

#### 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	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<sub>R.</sub>

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





ADCM-S07R5S

Request Samples (>)



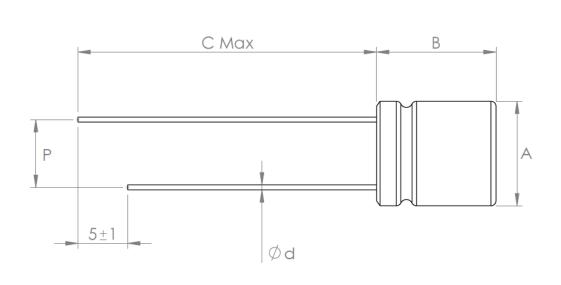
Check Inventory (>)



Various Sizes **RoHS/RoHS II Compliant** MSL Level = 1

### **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** 





#### ADCM-S07R5S

Request Samples (>)

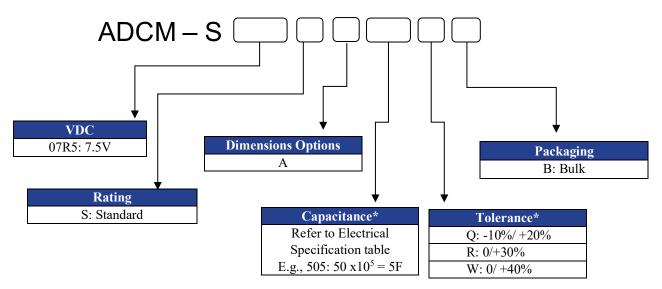


Check Inventory (>)



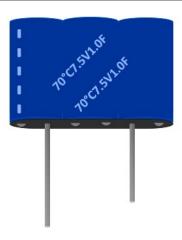
Various Sizes
RoHS/RoHS II Compliant
MSL Level = 1

#### **Part Number Identification**



<sup>\*</sup>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).





#### ADCM-S07R5S

Request Samples (>)

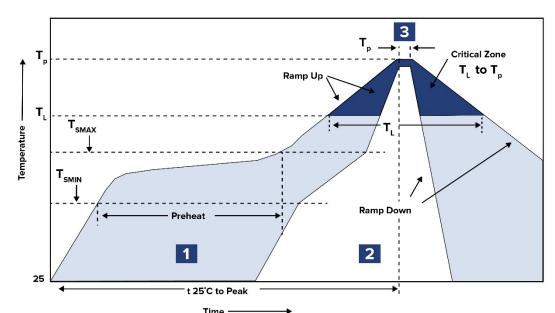


Check Inventory (>)



Various Sizes **RoHS/RoHS II Compliant** MSL Level = 1

#### **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 <sub>L</sub> 200°C	$30 \sim 40$ sec.			
3	Peak heat	Т <sub>Р</sub> 240°С±5°С	5 sec. MAX			





ADCM-S07R5S

Request Samples (>)



Check Inventory (>)



Various Sizes **RoHS/RoHS II Compliant** MSL Level = 1

### **Packaging**

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

ATTENTION: Abracon LLC's products are COTS - Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



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

**REVISION Initial Release:** 9/25/2023

ABRACON IS ISO9001-2015 CERTIFIED

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Supercapacitors / Ultracapacitors category:

Click to view products by Abracon manufacturer:

Other Similar products are found below:

BZ12GA154ZHB BZ195B273ZNBDM C-TEC1225 P SCCY73B407SLBLE CPM3225A-2K iMOD054V062P3L-11A SCCS30B126SRB SC5V5Z255M TV1020-3R0605-AP SC5V5C224Z SC6V0Z505MV SC5V5Z255MH SC3V0L156MV SC5V5H474Z SC2V7L156M SC5V5V224Z SC5V5H334Z SC6V0Z105MV SC2V7L206M SC2V7L105MLR SC5V5Z505M SC5V5Z106MH SC5V5H105Z SC2V7L705MLR SC5V5H104Z SC5V5C474Z SC3V0L256MV SC5V5Z105Z SC5V5C334Z SC5V5V474Z SC5V5V334Z SC5V5V5Z505MH SC5V5V104Z SC5V5V155Z SC5V5H155Z SC5V5C155Z SC5V5H224Z FMU0H334ZFTP18 ADCR-S03R0SA505MB ADCR-S03R0SA335MB ADCR-S03R0SA156MB ADCR-S03R0SA256MB ADCR-S03R0SA106MB ADCR-S03R0SA305MB ADCR-S03R0SB505MB DB5U207M30045HA DH5U128W60074TH DRE10/2.5 106DCN2R7M SCCR20B335SRB