# PowerStor PB Family

# 5.0 volt cylindrical supercapacitors



# **Description**

Eaton PowerStor supercapacitors are unique, ultrahigh 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.

#### **Features**

- 5.0 volts
- · Low Equivalent Series Resistance (ESR)
- · High capacitance
- · Long cycle life
- · Low leakage currents
- · UL recognized

### **Applications**

- · Bridge or hold-up power
- · Memory backup
- · Battery swap out

#### **General Specifications**

Working voltage 5.0V Surge voltage 6.0V

Capacitance 0.1F to 1.0F

Capacitance tolerance -20% to +80% (20°C)

Operating temperature range -25°C to 70°C extended to 85°C

Ihr Vertriebspartner:

Hy-LINE

POWER COMPONENTS

Inselkammerstraße 10 D-82008 Unterhaching Tel: +49 (0)89 614 503 10 Fax:+49 (0)89 614 503 20 E-Mail: power@hy-line.de www.hy-line.de Hochstraße 355 CH-8200 Schaffhausen Tel: +41 (0)52 647 42 00 Fax:+41 (0)52 647 42 01 E-Mail: power@hy-line.ch



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**

Nominal Capacitance (F)	Vertical Part Number	Horizontal Part Number	Maximum Initial ESR (Ω) (Equivalent Series Resistanc) Measured @ 100Hz	Nominal leakage current (µA) after 72 hours @ 20°C	Nominal dimensions (mm)	Typical mass (grams/piece)
0.1	PB-5R0V104-R	PB-5R0H104-R	4.0	3	5.5 x 10.8 x 12.5	1.1
0.47	PB-5R0V474-R	PB-5R0H474-R	1.0	7	8.5 x 16.8 x 14.0	2.4
1.0	PB-5R0V105-R	PB-5R0H105-R	0.5	12	8.5 x 16.8 x 21.5	3.5

#### **Performance**

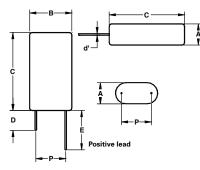
Parameter	Capacitance change (% of initial value)	ESR (% of max. initial value)
Life (1000 hours @ 70°C, 5.0Vdc or 85°C, 4.2Vdc)	≤ 30%	≤ 300%
Storage - Low and High Temperature (1000 hours @ -25°C to +70°C)	≤ 30%	≤ 300%

# **Dimensions (mm)**

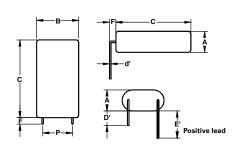
Vertical Part Number	Horizontal Part Number	Α	В	С	d'	D	D'	E	E'	F	P
PB-5R0V104-R	PB-5R0H104-R	6.0	11.3	13.0	0.5	20	15	25	20	2.0	7.3
PB-5R0V474-R	PB-5R0H474-R	9.0	17.3	14.5	0.5	20	15	25	20	2.0	11.8
PB-5R0V105-R	PB-5R0H105-R	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
То	Maximum			± 0.02	Minimum			± 0.5			

Note: Longer lead is positive.

#### Vertical







# Part numbering system

Р	В		5	R	0				_	R
Family Code	Version		Volta			Configuration	Capacitance (μF)			Ontion
Family Code			R = Decimal			Configuration	Value	Multiplier		Option
P Family	High capacitance		5R0 =	= 5.0V		V = Vertical H = Horizontal	Example: 474 = 47 x 104µF or 0.47F			RoHS Compliant

# **Packaging information**

- Standard packaging: Bulk, 100 units per bag
- · Larger bulk packages available on request

# Part marking

- Manufacturer
- Capacitance (F)
- Max operating voltage (V)
- Family code (or part number)
- Polarity

Life Support Policy: Eaton 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 Electronics Division 1000 Eaton Boulevard Cleveland, OH 44122

Cleveland, OH 44122 United States www.eaton.com/elx

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Inselkammerstraße 10 D-82008 Unterhaching Tel: +49 (0)89 614 503 10 Fax:+49 (0)89 614 503 20 E-Mail: power@hy-line.de www.hy-line.de Hochstraße 355 CH-8200 Schaffhausen Tel: +41 (0)52 647 42 00 Fax:+41 (0)52 647 42 01 E-Mail: power@hy-line.ch www.hy-line.ch

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