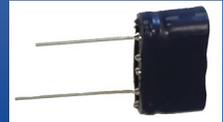


# Series-Connected Supercapacitor Module, 7.5V



ADCM-S07R5S

Request Samples



Check Inventory



Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Features

- Assembled Type Supercapacitor
- Series connected 3-Cell configuration.
- No balancing required.
- High power density
- Minimal discharge rate, 72 hours @ discharge < 20%
- Excellent cycle life
- Green, meet RoHS requirements.

## Applications

- Power Assist Circuits
- Power Backup
- Micro Energy Storage
- IoT Energy Harvesting
- SSD applications
- DDR power back up
- RTC System power transfer to battery backup

## Electrical Specifications

Part Number	Nominal Voltage (U <sub>R</sub> )	Capacitance	Tol.	ESR (Max)	Nominal Current	Peak Current (Max)	Leakage Current (Max)	Stored Energy (Max)	Gravimetric Energy Density	Gravimetric Power Density
ADCM-S07R5S	DC(V)	Farads	±%	Ω	A	A	uA	mWh	Wh/kg	KW/kg
ADCM-S07R5SA224WB	7.5	0.22	0/+40	1.35	0.16	0.64	4	1.72	0.57	3.47
ADCM-S07R5SA334RB	7.5	0.33	0/+30	1.35	0.23	0.86	5	2.58	0.75	3.02
ADCM-S07R5SA105QB	7.5	1.00	-10/+20	0.720	0.66	2.18	10	7.81	1.63	4.07

**Operating Temperature:** -40°C to +70°C

**Storage Temperature:** -40°C to +70°C, RH < 60%, Max. Humidity < 85% RH

### Test Conditions:

All parameters are measured according to the IEC 62391-1 standard.

**Ambient Temperature:** +25°C

**Capacitance:** measured with  $I(mA) = 4(C * U_R)$ .

**ESR:** Measured at 1KHz.

**Nominal Current:** 5 Seconds to discharge from U<sub>R</sub> to 1/2U<sub>R</sub>.

**Peak Current (Max.):** 1 second to discharge to U<sub>R</sub> to 1/2U<sub>R</sub>.

**Leakage Current:** Measured after 72h at U<sub>R</sub>.

**Life Cycles:** 500,000 cycles with less than 30% change in capacitance.



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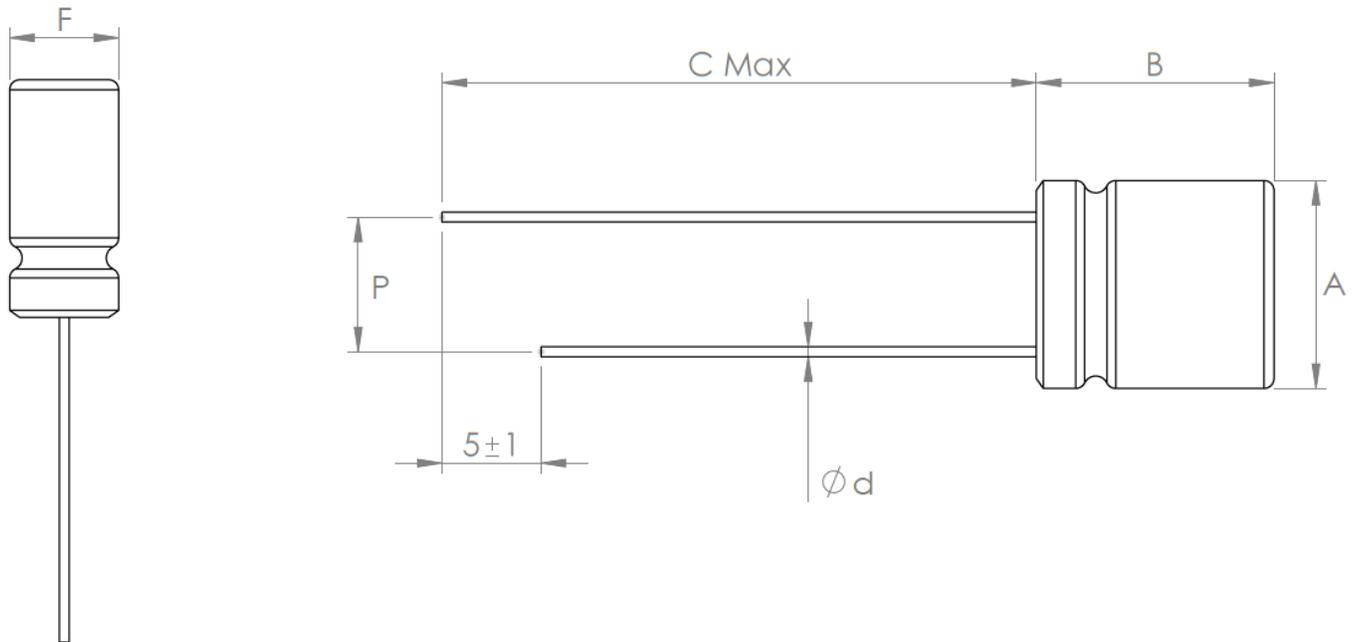


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## Mechanical Specifications



ABRACON PART#	SIZE (A x F x B) $\pm 1$	Pin Spacing P	Pin Length C (MAX)	Pin Diameter $\phi d$
ADCM-S07R5SA224WB	24.5 x 8.5 x 15	13.3 $\pm 0.5$	30	0.6 $\pm 0.1$
ADCM-S07R5SA334RB	24.5 x 8.5 x 15	13.3 $\pm 0.5$	30	0.6 $\pm 0.1$
ADCM-S07R5SA105QB	24.5 x 8.5 x 22	13.3 $\pm 0.5$	30	0.6 $\pm 0.1$

Dimensions: mm



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**ADCM-S07R5S**

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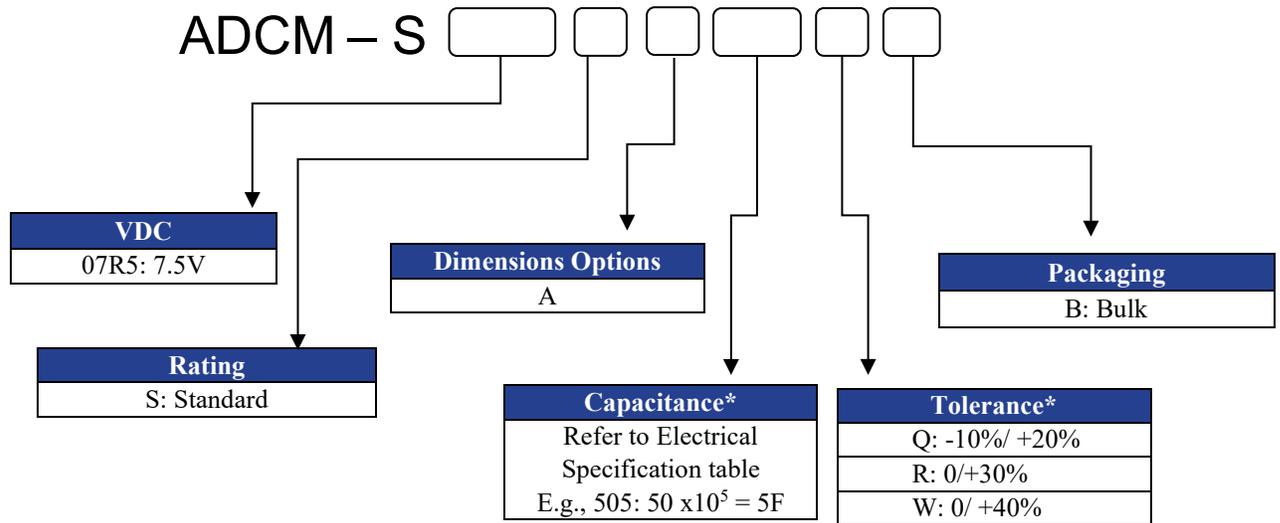


Various Sizes

RoHS/RoHS II Compliant

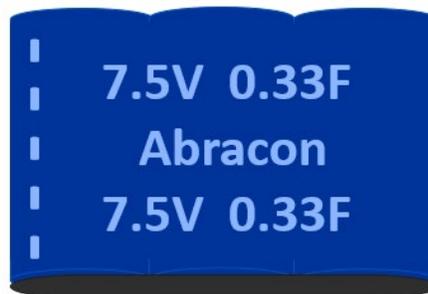
MSL Level = 1

## 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 7.5V 0.33F supercapacitor

Capacitance (F)

Rated Voltage (V)

Polarity (negative indicator bar on the sleeve to indicate the cathode).



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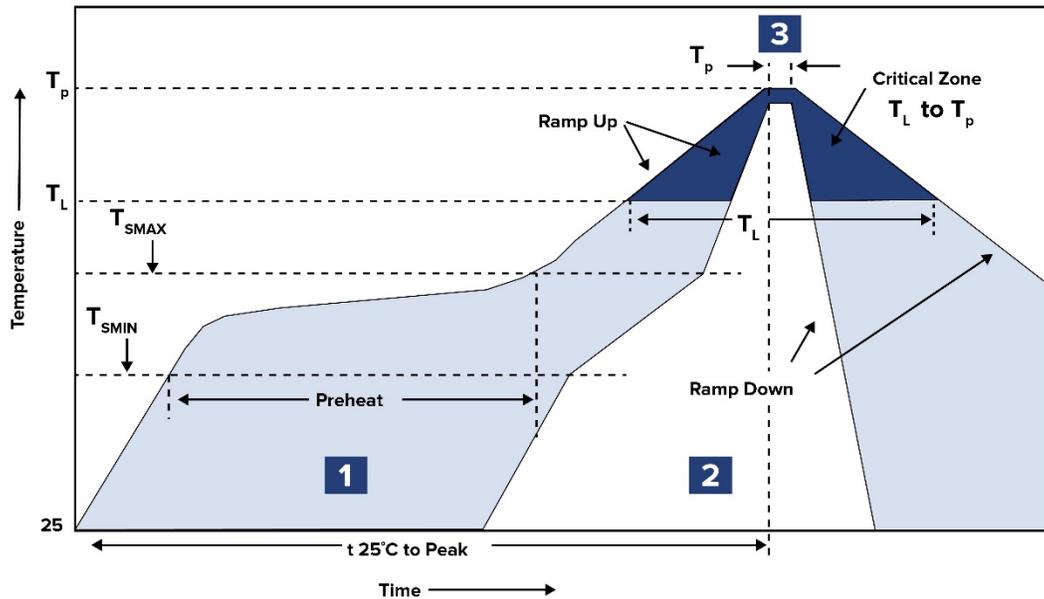


Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 100°C ~ 150°C	60 ~ 120 sec.
2	Reflow	$T_L$ 200°C	30 ~ 40 sec.
3	Peak heat	$T_P$ 240°C±5°C	5 sec. MAX

# Series-Connected Supercapacitor Module, 7.5V



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## Packaging

Part Number	Pcs/Box	Pcs/Carton
ADCM-S07R5SA224WB	341	1023
ADCM-S07R5SA334RB	149	447
ADCM-S07R5SA105QB	149	447

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