

PowerStor XB Series

Snap-in cylindrical supercapacitors



Features and benefits

- Over 10-year operating life at room temperature
- Low ESR for high power density
- Large capacitance for high energy density
- Long cycle life
- Environmentally friendly electrolyte
- UL Recognized

Applications

- Hybrid battery or fuel cell systems
- High pulse current applications
- UPS / hold up power

Description

Eaton PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Eaton to offer a wide variety of capacitor solutions tailored to specific applications that range from a few micro-amps for several days to several amps for milliseconds.



Powering Business Worldwide



The PowerStor brand of supercapacitors (formerly of the Bussmann Division of Cooper Industries) is now part of Eaton's Electrical Group, Electronics Division.

PowerStor is now part of Eaton
Same great products plus even more.

Specifications

Capacitance	300F to 600F
Working voltage	2.5V
Surge voltage	2.85V
Capacitance tolerance	-10% to +10%
Operating temperature range	-25°C to 70°C

Standard Product¹

Capacitance (F)	Part number	Max. initial DC ESR (mΩ) (Equivalent Series Resistance)	Max continous current (A) ²	Peak current (A) ³	Max leakage current (mA) ⁴	Max power (W) ⁵	Stored energy (Wh) ⁶	Typical mass (g)
300	XB3550-2R5307-R	7	15	120	0.30	220	0.26	69
400	XB3560-2R5407-R	4.5	19	180	0.45	350	0.35	80
600	XB3585-2R5607-R	3.7	29	235	0.70	420	0.52	122

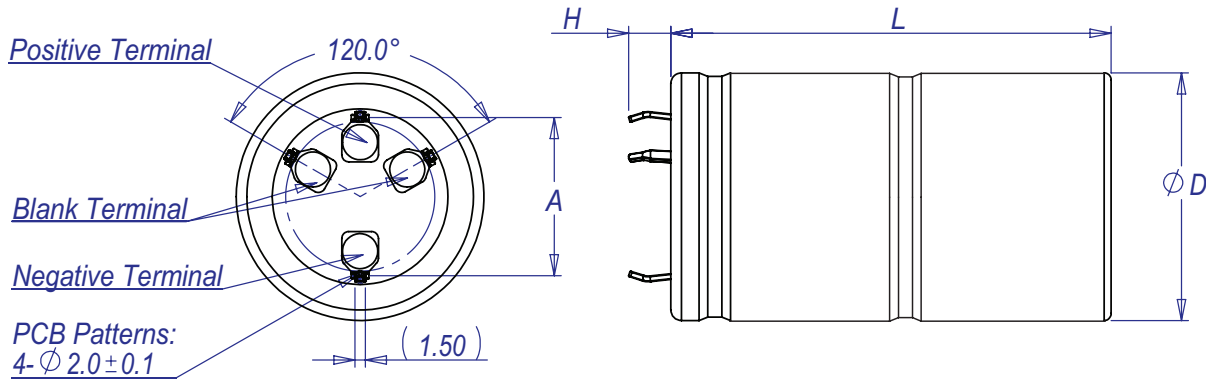
1. Capacitance, ESR and Leakage current are all measured according to IEC 62391-1 at 20°C
2. 15°C Temperature Rise
3. Peak Current is for 1 second = $\frac{1}{2}$ Working Voltage x Capacitance / (1 + DC ESR x Capacitance)
4. Leakage current measured after 72 hours, 20°C
5. Max. Power = Working Voltage² / 4 / DC ESR
6. Stored energy = $\frac{1}{2}$ Capacitance x Working Voltage² / 3600

Performance

Parameter		Capacitance change (% of initial value)	ESR (% of max. initial value)
Life			
@ Max. operating voltage and temp)	1500 hours	≤ 20%	≤ 200%
Charge/discharge cycling ¹	500,000	≤ 20%	≤ 200%
Storage Life			
-25°C to +70°C	1500 hours	≤ 20%	≤ 200%
≤ 30°C	3 years	≤ 5%	≤ 10%

1. Cycling between max operating and 50% of max operating voltage at room temperature

Dimensions - mm



Part number	D \pm 1.0	L \pm 1.0	H \pm 1.0	A \pm 0.1
XV3550-2R7307-R	35	53	6	22.5
XV3560-2R7407-R	35	63	6	22.5
XV3585-2R7607-R	35	87.5	6	22.5

Part Numbering System

XB					-		R						-R
Series Code	Dimensions					Voltage (V) R = Decimal	Capacitance (μ F)					RoHS Compliant	
XB = Series	Diameter	Length					Value	Multiplier					
					2R5 = 2.5V	Example: 407 = 40 x 10 ⁷ μ F or 400F							

Packaging information

- Standard packaging: 20 pieces per box

Part marking

- Manufacturer
- Capacitance (F)
- Nominal Working Voltage (V)
- Series Code (or part number)
- Polarity

North America

Eaton's Electrical Group
Electronics Division
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Eaton's Electrical Group
Electronics Division
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe

Eaton's Electrical Group
Electronics Division
Burton-on-the-Wolds
Leicestershire, LE 12 5th UK
Phone: +44 (0) 1509 882 600
Fax: +44 (0) 1509 882 786

Eaton's Electrical Group
Electronics Division
Avda Santa Eulalia, 290
Terrassa, Barcelona 08223 Spain
Phone: +34-93-736-2813
Fax: +34-93-783-5055

Asia Pacific

Eaton's Electrical Group
Electronics Division
No.2, #06-01
Serangoon North Avenue 5
Singapore 554911
Tel: +65 6645 9888
Fax: +65 6728 3155

The only controlled copy of this Data Sheet is the electronic read-only version located on the Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Bussmann does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton's Electrical Group
Electronics Division
114 Old State Road
Ellisville, MO 63021
United States
www.eaton.com/elx

© 2014 Eaton
All Rights Reserved
Publication No. 4423 — BU-SB14xxx
November 2014

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Supercapacitors](#) / [Ultracapacitors](#) category:

Click to view products by [Eaton](#) manufacturer:

Other Similar products are found below :

[DCK-3R3E224U-E](#) [C-TEC2403-1](#) [CEM2](#) [KW-5R5C105H-R](#) [KW-5R5C224H-R](#) [KR-5R5C105H-R](#) [DBJ-5R5D105T](#) [DXJ-5R5H334U](#) [DSK-3R3H703T414-HRL](#) [DHL-5R5D224GT](#) [LX055105A](#) [LT055105A](#) [SCCY73B407SLBLE](#) [VPF127M3R8](#) [VPF706M3R8](#) [VMF706M3R8](#) [VMF506M3R8](#) [VPF506M3R8](#) [VMF306M3R8](#) [VPF227M3R8](#) [VMF227M3R8](#) [VMF127M3R8](#) [DB5U207M30045HA](#) [DH5U128W60074TH](#) [DRE10/2.5](#) [DRL106S0TI25RRDAP](#) [DRL226S0TK25RR](#) [106DCN2R7M](#) [SCCR20B335SRB](#) [SCCS30B106SRB](#) [SCCT30B156SRB](#) [SCCU30B306MRB](#) [SCCW45B107VSB](#) [SCMR14C474MSBA0](#) [SCMR22C155MRBA0](#) [SCMR22C155MSBA0](#) [SCMS22C255MRBA0](#) [SCMT22C505MRBA0](#) [SCMT32C755MRBA0](#) [DRL475S0TG20RRDAP](#) [FT0H225ZF](#) [FCS0H224ZFTBR24](#) [FR0H473ZF](#) [GS206F](#) [DS5U506M18040BB](#) [SCCV40B506MRB](#) [NEXT474Z5.5V16.5X13F](#) [DBJ-5R5D224T](#) [GW209F](#) [SCCX50B207VSB](#)