

ECN/PCN No.: M1738

For Manufacturer

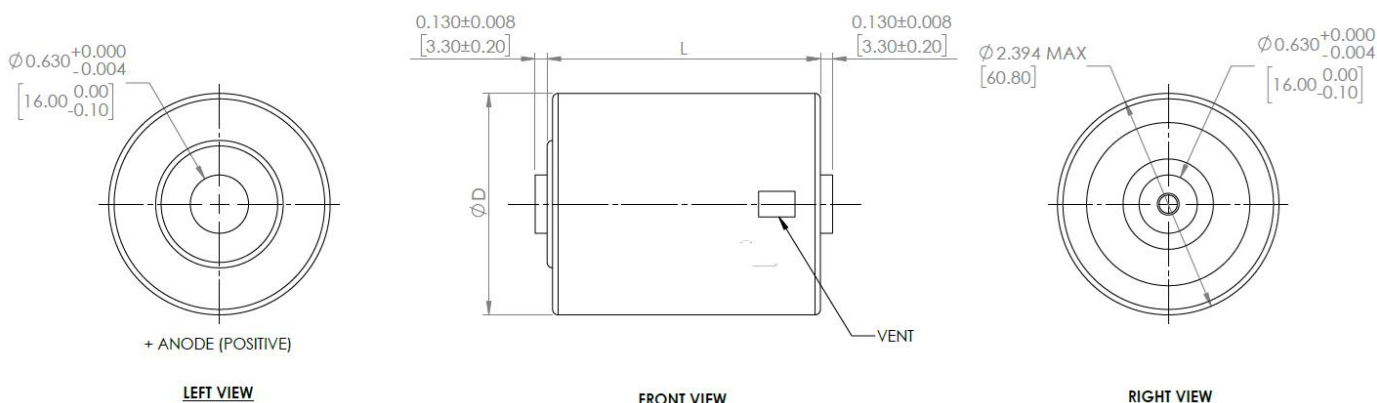
Product Description: HIGH CAPACITANCE SUPERCAPACITORS	Abraccon Part Number / Part Series: ADCP-E02R7SA308Q	☐ Documentation only ☒ ECN ☐ EOL ☐ Series ☒ Part Number(s)
Affected Revision: Initial Revision	New Revision: A	Application: ☐ Safety ☒ Non-Safety

Prior to Change:

Electrical Specifications

Part Number	Rated Voltage (U _R)	Surge Voltage (Max)	Capacitance	Tolerance	ESR (Max)		Continuous Current (Max)	Peak Current (Max)	Leakage Current	Stored Energy (Max)	Gravimetric Energy Density
ADCP-E02R7S	DC (V)	DC (V)	Farads	See Part number Identifier	AC ESR (mΩ)	DC ESR (mΩ)	A	A	mA	Wh	Wh/kg
ADCP-E02R7SA128	2.7	2.85	1200	Q, M	0.40	0.55	70	976	2.80	1.2150	4.67
ADCP-E02R7SA158	2.7	2.85	1500	Q, M	0.33	0.45	84	1209	3.00	1.5188	5.42
ADCP-E02R7SA208	2.7	2.85	2000	Q, M	0.25	0.35	110	1588	4.20	2.0250	5.63
ADCP-E02R7SA308	2.7	2.85	3000	Q, M	0.22	0.26	130	2275	5.20	3.0375	6.08

Mechanical Specifications



Part Number	Dimensions (ØD x L)	ØD (±1.5)	L (±0.3)
ADCP-E02R7SA128	60 x 75	60	75
ADCP-E02R7SA158	60 x 85	60	85
ADCP-E02R7SA208	60 x 105	60	105
ADCP-E02R7SA308	60 x 138	60	138

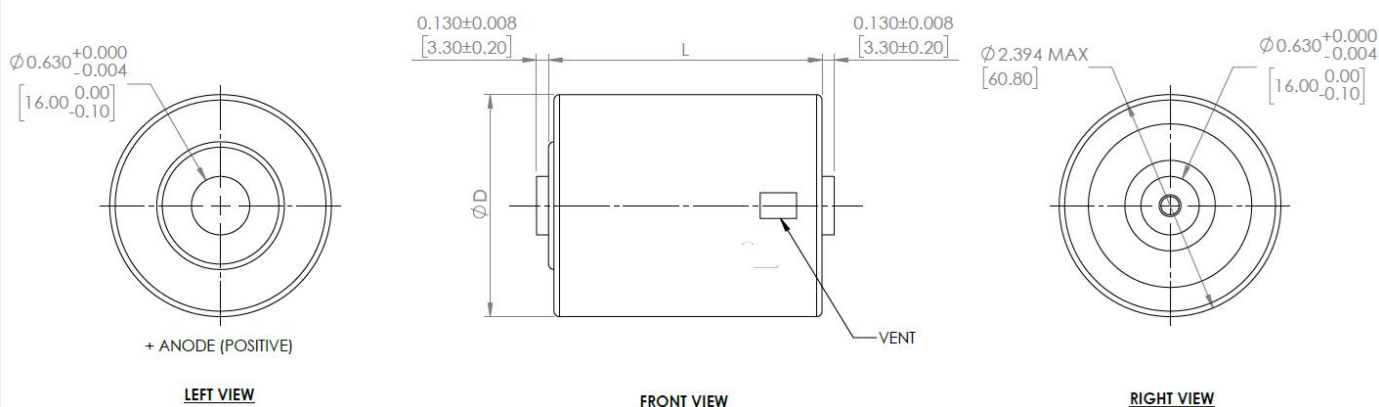
Dimensions: Inches [mm]

After Change:

Electrical Specifications

Part Number	Rated Voltage (U _R)	Surge Voltage (Max)	Capacitance	Tolerance	ESR (Max)		Continuous Current (Max)	Peak Current (Max)	Leakage Current	Stored Energy (Max)	Gravimetric Energy Density
ADCP-E02R7S	DC (V)	DC (V)	Farads	See Part number Identifier	AC ESR (mΩ)	DC ESR (mΩ)	A	A	mA	Wh	Wh/kg
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ADCP-E02R7SA308	2.7	2.85	3000	Q, M	0.22	0.26	130	2528	5.20	3.750	7.2

Mechanical Specifications



Part Number	Dimensions (ØD x L)	ØD	L
ADCP-E02R7SA128	60 x 75	60 ±1.5	75 ±0.3
ADCP-E02R7SA158	60 x 85	60 ±1.5	85 ±0.3
ADCP-E02R7SA208	60 x 105	60 ±1.5	105 ±0.3
ADCP-E02R7SA308	60.5 x 138	60.5 ±0.5	138 ±0.5

Dimensions: Inches [mm]

Cause/Reason for Change:

Change of production line to increase capacity.

Change Plan
Effective Date:

8/7/2026

Additional Remarks:
Change Declaration:

The changes described in this document do not adversely affect the products functionality. Slight changes to mechanical dimensions may affect the product's fit.

Issued Date:

7/7/2026

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:

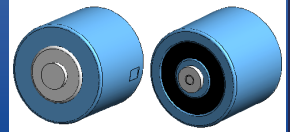
☐ Approved ☐ Not accepted

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	ADCP-E02R7SA308Q			ADCP-E02R7SA	IM1738	https://abracon.com/datasheets/ADCP-E02R7S.pdf	https://abracon.com/downloads/ECN-PCN/ECN-PCN-M1738-ADCP-E02R7SA308Q-Notification.pdf

High Capacitance Supercapacitors



ADCP-E02R7S

Request Samples



Check Inventory



Various Sizes

RoHS/RoHS II Compliant

MSL Level = 2

Features

- High Energy density of over 6Wh/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
- Energy Storage
- SSD applications
- Large Arrays and Module designs

Electrical Specifications

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Operating Temperature: -40°C to +65°C

Storage: Temperature 10°C to +50°C, RH<60%, Max. Humidity <70% RH

Test Conditions: +25°C

All parameters are measured according to the IEC 62813 standard.

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

Nominal Current: 1C

Peak Current (Max.): 50C

Leakage Current: Measured after 72h at U_R

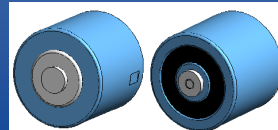


12117 Bee Caves Rd Bldg-3, Ste 200
Bee Cave, TX 78738
Ph: (512) 371-6159; Fax: (512) 351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION A : 7/6/2026

ABRACON IS
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CERTIFIED

High Capacitance Supercapacitors



ADCP-E02R7S

Request Samples



Check Inventory

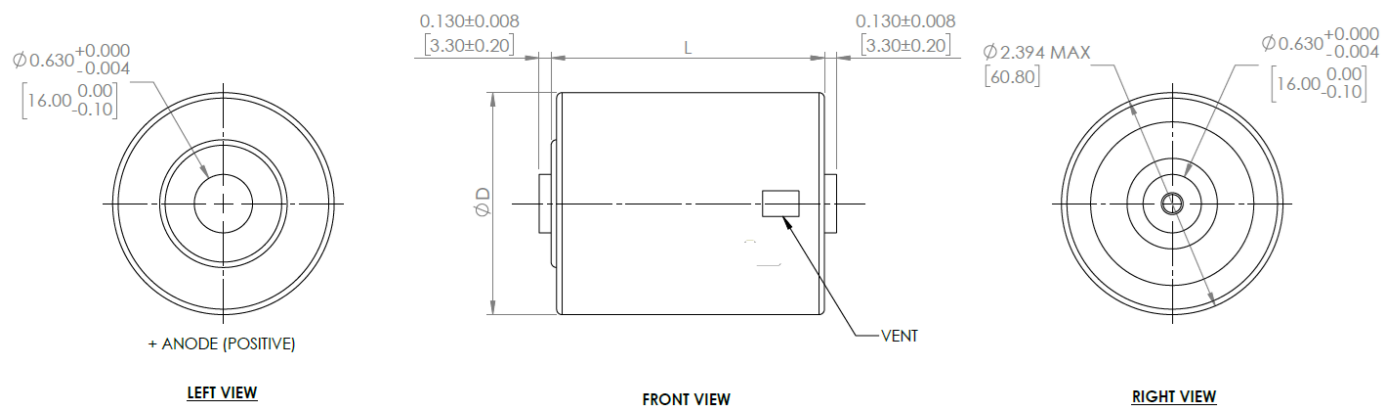


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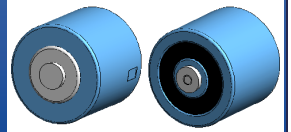
Mechanical Specifications



Part Number	Dimensions (ØD x L)	ØD	L
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ADCP-E02R7SA208	60 x 105	60 ±1.5	105 ±0.3
ADCP-E02R7SA308	60.5 x 138	60.5 ±0.5	138 ±0.5

Dimensions: Inches [mm]

High Capacitance Supercapacitors



ADCP-E02R7S

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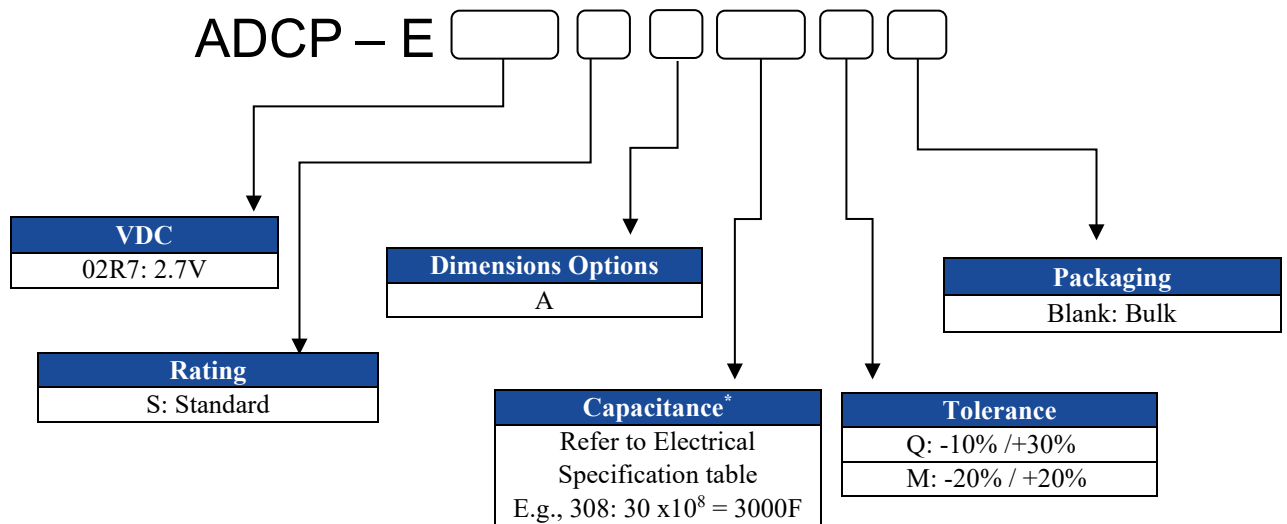


Various Sizes

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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



Example of the Markings of a 3000F 2.7V capacitor

Capacitance (F)

Rated Voltage (V)

Polarity (Refer to mechanical drawing to determine polarity)

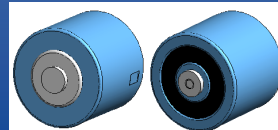


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Welding Method

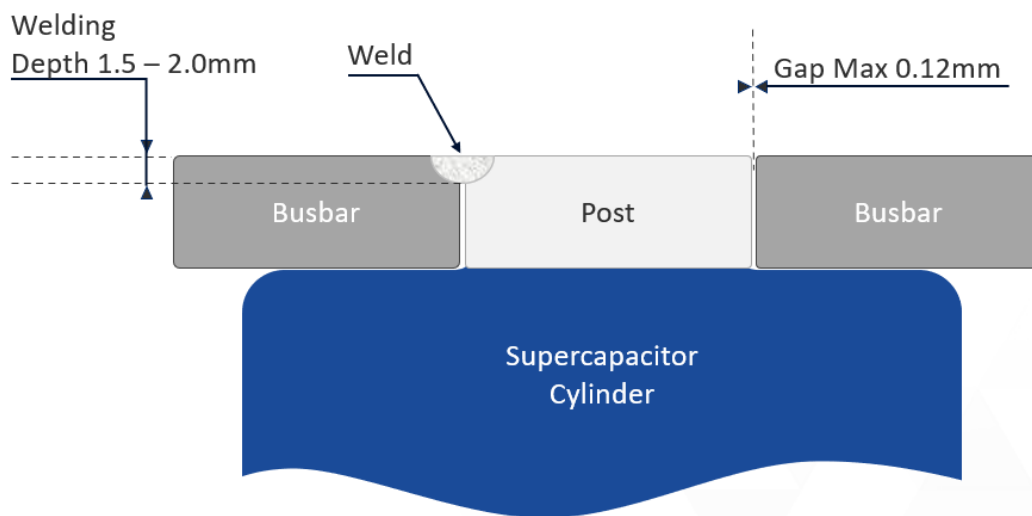
Pulsed laser welding is recommended using the following parameters.

Laser Energy: 2.5 – 5.5kW

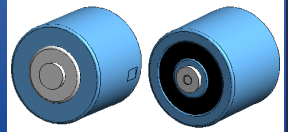
Minimum travel rate: 30mm/s

Capacitor Post Material: AW1070

Capacitor Body Temperature Max: $100^{\circ}\text{C} < 2\text{sec}$



High Capacitance Supercapacitors



ADCP-E02R7S

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RoHS/RoHS II Compliant

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Packaging

Products are packaged in a carton containing multiple inner boxes.

Inner Box (Example 25pcs):



Part Number	Pcs/Inner Box	Pcs/Carton [# of Inner Boxes]	Carton Length	Carton Width	Carton Height
ADCP-E02R7SA128	25	50 [2]	368	368	280
ADCP-E02R7SA158	25	50 [2]	368	368	280
ADCP-E02R7SA208	25	50 [2]	368	368	315
ADCP-E02R7SA308	25	25 [1]	368	368	206

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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