

ECN/PCN No.: M1733

For Manufacturer

Product Description: 1200F HIGH CAPACITANCE SUPERCAPACITOR	Abraccon Part Number / Part Series: ADCS-E02R7SA128Q	☐ Documentation only ☒ ECN ☐ EOL	☐ Series ☒ Part Number(s)
Affected Revision: A	New Revision: B	Application:	☐ Safety ☒ Non-Safety

Prior to Change:

Electrical Specifications

Part Number	Rated Voltage (U _R)	Capacitance	Tolerance	ESR (Max)		Continuous Current (Max)	Peak Current (Max)	Leakage Current	Stored Energy (Max)	Gravimetric Energy Density
ADCS-E02R7S	DC (V)	Farads	See Part number Identifier	AC ESR (mΩ)	DC ESR (mΩ)	A	A	mA	Wh	Wh/kg
ADCS-E02R7SA128	2.7	1200	Q, M	0.40	0.55	70	976	2.80	1.2150	4.67
ADCS-E02R7SA158	2.7	1500	Q, M	0.33	0.45	84	1209	3.00	1.5188	5.42
ADCS-E02R7SA208	2.7	2000	Q, M	0.25	0.35	110	1588	4.20	2.0250	5.63
ADCS-E02R7SA308	2.7	3000	Q, M	0.22	0.26	130	2275	5.20	3.0375	6.08

Mechanical Dimensions

Dimensions	OD ±0.5	L ±0.5
ADCS-E02R7SA128	2.387[60.5]	2.952[75]
ADCS-E02R7SA158	2.387[60.5]	3.346[85]
ADCS-E02R7SA208	2.387[60.5]	4.133[105]
ADCS-E02R7SA308	2.387[60.5]	5.433[138]

After Change:

Electrical Specifications

Part Number	Rated Voltage (U _R)	Capacitance	Tolerance	ESR (Max)		Continuous Current (Max)	Peak Current (Max)	Leakage Current	Stored Energy (Max)	Gravimetric Energy Density
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ADCS-E02R7SA308	2.7	3000	Q, M	0.22	0.26	130	2275	5.20	3.0375	6.08

Mechanical Dimensions

Dimensions	ØD ±0.5	L ±0.5
ADCS-E02R7SA128	2.387[60.5]	2.913[74]
ADCS-E02R7SA158	2.387[60.5]	3.346[85]
ADCS-E02R7SA208	2.387[60.5]	4.133[105]
ADCS-E02R7SA308	2.387[60.5]	5.433[138]

Cause/Reason for Change:

Updating mechanical specs and electrical specs

Change Plan

Effective Date:

6/24/2026

Additional Remarks:
Change Declaration:

Small mechanical change may affect product fit. The minor electrical changes should not affect the products performance. Please carefully review.

Issued Date:

6/24/2026

Issued By:

Gerald Capwell

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:

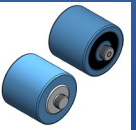
☐ Approved ☐ Not accepted

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	ADCS-E02R75A128Q			ADCS-E02R75	M1733	https://abracon.com/datasheets/ADCS-E02R75.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1733-ADCS-E02R75A128Q-Notification.pdf

High Capacitance Supercapacitors



ADCS-E02R7S

Request Samples



Check Inventory



Various Sizes

RoHS/RoHS II Compliant

MSL Level = 2

Features

- High Energy density of over 50Wh/Kg
- Low Leakage Current as small as 2.8mA
- Low Self-discharge rate, 72 hours @ discharge <5%
- Excellent cycle life of >500K cycles @25C
- Green, meet RoHS requirements.

Applications

- Power Assist Circuits
- Power Backup
- Micro Energy Storage
- IoT Energy Harvesting
- SSD applications
- DDR power back up
- System power transfer to battery backup

Electrical Specifications

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Operating Temperature: -40°C to +70°C

Storage: Temperature 10°C to +50°C, RH<60%, Max. Humidity <85% RH

Test Conditions: +25°C

All parameters are measured according to the IEC 62813 standard.

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

Maximum Surge Voltage: $2.85\text{V} \leq 30$ seconds

Nominal Current: 1C

Peak Current (Max.): 50C

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

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ABRACON IS
ISO9001-2015
CERTIFIED

High Capacitance Supercapacitors



ADCS-E02R7S

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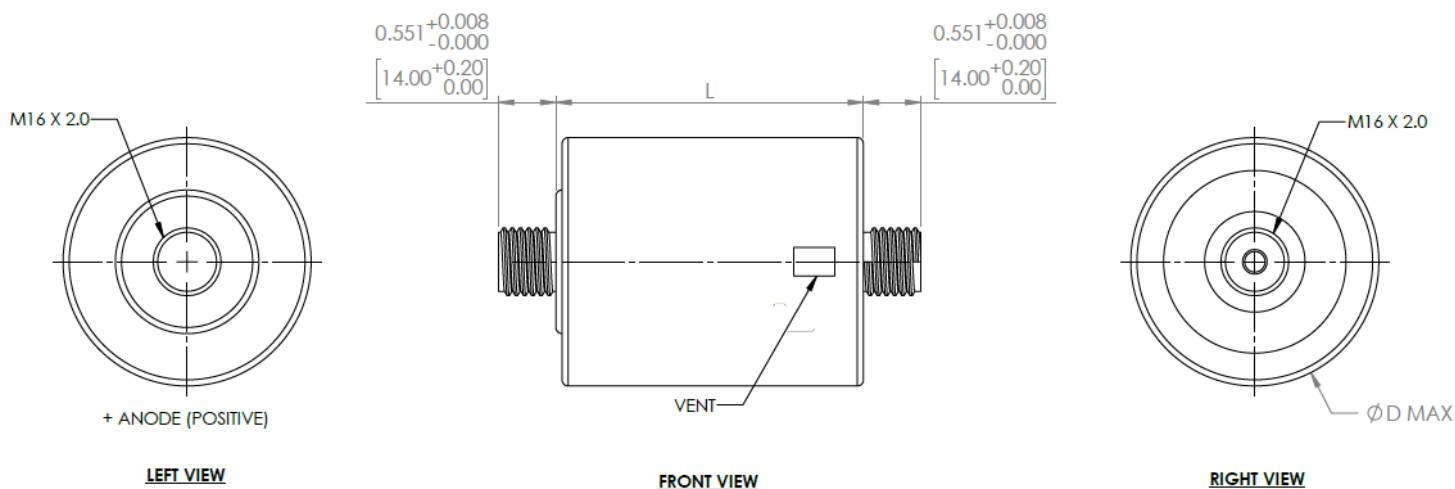


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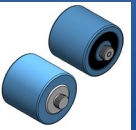
Mechanical Specifications



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Dimensions: Inches [mm]

High Capacitance Supercapacitors



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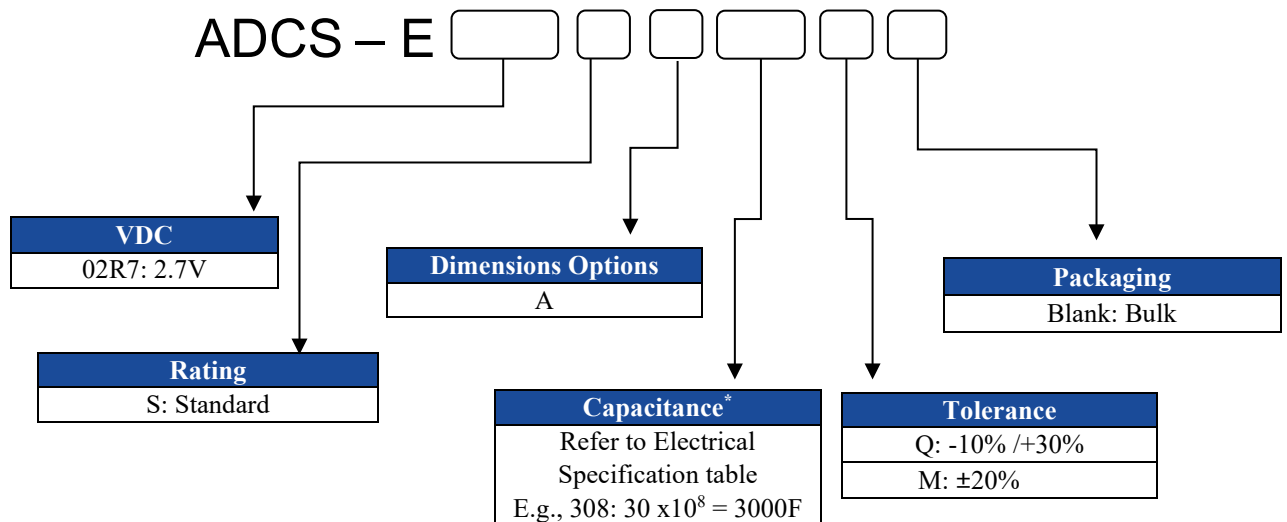


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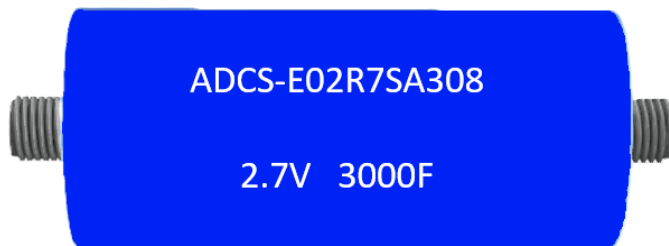
MSL Level = 2

Part Number Identification



*Only part numbers listed in the Electrical Specs table are available. For custom builds, please contact Abracon.

Part Marking and Polarity Indicators



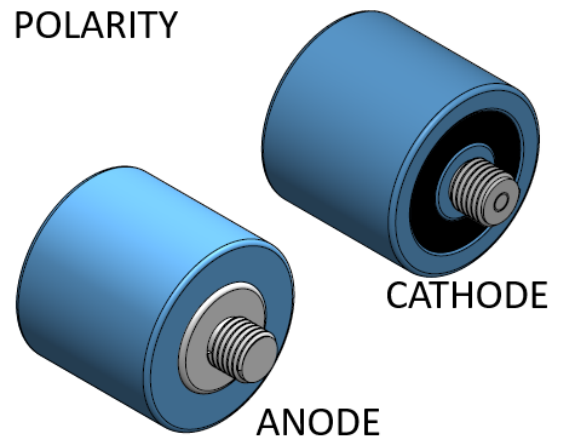
Example of the Markings of a 3000F 2.7V capacitor

Capacitance (F)

Rated Voltage (V)

Polarity (refer to illustration to the right)

POLARITY

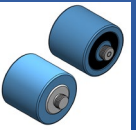


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Packaging

Products are packaged in a carton which may contain multiple inner boxes. The inner box contains devices that are each separated by individual compartments.

Part Number	SPQ	MOQ
ADCS-E02R7SA128	25	50
ADCS-E02R7SA158	25	50
ADCS-E02R7SA208	25	50
ADCS-E02R7SA308	25	25

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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