ABRACON

Engineering/Process Change Notice

ECN/PCN No.: M1757

For Manufacturer

Product Description:	**Abracon Part Number / Part Series:**	☐ Documentation only ☒ ECN ☐ EOL	☒ Series ☐ Part Number(s)
Low ESR, 2.7V Radial Supercapacitors	ADCR-E02R7S		
Affected Revision: D	**New Revision:** E	**Application:**	☐ Safety ☒ Non-Safety

Prior to Change:
Bundle packaging details are not included

After Change:
Packaging details will be included, specifying the number of pieces per bundle.

Before Change:

Part Number	Quantity (PCS/Tray)
ADCR-E02R7SA504MB	180
ADCR-E02R7SA105MB	180
ADCR-E02R7SB105MB	160
ADCR-E02R7SA205MB	120
ADCR-E02R7SA335MB	120
ADCR-E02R7SA505MB	100
ADCR-E02R7SB505MB	120
ADCR-E02R7SA605MB	120
ADCR-E02R7SA705MB	120
ADCR-E02R7SA106MB	80

After Change

Part Number	Quantity (PCS/Tray)	Quantity (PCS/Bundle)
ADCR-E02R7SA504MB	180	1620
ADCR-E02R7SA105MB	180	1620
ADCR-E02R7SB105MB	160	960
ADCR-E02R7SA205MB	120	720
ADCR-E02R7SA335MB	120	720
ADCR-E02R7SA505MB	100	600
ADCR-E02R7SB505MB	120	600
ADCR-E02R7SA605MB	120	600
ADCR-E02R7SA705MB	120	600
ADCR-E02R7SA106MB	80	400

Cause/Reason for Change:
Update the datasheet to include the number of pieces per bundle.

Change Plan

Effective Date: 09/18/2026	**Additional Remarks:**

Change Declaration:
Changes described here do not affect the products form, fit or function.

Issued Date: 09/18/2026	**Issued By:** *Baji Suryadevara*	**Issued Department:** Engineering
Approval: *Gerald Capwell* Director, Engineering	**Approval:** *Reuben Quintanilla* Quality Director	**Approval:** *Ying Huang* Purchasing Director

For Abracon EOL only

Last Time Buy (if applicable):	**Alternate Part Number / Part Series:**	
Additional Approval:	**Additional Approval:**	**Additional Approval:**

Customer Approval (If Applicable)

Qualification Status:

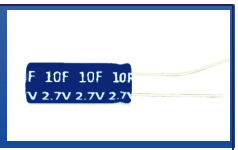
☑ Approved ☐ Not accepted

Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.

Customer Part Number:	**Customer Project:**	
Company Name:	**Company Representative:**	**Representative Signature:**
Customer Remarks:		

Brand	Affected PN	Discontinued/EOL PN	Added PN	Series	ECO#	Datasheet Link	ECN Notification Link
Abracon	ADCR-E02R7SA504MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA105MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SB105MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA205MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA335MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA505MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SB505MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA605MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA705MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf
Abracon	ADCR-E02R7SA106MB			ADCR-E02R7S	M1757	https://abracon.com/datasheets/ADCR-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1757-ADCR-E02R7S-Series-Notification.pdf

Low ESR, 2.7V Radial Supercapacitor



ADCR-E02R7S

Request Samples | Check Inventory

Various Sizes
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Very Low internal resistance (ESR)
- 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	Stored Energy (Max)	Gravimetric Energy Density	Power Density	Volumetric Energy Density
ADCR-E02R7S	DC(V)	Farads	±%	mΩ	A	A	mA	mWh	Wh/kg	kW/kg	Wh/L
ADCR-E02R7SA504MB	2.7V	0.5	20	280	0.13	0.59	0.013	0.51	0.72	4.65	1.31
ADCR-E02R7SA105MB	2.7V	1	20	240	0.26	1.09	0.016	1.01	1.58	5.93	2.59
ADCR-E02R7SB105MB	2.7V	1	20	200	0.26	1.13	0.016	1.01	0.99	4.47	1.55
ADCR-E02R7SA205MB	2.7V	2	20	140	0.51	2.11	0.018	2.03	0.96	3.10	2.02
ADCR-E02R7SA335MB	2.7V	3.3	20	80	0.85	3.52	0.021	3.34	1.57	5.35	3.32
ADCR-E02R7SA505MB	2.7V	5	20	60	1.27	5.19	0.030	5.06	1.43	4.29	4.19
ADCR-E02R7SB505MB	2.7V	5	20	60	1.27	5.19	0.030	5.06	1.00	3.00	3.22
ADCR-E02R7SA605MB	2.7V	6	20	55	1.52	6.09	0.036	6.08	1.20	3.27	3.87
ADCR-E02R7SA705MB	2.7V	7	20	50	1.77	7.00	0.042	7.09	1.14	2.93	4.51
ADCR-E02R7SA106MB	2.7V	10	20	45	2.48	9.31	0.050	10.13	1.00	2.00	5.16

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(mA)= 8(C*U_R)

Maximum Surge Voltage: 2.85V ≤ 30 seconds
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

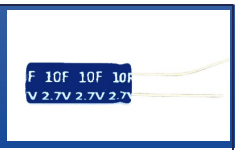
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Bee Cave, TX 78738
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

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ABRACON IS ISO9001-2015 CERTIFIED

Low ESR, 2.7V Radial Supercapacitor

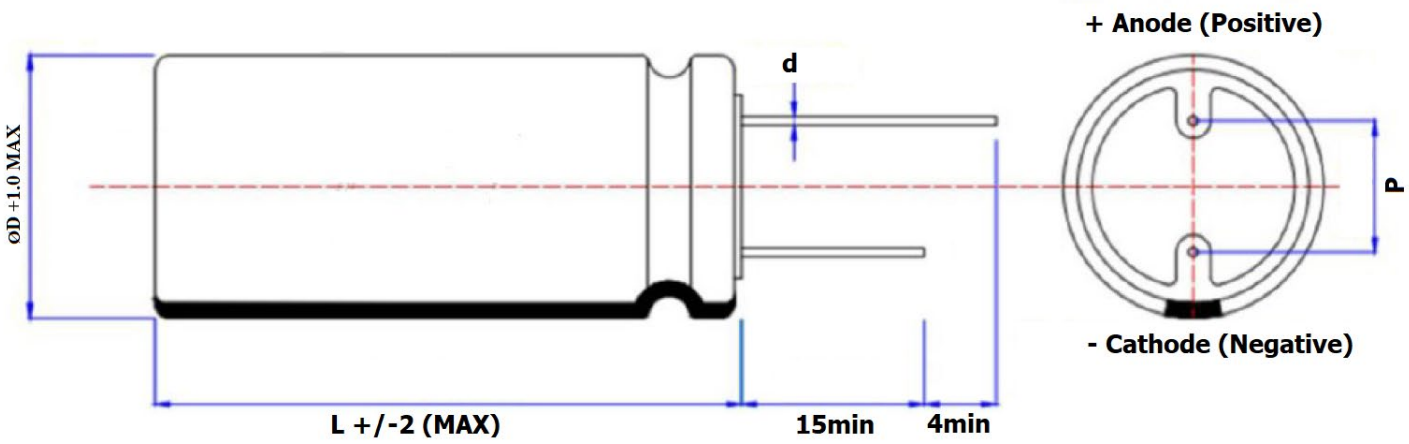


ADCR-E02R7S

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Various Sizes
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications



Dimensions	D	L	P	d
ADCR-E02R7SA504MB	6.3±1.0	12.5±1.5	2.5±0.5	0.5±0.05
ADCR-E02R7SA105MB	6.3±1.0	12.5±1.5	2.5±0.5	0.5±0.05
ADCR-E02R7SB105MB	8±1.0	13±1.5	3.5±0.5	0.6±0.05
ADCR-E02R7SA205MB	8±1.0	20±1.5	3.5±0.5	0.6±0.05
ADCR-E02R7SA335MB	8±1.0	20±1.5	3.5±0.5	0.6±0.05
ADCR-E02R7SA505MB	8±1.0	24±1.5	3.5±0.5	0.6±0.05
ADCR-E02R7SB505MB	10±1.0	20±1.5	5.0±0.5	0.6±0.05
ADCR-E02R7SA605MB	10±1.0	20±1.5	5.0±0.5	0.6±0.05
ADCR-E02R7SA705MB	10±1.0	20±1.5	5.0±0.5	0.6±0.05
ADCR-E02R7SA106MB	10±1.0	25±2.0	5.0±0.5	0.6±0.05

Dimensions: mm

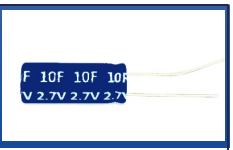
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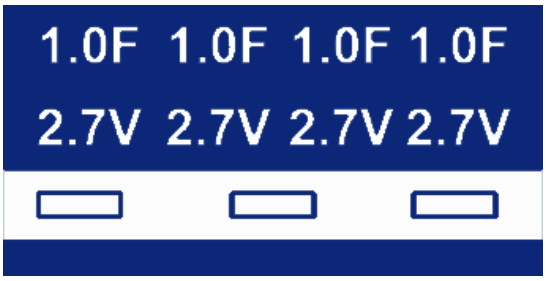
Part Number Identification

ADCR – E [ ] [ ] [ ] [ ] [ ] [ ]

VDC	Rating	Dimensions Options*	Capacitance*	Tolerance	Packaging
02R7: 2.7V	S: Standard	A B	Refer to Electrical Specification table E.g., 505: 50 x10^5 = 5F	M: ±20%	B: Bulk

*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 2.7V capacitor

Capacitance (F)
Rated Voltage (V)
Polarity (negative bar on the sleeve to indicate the cathode)

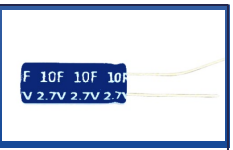
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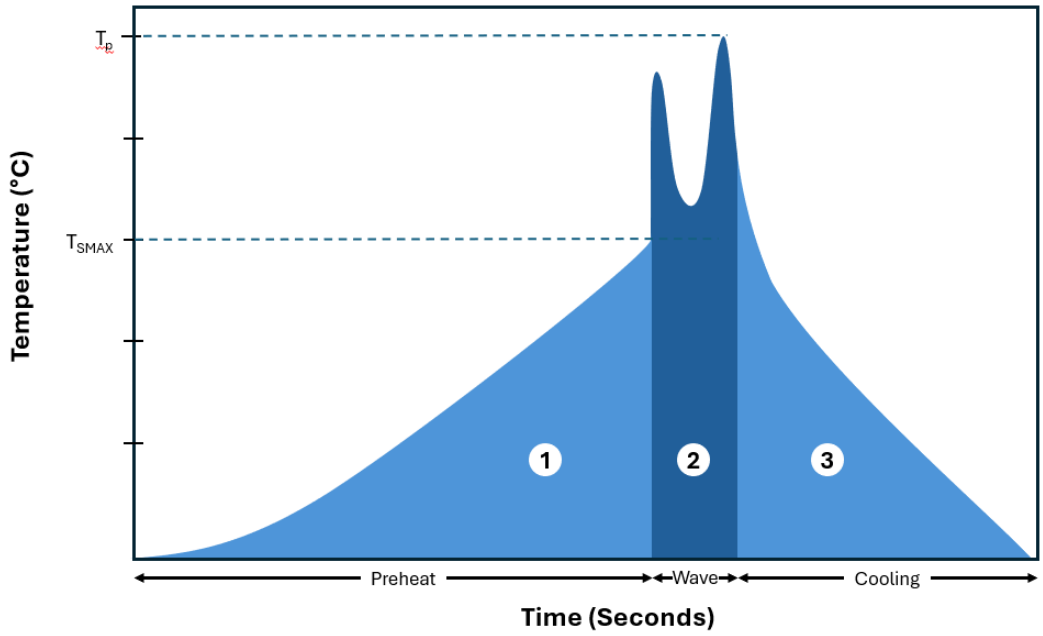


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Wave Soldering Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 25°C ~ 150°C	60 sec. MAX
	Preheat Rate	$T_{PREHEAT}$ +4ºC/Sec MAX	
2	Wave Temperature	T_w 245°C ~ 260°C	10 sec. MAX Dual wave
	Wave Peak Temperature	T_P 260°C	5 sec. MAX/wave
3	Cooling Rate	$T_{COOLING}$	-5ºC/Sec MAX

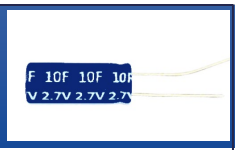
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RoHS/RoHS II Compliant
MSL Level = 1

Packaging

The product is packaged in a carton containing multiple inner boxes, each containing several trays.

Part Number	Quantity (PCS/Tray)	Quantity (PCS/Bundle)
ADCR-E02R7SA504MB	180	1620
ADCR-E02R7SA105MB	180	1620
ADCR-E02R7SB105MB	160	960
ADCR-E02R7SA205MB	120	720
ADCR-E02R7SA335MB	120	720
ADCR-E02R7SA505MB	100	600
ADCR-E02R7SB505MB	120	600
ADCR-E02R7SA605MB	120	600
ADCR-E02R7SA705MB	120	600
ADCR-E02R7SA106MB	80	400

Transport of Product

This product is not subject to US DOT or IATA regulations UN3499 since maximum stored energy is below 10Wh and can be considered Non-Hazardous Goods. Please refer to the Abracon | UN/IATA Transportation Guidelines for more information.

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.

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