EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

2.7V High Temperature Snap-In Supercapacitors

ADCN-T02R7S

Request Samples Check Inventory

Various Sizes
RoHS/RoHS II Compliant
MSL Level = 1

Features

- High Energy density of over 5.0Wh/Kg
- Extreme ambient operating temperature range as cold as -40ºC and as hot as +85ºC.
- Low Self-discharge rate,
- Excellent cycle life of >50K cycles

Applications

- Smart Meter Applications
- Power Assist Circuits
- Power Backup
- Micro Energy Storage
- IoT Energy Harvesting

Electrical Specifications

Part Number	Nominal Voltage (U_R)	Capacitance	Tolerance Code	DC ESR (Max)	Continuous Current (Max)	Peak Current (Max)	Leakage Current (72hrs)	Stored Energy (Max)	Gravimetric Energy Density
ADCN-T02R7S	DC(V)	Farads		mΩ	A	A	µA	Wh	Wh/kg
ADCN-T02R7SA107	2.7V	100	M, Q	11.2	6.84	63	250	0.1010	4.44
ADCN-T02R7SA127	2.7V	120	M, Q	10.5	7.40	71	300	0.1215	4.25
ADCN-T02R7SA157	2.7V	150	M, Q	9.8	8.22	82	400	0.1519	4.34
ADCN-T02R7SA227	2.7V	220	M, Q	8.4	9.83	104	500	0.2228	4.72
ADCN-T02R7SA257	2.7V	250	M, Q	7.7	10.71	115	600	0.2531	5.19
ADCN-T02R7SA367	2.7V	360	M, Q	5.4	14.49	165	800	0.3645	4.84
ADCN-T02R7SB407	2.7V	400	M, Q	4.7	16.15	186	1000	0.4050	4.50

Operating Temperature: -40°C to +85°C
Storage Temperature: 10°C to +50°C, RH<60%
Test Conditions: +25°C

All parameters are measured according to the IEC 62391-1 standard.
Capacitance is measured with I(mA)= 4(C*U_R) and DC ESR is measured with I(mA)= 40(C*U_R).

Continuous Current (Δ15ºC): $\sqrt{15 \times SurfaceArea/ESR}$

Peak Current (Max.): $0.5U_R/(ESR + 1/C)$

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5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

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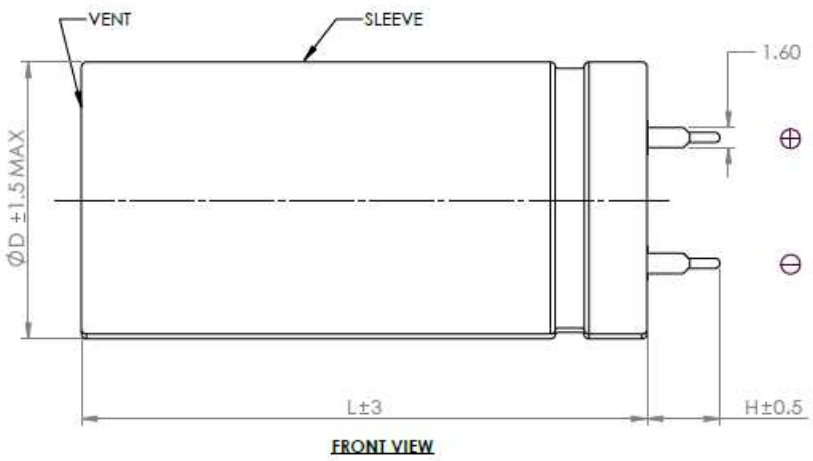
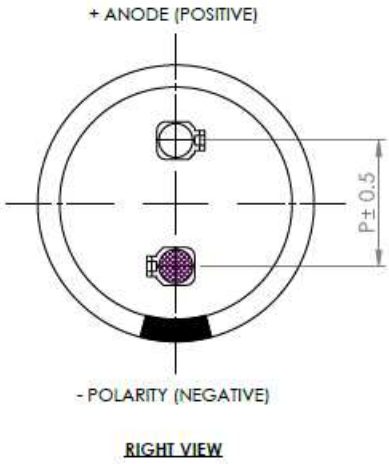
Mechanical Specifications





Part Number	D	L	P	H
ADCN-T02R7SA107	22	45	10	5.8
ADCN-T02R7SA127	22	50	10	5.8
ADCN-T02R7SA157	25	50	10	5.8
ADCN-T02R7SA227	30	50	10	5.8
ADCN-T02R7SA257	30	55	10	5.8
ADCN-T02R7SA367	35	60	10	5.8
ADCN-T02R7SA407	35	66	10	5.8

Dimensions: mm

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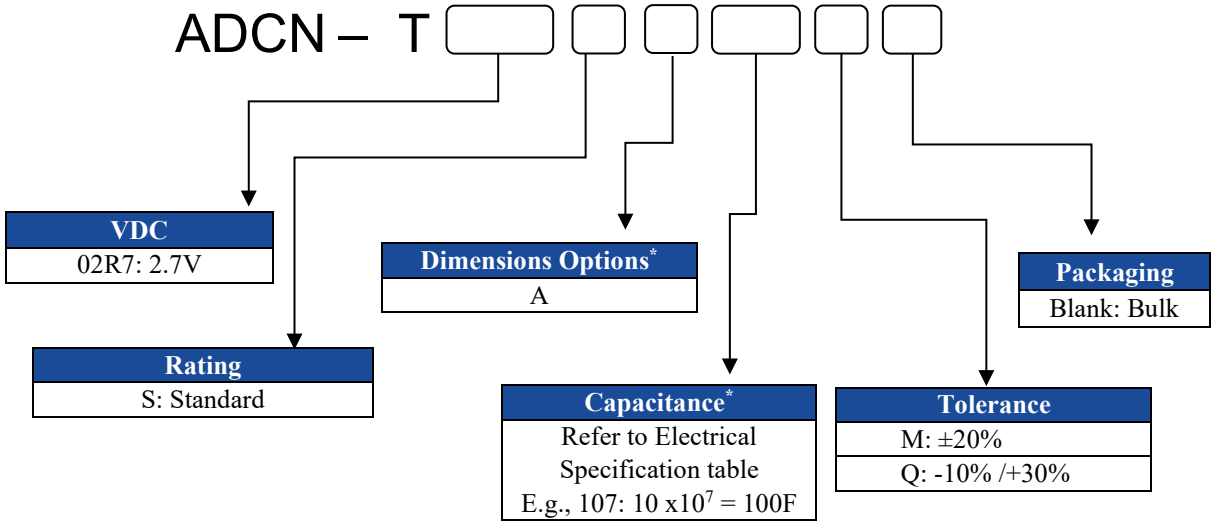
Part Number Identification



*Only part numbers listed in the Electrical Specs table are available. For custom builds, please contact us.

Part Marking

Example of the Markings of a 400F 2.7V capacitor

Capacitance (F)
Rated Voltage (V)
Polarity (negative bar on the sleeve to indicate the cathode)

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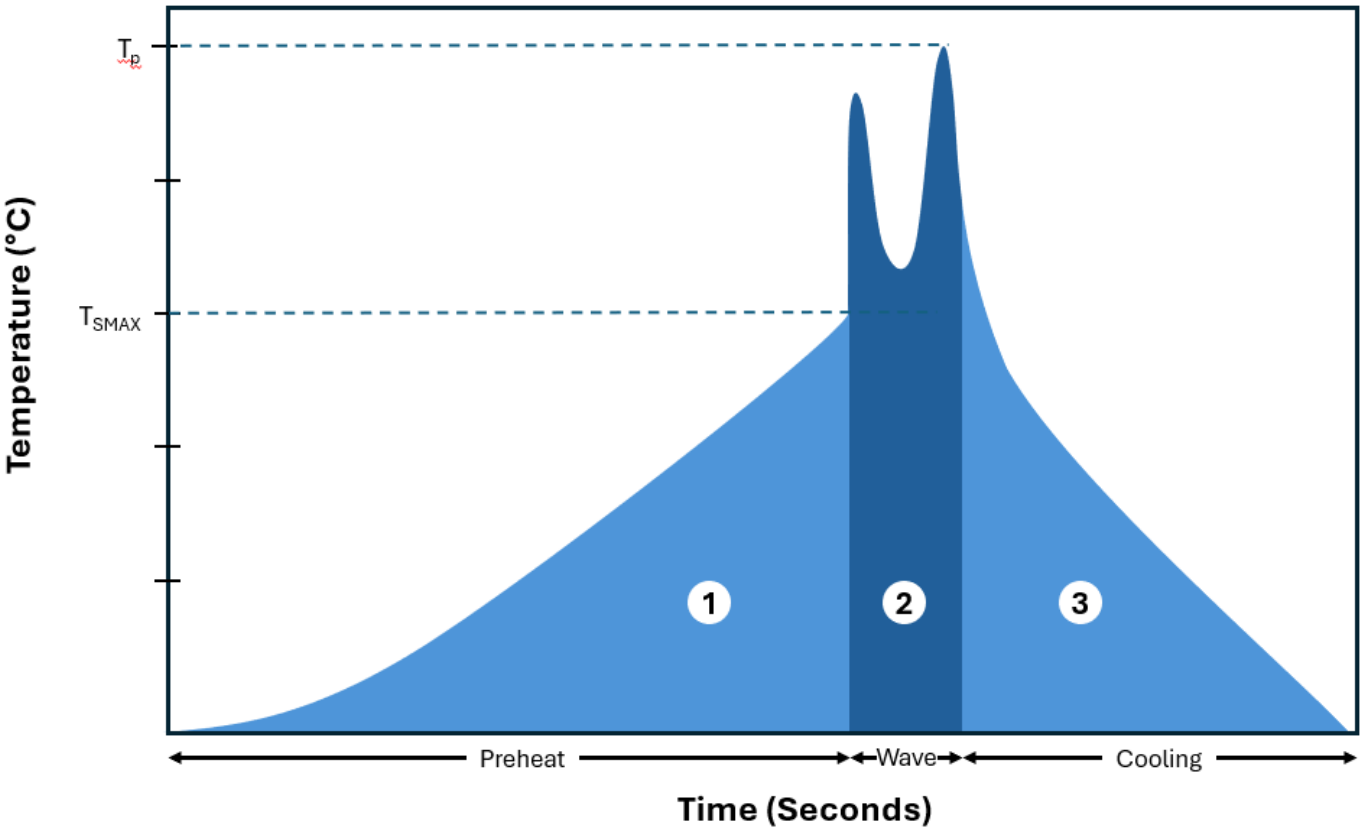
Wave Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 25°C ~ 130°C	80 sec. MAX
	Preheat Rate	$T_{PREHEAT}$ +4ºC/Sec MAX	
2	Wave Temperature	T_w 245°C ~ 260°C	10 sec. MAX Dual wave
	Wave Peak Temperature	T_P 260°C	5 sec. MAX/wave
3	Cooling Rate	$T_{COOLING}$	-5ºC/Sec MAX

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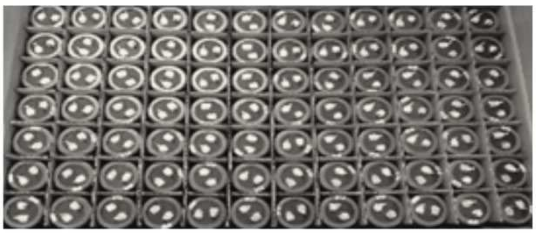
Packaging

Product is packaged in a carton containing multiple inner boxes, each containing several trays, boxes, etc.

Part Number	SPQ	Format
ADCN-T02R7SA107	84	Box, Individual
ADCN-T02R7SA127	84	Box, Individual
ADCN-T02R7SA157	84	Box, Individual
ADCN-T02R7SA227	45	Box, Individual
ADCN-T02R7SA257	45	Box, Individual
ADCN-T02R7SA367	45	Box, Individual
ADCN-T02R7SA407	45	Box, Individual



Transport of Product

This product is not subject to US DOT or IATA regulations UN3499 since maximum stored energy is below 10Wh and can be considered Non-Hazardous Goods.

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.

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