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# UES

Bi-Polarized, For Audio Equipment



For Audio Use



Bi-polarized

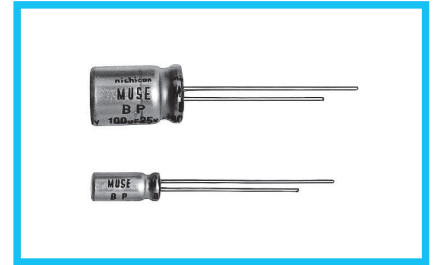
Anti-Solvent  
Feature

- Bi-polarized “nichicon MUSE” acoustic series.
- Suited for audio signal circuits.
- Compliant to the RoHS directive (2011/65/EU).

**UES**

Bi-polarized

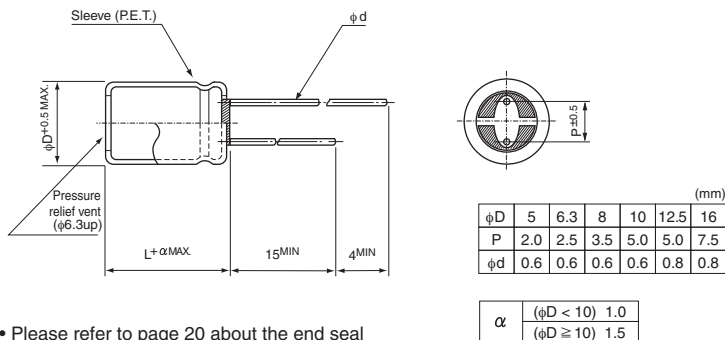
UFW



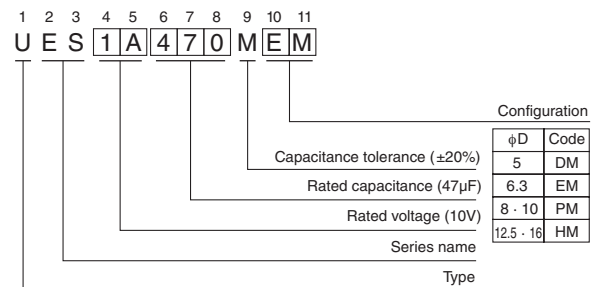
## Specifications

| Item                          | Performance Characteristics                                                                                                                                                                                                            |                 |      |      |                    |      |                                                   |    |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------|------|--------------------|------|---------------------------------------------------|----|
| Category Temperature Range    | -40 to +85°C                                                                                                                                                                                                                           |                 |      |      |                    |      |                                                   |    |
| Rated Voltage Range           | 6.3 to 50V                                                                                                                                                                                                                             |                 |      |      |                    |      |                                                   |    |
| Rated Capacitance Range       | 1 to 1000μF                                                                                                                                                                                                                            |                 |      |      |                    |      |                                                   |    |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C                                                                                                                                                                                                                    |                 |      |      |                    |      |                                                   |    |
| Leakage Current               | After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.                                                                                                        |                 |      |      |                    |      |                                                   |    |
| Tangent of loss angle (tan δ) | Measurement frequency : 120Hz at 20°C                                                                                                                                                                                                  |                 |      |      |                    |      |                                                   |    |
|                               | Rated voltage (V)                                                                                                                                                                                                                      | 6.3             | 10   | 16   | 25                 | 35   | 50                                                |    |
|                               | tan δ (MAX.)                                                                                                                                                                                                                           | 0.24            | 0.20 | 0.16 | 0.16               | 0.14 | 0.12                                              |    |
| Stability at Low Temperature  | Measurement frequency : 120Hz                                                                                                                                                                                                          |                 |      |      |                    |      |                                                   |    |
|                               | Rated voltage (V)                                                                                                                                                                                                                      |                 | 6.3  | 10   | 16                 | 25   | 35                                                | 50 |
|                               | Impedance ratio                                                                                                                                                                                                                        | Z-25°C / Z+20°C | 4    | 3    | 2                  | 2    | 2                                                 | 2  |
|                               | ZT / Z20 (MAX.)                                                                                                                                                                                                                        | Z-40°C / Z+20°C | 8    | 6    | 4                  | 4    | 4                                                 | 4  |
| Endurance                     | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C with the polarity inverted every 250 hours.                                         |                 |      |      | Capacitance change |      | Within ±20% of the initial capacitance value      |    |
|                               |                                                                                                                                                                                                                                        |                 |      |      | tan δ              |      | 150% or less than the initial specified value     |    |
|                               |                                                                                                                                                                                                                                        |                 |      |      | Leakage current    |      | Less than or equal to the initial specified value |    |
| Shelf Life                    | After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. |                 |      |      |                    |      |                                                   |    |
| Marking                       | Printed with black color letter on clear green sleeve.                                                                                                                                                                                 |                 |      |      |                    |      |                                                   |    |

## Radial Lead Type



## Type numbering system (Example : 10V 47μF)



- Please refer to page 20 about the end seal configuration.

## Dimensions

|          |      | $\phi D \times L$ (mm) |           |           |           |           |           |
|----------|------|------------------------|-----------|-----------|-----------|-----------|-----------|
| V        | Code | 6.3                    | 10        | 16        | 25        | 35        | 50        |
| Cap.(μF) |      | 0J                     | 1A        | 1C        | 1E        | 1V        | 1H        |
| 1        | 010  |                        |           |           |           |           | 5 × 11    |
| 2.2      | 2R2  |                        |           |           |           |           | 5 × 11    |
| 3.3      | 3R3  |                        |           |           |           |           | 5 × 11    |
| 4.7      | 4R7  |                        |           |           | 5 × 11    | 5 × 11    | 6.3 × 11  |
| 10       | 100  |                        |           | 5 × 11    | 5 × 11    | 6.3 × 11  | 8 × 11.5  |
| 22       | 220  |                        | 5 × 11    | 6.3 × 11  | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 |
| 33       | 330  | 5 × 11                 | 6.3 × 11  | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 | 10 × 16   |
| 47       | 470  | 6.3 × 11               | 6.3 × 11  | 8 × 11.5  | 10 × 12.5 | 10 × 12.5 | 10 × 20   |
| 100      | 101  | 8 × 11.5               | 10 × 12.5 | 10 × 12.5 | 10 × 16   | 10 × 20   | 12.5 × 25 |
| 220      | 221  | 10 × 12.5              | 10 × 16   | 10 × 20   | 12.5 × 25 | 12.5 × 25 | 16 × 25   |
| 330      | 331  | 10 × 16                | 10 × 20   | 12.5 × 20 | 12.5 × 25 | 16 × 25   | 16 × 31.5 |
| 470      | 471  | 10 × 20                | 12.5 × 20 | 12.5 × 25 | 16 × 25   | 16 × 25   |           |
| 1000     | 102  | 12.5 × 25              | 16 × 25   | 16 × 25   | 16 × 31.5 |           |           |

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.