0pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H040CNT00</a> | <a href="#">FG28C0G1H040CNT06</a> |
| C0G                         | 4.7pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H4R7CNT00</a> | <a href="#">FG28C0G1H4R7CNT06</a> |
| C0G                         | 5.0pF       | ±0.25pF   | 50                       | <a href="#">FG28C0G1H050CNT00</a> | <a href="#">FG28C0G1H050CNT06</a> |
| C0G                         | 6.0pF       | ±0.5pF    | 50                       | <a href="#">FG28C0G1H060DNT00</a> | <a href="#">FG28C0G1H060DNT06</a> |
| C0G                         | 6.8pF       | ±0.5pF    | 50                       | <a href="#">FG28C0G1H6R8DNT00</a> | <a href="#">FG28C0G1H6R8DNT06</a> |
| C0G                         | 7.0pF       | ±0.5pF    | 50                       | <a href="#">FG28C0G1H070DNT00</a> | <a href="#">FG28C0G1H070DNT06</a> |
| C0G                         | 8.0pF       | ±0.5pF    | 50                       | <a href="#">FG28C0G1H080DNT00</a> | <a href="#">FG28C0G1H080DNT06</a> |
| C0G                         | 9.0pF       | ±0.5pF    | 50                       | <a href="#">FG28C0G1H090DNT00</a> | <a href="#">FG28C0G1H090DNT06</a> |
| C0G                         | 10pF        | ±0.5pF    | 50                       | <a href="#">FG28C0G1H100DNT00</a> | <a href="#">FG28C0G1H100DNT06</a> |
| C0G                         | 12pF        | ±5%       | 50                       | <a href="#">FG28C0G1H120JNT00</a> | <a href="#">FG28C0G1H120JNT06</a> |
| C0G                         | 15pF        | ±5%       | 50                       | <a href="#">FG28C0G1H150JNT00</a> | <a href="#">FG28C0G1H150JNT06</a> |
| C0G                         | 18pF        | ±5%       | 50                       | <a href="#">FG28C0G1H180JNT00</a> | <a href="#">FG28C0G1H180JNT06</a> |
| C0G                         | 22pF        | ±5%       | 50                       | <a href="#">FG28C0G1H220JNT00</a> | <a href="#">FG28C0G1H220JNT06</a> |
| C0G                         | 27pF        | ±5%       | 50                       | <a href="#">FG28C0G1H270JNT00</a> | <a href="#">FG28C0G1H270JNT06</a> |
| C0G                         | 33pF        | ±5%       | 50                       | <a href="#">FG28C0G1H330JNT00</a> | <a href="#">FG28C0G1H330JNT06</a> |
| C0G                         | 39pF        | ±5%       | 50                       | <a href="#">FG28C0G1H390JNT00</a> | <a href="#">FG28C0G1H390JNT06</a> |
| C0G                         | 47pF        | ±5%       | 50                       | <a href="#">FG28C0G1H470JNT00</a> | <a href="#">FG28C0G1H470JNT06</a> |
| C0G                         | 56pF        | ±5%       | 50                       | <a href="#">FG28C0G1H560JNT00</a> | <a href="#">FG28C0G1H560JNT06</a> |
| C0G                         | 68pF        | ±5%       | 50                       | <a href="#">FG28C0G1H680JNT00</a> | <a href="#">FG28C0G1H680JNT06</a> |
| C0G                         | 82pF        | ±5%       | 50                       | <a href="#">FG28C0G1H820JNT00</a> | <a href="#">FG28C0G1H820JNT06</a> |
| C0G                         | 100pF       | ±5%       | 50                       | <a href="#">FG28C0G1H101JNT00</a> | <a href="#">FG28C0G1H101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 50                       | <a href="#">FG28C0G1H121JNT00</a> | <a href="#">FG28C0G1H121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 50                       | <a href="#">FG28C0G1H151JNT00</a> | <a href="#">FG28C0G1H151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 50                       | <a href="#">FG28C0G1H181JNT00</a> | <a href="#">FG28C0G1H181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 50                       | <a href="#">FG28C0G1H221JNT00</a> | <a href="#">FG28C0G1H221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 50                       | <a href="#">FG28C0G1H271JNT00</a> | <a href="#">FG28C0G1H271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 50                       | <a href="#">FG28C0G1H331JNT00</a> | <a href="#">FG28C0G1H331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 50                       | <a href="#">FG28C0G1H391JNT00</a> | <a href="#">FG28C0G1H391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 50                       | <a href="#">FG28C0G1H471JNT00</a> | <a href="#">FG28C0G1H471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 50                       | <a href="#">FG28C0G1H561JNT00</a> | <a href="#">FG28C0G1H561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 50                       | <a href="#">FG28C0G1H681JNT00</a> | <a href="#">FG28C0G1H681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 50                       | <a href="#">FG28C0G1H821JNT00</a> | <a href="#">FG28C0G1H821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 50                       | <a href="#">FG28C0G1H102JNT00</a> | <a href="#">FG28C0G1H102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 50                       | <a href="#">FG28C0G1H122JNT00</a> | <a href="#">FG28C0G1H122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 50                       | <a href="#">FG28C0G1H152JNT00</a> | <a href="#">FG28C0G1H152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 50                       | <a href="#">FG28C0G1H182JNT00</a> | <a href="#">FG28C0G1H182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 50                       | <a href="#">FG28C0G1H222JNT00</a> | <a href="#">FG28C0G1H222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 50                       | <a href="#">FG28C0G1H272JNT00</a> | <a href="#">FG28C0G1H272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 50                       | <a href="#">FG28C0G1H332JNT00</a> | <a href="#">FG28C0G1H332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 50                       | <a href="#">FG28C0G1H392JNT00</a> | <a href="#">FG28C0G1H392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 50                       | <a href="#">FG28C0G1H472JNT00</a> | <a href="#">FG28C0G1H472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 50                       | <a href="#">FG28C0G1H562JNT00</a> | <a href="#">FG28C0G1H562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 50                       | <a href="#">FG28C0G1H682JNT00</a> | <a href="#">FG28C0G1H682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 50                       | <a href="#">FG28C0G1H822JNT00</a> | <a href="#">FG28C0G1H822JNT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG28 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 10nF        | ±5%       | 50                       | <a href="#">FG28C0G1H103JNT00</a> | <a href="#">FG28C0G1H103JNT06</a> |
| C0G                         | 1.0pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A010CNT00</a> | <a href="#">FG28C0G2A010CNT06</a> |
| C0G                         | 1.5pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A1R5CNT00</a> | <a href="#">FG28C0G2A1R5CNT06</a> |
| C0G                         | 2.0pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A020CNT00</a> | <a href="#">FG28C0G2A020CNT06</a> |
| C0G                         | 2.2pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A2R2CNT00</a> | <a href="#">FG28C0G2A2R2CNT06</a> |
| C0G                         | 3.0pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A030CNT00</a> | <a href="#">FG28C0G2A030CNT06</a> |
| C0G                         | 3.3pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A3R3CNT00</a> | <a href="#">FG28C0G2A3R3CNT06</a> |
| C0G                         | 4.0pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A040CNT00</a> | <a href="#">FG28C0G2A040CNT06</a> |
| C0G                         | 4.7pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A4R7CNT00</a> | <a href="#">FG28C0G2A4R7CNT06</a> |
| C0G                         | 5.0pF       | ±0.25pF   | 100                      | <a href="#">FG28C0G2A050CNT00</a> | <a href="#">FG28C0G2A050CNT06</a> |
| C0G                         | 6.0pF       | ±0.5pF    | 100                      | <a href="#">FG28C0G2A060DNT00</a> | <a href="#">FG28C0G2A060DNT06</a> |
| C0G                         | 6.8pF       | ±0.5pF    | 100                      | <a href="#">FG28C0G2A6R8DNT00</a> | <a href="#">FG28C0G2A6R8DNT06</a> |
| C0G                         | 7.0pF       | ±0.5pF    | 100                      | <a href="#">FG28C0G2A070DNT00</a> | <a href="#">FG28C0G2A070DNT06</a> |
| C0G                         | 8.0pF       | ±0.5pF    | 100                      | <a href="#">FG28C0G2A080DNT00</a> | <a href="#">FG28C0G2A080DNT06</a> |
| C0G                         | 9.0pF       | ±0.5pF    | 100                      | <a href="#">FG28C0G2A090DNT00</a> | <a href="#">FG28C0G2A090DNT06</a> |
| C0G                         | 10pF        | ±0.5pF    | 100                      | <a href="#">FG28C0G2A100DNT00</a> | <a href="#">FG28C0G2A100DNT06</a> |
| C0G                         | 12pF        | ±5%       | 100                      | <a href="#">FG28C0G2A120JNT00</a> | <a href="#">FG28C0G2A120JNT06</a> |
| C0G                         | 15pF        | ±5%       | 100                      | <a href="#">FG28C0G2A150JNT00</a> | <a href="#">FG28C0G2A150JNT06</a> |
| C0G                         | 18pF        | ±5%       | 100                      | <a href="#">FG28C0G2A180JNT00</a> | <a href="#">FG28C0G2A180JNT06</a> |
| C0G                         | 22pF        | ±5%       | 100                      | <a href="#">FG28C0G2A220JNT00</a> | <a href="#">FG28C0G2A220JNT06</a> |
| C0G                         | 27pF        | ±5%       | 100                      | <a href="#">FG28C0G2A270JNT00</a> | <a href="#">FG28C0G2A270JNT06</a> |
| C0G                         | 33pF        | ±5%       | 100                      | <a href="#">FG28C0G2A330JNT00</a> | <a href="#">FG28C0G2A330JNT06</a> |
| C0G                         | 39pF        | ±5%       | 100                      | <a href="#">FG28C0G2A390JNT00</a> | <a href="#">FG28C0G2A390JNT06</a> |
| C0G                         | 47pF        | ±5%       | 100                      | <a href="#">FG28C0G2A470JNT00</a> | <a href="#">FG28C0G2A470JNT06</a> |
| C0G                         | 56pF        | ±5%       | 100                      | <a href="#">FG28C0G2A560JNT00</a> | <a href="#">FG28C0G2A560JNT06</a> |
| C0G                         | 68pF        | ±5%       | 100                      | <a href="#">FG28C0G2A680JNT00</a> | <a href="#">FG28C0G2A680JNT06</a> |
| C0G                         | 82pF        | ±5%       | 100                      | <a href="#">FG28C0G2A820JNT00</a> | <a href="#">FG28C0G2A820JNT06</a> |
| C0G                         | 100pF       | ±5%       | 100                      | <a href="#">FG28C0G2A101JNT00</a> | <a href="#">FG28C0G2A101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 100                      | <a href="#">FG28C0G2A121JNT00</a> | <a href="#">FG28C0G2A121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 100                      | <a href="#">FG28C0G2A151JNT00</a> | <a href="#">FG28C0G2A151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 100                      | <a href="#">FG28C0G2A181JNT00</a> | <a href="#">FG28C0G2A181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 100                      | <a href="#">FG28C0G2A221JNT00</a> | <a href="#">FG28C0G2A221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 100                      | <a href="#">FG28C0G2A271JNT00</a> | <a href="#">FG28C0G2A271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 100                      | <a href="#">FG28C0G2A331JNT00</a> | <a href="#">FG28C0G2A331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 100                      | <a href="#">FG28C0G2A391JNT00</a> | <a href="#">FG28C0G2A391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 100                      | <a href="#">FG28C0G2A471JNT00</a> | <a href="#">FG28C0G2A471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 100                      | <a href="#">FG28C0G2A561JNT00</a> | <a href="#">FG28C0G2A561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 100                      | <a href="#">FG28C0G2A681JNT00</a> | <a href="#">FG28C0G2A681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 100                      | <a href="#">FG28C0G2A821JNT00</a> | <a href="#">FG28C0G2A821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 100                      | <a href="#">FG28C0G2A102JNT00</a> | <a href="#">FG28C0G2A102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 100                      | <a href="#">FG28C0G2A122JNT00</a> | <a href="#">FG28C0G2A122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 100                      | <a href="#">FG28C0G2A152JNT00</a> | <a href="#">FG28C0G2A152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 100                      | <a href="#">FG28C0G2A182JNT00</a> | <a href="#">FG28C0G2A182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 100                      | <a href="#">FG28C0G2A222JNT00</a> | <a href="#">FG28C0G2A222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 100                      | <a href="#">FG28C0G2A272JNT00</a> | <a href="#">FG28C0G2A272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 100                      | <a href="#">FG28C0G2A332JNT00</a> | <a href="#">FG28C0G2A332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 100                      | <a href="#">FG28C0G2A392JRT00</a> | <a href="#">FG28C0G2A392JRT06</a> |
| C0G                         | 4.7nF       | ±5%       | 100                      | <a href="#">FG28C0G2A472JRT00</a> | <a href="#">FG28C0G2A472JRT06</a> |
| C0G                         | 5.6nF       | ±5%       | 100                      | <a href="#">FG28C0G2A562JRT00</a> | <a href="#">FG28C0G2A562JRT06</a> |
| C0G                         | 6.8nF       | ±5%       | 100                      | <a href="#">FG28C0G2A682JRT00</a> | <a href="#">FG28C0G2A682JRT06</a> |
| C0G                         | 8.2nF       | ±5%       | 100                      | <a href="#">FG28C0G2A822JRT00</a> | <a href="#">FG28C0G2A822JRT06</a> |
| C0G                         | 10nF        | ±5%       | 100                      | <a href="#">FG28C0G2A103JRT00</a> | <a href="#">FG28C0G2A103JRT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG28 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 100pF       | ±5%       | 250                      | <a href="#">FG28C0G2E101JNT00</a> | <a href="#">FG28C0G2E101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 250                      | <a href="#">FG28C0G2E121JNT00</a> | <a href="#">FG28C0G2E121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 250                      | <a href="#">FG28C0G2E151JNT00</a> | <a href="#">FG28C0G2E151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 250                      | <a href="#">FG28C0G2E181JNT00</a> | <a href="#">FG28C0G2E181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 250                      | <a href="#">FG28C0G2E221JNT00</a> | <a href="#">FG28C0G2E221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 250                      | <a href="#">FG28C0G2E271JNT00</a> | <a href="#">FG28C0G2E271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 250                      | <a href="#">FG28C0G2E331JNT00</a> | <a href="#">FG28C0G2E331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 250                      | <a href="#">FG28C0G2E391JNT00</a> | <a href="#">FG28C0G2E391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 250                      | <a href="#">FG28C0G2E471JNT00</a> | <a href="#">FG28C0G2E471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 250                      | <a href="#">FG28C0G2E561JNT00</a> | <a href="#">FG28C0G2E561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 250                      | <a href="#">FG28C0G2E681JNT00</a> | <a href="#">FG28C0G2E681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 250                      | <a href="#">FG28C0G2E821JNT00</a> | <a href="#">FG28C0G2E821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 250                      | <a href="#">FG28C0G2E102JNT00</a> | <a href="#">FG28C0G2E102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 250                      | <a href="#">FG28C0G2E122JNT00</a> | <a href="#">FG28C0G2E122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 250                      | <a href="#">FG28C0G2E152JNT00</a> | <a href="#">FG28C0G2E152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 250                      | <a href="#">FG28C0G2E182JNT00</a> | <a href="#">FG28C0G2E182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 250                      | <a href="#">FG28C0G2E222JNT00</a> | <a href="#">FG28C0G2E222JNT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG28 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 1.5uF       | ±10%      | 25                       | <a href="#">FG28X5R1E155KRT00</a> | <a href="#">FG28X5R1E155KRT06</a> |
| X5R                         | 2.2uF       | ±10%      | 25                       | <a href="#">FG28X5R1E225KRT00</a> | <a href="#">FG28X5R1E225KRT06</a> |
| X5R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG28X5R1E335KRT00</a> | <a href="#">FG28X5R1E335KRT06</a> |
| X5R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG28X5R1E475KRT00</a> | <a href="#">FG28X5R1E475KRT06</a> |
| X5R                         | 6.8uF       | ±10%      | 25                       | <a href="#">FG28X5R1E685KRT00</a> | <a href="#">FG28X5R1E685KRT06</a> |
| X5R                         | 10uF        | ±20%      | 25                       | <a href="#">FG28X5R1E106MRT00</a> | <a href="#">FG28X5R1E106MRT06</a> |
| X5R                         | 680nF       | ±10%      | 50                       | <a href="#">FG28X5R1H684KRT00</a> | <a href="#">FG28X5R1H684KRT06</a> |
| X5R                         | 1uF         | ±10%      | 50                       | <a href="#">FG28X5R1H105KRT00</a> | <a href="#">FG28X5R1H105KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 10                       | <a href="#">FG28X7R1A155KRT00</a> | <a href="#">FG28X7R1A155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 10                       | <a href="#">FG28X7R1A225KRT00</a> | <a href="#">FG28X7R1A225KRT06</a> |
| X7R                         | 150nF       | ±10%      | 25                       | <a href="#">FG28X7R1E154KNT00</a> | <a href="#">FG28X7R1E154KNT06</a> |
| X7R                         | 680nF       | ±10%      | 25                       | <a href="#">FG28X7R1E684KRT00</a> | <a href="#">FG28X7R1E684KRT06</a> |
| X7R                         | 1uF         | ±10%      | 25                       | <a href="#">FG28X7R1E105KRT00</a> | <a href="#">FG28X7R1E105KRT06</a> |
| X7R                         | 1nF         | ±10%      | 50                       | <a href="#">FG28X7R1H102KNT00</a> | <a href="#">FG28X7R1H102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 50                       | <a href="#">FG28X7R1H152KNT00</a> | <a href="#">FG28X7R1H152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 50                       | <a href="#">FG28X7R1H222KNT00</a> | <a href="#">FG28X7R1H222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 50                       | <a href="#">FG28X7R1H332KNT00</a> | <a href="#">FG28X7R1H332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 50                       | <a href="#">FG28X7R1H472KNT00</a> | <a href="#">FG28X7R1H472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 50                       | <a href="#">FG28X7R1H682KNT00</a> | <a href="#">FG28X7R1H682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 50                       | <a href="#">FG28X7R1H103KNT00</a> | <a href="#">FG28X7R1H103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 50                       | <a href="#">FG28X7R1H153KNT00</a> | <a href="#">FG28X7R1H153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 50                       | <a href="#">FG28X7R1H223KNT00</a> | <a href="#">FG28X7R1H223KNT06</a> |
| X7R                         | 33nF        | ±10%      | 50                       | <a href="#">FG28X7R1H333KNT00</a> | <a href="#">FG28X7R1H333KNT06</a> |
| X7R                         | 47nF        | ±10%      | 50                       | <a href="#">FG28X7R1H473KNT00</a> | <a href="#">FG28X7R1H473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 50                       | <a href="#">FG28X7R1H683KNT00</a> | <a href="#">FG28X7R1H683KNT06</a> |
| X7R                         | 100nF       | ±10%      | 50                       | <a href="#">FG28X7R1H104KNT00</a> | <a href="#">FG28X7R1H104KNT06</a> |
| X7R                         | 150nF       | ±10%      | 50                       | <a href="#">FG28X7R1H154KRT00</a> | <a href="#">FG28X7R1H154KRT06</a> |
| X7R                         | 220nF       | ±10%      | 50                       | <a href="#">FG28X7R1H224KRT00</a> | <a href="#">FG28X7R1H224KRT06</a> |
| X7R                         | 330nF       | ±10%      | 50                       | <a href="#">FG28X7R1H334KRT00</a> | <a href="#">FG28X7R1H334KRT06</a> |
| X7R                         | 470nF       | ±10%      | 50                       | <a href="#">FG28X7R1H474KRT00</a> | <a href="#">FG28X7R1H474KRT06</a> |
| X7R                         | 1nF         | ±10%      | 100                      | <a href="#">FG28X7R2A102KNT00</a> | <a href="#">FG28X7R2A102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 100                      | <a href="#">FG28X7R2A152KNT00</a> | <a href="#">FG28X7R2A152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 100                      | <a href="#">FG28X7R2A222KNT00</a> | <a href="#">FG28X7R2A222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 100                      | <a href="#">FG28X7R2A332KNT00</a> | <a href="#">FG28X7R2A332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 100                      | <a href="#">FG28X7R2A472KNT00</a> | <a href="#">FG28X7R2A472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 100                      | <a href="#">FG28X7R2A682KNT00</a> | <a href="#">FG28X7R2A682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 100                      | <a href="#">FG28X7R2A103KNT00</a> | <a href="#">FG28X7R2A103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 100                      | <a href="#">FG28X7R2A153KNT00</a> | <a href="#">FG28X7R2A153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 100                      | <a href="#">FG28X7R2A223KNT00</a> | <a href="#">FG28X7R2A223KNT06</a> |
| X7S                         | 33nF        | ±10%      | 100                      | <a href="#">FG28X7S2A333KRT00</a> | <a href="#">FG28X7S2A333KRT06</a> |
| X7S                         | 47nF        | ±10%      | 100                      | <a href="#">FG28X7S2A473KRT00</a> | <a href="#">FG28X7S2A473KRT06</a> |
| X7S                         | 68nF        | ±10%      | 100                      | <a href="#">FG28X7S2A683KRT00</a> | <a href="#">FG28X7S2A683KRT06</a> |
| X7S                         | 100nF       | ±10%      | 100                      | <a href="#">FG28X7S2A104KRT00</a> | <a href="#">FG28X7S2A104KRT06</a> |

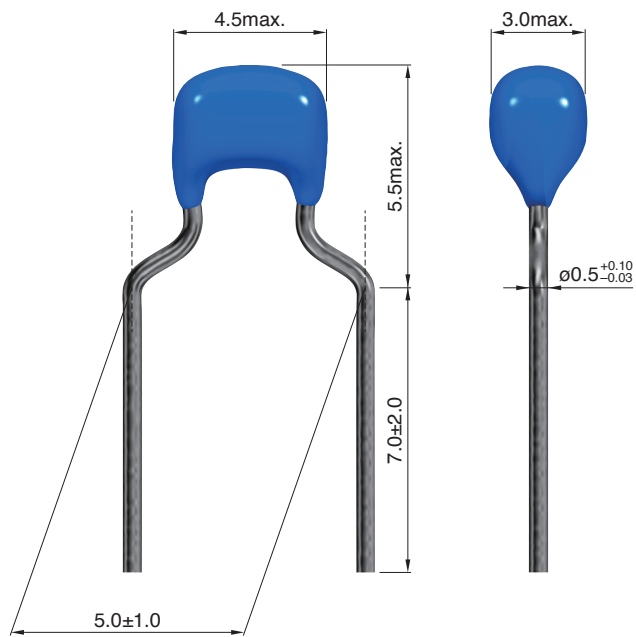
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

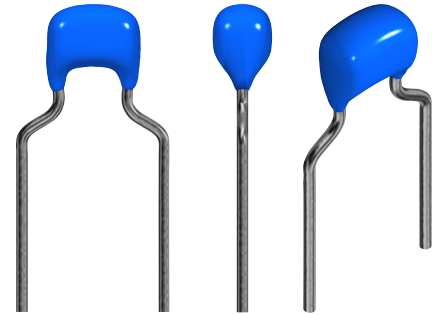
\* The part numbers are TDK's standard specification products.

# FG24 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG24 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 15nF        | ±5%       | 50                       | <a href="#">FG24C0G1H153JNT00</a> | <a href="#">FG24C0G1H153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 50                       | <a href="#">FG24C0G1H223JNT00</a> | <a href="#">FG24C0G1H223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 50                       | <a href="#">FG24C0G1H333JNT00</a> | <a href="#">FG24C0G1H333JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 100                      | <a href="#">FG24C0G2A392JNT00</a> | <a href="#">FG24C0G2A392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 100                      | <a href="#">FG24C0G2A472JNT00</a> | <a href="#">FG24C0G2A472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 100                      | <a href="#">FG24C0G2A562JNT00</a> | <a href="#">FG24C0G2A562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 100                      | <a href="#">FG24C0G2A682JNT00</a> | <a href="#">FG24C0G2A682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 100                      | <a href="#">FG24C0G2A822JNT00</a> | <a href="#">FG24C0G2A822JNT06</a> |
| C0G                         | 10nF        | ±5%       | 100                      | <a href="#">FG24C0G2A103JNT00</a> | <a href="#">FG24C0G2A103JNT06</a> |
| C0G                         | 15nF        | ±5%       | 100                      | <a href="#">FG24C0G2A153JRT00</a> | <a href="#">FG24C0G2A153JRT06</a> |
| C0G                         | 22nF        | ±5%       | 100                      | <a href="#">FG24C0G2A223JRT00</a> | <a href="#">FG24C0G2A223JRT06</a> |
| C0G                         | 33nF        | ±5%       | 100                      | <a href="#">FG24C0G2A333JRT00</a> | <a href="#">FG24C0G2A333JRT06</a> |
| C0G                         | 2.7nF       | ±5%       | 250                      | <a href="#">FG24C0G2E272JNT00</a> | <a href="#">FG24C0G2E272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 250                      | <a href="#">FG24C0G2E332JNT00</a> | <a href="#">FG24C0G2E332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 250                      | <a href="#">FG24C0G2E392JNT00</a> | <a href="#">FG24C0G2E392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 250                      | <a href="#">FG24C0G2E472JNT00</a> | <a href="#">FG24C0G2E472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 250                      | <a href="#">FG24C0G2E562JNT00</a> | <a href="#">FG24C0G2E562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 250                      | <a href="#">FG24C0G2E682JNT00</a> | <a href="#">FG24C0G2E682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 250                      | <a href="#">FG24C0G2E822JNT00</a> | <a href="#">FG24C0G2E822JNT06</a> |
| C0G                         | 10nF        | ±5%       | 250                      | <a href="#">FG24C0G2E103JNT00</a> | <a href="#">FG24C0G2E103JNT06</a> |
| C0G                         | 100pF       | ±5%       | 450                      | <a href="#">FG24C0G2W101JNT00</a> | <a href="#">FG24C0G2W101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 450                      | <a href="#">FG24C0G2W121JNT00</a> | <a href="#">FG24C0G2W121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 450                      | <a href="#">FG24C0G2W151JNT00</a> | <a href="#">FG24C0G2W151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 450                      | <a href="#">FG24C0G2W181JNT00</a> | <a href="#">FG24C0G2W181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 450                      | <a href="#">FG24C0G2W221JNT00</a> | <a href="#">FG24C0G2W221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 450                      | <a href="#">FG24C0G2W271JNT00</a> | <a href="#">FG24C0G2W271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 450                      | <a href="#">FG24C0G2W331JNT00</a> | <a href="#">FG24C0G2W331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 450                      | <a href="#">FG24C0G2W391JNT00</a> | <a href="#">FG24C0G2W391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 450                      | <a href="#">FG24C0G2W471JNT00</a> | <a href="#">FG24C0G2W471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 450                      | <a href="#">FG24C0G2W561JNT00</a> | <a href="#">FG24C0G2W561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 450                      | <a href="#">FG24C0G2W681JNT00</a> | <a href="#">FG24C0G2W681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 450                      | <a href="#">FG24C0G2W821JNT00</a> | <a href="#">FG24C0G2W821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 450                      | <a href="#">FG24C0G2W102JNT00</a> | <a href="#">FG24C0G2W102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 450                      | <a href="#">FG24C0G2W122JNT00</a> | <a href="#">FG24C0G2W122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 450                      | <a href="#">FG24C0G2W152JNT00</a> | <a href="#">FG24C0G2W152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 450                      | <a href="#">FG24C0G2W182JNT00</a> | <a href="#">FG24C0G2W182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 450                      | <a href="#">FG24C0G2W222JNT00</a> | <a href="#">FG24C0G2W222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 450                      | <a href="#">FG24C0G2W272JNT00</a> | <a href="#">FG24C0G2W272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 450                      | <a href="#">FG24C0G2W332JNT00</a> | <a href="#">FG24C0G2W332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 450                      | <a href="#">FG24C0G2W392JNT00</a> | <a href="#">FG24C0G2W392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 450                      | <a href="#">FG24C0G2W472JNT00</a> | <a href="#">FG24C0G2W472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 450                      | <a href="#">FG24C0G2W562JNT00</a> | <a href="#">FG24C0G2W562JNT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG24 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 15uF        | ±20%      | 25                       | <a href="#">FG24X5R1E156MRT00</a> | <a href="#">FG24X5R1E156MRT06</a> |
| X5R                         | 3.3uF       | ±10%      | 50                       | <a href="#">FG24X5R1H335KRT00</a> | <a href="#">FG24X5R1H335KRT06</a> |
| X5R                         | 4.7uF       | ±10%      | 50                       | <a href="#">FG24X5R1H475KRT00</a> | <a href="#">FG24X5R1H475KRT06</a> |
| X7R                         | 6.8uF       | ±10%      | 10                       | <a href="#">FG24X7R1A685KRT00</a> | <a href="#">FG24X7R1A685KRT06</a> |
| X7R                         | 10uF        | ±10%      | 10                       | <a href="#">FG24X7R1A106KRT00</a> | <a href="#">FG24X7R1A106KRT06</a> |
| X7R                         | 680nF       | ±10%      | 16                       | <a href="#">FG24X7R1C684KNT00</a> | <a href="#">FG24X7R1C684KNT06</a> |
| X7R                         | 470nF       | ±10%      | 25                       | <a href="#">FG24X7R1E474KNT00</a> | <a href="#">FG24X7R1E474KNT06</a> |
| X7R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG24X7R1E335KRT00</a> | <a href="#">FG24X7R1E335KRT06</a> |
| X7R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG24X7R1E475KRT00</a> | <a href="#">FG24X7R1E475KRT06</a> |
| X7R                         | 150nF       | ±10%      | 50                       | <a href="#">FG24X7R1H154KNT00</a> | <a href="#">FG24X7R1H154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 50                       | <a href="#">FG24X7R1H224KNT00</a> | <a href="#">FG24X7R1H224KNT06</a> |
| X7R                         | 330nF       | ±10%      | 50                       | <a href="#">FG24X7R1H334KNT00</a> | <a href="#">FG24X7R1H334KNT06</a> |
| X7R                         | 680nF       | ±10%      | 50                       | <a href="#">FG24X7R1H684KRT00</a> | <a href="#">FG24X7R1H684KRT06</a> |
| X7R                         | 1uF         | ±10%      | 50                       | <a href="#">FG24X7R1H105KRT00</a> | <a href="#">FG24X7R1H105KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 50                       | <a href="#">FG24X7R1H155KRT00</a> | <a href="#">FG24X7R1H155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 50                       | <a href="#">FG24X7R1H225KRT00</a> | <a href="#">FG24X7R1H225KRT06</a> |
| X7R                         | 33nF        | ±10%      | 100                      | <a href="#">FG24X7R2A333KNT00</a> | <a href="#">FG24X7R2A333KNT06</a> |
| X7R                         | 47nF        | ±10%      | 100                      | <a href="#">FG24X7R2A473KNT00</a> | <a href="#">FG24X7R2A473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 100                      | <a href="#">FG24X7R2A683KNT00</a> | <a href="#">FG24X7R2A683KNT06</a> |
| X7R                         | 100nF       | ±10%      | 100                      | <a href="#">FG24X7R2A104KNT00</a> | <a href="#">FG24X7R2A104KNT06</a> |
| X7R                         | 1nF         | ±10%      | 250                      | <a href="#">FG24X7R2E102KNT00</a> | <a href="#">FG24X7R2E102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 250                      | <a href="#">FG24X7R2E152KNT00</a> | <a href="#">FG24X7R2E152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 250                      | <a href="#">FG24X7R2E222KNT00</a> | <a href="#">FG24X7R2E222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 250                      | <a href="#">FG24X7R2E332KNT00</a> | <a href="#">FG24X7R2E332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 250                      | <a href="#">FG24X7R2E472KNT00</a> | <a href="#">FG24X7R2E472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 250                      | <a href="#">FG24X7R2E682KNT00</a> | <a href="#">FG24X7R2E682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 250                      | <a href="#">FG24X7R2E103KNT00</a> | <a href="#">FG24X7R2E103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 250                      | <a href="#">FG24X7R2E153KNT00</a> | <a href="#">FG24X7R2E153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 250                      | <a href="#">FG24X7R2E223KNT00</a> | <a href="#">FG24X7R2E223KNT06</a> |
| X7S                         | 150nF       | ±10%      | 100                      | <a href="#">FG24X7S2A154KRT00</a> | <a href="#">FG24X7S2A154KRT06</a> |
| X7S                         | 220nF       | ±10%      | 100                      | <a href="#">FG24X7S2A224KRT00</a> | <a href="#">FG24X7S2A224KRT06</a> |
| X7S                         | 330nF       | ±10%      | 100                      | <a href="#">FG24X7S2A334KRT00</a> | <a href="#">FG24X7S2A334KRT06</a> |
| X7S                         | 470nF       | ±10%      | 100                      | <a href="#">FG24X7S2A474KRT00</a> | <a href="#">FG24X7S2A474KRT06</a> |
| X7S                         | 680nF       | ±10%      | 100                      | <a href="#">FG24X7S2A684KRT00</a> | <a href="#">FG24X7S2A684KRT06</a> |
| X7S                         | 1uF         | ±10%      | 100                      | <a href="#">FG24X7S2A105KRT00</a> | <a href="#">FG24X7S2A105KRT06</a> |
| X7T                         | 33nF        | ±10%      | 250                      | <a href="#">FG24X7T2E333KNT00</a> | <a href="#">FG24X7T2E333KNT06</a> |
| X7T                         | 47nF        | ±10%      | 250                      | <a href="#">FG24X7T2E473KNT00</a> | <a href="#">FG24X7T2E473KNT06</a> |
| X7T                         | 68nF        | ±10%      | 250                      | <a href="#">FG24X7T2E683KNT00</a> | <a href="#">FG24X7T2E683KNT06</a> |
| X7T                         | 100nF       | ±10%      | 250                      | <a href="#">FG24X7T2E104KNT00</a> | <a href="#">FG24X7T2E104KNT06</a> |

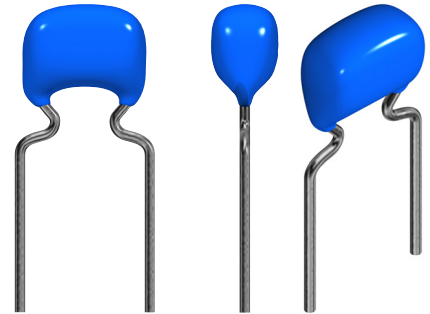
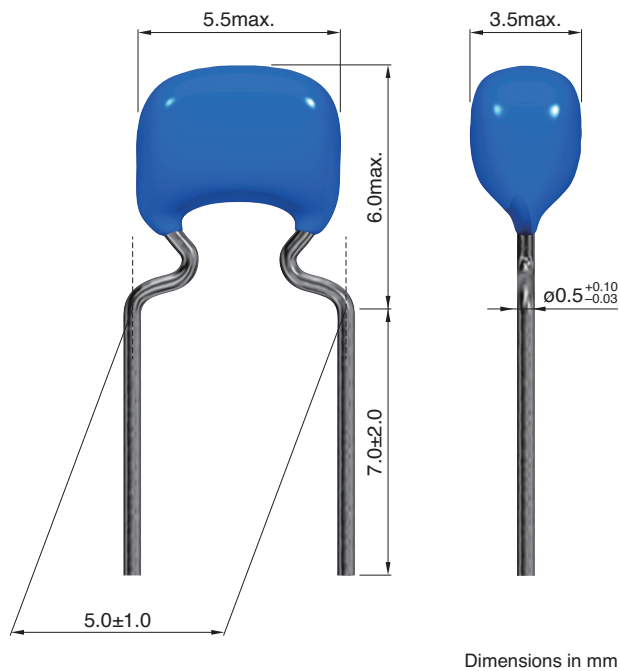
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG26 type

## ■ SHAPE & DIMENSIONS



# FG26 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 47nF        | ±5%       | 50                       | <a href="#">FG26C0G1H473JNT00</a> | <a href="#">FG26C0G1H473JNT06</a> |
| C0G                         | 68nF        | ±5%       | 50                       | <a href="#">FG26C0G1H683JNT00</a> | <a href="#">FG26C0G1H683JNT06</a> |
| C0G                         | 100nF       | ±5%       | 50                       | <a href="#">FG26C0G1H104JNT00</a> | <a href="#">FG26C0G1H104JNT06</a> |
| C0G                         | 15nF        | ±5%       | 100                      | <a href="#">FG26C0G2A153JNT00</a> | <a href="#">FG26C0G2A153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 100                      | <a href="#">FG26C0G2A223JNT00</a> | <a href="#">FG26C0G2A223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 100                      | <a href="#">FG26C0G2A333JNT00</a> | <a href="#">FG26C0G2A333JNT06</a> |
| C0G                         | 47nF        | ±5%       | 100                      | <a href="#">FG26C0G2A473JRT00</a> | <a href="#">FG26C0G2A473JRT06</a> |
| C0G                         | 68nF        | ±5%       | 100                      | <a href="#">FG26C0G2A683JRT00</a> | <a href="#">FG26C0G2A683JRT06</a> |
| C0G                         | 100nF       | ±5%       | 100                      | <a href="#">FG26C0G2A104JRT00</a> | <a href="#">FG26C0G2A104JRT06</a> |
| C0G                         | 15nF        | ±5%       | 250                      | <a href="#">FG26C0G2E153JNT00</a> | <a href="#">FG26C0G2E153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 250                      | <a href="#">FG26C0G2E223JNT00</a> | <a href="#">FG26C0G2E223JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 450                      | <a href="#">FG26C0G2W682JNT00</a> | <a href="#">FG26C0G2W682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 450                      | <a href="#">FG26C0G2W822JNT00</a> | <a href="#">FG26C0G2W822JNT06</a> |
| C0G                         | 10nF        | ±5%       | 450                      | <a href="#">FG26C0G2W103JNT00</a> | <a href="#">FG26C0G2W103JNT06</a> |
| C0G                         | 15nF        | ±5%       | 450                      | <a href="#">FG26C0G2W153JNT00</a> | <a href="#">FG26C0G2W153JNT06</a> |
| C0G                         | 100pF       | ±5%       | 630                      | <a href="#">FG26C0G2J101JNT00</a> | <a href="#">FG26C0G2J101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 630                      | <a href="#">FG26C0G2J121JNT00</a> | <a href="#">FG26C0G2J121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 630                      | <a href="#">FG26C0G2J151JNT00</a> | <a href="#">FG26C0G2J151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 630                      | <a href="#">FG26C0G2J181JNT00</a> | <a href="#">FG26C0G2J181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 630                      | <a href="#">FG26C0G2J221JNT00</a> | <a href="#">FG26C0G2J221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 630                      | <a href="#">FG26C0G2J271JNT00</a> | <a href="#">FG26C0G2J271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 630                      | <a href="#">FG26C0G2J331JNT00</a> | <a href="#">FG26C0G2J331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 630                      | <a href="#">FG26C0G2J391JNT00</a> | <a href="#">FG26C0G2J391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 630                      | <a href="#">FG26C0G2J471JNT00</a> | <a href="#">FG26C0G2J471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 630                      | <a href="#">FG26C0G2J561JNT00</a> | <a href="#">FG26C0G2J561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 630                      | <a href="#">FG26C0G2J681JNT00</a> | <a href="#">FG26C0G2J681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 630                      | <a href="#">FG26C0G2J821JNT00</a> | <a href="#">FG26C0G2J821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 630                      | <a href="#">FG26C0G2J102JNT00</a> | <a href="#">FG26C0G2J102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 630                      | <a href="#">FG26C0G2J122JNT00</a> | <a href="#">FG26C0G2J122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 630                      | <a href="#">FG26C0G2J152JNT00</a> | <a href="#">FG26C0G2J152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 630                      | <a href="#">FG26C0G2J182JNT00</a> | <a href="#">FG26C0G2J182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 630                      | <a href="#">FG26C0G2J222JNT00</a> | <a href="#">FG26C0G2J222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 630                      | <a href="#">FG26C0G2J272JNT00</a> | <a href="#">FG26C0G2J272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 630                      | <a href="#">FG26C0G2J332JNT00</a> | <a href="#">FG26C0G2J332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 630                      | <a href="#">FG26C0G2J392JNT00</a> | <a href="#">FG26C0G2J392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 630                      | <a href="#">FG26C0G2J472JNT00</a> | <a href="#">FG26C0G2J472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 630                      | <a href="#">FG26C0G2J562JNT00</a> | <a href="#">FG26C0G2J562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 630                      | <a href="#">FG26C0G2J682JNT00</a> | <a href="#">FG26C0G2J682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 630                      | <a href="#">FG26C0G2J822JNT00</a> | <a href="#">FG26C0G2J822JNT06</a> |
| C0G                         | 10nF        | ±5%       | 630                      | <a href="#">FG26C0G2J103JNT00</a> | <a href="#">FG26C0G2J103JNT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG26 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 33uF        | ±20%      | 25                       | <a href="#">FG26X5R1E336MRT00</a> | <a href="#">FG26X5R1E336MRT06</a> |
| X5R                         | 6.8uF       | ±10%      | 50                       | <a href="#">FG26X5R1H685KRT00</a> | <a href="#">FG26X5R1H685KRT06</a> |
| X5R                         | 10uF        | ±10%      | 50                       | <a href="#">FG26X5R1H106KRT00</a> | <a href="#">FG26X5R1H106KRT06</a> |
| X7R                         | 1uF         | ±10%      | 25                       | <a href="#">FG26X7R1E105KNT00</a> | <a href="#">FG26X7R1E105KNT06</a> |
| X7R                         | 1.5uF       | ±10%      | 25                       | <a href="#">FG26X7R1E155KNT00</a> | <a href="#">FG26X7R1E155KNT06</a> |
| X7R                         | 2.2uF       | ±10%      | 25                       | <a href="#">FG26X7R1E225KNT00</a> | <a href="#">FG26X7R1E225KNT06</a> |
| X7R                         | 6.8uF       | ±10%      | 25                       | <a href="#">FG26X7R1E685KRT00</a> | <a href="#">FG26X7R1E685KRT06</a> |
| X7R                         | 10uF        | ±10%      | 25                       | <a href="#">FG26X7R1E106KRT00</a> | <a href="#">FG26X7R1E106KRT06</a> |
| X7R                         | 470nF       | ±10%      | 50                       | <a href="#">FG26X7R1H474KNT00</a> | <a href="#">FG26X7R1H474KNT06</a> |
| X7R                         | 680nF       | ±10%      | 50                       | <a href="#">FG26X7R1H684KNT00</a> | <a href="#">FG26X7R1H684KNT06</a> |
| X7R                         | 3.3uF       | ±10%      | 50                       | <a href="#">FG26X7R1H335KRT00</a> | <a href="#">FG26X7R1H335KRT06</a> |
| X7R                         | 4.7uF       | ±10%      | 50                       | <a href="#">FG26X7R1H475KRT00</a> | <a href="#">FG26X7R1H475KRT06</a> |
| X7R                         | 150nF       | ±10%      | 100                      | <a href="#">FG26X7R2A154KNT00</a> | <a href="#">FG26X7R2A154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 100                      | <a href="#">FG26X7R2A224KNT00</a> | <a href="#">FG26X7R2A224KNT06</a> |
| X7R                         | 330nF       | ±10%      | 100                      | <a href="#">FG26X7R2A334KNT00</a> | <a href="#">FG26X7R2A334KNT06</a> |
| X7R                         | 470nF       | ±10%      | 100                      | <a href="#">FG26X7R2A474KNT00</a> | <a href="#">FG26X7R2A474KNT06</a> |
| X7R                         | 680nF       | ±10%      | 100                      | <a href="#">FG26X7R2A684KNT00</a> | <a href="#">FG26X7R2A684KNT06</a> |
| X7R                         | 1uF         | ±10%      | 100                      | <a href="#">FG26X7R2A105KNT00</a> | <a href="#">FG26X7R2A105KNT06</a> |
| X7R                         | 33nF        | ±10%      | 250                      | <a href="#">FG26X7R2E333KNT00</a> | <a href="#">FG26X7R2E333KNT06</a> |
| X7R                         | 47nF        | ±10%      | 250                      | <a href="#">FG26X7R2E473KNT00</a> | <a href="#">FG26X7R2E473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 250                      | <a href="#">FG26X7R2E683KNT00</a> | <a href="#">FG26X7R2E683KNT06</a> |
| X7R                         | 100nF       | ±10%      | 250                      | <a href="#">FG26X7R2E104KNT00</a> | <a href="#">FG26X7R2E104KNT06</a> |
| X7R                         | 1nF         | ±10%      | 630                      | <a href="#">FG26X7R2J102KNT00</a> | <a href="#">FG26X7R2J102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 630                      | <a href="#">FG26X7R2J152KNT00</a> | <a href="#">FG26X7R2J152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 630                      | <a href="#">FG26X7R2J222KNT00</a> | <a href="#">FG26X7R2J222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 630                      | <a href="#">FG26X7R2J332KNT00</a> | <a href="#">FG26X7R2J332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 630                      | <a href="#">FG26X7R2J472KNT00</a> | <a href="#">FG26X7R2J472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 630                      | <a href="#">FG26X7R2J682KNT00</a> | <a href="#">FG26X7R2J682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 630                      | <a href="#">FG26X7R2J103KNT00</a> | <a href="#">FG26X7R2J103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 630                      | <a href="#">FG26X7R2J153KNT00</a> | <a href="#">FG26X7R2J153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 630                      | <a href="#">FG26X7R2J223KNT00</a> | <a href="#">FG26X7R2J223KNT06</a> |
| X7R                         | 33nF        | ±10%      | 630                      | <a href="#">FG26X7R2J333KNT00</a> | <a href="#">FG26X7R2J333KNT06</a> |
| X7S                         | 1.5uF       | ±10%      | 100                      | <a href="#">FG26X7S2A155KRT00</a> | <a href="#">FG26X7S2A155KRT06</a> |
| X7S                         | 2.2uF       | ±10%      | 100                      | <a href="#">FG26X7S2A225KRT00</a> | <a href="#">FG26X7S2A225KRT06</a> |
| X7S                         | 3.3uF       | ±10%      | 100                      | <a href="#">FG26X7S2A335KRT00</a> | <a href="#">FG26X7S2A335KRT06</a> |
| X7T                         | 150nF       | ±10%      | 250                      | <a href="#">FG26X7T2E154KNT00</a> | <a href="#">FG26X7T2E154KNT06</a> |
| X7T                         | 220nF       | ±10%      | 250                      | <a href="#">FG26X7T2E224KNT00</a> | <a href="#">FG26X7T2E224KNT06</a> |

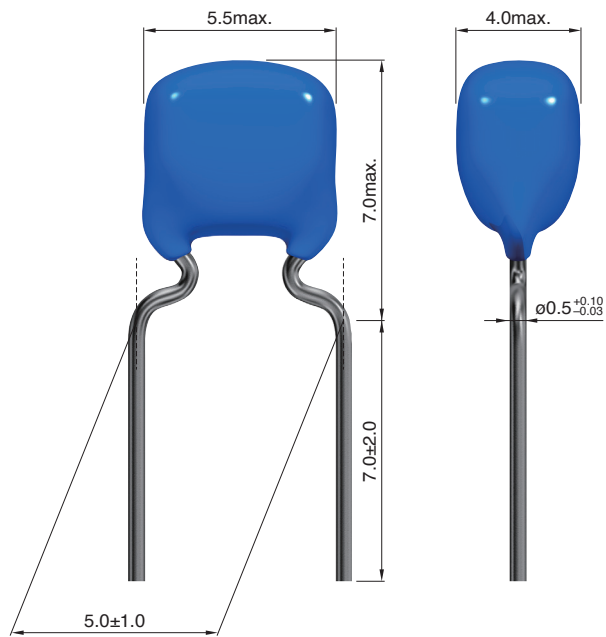
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

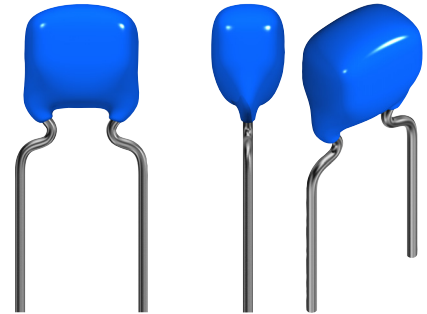
\* The part numbers are TDK's standard specification products.

# FG20 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG20 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 47nF        | ±5%       | 100                      | <a href="#">FG20C0G2A473JNT00</a> | <a href="#">FG20C0G2A473JNT06</a> |
| C0G                         | 68nF        | ±5%       | 100                      | <a href="#">FG20C0G2A683JNT00</a> | <a href="#">FG20C0G2A683JNT06</a> |
| C0G                         | 33nF        | ±5%       | 250                      | <a href="#">FG20C0G2E333JNT00</a> | <a href="#">FG20C0G2E333JNT06</a> |
| C0G                         | 47nF        | ±5%       | 250                      | <a href="#">FG20C0G2E473JNT00</a> | <a href="#">FG20C0G2E473JNT06</a> |
| C0G                         | 22nF        | ±5%       | 450                      | <a href="#">FG20C0G2W223JNT00</a> | <a href="#">FG20C0G2W223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 450                      | <a href="#">FG20C0G2W333JNT00</a> | <a href="#">FG20C0G2W333JNT06</a> |
| C0G                         | 15nF        | ±5%       | 630                      | <a href="#">FG20C0G2J153JNT00</a> | <a href="#">FG20C0G2J153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 630                      | <a href="#">FG20C0G2J223JNT00</a> | <a href="#">FG20C0G2J223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 630                      | <a href="#">FG20C0G2J333JNT00</a> | <a href="#">FG20C0G2J333JNT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X7R                         | 15uF        | ±20%      | 16                       | <a href="#">FG20X7R1C156MRT00</a> | <a href="#">FG20X7R1C156MRT06</a> |
| X7R                         | 22uF        | ±20%      | 16                       | <a href="#">FG20X7R1C226MRT00</a> | <a href="#">FG20X7R1C226MRT06</a> |
| X7R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG20X7R1E335KNT00</a> | <a href="#">FG20X7R1E335KNT06</a> |
| X7R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG20X7R1E475KNT00</a> | <a href="#">FG20X7R1E475KNT06</a> |
| X7R                         | 1uF         | ±10%      | 50                       | <a href="#">FG20X7R1H105KNT00</a> | <a href="#">FG20X7R1H105KNT06</a> |
| X7R                         | 1.5uF       | ±10%      | 50                       | <a href="#">FG20X7R1H155KNT00</a> | <a href="#">FG20X7R1H155KNT06</a> |
| X7R                         | 10uF        | ±10%      | 50                       | <a href="#">FG20X7R1H106KRT00</a> | <a href="#">FG20X7R1H106KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 100                      | <a href="#">FG20X7R2A155KRT00</a> | <a href="#">FG20X7R2A155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 100                      | <a href="#">FG20X7R2A225KRT00</a> | <a href="#">FG20X7R2A225KRT06</a> |
| X7R                         | 150nF       | ±10%      | 250                      | <a href="#">FG20X7R2E154KNT00</a> | <a href="#">FG20X7R2E154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 250                      | <a href="#">FG20X7R2E224KNT00</a> | <a href="#">FG20X7R2E224KNT06</a> |
| X7R                         | 47nF        | ±10%      | 630                      | <a href="#">FG20X7R2J473KNT00</a> | <a href="#">FG20X7R2J473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 630                      | <a href="#">FG20X7R2J683KNT00</a> | <a href="#">FG20X7R2J683KNT06</a> |
| X7S                         | 6.8uF       | ±10%      | 50                       | <a href="#">FG20X7S1H685KRT00</a> | <a href="#">FG20X7S1H685KRT06</a> |
| X7S                         | 10uF        | ±10%      | 50                       | <a href="#">FG20X7S1H106KRT00</a> | <a href="#">FG20X7S1H106KRT06</a> |
| X7S                         | 4.7uF       | ±10%      | 100                      | <a href="#">FG20X7S2A475KRT00</a> | <a href="#">FG20X7S2A475KRT06</a> |
| X7T                         | 330nF       | ±10%      | 250                      | <a href="#">FG20X7T2E334KNT00</a> | <a href="#">FG20X7T2E334KNT06</a> |

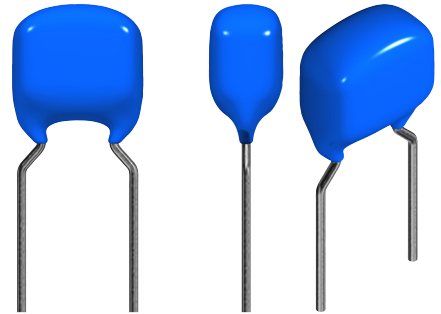
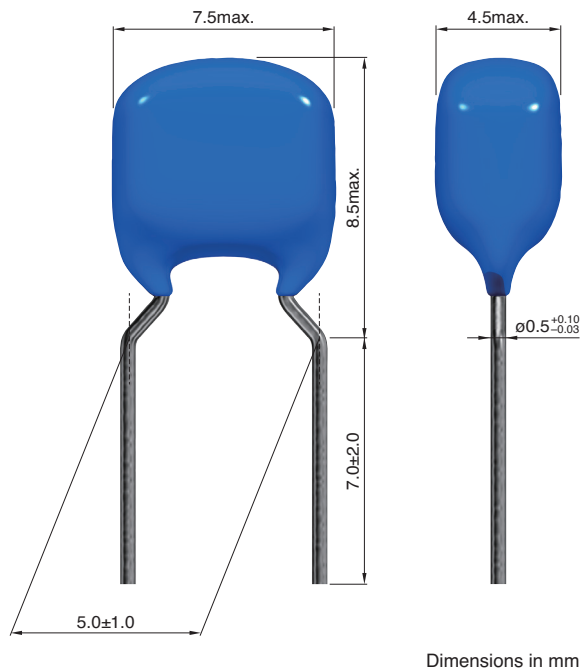
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG22 type

## ■ SHAPE & DIMENSIONS



# FG22 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 150nF       | ±5%       | 50                       | <a href="#">FG22C0G1H154JNT00</a> | <a href="#">FG22C0G1H154JNT06</a> |
| C0G                         | 220nF       | ±5%       | 50                       | <a href="#">FG22C0G1H224JNT00</a> | <a href="#">FG22C0G1H224JNT06</a> |
| C0G                         | 100nF       | ±5%       | 100                      | <a href="#">FG22C0G2A104JNT00</a> | <a href="#">FG22C0G2A104JNT06</a> |
| C0G                         | 68nF        | ±5%       | 250                      | <a href="#">FG22C0G2E683JRT00</a> | <a href="#">FG22C0G2E683JRT06</a> |
| C0G                         | 100nF       | ±5%       | 250                      | <a href="#">FG22C0G2E104JRT00</a> | <a href="#">FG22C0G2E104JRT06</a> |
| C0G                         | 47nF        | ±5%       | 450                      | <a href="#">FG22C0G2W473JNT00</a> | <a href="#">FG22C0G2W473JNT06</a> |
| C0G                         | 68nF        | ±5%       | 450                      | <a href="#">FG22C0G2W683JNT00</a> | <a href="#">FG22C0G2W683JNT06</a> |
| C0G                         | 47nF        | ±5%       | 630                      | <a href="#">FG22C0G2J473JNT00</a> | <a href="#">FG22C0G2J473JNT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 47μF        | ±20%      | 10                       | <a href="#">FG22X5R1A476MNT00</a> | <a href="#">FG22X5R1A476MNT06</a> |
| X5R                         | 33μF        | ±20%      | 16                       | <a href="#">FG22X5R1C336MNT00</a> | <a href="#">FG22X5R1C336MNT06</a> |
| X7R                         | 33μF        | ±20%      | 16                       | <a href="#">FG22X7R1C336MRT00</a> | <a href="#">FG22X7R1C336MRT06</a> |
| X7R                         | 10μF        | ±10%      | 25                       | <a href="#">FG22X7R1E106KNT00</a> | <a href="#">FG22X7R1E106KNT06</a> |
| X7R                         | 15μF        | ±20%      | 25                       | <a href="#">FG22X7R1E156MRT00</a> | <a href="#">FG22X7R1E156MRT06</a> |
| X7R                         | 22μF        | ±20%      | 25                       | <a href="#">FG22X7R1E226MRT00</a> | <a href="#">FG22X7R1E226MRT06</a> |
| X7R                         | 2.2μF       | ±10%      | 50                       | <a href="#">FG22X7R1H225KNT00</a> | <a href="#">FG22X7R1H225KNT06</a> |
| X7R                         | 3.3μF       | ±10%      | 50                       | <a href="#">FG22X7R1H335KNT00</a> | <a href="#">FG22X7R1H335KNT06</a> |
| X7R                         | 6.8μF       | ±10%      | 50                       | <a href="#">FG22X7R1H685KRT00</a> | <a href="#">FG22X7R1H685KRT06</a> |
| X7R                         | 1.5μF       | ±10%      | 100                      | <a href="#">FG22X7R2A155KNT00</a> | <a href="#">FG22X7R2A155KNT06</a> |
| X7R                         | 2.2μF       | ±10%      | 100                      | <a href="#">FG22X7R2A225KNT00</a> | <a href="#">FG22X7R2A225KNT06</a> |
| X7R                         | 330nF       | ±10%      | 250                      | <a href="#">FG22X7R2E334KNT00</a> | <a href="#">FG22X7R2E334KNT06</a> |
| X7R                         | 470nF       | ±10%      | 250                      | <a href="#">FG22X7R2E474KNT00</a> | <a href="#">FG22X7R2E474KNT06</a> |
| X7R                         | 100nF       | ±10%      | 630                      | <a href="#">FG22X7R2J104KNT00</a> | <a href="#">FG22X7R2J104KNT06</a> |
| X7T                         | 680nF       | ±10%      | 250                      | <a href="#">FG22X7T2E684KNT00</a> | <a href="#">FG22X7T2E684KNT06</a> |
| X7T                         | 1μF         | ±10%      | 250                      | <a href="#">FG22X7T2E105KNT00</a> | <a href="#">FG22X7T2E105KNT06</a> |

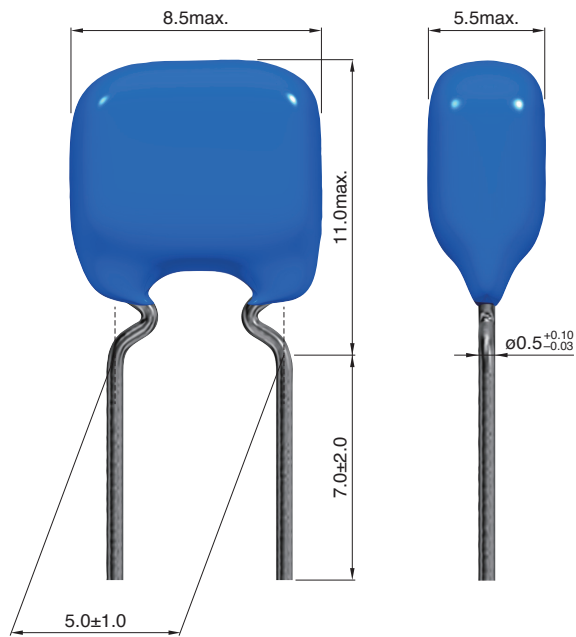
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

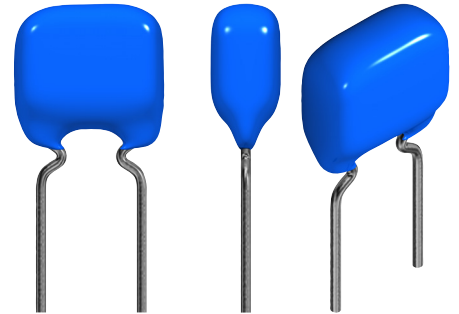
\* The part numbers are TDK's standard specification products.

# FG23 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG23 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 150nF       | ±5%       | 100                      | <a href="#">FG23C0G2A154JNT00</a> | <a href="#">FG23C0G2A154JNT06</a> |
| C0G                         | 150nF       | ±5%       | 250                      | <a href="#">FG23C0G2E154JRT00</a> | <a href="#">FG23C0G2E154JRT06</a> |
| C0G                         | 100nF       | ±5%       | 450                      | <a href="#">FG23C0G2W104JNT00</a> | <a href="#">FG23C0G2W104JNT06</a> |
| C0G                         | 68nF        | ±5%       | 630                      | <a href="#">FG23C0G2J683JRT00</a> | <a href="#">FG23C0G2J683JRT06</a> |
| C0G                         | 100nF       | ±5%       | 630                      | <a href="#">FG23C0G2J104JRT00</a> | <a href="#">FG23C0G2J104JRT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X7R                         | 47μF        | ±20%      | 16                       | <a href="#">FG23X7R1C476MRT00</a> | <a href="#">FG23X7R1C476MRT06</a> |
| X7R                         | 22μF        | ±20%      | 25                       | <a href="#">FG23X7R1E226MNT00</a> | <a href="#">FG23X7R1E226MNT06</a> |
| X7R                         | 10μF        | ±10%      | 50                       | <a href="#">FG23X7R1H106KRT00</a> | <a href="#">FG23X7R1H106KRT06</a> |
| X7R                         | 3.3μF       | ±10%      | 100                      | <a href="#">FG23X7R2A335KNT00</a> | <a href="#">FG23X7R2A335KNT06</a> |
| X7R                         | 4.7μF       | ±10%      | 100                      | <a href="#">FG23X7R2A475KNT00</a> | <a href="#">FG23X7R2A475KNT06</a> |
| X7R                         | 680nF       | ±10%      | 250                      | <a href="#">FG23X7R2E684KNT00</a> | <a href="#">FG23X7R2E684KNT06</a> |
| X7R                         | 1μF         | ±10%      | 250                      | <a href="#">FG23X7R2E105KNT00</a> | <a href="#">FG23X7R2E105KNT06</a> |
| X7R                         | 150nF       | ±10%      | 630                      | <a href="#">FG23X7R2J154KNT00</a> | <a href="#">FG23X7R2J154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 630                      | <a href="#">FG23X7R2J224KNT00</a> | <a href="#">FG23X7R2J224KNT06</a> |
| X7S                         | 6.8μF       | ±10%      | 100                      | <a href="#">FG23X7S2A685KRT00</a> | <a href="#">FG23X7S2A685KRT06</a> |
| X7S                         | 10μF        | ±10%      | 100                      | <a href="#">FG23X7S2A106KRT00</a> | <a href="#">FG23X7S2A106KRT06</a> |
| X7S                         | 15μF        | ±20%      | 100                      | <a href="#">FG23X7S2A156MRT00</a> | <a href="#">FG23X7S2A156MRT06</a> |
| X7T                         | 1.5μF       | ±10%      | 250                      | <a href="#">FG23X7T2E155KNT00</a> | <a href="#">FG23X7T2E155KNT06</a> |
| X7T                         | 2.2μF       | ±10%      | 250                      | <a href="#">FG23X7T2E225KNT00</a> | <a href="#">FG23X7T2E225KNT06</a> |

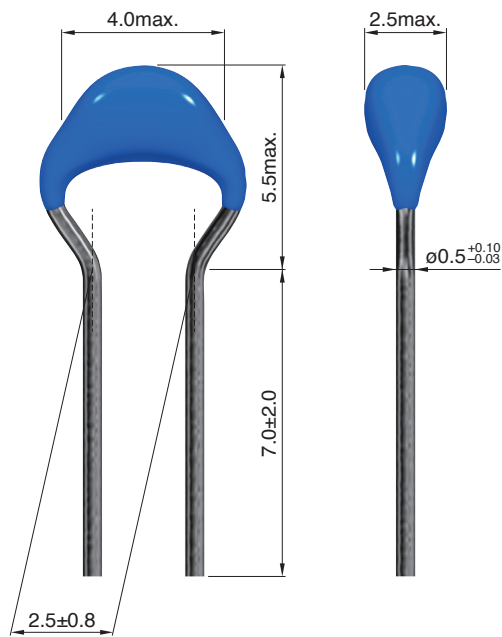
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

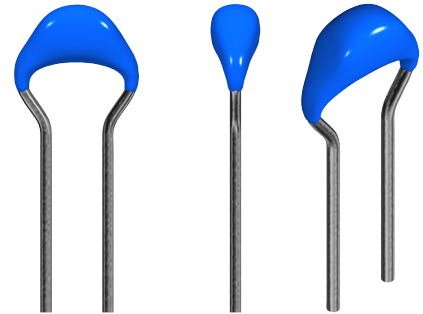
\* The part numbers are TDK's standard specification products.

# FG18 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG18 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 1.0pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H010CNT00</a> | <a href="#">FG18C0G1H010CNT06</a> |
| C0G                         | 1.5pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H1R5CNT00</a> | <a href="#">FG18C0G1H1R5CNT06</a> |
| C0G                         | 2.0pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H020CNT00</a> | <a href="#">FG18C0G1H020CNT06</a> |
| C0G                         | 2.2pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H2R2CNT00</a> | <a href="#">FG18C0G1H2R2CNT06</a> |
| C0G                         | 3.0pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H030CNT00</a> | <a href="#">FG18C0G1H030CNT06</a> |
| C0G                         | 3.3pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H3R3CNT00</a> | <a href="#">FG18C0G1H3R3CNT06</a> |
| C0G                         | 4.0pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H040CNT00</a> | <a href="#">FG18C0G1H040CNT06</a> |
| C0G                         | 4.7pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H4R7CNT00</a> | <a href="#">FG18C0G1H4R7CNT06</a> |
| C0G                         | 5.0pF       | ±0.25pF   | 50                       | <a href="#">FG18C0G1H050CNT00</a> | <a href="#">FG18C0G1H050CNT06</a> |
| C0G                         | 6.0pF       | ±0.5pF    | 50                       | <a href="#">FG18C0G1H060DNT00</a> | <a href="#">FG18C0G1H060DNT06</a> |
| C0G                         | 6.8pF       | ±0.5pF    | 50                       | <a href="#">FG18C0G1H6R8DNT00</a> | <a href="#">FG18C0G1H6R8DNT06</a> |
| C0G                         | 7.0pF       | ±0.5pF    | 50                       | <a href="#">FG18C0G1H070DNT00</a> | <a href="#">FG18C0G1H070DNT06</a> |
| C0G                         | 8.0pF       | ±0.5pF    | 50                       | <a href="#">FG18C0G1H080DNT00</a> | <a href="#">FG18C0G1H080DNT06</a> |
| C0G                         | 9.0pF       | ±0.5pF    | 50                       | <a href="#">FG18C0G1H090DNT00</a> | <a href="#">FG18C0G1H090DNT06</a> |
| C0G                         | 10pF        | ±0.5pF    | 50                       | <a href="#">FG18C0G1H100DNT00</a> | <a href="#">FG18C0G1H100DNT06</a> |
| C0G                         | 12pF        | ±5%       | 50                       | <a href="#">FG18C0G1H120JNT00</a> | <a href="#">FG18C0G1H120JNT06</a> |
| C0G                         | 15pF        | ±5%       | 50                       | <a href="#">FG18C0G1H150JNT00</a> | <a href="#">FG18C0G1H150JNT06</a> |
| C0G                         | 18pF        | ±5%       | 50                       | <a href="#">FG18C0G1H180JNT00</a> | <a href="#">FG18C0G1H180JNT06</a> |
| C0G                         | 22pF        | ±5%       | 50                       | <a href="#">FG18C0G1H220JNT00</a> | <a href="#">FG18C0G1H220JNT06</a> |
| C0G                         | 27pF        | ±5%       | 50                       | <a href="#">FG18C0G1H270JNT00</a> | <a href="#">FG18C0G1H270JNT06</a> |
| C0G                         | 33pF        | ±5%       | 50                       | <a href="#">FG18C0G1H330JNT00</a> | <a href="#">FG18C0G1H330JNT06</a> |
| C0G                         | 39pF        | ±5%       | 50                       | <a href="#">FG18C0G1H390JNT00</a> | <a href="#">FG18C0G1H390JNT06</a> |
| C0G                         | 47pF        | ±5%       | 50                       | <a href="#">FG18C0G1H470JNT00</a> | <a href="#">FG18C0G1H470JNT06</a> |
| C0G                         | 56pF        | ±5%       | 50                       | <a href="#">FG18C0G1H560JNT00</a> | <a href="#">FG18C0G1H560JNT06</a> |
| C0G                         | 68pF        | ±5%       | 50                       | <a href="#">FG18C0G1H680JNT00</a> | <a href="#">FG18C0G1H680JNT06</a> |
| C0G                         | 82pF        | ±5%       | 50                       | <a href="#">FG18C0G1H820JNT00</a> | <a href="#">FG18C0G1H820JNT06</a> |
| C0G                         | 100pF       | ±5%       | 50                       | <a href="#">FG18C0G1H101JNT00</a> | <a href="#">FG18C0G1H101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 50                       | <a href="#">FG18C0G1H121JNT00</a> | <a href="#">FG18C0G1H121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 50                       | <a href="#">FG18C0G1H151JNT00</a> | <a href="#">FG18C0G1H151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 50                       | <a href="#">FG18C0G1H181JNT00</a> | <a href="#">FG18C0G1H181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 50                       | <a href="#">FG18C0G1H221JNT00</a> | <a href="#">FG18C0G1H221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 50                       | <a href="#">FG18C0G1H271JNT00</a> | <a href="#">FG18C0G1H271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 50                       | <a href="#">FG18C0G1H331JNT00</a> | <a href="#">FG18C0G1H331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 50                       | <a href="#">FG18C0G1H391JNT00</a> | <a href="#">FG18C0G1H391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 50                       | <a href="#">FG18C0G1H471JNT00</a> | <a href="#">FG18C0G1H471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 50                       | <a href="#">FG18C0G1H561JNT00</a> | <a href="#">FG18C0G1H561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 50                       | <a href="#">FG18C0G1H681JNT00</a> | <a href="#">FG18C0G1H681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 50                       | <a href="#">FG18C0G1H821JNT00</a> | <a href="#">FG18C0G1H821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 50                       | <a href="#">FG18C0G1H102JNT00</a> | <a href="#">FG18C0G1H102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 50                       | <a href="#">FG18C0G1H122JNT00</a> | <a href="#">FG18C0G1H122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 50                       | <a href="#">FG18C0G1H152JNT00</a> | <a href="#">FG18C0G1H152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 50                       | <a href="#">FG18C0G1H182JNT00</a> | <a href="#">FG18C0G1H182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 50                       | <a href="#">FG18C0G1H222JNT00</a> | <a href="#">FG18C0G1H222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 50                       | <a href="#">FG18C0G1H272JNT00</a> | <a href="#">FG18C0G1H272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 50                       | <a href="#">FG18C0G1H332JNT00</a> | <a href="#">FG18C0G1H332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 50                       | <a href="#">FG18C0G1H392JNT00</a> | <a href="#">FG18C0G1H392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 50                       | <a href="#">FG18C0G1H472JNT00</a> | <a href="#">FG18C0G1H472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 50                       | <a href="#">FG18C0G1H562JNT00</a> | <a href="#">FG18C0G1H562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 50                       | <a href="#">FG18C0G1H682JNT00</a> | <a href="#">FG18C0G1H682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 50                       | <a href="#">FG18C0G1H822JNT00</a> | <a href="#">FG18C0G1H822JNT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG18 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 10nF        | ±5%       | 50                       | <a href="#">FG18C0G1H103JNT00</a> | <a href="#">FG18C0G1H103JNT06</a> |
| C0G                         | 1.0pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A010CNT00</a> | <a href="#">FG18C0G2A010CNT06</a> |
| C0G                         | 1.5pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A1R5CNT00</a> | <a href="#">FG18C0G2A1R5CNT06</a> |
| C0G                         | 2.0pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A020CNT00</a> | <a href="#">FG18C0G2A020CNT06</a> |
| C0G                         | 2.2pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A2R2CNT00</a> | <a href="#">FG18C0G2A2R2CNT06</a> |
| C0G                         | 3.0pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A030CNT00</a> | <a href="#">FG18C0G2A030CNT06</a> |
| C0G                         | 3.3pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A3R3CNT00</a> | <a href="#">FG18C0G2A3R3CNT06</a> |
| C0G                         | 4.0pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A040CNT00</a> | <a href="#">FG18C0G2A040CNT06</a> |
| C0G                         | 4.7pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A4R7CNT00</a> | <a href="#">FG18C0G2A4R7CNT06</a> |
| C0G                         | 5.0pF       | ±0.25pF   | 100                      | <a href="#">FG18C0G2A050CNT00</a> | <a href="#">FG18C0G2A050CNT06</a> |
| C0G                         | 6.0pF       | ±0.5pF    | 100                      | <a href="#">FG18C0G2A060DNT00</a> | <a href="#">FG18C0G2A060DNT06</a> |
| C0G                         | 6.8pF       | ±0.5pF    | 100                      | <a href="#">FG18C0G2A6R8DNT00</a> | <a href="#">FG18C0G2A6R8DNT06</a> |
| C0G                         | 7.0pF       | ±0.5pF    | 100                      | <a href="#">FG18C0G2A070DNT00</a> | <a href="#">FG18C0G2A070DNT06</a> |
| C0G                         | 8.0pF       | ±0.5pF    | 100                      | <a href="#">FG18C0G2A080DNT00</a> | <a href="#">FG18C0G2A080DNT06</a> |
| C0G                         | 9.0pF       | ±0.5pF    | 100                      | <a href="#">FG18C0G2A090DNT00</a> | <a href="#">FG18C0G2A090DNT06</a> |
| C0G                         | 10pF        | ±0.5pF    | 100                      | <a href="#">FG18C0G2A100DNT00</a> | <a href="#">FG18C0G2A100DNT06</a> |
| C0G                         | 12pF        | ±5%       | 100                      | <a href="#">FG18C0G2A120JNT00</a> | <a href="#">FG18C0G2A120JNT06</a> |
| C0G                         | 15pF        | ±5%       | 100                      | <a href="#">FG18C0G2A150JNT00</a> | <a href="#">FG18C0G2A150JNT06</a> |
| C0G                         | 18pF        | ±5%       | 100                      | <a href="#">FG18C0G2A180JNT00</a> | <a href="#">FG18C0G2A180JNT06</a> |
| C0G                         | 22pF        | ±5%       | 100                      | <a href="#">FG18C0G2A220JNT00</a> | <a href="#">FG18C0G2A220JNT06</a> |
| C0G                         | 27pF        | ±5%       | 100                      | <a href="#">FG18C0G2A270JNT00</a> | <a href="#">FG18C0G2A270JNT06</a> |
| C0G                         | 33pF        | ±5%       | 100                      | <a href="#">FG18C0G2A330JNT00</a> | <a href="#">FG18C0G2A330JNT06</a> |
| C0G                         | 39pF        | ±5%       | 100                      | <a href="#">FG18C0G2A390JNT00</a> | <a href="#">FG18C0G2A390JNT06</a> |
| C0G                         | 47pF        | ±5%       | 100                      | <a href="#">FG18C0G2A470JNT00</a> | <a href="#">FG18C0G2A470JNT06</a> |
| C0G                         | 56pF        | ±5%       | 100                      | <a href="#">FG18C0G2A560JNT00</a> | <a href="#">FG18C0G2A560JNT06</a> |
| C0G                         | 68pF        | ±5%       | 100                      | <a href="#">FG18C0G2A680JNT00</a> | <a href="#">FG18C0G2A680JNT06</a> |
| C0G                         | 82pF        | ±5%       | 100                      | <a href="#">FG18C0G2A820JNT00</a> | <a href="#">FG18C0G2A820JNT06</a> |
| C0G                         | 100pF       | ±5%       | 100                      | <a href="#">FG18C0G2A101JNT00</a> | <a href="#">FG18C0G2A101JNT06</a> |
| C0G                         | 120pF       | ±5%       | 100                      | <a href="#">FG18C0G2A121JNT00</a> | <a href="#">FG18C0G2A121JNT06</a> |
| C0G                         | 150pF       | ±5%       | 100                      | <a href="#">FG18C0G2A151JNT00</a> | <a href="#">FG18C0G2A151JNT06</a> |
| C0G                         | 180pF       | ±5%       | 100                      | <a href="#">FG18C0G2A181JNT00</a> | <a href="#">FG18C0G2A181JNT06</a> |
| C0G                         | 220pF       | ±5%       | 100                      | <a href="#">FG18C0G2A221JNT00</a> | <a href="#">FG18C0G2A221JNT06</a> |
| C0G                         | 270pF       | ±5%       | 100                      | <a href="#">FG18C0G2A271JNT00</a> | <a href="#">FG18C0G2A271JNT06</a> |
| C0G                         | 330pF       | ±5%       | 100                      | <a href="#">FG18C0G2A331JNT00</a> | <a href="#">FG18C0G2A331JNT06</a> |
| C0G                         | 390pF       | ±5%       | 100                      | <a href="#">FG18C0G2A391JNT00</a> | <a href="#">FG18C0G2A391JNT06</a> |
| C0G                         | 470pF       | ±5%       | 100                      | <a href="#">FG18C0G2A471JNT00</a> | <a href="#">FG18C0G2A471JNT06</a> |
| C0G                         | 560pF       | ±5%       | 100                      | <a href="#">FG18C0G2A561JNT00</a> | <a href="#">FG18C0G2A561JNT06</a> |
| C0G                         | 680pF       | ±5%       | 100                      | <a href="#">FG18C0G2A681JNT00</a> | <a href="#">FG18C0G2A681JNT06</a> |
| C0G                         | 820pF       | ±5%       | 100                      | <a href="#">FG18C0G2A821JNT00</a> | <a href="#">FG18C0G2A821JNT06</a> |
| C0G                         | 1nF         | ±5%       | 100                      | <a href="#">FG18C0G2A102JNT00</a> | <a href="#">FG18C0G2A102JNT06</a> |
| C0G                         | 1.2nF       | ±5%       | 100                      | <a href="#">FG18C0G2A122JNT00</a> | <a href="#">FG18C0G2A122JNT06</a> |
| C0G                         | 1.5nF       | ±5%       | 100                      | <a href="#">FG18C0G2A152JNT00</a> | <a href="#">FG18C0G2A152JNT06</a> |
| C0G                         | 1.8nF       | ±5%       | 100                      | <a href="#">FG18C0G2A182JNT00</a> | <a href="#">FG18C0G2A182JNT06</a> |
| C0G                         | 2.2nF       | ±5%       | 100                      | <a href="#">FG18C0G2A222JNT00</a> | <a href="#">FG18C0G2A222JNT06</a> |
| C0G                         | 2.7nF       | ±5%       | 100                      | <a href="#">FG18C0G2A272JNT00</a> | <a href="#">FG18C0G2A272JNT06</a> |
| C0G                         | 3.3nF       | ±5%       | 100                      | <a href="#">FG18C0G2A332JNT00</a> | <a href="#">FG18C0G2A332JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 100                      | <a href="#">FG18C0G2A392JRT00</a> | <a href="#">FG18C0G2A392JRT06</a> |
| C0G                         | 4.7nF       | ±5%       | 100                      | <a href="#">FG18C0G2A472JRT00</a> | <a href="#">FG18C0G2A472JRT06</a> |
| C0G                         | 5.6nF       | ±5%       | 100                      | <a href="#">FG18C0G2A562JRT00</a> | <a href="#">FG18C0G2A562JRT06</a> |
| C0G                         | 6.8nF       | ±5%       | 100                      | <a href="#">FG18C0G2A682JRT00</a> | <a href="#">FG18C0G2A682JRT06</a> |
| C0G                         | 8.2nF       | ±5%       | 100                      | <a href="#">FG18C0G2A822JRT00</a> | <a href="#">FG18C0G2A822JRT06</a> |
| C0G                         | 10nF        | ±5%       | 100                      | <a href="#">FG18C0G2A103JRT00</a> | <a href="#">FG18C0G2A103JRT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

# FG18 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 1.5uF       | ±10%      | 25                       | <a href="#">FG18X5R1E155KRT00</a> | <a href="#">FG18X5R1E155KRT06</a> |
| X5R                         | 2.2uF       | ±10%      | 25                       | <a href="#">FG18X5R1E225KRT00</a> | <a href="#">FG18X5R1E225KRT06</a> |
| X5R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG18X5R1E335KRT00</a> | <a href="#">FG18X5R1E335KRT06</a> |
| X5R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG18X5R1E475KRT00</a> | <a href="#">FG18X5R1E475KRT06</a> |
| X5R                         | 6.8uF       | ±10%      | 25                       | <a href="#">FG18X5R1E685KRT00</a> | <a href="#">FG18X5R1E685KRT06</a> |
| X5R                         | 10uF        | ±20%      | 25                       | <a href="#">FG18X5R1E106MRT00</a> | <a href="#">FG18X5R1E106MRT06</a> |
| X5R                         | 680nF       | ±10%      | 50                       | <a href="#">FG18X5R1H684KRT00</a> | <a href="#">FG18X5R1H684KRT06</a> |
| X5R                         | 1uF         | ±10%      | 50                       | <a href="#">FG18X5R1H105KRT00</a> | <a href="#">FG18X5R1H105KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 10                       | <a href="#">FG18X7R1A155KRT00</a> | <a href="#">FG18X7R1A155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 10                       | <a href="#">FG18X7R1A225KRT00</a> | <a href="#">FG18X7R1A225KRT06</a> |
| X7R                         | 150nF       | ±10%      | 25                       | <a href="#">FG18X7R1E154KNT00</a> | <a href="#">FG18X7R1E154KNT06</a> |
| X7R                         | 680nF       | ±10%      | 25                       | <a href="#">FG18X7R1E684KRT00</a> | <a href="#">FG18X7R1E684KRT06</a> |
| X7R                         | 1uF         | ±10%      | 25                       | <a href="#">FG18X7R1E105KRT00</a> | <a href="#">FG18X7R1E105KRT06</a> |
| X7R                         | 1nF         | ±10%      | 50                       | <a href="#">FG18X7R1H102KNT00</a> | <a href="#">FG18X7R1H102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 50                       | <a href="#">FG18X7R1H152KNT00</a> | <a href="#">FG18X7R1H152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 50                       | <a href="#">FG18X7R1H222KNT00</a> | <a href="#">FG18X7R1H222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 50                       | <a href="#">FG18X7R1H332KNT00</a> | <a href="#">FG18X7R1H332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 50                       | <a href="#">FG18X7R1H472KNT00</a> | <a href="#">FG18X7R1H472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 50                       | <a href="#">FG18X7R1H682KNT00</a> | <a href="#">FG18X7R1H682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 50                       | <a href="#">FG18X7R1H103KNT00</a> | <a href="#">FG18X7R1H103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 50                       | <a href="#">FG18X7R1H153KNT00</a> | <a href="#">FG18X7R1H153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 50                       | <a href="#">FG18X7R1H223KNT00</a> | <a href="#">FG18X7R1H223KNT06</a> |
| X7R                         | 33nF        | ±10%      | 50                       | <a href="#">FG18X7R1H333KNT00</a> | <a href="#">FG18X7R1H333KNT06</a> |
| X7R                         | 47nF        | ±10%      | 50                       | <a href="#">FG18X7R1H473KNT00</a> | <a href="#">FG18X7R1H473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 50                       | <a href="#">FG18X7R1H683KNT00</a> | <a href="#">FG18X7R1H683KNT06</a> |
| X7R                         | 100nF       | ±10%      | 50                       | <a href="#">FG18X7R1H104KNT00</a> | <a href="#">FG18X7R1H104KNT06</a> |
| X7R                         | 150nF       | ±10%      | 50                       | <a href="#">FG18X7R1H154KRT00</a> | <a href="#">FG18X7R1H154KRT06</a> |
| X7R                         | 220nF       | ±10%      | 50                       | <a href="#">FG18X7R1H224KRT00</a> | <a href="#">FG18X7R1H224KRT06</a> |
| X7R                         | 330nF       | ±10%      | 50                       | <a href="#">FG18X7R1H334KRT00</a> | <a href="#">FG18X7R1H334KRT06</a> |
| X7R                         | 470nF       | ±10%      | 50                       | <a href="#">FG18X7R1H474KRT00</a> | <a href="#">FG18X7R1H474KRT06</a> |
| X7R                         | 1nF         | ±10%      | 100                      | <a href="#">FG18X7R2A102KNT00</a> | <a href="#">FG18X7R2A102KNT06</a> |
| X7R                         | 1.5nF       | ±10%      | 100                      | <a href="#">FG18X7R2A152KNT00</a> | <a href="#">FG18X7R2A152KNT06</a> |
| X7R                         | 2.2nF       | ±10%      | 100                      | <a href="#">FG18X7R2A222KNT00</a> | <a href="#">FG18X7R2A222KNT06</a> |
| X7R                         | 3.3nF       | ±10%      | 100                      | <a href="#">FG18X7R2A332KNT00</a> | <a href="#">FG18X7R2A332KNT06</a> |
| X7R                         | 4.7nF       | ±10%      | 100                      | <a href="#">FG18X7R2A472KNT00</a> | <a href="#">FG18X7R2A472KNT06</a> |
| X7R                         | 6.8nF       | ±10%      | 100                      | <a href="#">FG18X7R2A682KNT00</a> | <a href="#">FG18X7R2A682KNT06</a> |
| X7R                         | 10nF        | ±10%      | 100                      | <a href="#">FG18X7R2A103KNT00</a> | <a href="#">FG18X7R2A103KNT06</a> |
| X7R                         | 15nF        | ±10%      | 100                      | <a href="#">FG18X7R2A153KNT00</a> | <a href="#">FG18X7R2A153KNT06</a> |
| X7R                         | 22nF        | ±10%      | 100                      | <a href="#">FG18X7R2A223KNT00</a> | <a href="#">FG18X7R2A223KNT06</a> |
| X7S                         | 33nF        | ±10%      | 100                      | <a href="#">FG18X7S2A333KRT00</a> | <a href="#">FG18X7S2A333KRT06</a> |
| X7S                         | 47nF        | ±10%      | 100                      | <a href="#">FG18X7S2A473KRT00</a> | <a href="#">FG18X7S2A473KRT06</a> |
| X7S                         | 68nF        | ±10%      | 100                      | <a href="#">FG18X7S2A683KRT00</a> | <a href="#">FG18X7S2A683KRT06</a> |
| X7S                         | 100nF       | ±10%      | 100                      | <a href="#">FG18X7S2A104KRT00</a> | <a href="#">FG18X7S2A104KRT06</a> |

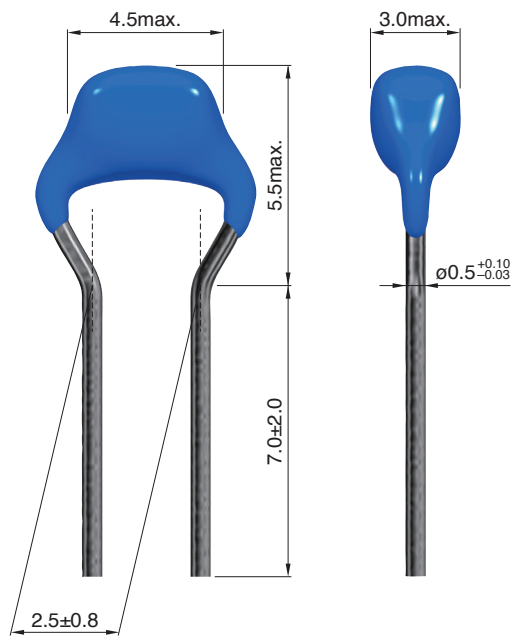
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

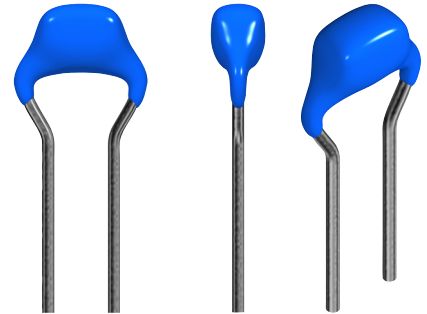
\* The part numbers are TDK's standard specification products.

# FG14 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG14 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 15nF        | ±5%       | 50                       | <a href="#">FG14C0G1H153JNT00</a> | <a href="#">FG14C0G1H153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 50                       | <a href="#">FG14C0G1H223JNT00</a> | <a href="#">FG14C0G1H223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 50                       | <a href="#">FG14C0G1H333JNT00</a> | <a href="#">FG14C0G1H333JNT06</a> |
| C0G                         | 3.9nF       | ±5%       | 100                      | <a href="#">FG14C0G2A392JNT00</a> | <a href="#">FG14C0G2A392JNT06</a> |
| C0G                         | 4.7nF       | ±5%       | 100                      | <a href="#">FG14C0G2A472JNT00</a> | <a href="#">FG14C0G2A472JNT06</a> |
| C0G                         | 5.6nF       | ±5%       | 100                      | <a href="#">FG14C0G2A562JNT00</a> | <a href="#">FG14C0G2A562JNT06</a> |
| C0G                         | 6.8nF       | ±5%       | 100                      | <a href="#">FG14C0G2A682JNT00</a> | <a href="#">FG14C0G2A682JNT06</a> |
| C0G                         | 8.2nF       | ±5%       | 100                      | <a href="#">FG14C0G2A822JNT00</a> | <a href="#">FG14C0G2A822JNT06</a> |
| C0G                         | 10nF        | ±5%       | 100                      | <a href="#">FG14C0G2A103JNT00</a> | <a href="#">FG14C0G2A103JNT06</a> |
| C0G                         | 15nF        | ±5%       | 100                      | <a href="#">FG14C0G2A153JRT00</a> | <a href="#">FG14C0G2A153JRT06</a> |
| C0G                         | 22nF        | ±5%       | 100                      | <a href="#">FG14C0G2A223JRT00</a> | <a href="#">FG14C0G2A223JRT06</a> |
| C0G                         | 33nF        | ±5%       | 100                      | <a href="#">FG14C0G2A333JRT00</a> | <a href="#">FG14C0G2A333JRT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 15uF        | ±20%      | 25                       | <a href="#">FG14X5R1E156MRT00</a> | <a href="#">FG14X5R1E156MRT06</a> |
| X5R                         | 3.3uF       | ±10%      | 50                       | <a href="#">FG14X5R1H335KRT00</a> | <a href="#">FG14X5R1H335KRT06</a> |
| X5R                         | 4.7uF       | ±10%      | 50                       | <a href="#">FG14X5R1H475KRT00</a> | <a href="#">FG14X5R1H475KRT06</a> |
| X7R                         | 6.8uF       | ±10%      | 10                       | <a href="#">FG14X7R1A685KRT00</a> | <a href="#">FG14X7R1A685KRT06</a> |
| X7R                         | 10uF        | ±10%      | 10                       | <a href="#">FG14X7R1A106KRT00</a> | <a href="#">FG14X7R1A106KRT06</a> |
| X7R                         | 680nF       | ±10%      | 16                       | <a href="#">FG14X7R1C684KNT00</a> | <a href="#">FG14X7R1C684KNT06</a> |
| X7R                         | 470nF       | ±10%      | 25                       | <a href="#">FG14X7R1E474KNT00</a> | <a href="#">FG14X7R1E474KNT06</a> |
| X7R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG14X7R1E335KRT00</a> | <a href="#">FG14X7R1E335KRT06</a> |
| X7R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG14X7R1E475KRT00</a> | <a href="#">FG14X7R1E475KRT06</a> |
| X7R                         | 150nF       | ±10%      | 50                       | <a href="#">FG14X7R1H154KNT00</a> | <a href="#">FG14X7R1H154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 50                       | <a href="#">FG14X7R1H224KNT00</a> | <a href="#">FG14X7R1H224KNT06</a> |
| X7R                         | 330nF       | ±10%      | 50                       | <a href="#">FG14X7R1H334KNT00</a> | <a href="#">FG14X7R1H334KNT06</a> |
| X7R                         | 680nF       | ±10%      | 50                       | <a href="#">FG14X7R1H684KRT00</a> | <a href="#">FG14X7R1H684KRT06</a> |
| X7R                         | 1uF         | ±10%      | 50                       | <a href="#">FG14X7R1H105KRT00</a> | <a href="#">FG14X7R1H105KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 50                       | <a href="#">FG14X7R1H155KRT00</a> | <a href="#">FG14X7R1H155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 50                       | <a href="#">FG14X7R1H225KRT00</a> | <a href="#">FG14X7R1H225KRT06</a> |
| X7R                         | 33nF        | ±10%      | 100                      | <a href="#">FG14X7R2A333KNT00</a> | <a href="#">FG14X7R2A333KNT06</a> |
| X7R                         | 47nF        | ±10%      | 100                      | <a href="#">FG14X7R2A473KNT00</a> | <a href="#">FG14X7R2A473KNT06</a> |
| X7R                         | 68nF        | ±10%      | 100                      | <a href="#">FG14X7R2A683KNT00</a> | <a href="#">FG14X7R2A683KNT06</a> |
| X7R                         | 100nF       | ±10%      | 100                      | <a href="#">FG14X7R2A104KNT00</a> | <a href="#">FG14X7R2A104KNT06</a> |
| X7S                         | 150nF       | ±10%      | 100                      | <a href="#">FG14X7S2A154KRT00</a> | <a href="#">FG14X7S2A154KRT06</a> |
| X7S                         | 220nF       | ±10%      | 100                      | <a href="#">FG14X7S2A224KRT00</a> | <a href="#">FG14X7S2A224KRT06</a> |
| X7S                         | 330nF       | ±10%      | 100                      | <a href="#">FG14X7S2A334KRT00</a> | <a href="#">FG14X7S2A334KRT06</a> |
| X7S                         | 470nF       | ±10%      | 100                      | <a href="#">FG14X7S2A474KRT00</a> | <a href="#">FG14X7S2A474KRT06</a> |
| X7S                         | 680nF       | ±10%      | 100                      | <a href="#">FG14X7S2A684KRT00</a> | <a href="#">FG14X7S2A684KRT06</a> |
| X7S                         | 1uF         | ±10%      | 100                      | <a href="#">FG14X7S2A105KRT00</a> | <a href="#">FG14X7S2A105KRT06</a> |

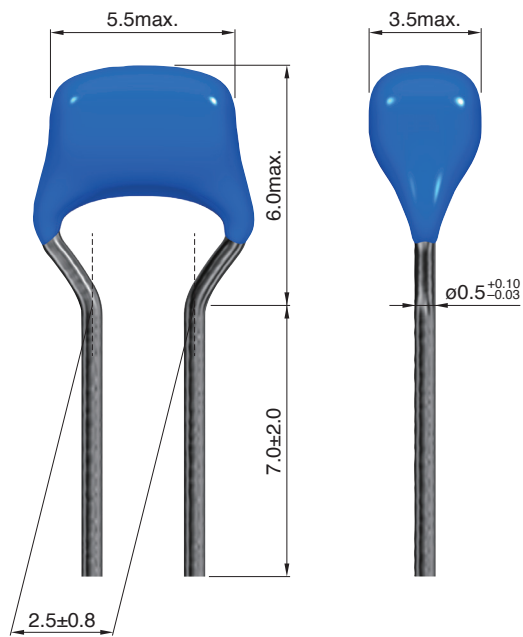
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

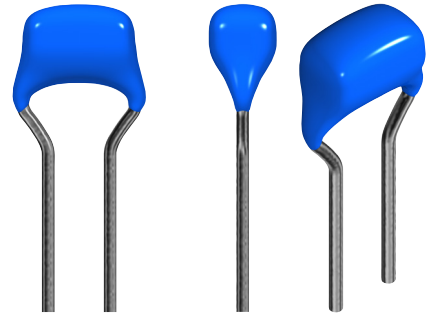
\* The part numbers are TDK's standard specification products.

# FG16 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG16 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 47nF        | ±5%       | 50                       | <a href="#">FG16C0G1H473JNT00</a> | <a href="#">FG16C0G1H473JNT06</a> |
| C0G                         | 68nF        | ±5%       | 50                       | <a href="#">FG16C0G1H683JNT00</a> | <a href="#">FG16C0G1H683JNT06</a> |
| C0G                         | 100nF       | ±5%       | 50                       | <a href="#">FG16C0G1H104JNT00</a> | <a href="#">FG16C0G1H104JNT06</a> |
| C0G                         | 15nF        | ±5%       | 100                      | <a href="#">FG16C0G2A153JNT00</a> | <a href="#">FG16C0G2A153JNT06</a> |
| C0G                         | 22nF        | ±5%       | 100                      | <a href="#">FG16C0G2A223JNT00</a> | <a href="#">FG16C0G2A223JNT06</a> |
| C0G                         | 33nF        | ±5%       | 100                      | <a href="#">FG16C0G2A333JNT00</a> | <a href="#">FG16C0G2A333JNT06</a> |
| C0G                         | 47nF        | ±5%       | 100                      | <a href="#">FG16C0G2A473JRT00</a> | <a href="#">FG16C0G2A473JRT06</a> |
| C0G                         | 68nF        | ±5%       | 100                      | <a href="#">FG16C0G2A683JRT00</a> | <a href="#">FG16C0G2A683JRT06</a> |
| C0G                         | 100nF       | ±5%       | 100                      | <a href="#">FG16C0G2A104JRT00</a> | <a href="#">FG16C0G2A104JRT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X5R                         | 33uF        | ±20%      | 25                       | <a href="#">FG16X5R1E336MRT00</a> | <a href="#">FG16X5R1E336MRT06</a> |
| X5R                         | 6.8uF       | ±10%      | 50                       | <a href="#">FG16X5R1H685KRT00</a> | <a href="#">FG16X5R1H685KRT06</a> |
| X5R                         | 10uF        | ±10%      | 50                       | <a href="#">FG16X5R1H106KRT00</a> | <a href="#">FG16X5R1H106KRT06</a> |
| X7R                         | 1uF         | ±10%      | 25                       | <a href="#">FG16X7R1E105KNT00</a> | <a href="#">FG16X7R1E105KNT06</a> |
| X7R                         | 1.5uF       | ±10%      | 25                       | <a href="#">FG16X7R1E155KNT00</a> | <a href="#">FG16X7R1E155KNT06</a> |
| X7R                         | 2.2uF       | ±10%      | 25                       | <a href="#">FG16X7R1E225KNT00</a> | <a href="#">FG16X7R1E225KNT06</a> |
| X7R                         | 6.8uF       | ±10%      | 25                       | <a href="#">FG16X7R1E685KRT00</a> | <a href="#">FG16X7R1E685KRT06</a> |
| X7R                         | 10uF        | ±10%      | 25                       | <a href="#">FG16X7R1E106KRT00</a> | <a href="#">FG16X7R1E106KRT06</a> |
| X7R                         | 470nF       | ±10%      | 50                       | <a href="#">FG16X7R1H474KNT00</a> | <a href="#">FG16X7R1H474KNT06</a> |
| X7R                         | 680nF       | ±10%      | 50                       | <a href="#">FG16X7R1H684KNT00</a> | <a href="#">FG16X7R1H684KNT06</a> |
| X7R                         | 3.3uF       | ±10%      | 50                       | <a href="#">FG16X7R1H335KRT00</a> | <a href="#">FG16X7R1H335KRT06</a> |
| X7R                         | 4.7uF       | ±10%      | 50                       | <a href="#">FG16X7R1H475KRT00</a> | <a href="#">FG16X7R1H475KRT06</a> |
| X7R                         | 150nF       | ±10%      | 100                      | <a href="#">FG16X7R2A154KNT00</a> | <a href="#">FG16X7R2A154KNT06</a> |
| X7R                         | 220nF       | ±10%      | 100                      | <a href="#">FG16X7R2A224KNT00</a> | <a href="#">FG16X7R2A224KNT06</a> |
| X7R                         | 330nF       | ±10%      | 100                      | <a href="#">FG16X7R2A334KNT00</a> | <a href="#">FG16X7R2A334KNT06</a> |
| X7R                         | 470nF       | ±10%      | 100                      | <a href="#">FG16X7R2A474KNT00</a> | <a href="#">FG16X7R2A474KNT06</a> |
| X7R                         | 680nF       | ±10%      | 100                      | <a href="#">FG16X7R2A684KNT00</a> | <a href="#">FG16X7R2A684KNT06</a> |
| X7R                         | 1uF         | ±10%      | 100                      | <a href="#">FG16X7R2A105KNT00</a> | <a href="#">FG16X7R2A105KNT06</a> |
| X7S                         | 1.5uF       | ±10%      | 100                      | <a href="#">FG16X7S2A155KRT00</a> | <a href="#">FG16X7S2A155KRT06</a> |
| X7S                         | 2.2uF       | ±10%      | 100                      | <a href="#">FG16X7S2A225KRT00</a> | <a href="#">FG16X7S2A225KRT06</a> |
| X7S                         | 3.3uF       | ±10%      | 100                      | <a href="#">FG16X7S2A335KRT00</a> | <a href="#">FG16X7S2A335KRT06</a> |

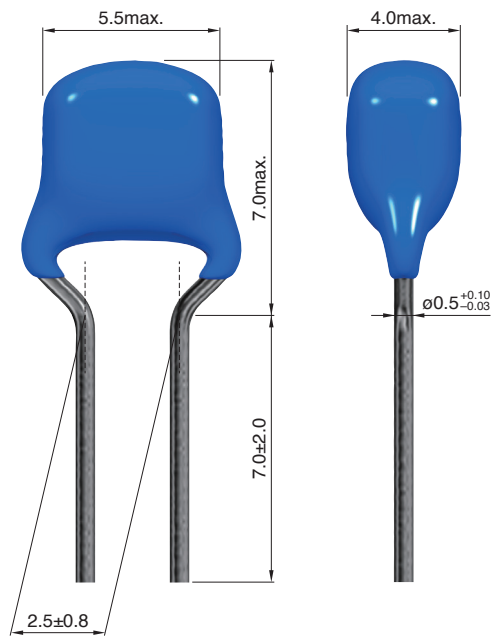
■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

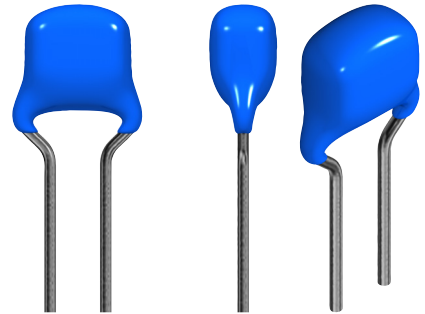
\* The part numbers are TDK's standard specification products.

# FG11 type

## ■ SHAPE & DIMENSIONS



Dimensions in mm



# FG11 type

## ELECTRICAL CHARACTERISTICS

### CHARACTERISTICS SPECIFICATION TABLE

#### CLASS 1 (TEMPERATURE COMPENSATION)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| C0G                         | 47nF        | ±5%       | 100                      | <a href="#">FG11C0G2A473JNT00</a> | <a href="#">FG11C0G2A473JNT06</a> |
| C0G                         | 68nF        | ±5%       | 100                      | <a href="#">FG11C0G2A683JNT00</a> | <a href="#">FG11C0G2A683JNT06</a> |

Click the part numbers for details.

\* The part numbers are TDK's standard specification products.

#### CLASS 2 (TEMPERATURE STABLE)

| Temperature characteristics | Capacitance | Tolerance | Rated voltage<br>Edc (V) | Part No.*                         |                                   |
|-----------------------------|-------------|-----------|--------------------------|-----------------------------------|-----------------------------------|
|                             |             |           |                          | Separate                          | Taping                            |
| X7R                         | 15uF        | ±20%      | 16                       | <a href="#">FG11X7R1C156MRT00</a> | <a href="#">FG11X7R1C156MRT06</a> |
| X7R                         | 22uF        | ±20%      | 16                       | <a href="#">FG11X7R1C226MRT00</a> | <a href="#">FG11X7R1C226MRT06</a> |
| X7R                         | 3.3uF       | ±10%      | 25                       | <a href="#">FG11X7R1E335KNT00</a> | <a href="#">FG11X7R1E335KNT06</a> |
| X7R                         | 4.7uF       | ±10%      | 25                       | <a href="#">FG11X7R1E475KNT00</a> | <a href="#">FG11X7R1E475KNT06</a> |
| X7R                         | 1uF         | ±10%      | 50                       | <a href="#">FG11X7R1H105KNT00</a> | <a href="#">FG11X7R1H105KNT06</a> |
| X7R                         | 1.5uF       | ±10%      | 50                       | <a href="#">FG11X7R1H155KNT00</a> | <a href="#">FG11X7R1H155KNT06</a> |
| X7R                         | 10uF        | ±10%      | 50                       | <a href="#">FG11X7R1H106KRT00</a> | <a href="#">FG11X7R1H106KRT06</a> |
| X7R                         | 1.5uF       | ±10%      | 100                      | <a href="#">FG11X7R2A155KRT00</a> | <a href="#">FG11X7R2A155KRT06</a> |
| X7R                         | 2.2uF       | ±10%      | 100                      | <a href="#">FG11X7R2A225KRT00</a> | <a href="#">FG11X7R2A225KRT06</a> |
| X7S                         | 6.8uF       | ±10%      | 50                       | <a href="#">FG11X7S1H685KRT00</a> | <a href="#">FG11X7S1H685KRT06</a> |
| X7S                         | 10uF        | ±10%      | 50                       | <a href="#">FG11X7S1H106KRT00</a> | <a href="#">FG11X7S1H106KRT06</a> |
| X7S                         | 4.7uF       | ±10%      | 100                      | <a href="#">FG11X7S2A475KRT00</a> | <a href="#">FG11X7S2A475KRT06</a> |

■ Gray items: These products are not recommended for new designs.

Click the part numbers for details.

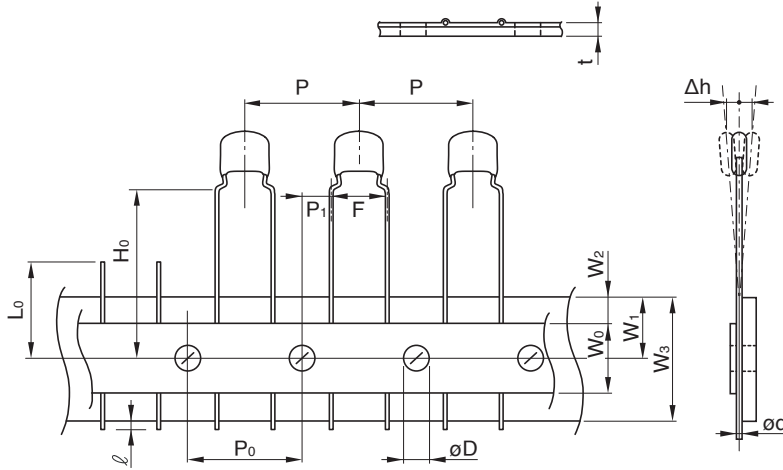
\* The part numbers are TDK's standard specification products.

# PACKAGING STYLE

## TAPING DIMENSIONS

### Lead pitch 5.0 mm

(FG28, FG24, FG26, FG20, FG22, FG23 type)



| Symbol                       | Dimensions(mm)  |
|------------------------------|-----------------|
| P                            | (12.7)          |
| P <sub>0</sub>               | (12.7)          |
| P <sub>1</sub>               | (3.85)          |
| W <sub>0</sub>               | 12.0±1.0        |
| W <sub>1</sub>               | 9.0±0.5         |
| W <sub>2</sub> <sup>*1</sup> | 3.0max.         |
| W <sub>3</sub>               | 18.0+1.0, -0.5  |
| H <sub>0</sub>               | 16.0±0.8        |
| l                            | 1.0max.         |
| t                            | 0.6±0.2         |
| L <sub>0</sub> <sup>*2</sup> | 11.0max.        |
| F <sup>*3</sup>              | 5.0+0.8, -0.2   |
| ød                           | ø0.5+0.1, -0.03 |
| øD                           | (ø4.0)          |
| Δh                           | (±2)            |

The values in parentheses "( )" are reference values.

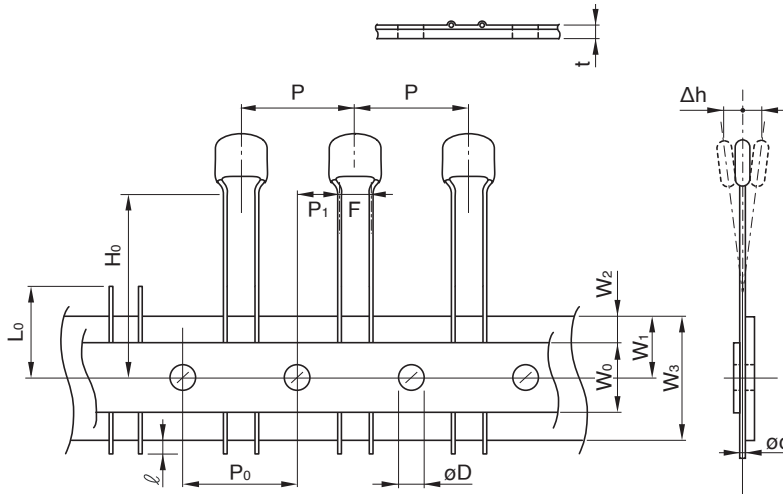
\*1 Adhesive tape shall not stick out from carrier tape.

\*2 The number of consecutive gaps in the product shall be three or less.

\*3 The measurement position should be 1.5 to 2.0 mm below the kink.

### Lead pitch 2.5 mm

(FG18, FG14, FG16, FG11 type)



| Symbol                       | Dimensions(mm)  |
|------------------------------|-----------------|
| P                            | (12.7)          |
| P <sub>0</sub>               | (12.7)          |
| P <sub>1</sub>               | (5.1)           |
| W <sub>0</sub>               | 12.0±1.0        |
| W <sub>1</sub>               | 9.0±0.5         |
| W <sub>2</sub> <sup>*1</sup> | 3.0max.         |
| W <sub>3</sub>               | 18.0+1.0, -0.5  |
| H <sub>0</sub>               | 16.0±0.8        |
| l                            | 1.0max.         |
| t                            | 0.6±0.2         |
| L <sub>0</sub> <sup>*2</sup> | 11.0max.        |
| F <sup>*3</sup>              | 2.5+0.5, -0.2   |
| ød                           | ø0.5+0.1, -0.03 |
| øD                           | (ø4.0)          |
| Δh                           | (±2)            |

The values in parentheses "( )" are reference values.

\*1 Adhesive tape shall not stick out from carrier tape.

\*2 The number of consecutive gaps in the product shall be three or less.

\*3 The measurement position should be 1.5 to 2.0 mm below the kink.

## AMMO PACK INNER BOX SIZE

