

# 3.0V Radial Supercapacitors



ADCR-S03R0S

Request Samples



Check Inventory



Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Features

- High Voltage 3.0V Series
- 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	Stored Energy (Max)	Gravimetric Energy Density	Power Density	Volumetric Energy Density
ADCR-S03R0S	DC(V)	Farads	±%	mΩ	A	A	mA	mWh	Wh/kg	kW/kg	Wh/L
ADCR-S03R0SA105MB	3.0V	1	±20	350	0.28	1.11	0.008	1.25	1.37	3.53	1.91
ADCR-S03R0SA305MB	3.0V	3	±20	120	0.84	3.31	0.013	3.75	2.82	4.05	3.73
ADCR-S03R0SA335MB	3.0V	3.3	±20	120	0.92	3.55	0.013	4.13	1.77	4.02	4.11
ADCR-S03R0SA505MB	3.0V	5	±20	80	1.39	5.36	0.016	6.25	4.40	9.90	5.18
ADCR-S03R0SB505MB	3.0V	5	±20	75	1.40	5.45	0.016	6.25	4.03	9.68	3.98
ADCR-S03R0SA605MB	3.0V	6	±20	75	1.65	6.21	0.024	7.50	4.21	8.43	4.77
ADCR-S03R0SA605QB	3.0V	6	-10/+30	75	1.65	6.21	0.024	7.50	4.21	8.43	4.77
ADCR-S03R0SA106MB	3.0V	10	±20	65	2.65	9.09	0.032	12.50	5.71	7.90	6.37
ADCR-S03R0SA156MB	3.0V	15	±20	55	3.86	12.33	0.052	18.75	7.08	7.72	6.11
ADCR-S03R0SA256MB	3.0V	25	±20	30	6.52	21.43	0.075	31.25	5.04	6.05	6.22
ADCR-S03R0SA306MB	3.0V	30	±20	30	7.63	23.68	0.075	37.50	5.15	5.15	6.22

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

**Storage:** Temperature -30°C to +50°C, RH < 60%, Max. Humidity < 85% RH

**Test Conditions:** +25°C

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

Capacitance and ESR are measured with  $I(\text{mA}) = 8(C \cdot U_R)$

**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  $U_R$



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](http://www.abracon.com)

REVISION Initial Release :  
5/26/2023

ABRACON IS  
ISO9001-2015  
CERTIFIED

# 3.0V Radial Supercapacitors



**ADCR-S03R0S**

Request Samples



Check Inventory

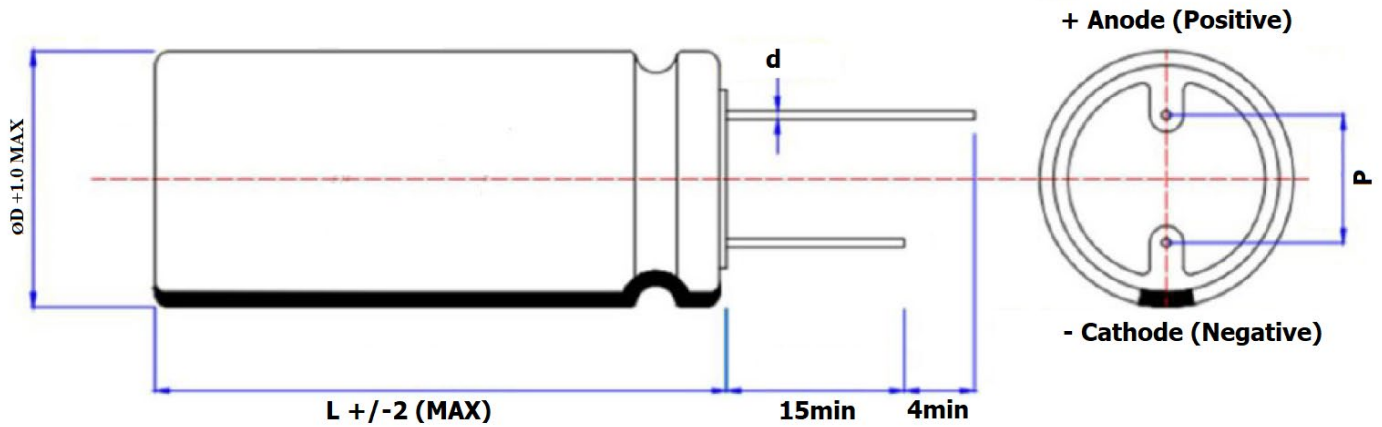


Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Mechanical Specifications



Dimensions	D	L	P	d
ADCR-S03R0SA105MB	$8 \pm 1.0$	$13 \pm 1.5$	$3.5 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA305MB	$8 \pm 1.0$	$20 \pm 1.5$	$3.5 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA335MB	$8 \pm 1.0$	$20 \pm 1.5$	$3.5 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA505MB	$8 \pm 1.0$	$24 \pm 1.0$	$3.5 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SB505MB	$10 \pm 1.0$	$20 \pm 1.5$	$5.0 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA605MB	$10 \pm 1.0$	$20 \pm 1.5$	$5.0 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA605QB	$10 \pm 1.0$	$20 \pm 1.5$	$5.0 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA106MB	$10 \pm 1.0$	$25 \pm 2.0$	$5.0 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA156MB	$12.5 \pm 1.0$	$25 \pm 2.0$	$5.0 \pm 0.5$	$0.6 \pm 0.05$
ADCR-S03R0SA256MB	$16 \pm 1.0$	$25 \pm 2.0$	$7.5 \pm 0.5$	$0.8 \pm 0.05$
ADCR-S03R0SA306MB	$16 \pm 1.0$	$30 \pm 2.0$	$7.5 \pm 0.5$	$0.8 \pm 0.05$

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](http://www.abracon.com)

REVISION Initial Release :  
 5/26/2023

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# 3.0V Radial Supercapacitors



**ADCR-S03R0S**

Request Samples



Check Inventory

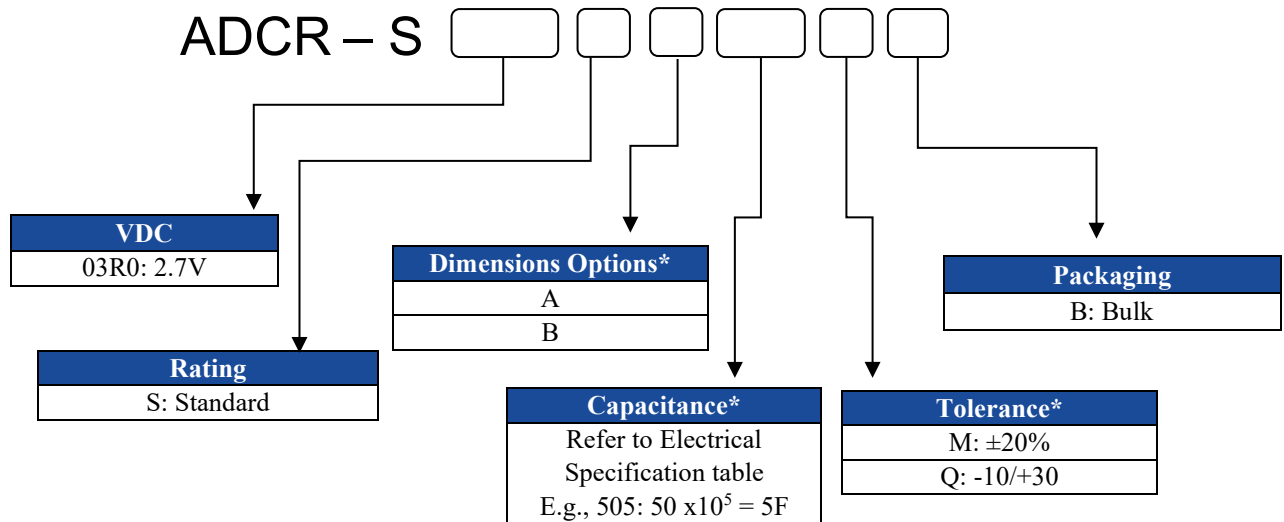


Various Sizes

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 1.0F 3.0V capacitor

Capacitance (F)

Rated Voltage (V)

Polarity (negative 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](http://www.abracon.com)

**REVISION Initial Release :**  
 5/26/2023

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# 3.0V Radial Supercapacitors



**ADCR-S03R0S**

Request Samples



Check Inventory

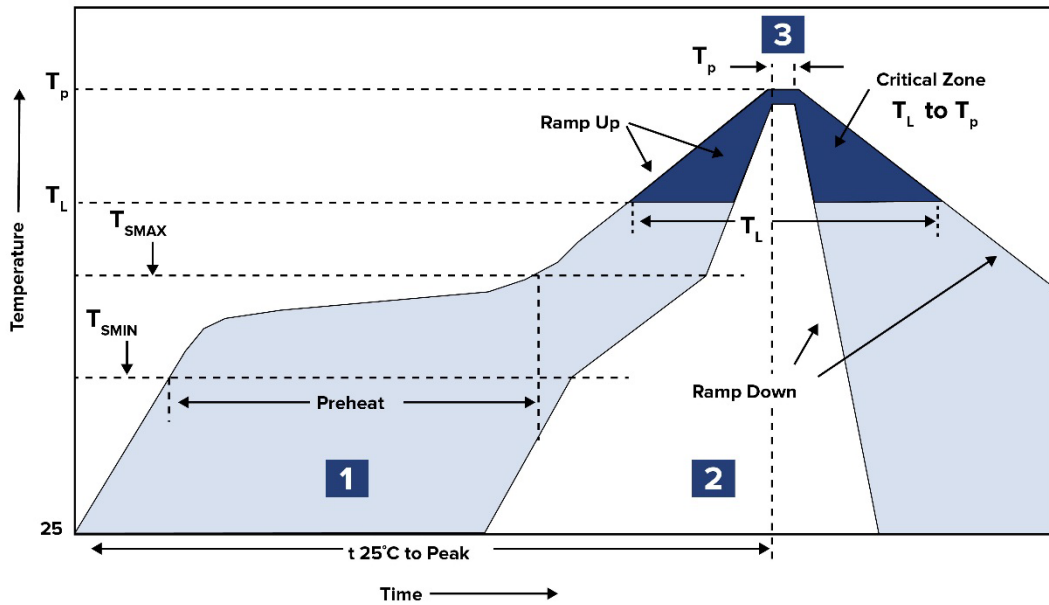


Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 100°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

# 3.0V Radial Supercapacitors



**ADCR-S03R0S**

Request Samples



Check Inventory



Various Sizes

RoHS/RoHS II Compliant

MSL Level = 1

## Packaging

Part Number	Quantity (PCS/bag)
ADCR-S03R0SA105MB	1500
ADCR-S03R0SA305MB	1000
ADCR-S03R0SA335MB	1000
ADCR-S03R0SA505MB	1000
ADCR-S03R0SB505MB	800
ADCR-S03R0SA605MB	800
ADCR-S03R0SA605QB	800
ADCR-S03R0SA106MB	600
ADCR-S03R0SA156MB	500
ADCR-S03R0SA256MB	250
ADCR-S03R0SA306MB	200

**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](http://www.abracon.com)

**REVISION Initial Release :**  
**5/26/2023**

ABRACON IS  
ISO9001-2015  
CERTIFIED