

ADCM-S07R5S

Request Samples



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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 _R)	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	Α	Α	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_R to $1/2U_R$. **Peak Current (Max.):** 1 second to discharge to U_R to $1/2U_R$.

Leakage Current: Measured after 72h at U_{R.}

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





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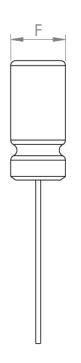


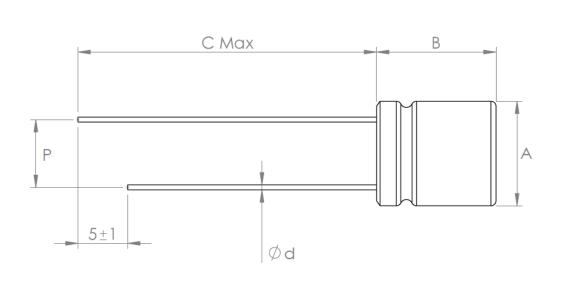
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Mechanical Specifications





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

Dimensions: mm





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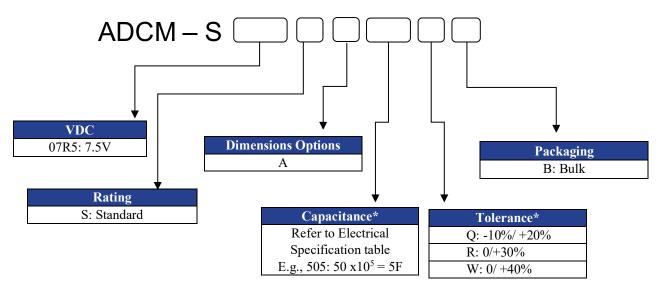


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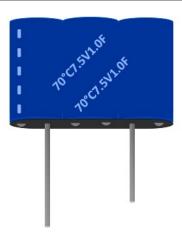
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Part Number Identification



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

Part Marking



Example of the Marking of a 7.5V 1.0F Supercapacitor

Capacitance (F)

Rated Voltage (V)

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





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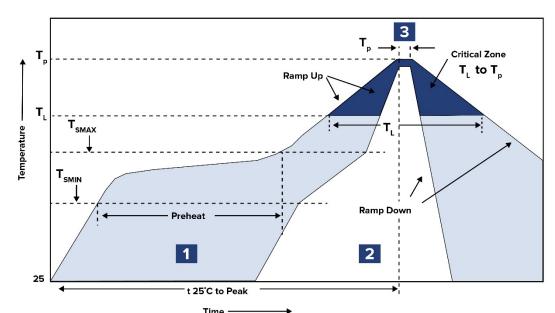


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Reflow Profile



Time						
Zone	Description	Temperature	Times			
1	Preheat	$\begin{split} T_{SMIN} \sim T_{SMAX} \\ 100^{\circ}C \sim 150^{\circ}C \end{split}$	60 ~ 120 sec.			
2	Reflow	T _L 200°C	$30 \sim 40$ sec.			
3	Peak heat	Т _Р 240°С±5°С	5 sec. MAX			





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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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ABRACON IS ISO9001-2015 CERTIFIED