

Supercapacitors

PM Series



Description

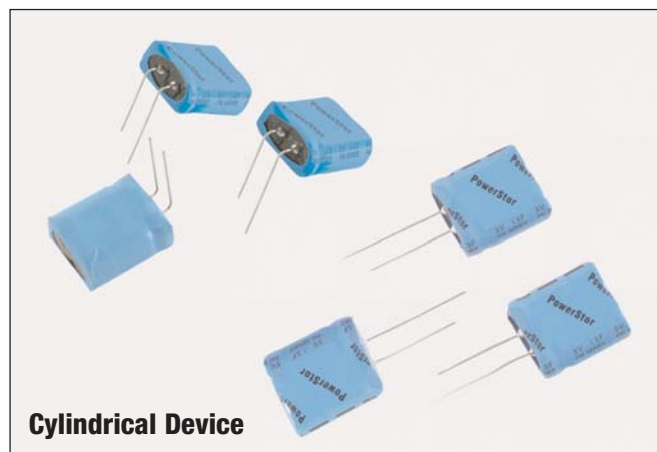
Cooper Bussmann® PowerStor® supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor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

Features & Benefits

- Low ESR with high energy density
- 5.0 Volts
- High capacitance
- Long cycle life
- Low leakage currents

Applications

- Pulse power
- Bridge or hold-up power



Cylindrical Device

Specifications

Working Voltage	5.0V
Surge Voltage	5.5V
Nominal Capacitance	0.47F to 3.0F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-40°C to 60°C
Extended Operating Temperature Range	-40°C to 85°C (Max. working voltage: 3.9V)

Standard Product

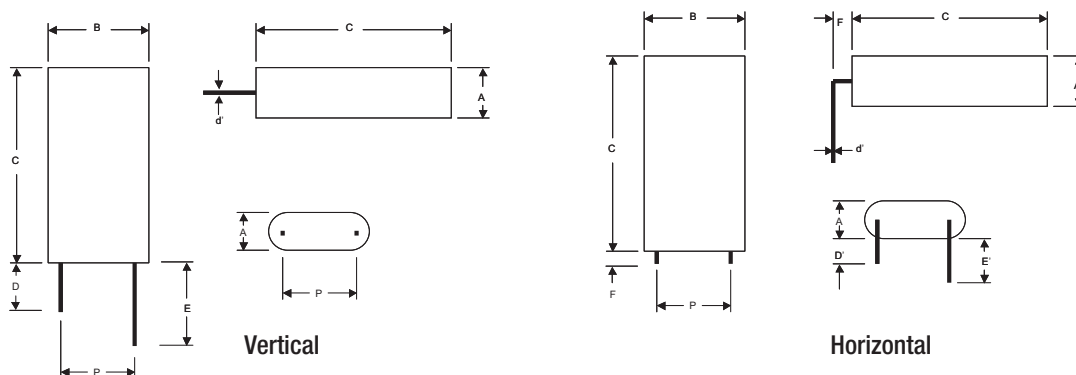
Nominal Capacitance (F)	Part Number		Nominal ESR (Ω) (Equivalent Series Resistance) Measured @		Nominal Leakage Current (μ A) After 100 Hrs. @ 5V, 20°C	Nominal Dimensions (mm)	Typical Mass (grams/piece)
	Vertical	Horizontal	1kHz	100Hz			
0.47	PM-5R0V474-R	PM-5R0H474-R	0.42	0.50	8	8.5 x 16.8 x 14.0	2.4
1.0	PM-5R0V105-R	PM-5R0H105-R	0.15	0.20	10	8.5 x 16.8 x 21.5	3.5
1.5	PM-5R0V155-R	PM-5R0H155-R	0.07	0.10	15	10.5 x 20.8 x 22.5	5.4
3.0	PM-5R0V305-R	PM-5R0H305-R	0.05	0.07	20	10.5 x 20.8 x 32	7.8

Performance

Parameter	Capacitance Change (% of specified value)	ESR (% of specified value)
Life (1000 hrs @ 60°C @ 5Vdc)	$\leq 30 \%$	$\leq 200 \%$
Storage - Low and High Temperature (1000 hrs @ -40°C and 60°C)	$\leq 30 \%$	$\leq 200 \%$

Dimensions (mm)											
Vertical Part#	Horizontal Part#	A	B	C	d'	D	D'	E	E'	F	P
PM-5ROV474-R	PM-5ROH474-R	9.0	17.3	14.5	0.5	20	15	25	20	2.0	11.8
PM-5ROV105-R	PM-5ROH105-R	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
PM-5ROV155-R	PM-5ROH155-R	11.0	21.3	23.0	0.6	20	15	25	20	2.0	5.3
PM-5ROV305-R	PM-5ROH305-R	11.0	21.3	32.5	0.6	20	15	25	20	2.0	5.3
Tolerances		Maximum			± 0.02	Minimum				± 0.5	

Note: Longer lead is positive.



Part Numbering System											
P	M	-	5	R	0	□	□	□	□	-	R
Series Code	Version		Voltage (V) R = Decimal			Configuration	Capacitance (μF)				RoHS Compliant
P = Pack			5R0 = 5.0V			V = Vertical H = Horizontal	Value	Multiplier			
							Example: 474 = 47 x 10 ⁴ μF or 0.47F				

Packaging Information	Part Marking
Standard packaging: Bulk, 100 units per package.	Manufacturer
Large, bulk packaging available upon request.	Capacitance (F)
	Max. Operating Voltage (V)
	Series Code (or part number)
	Polarity

North America
Cooper Bussmann
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

Cooper Bussmann
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe
Cooper Bussmann
Cooper (UK) Limited
Burton-on-the-Wolds
Leicestershire • LE12 5TH UK
Tel: +44 (0) 1509 882 737
Fax: +44 (0) 1509 882 786

Cooper Bussmann
Avda. Santa Eulalia, 290
08223
Terrassa, (Barcelona), Spain
Tel: +34 937 362 812
+34 937 362 813
Fax: +34 937 362 719

Asia Pacific
Cooper Bussmann
1 Jalan Kilang Timor
#06-01 Pacific Tech Centre
Singapore 159303
Tel: +65 278 6151
Fax: +65 270 4160

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