

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_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	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_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.

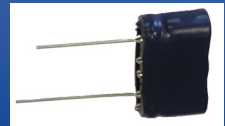


5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
9/25/2023

ABRACON IS
ISO9001-2015
CERTIFIED

Series-Connected Supercapacitor Module, 7.5V



ADCM-S07R5S

Request Samples



Check Inventory

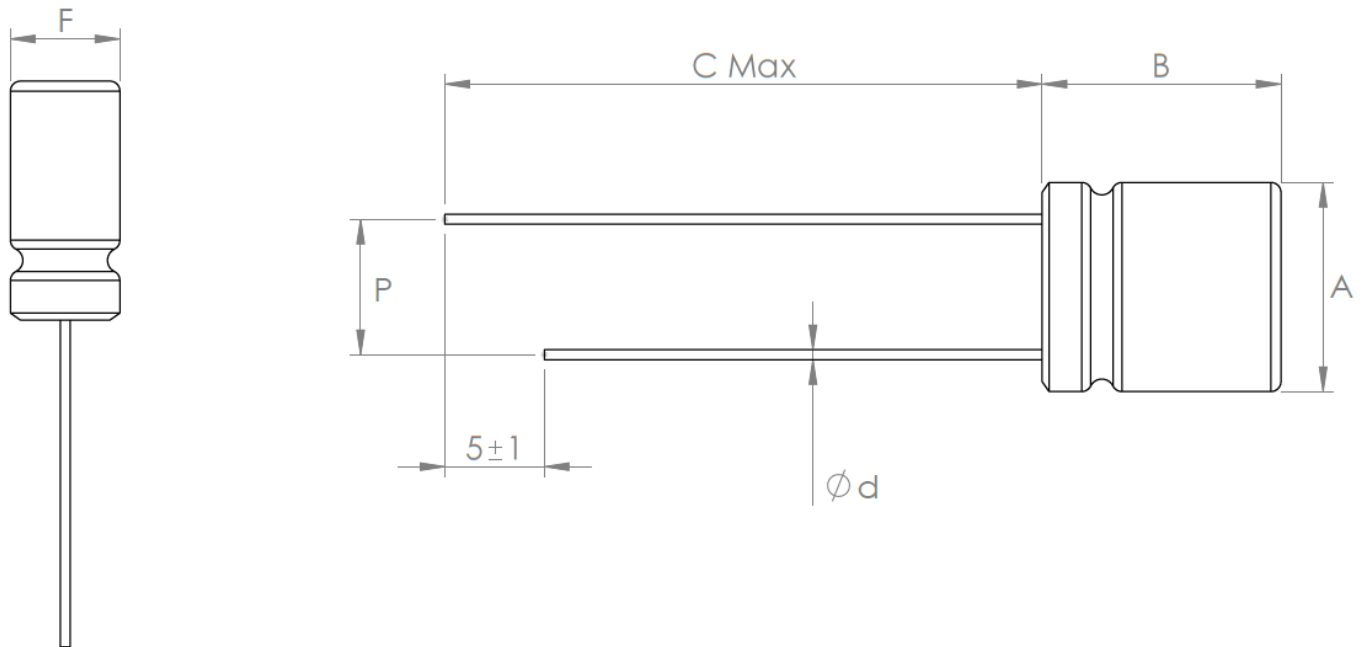


Various Sizes

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



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

Series-Connected Supercapacitor Module, 7.5V



ADCM-S07R5S

Request Samples



Check Inventory

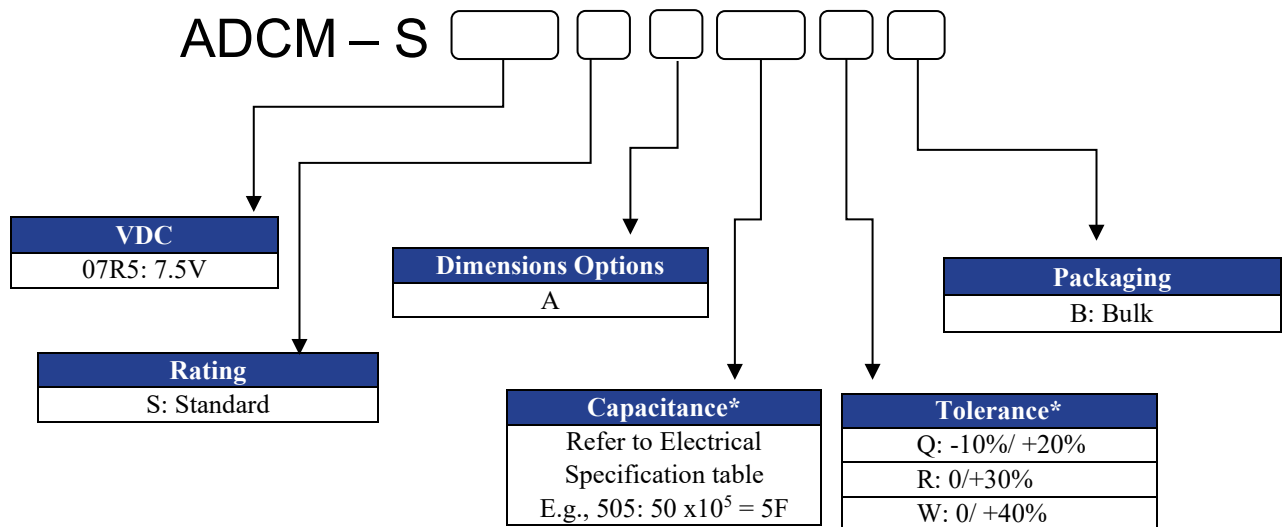


Various Sizes

RoHS/RoHS II Compliant

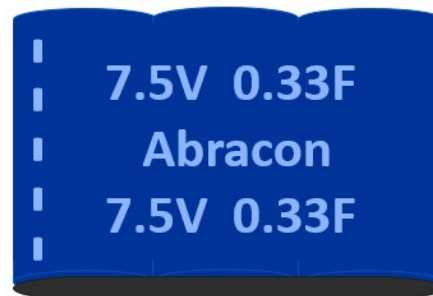
MSL Level = 1

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).

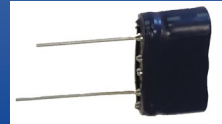


5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION Initial Release :
9/25/2023

ABRACON IS
ISO9001-2015
CERTIFIED

Series-Connected Supercapacitor Module, 7.5V



ADCM-S07R5S

Request Samples



Check Inventory

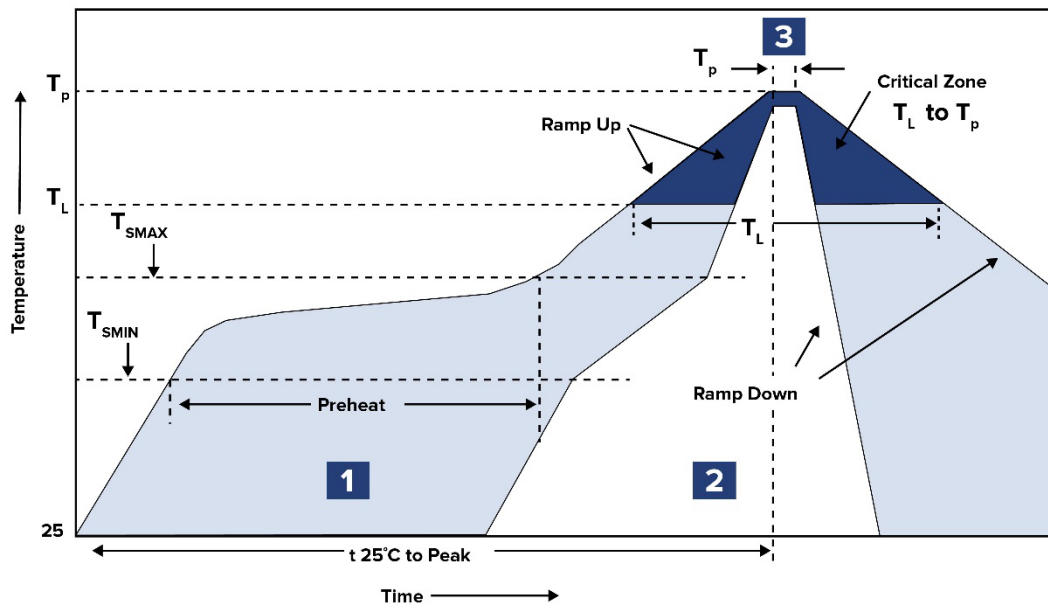


Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

Reflow Profile



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

Series-Connected Supercapacitor Module, 7.5V



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