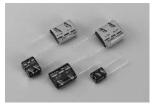
# **Provisional**



# **PowerStor** ® Aerogel Capacitors 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 microamps for several days to several amps for a few milliseconds.



LEADED DEVICE

SERIES	FEATURES AND	APPLICATIONS			
	Generic	Specific	APPLICATIONS		
PM	5.0 volts, Low ESR, High capacitance Long cycle life Low leakage currents RoHS compliant	Low ESR with high energy density	Pulse Power Bridge or Hold Up Power		

SPECIFICATIONS									
Working Voltage (maximum)	5.0 volts								
Surge Voltage	5.5 volts								
Nominal Capacitance Range	0.1F to 3F								
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 PRODUCTS										
	HIGH ENERGY DENSITY & ULTRA LOW ESR (PM SERIES)										
Nominal Capacitance (F)	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance)		Nominal Leakage Current (μA) @ 20 ℃ after	Nominal Dimensions	Typical Mass (grams/piece)					
		Measured @ 1kHz	Measured @ DC	100 Hours							
0.1	PM-5R0V104-R PM-5R0H104-R	1.25	1.5	TBD	5.5 x 10.8 x 12.5 mm	1.1					
0.47	PM-5R0V474-R PM-5R0H474-R	0.30	0.40	TBD	8.5 x 16.8 x 14.0 mm	2.4					
1.0	PM-5R0V105-R PM-5R0H105-R	0.15	0.20	TBD	8.5 x 16.8 x 21.5 mm	3.5					
1.5	PM-5R0V155-R PM-5R0H155-R	0.07	0.10	15	10.5 x 20.8 x 22.5 mm	5.4					
3.0	PM-5R0V305-R PM-5R0H305-R	0.05	0.07	20	10.5 x 20.8 x 32 mm	7.8					

PERFORMANCE							
Parameter Capacitance Change ESR (% of initial specified value) (% of initial specified							
Life (1000 hrs @ 60°C @ 5 volts DC)	≤ 30 %	≤ 200 %					
Storage- Low and High Temperature (1000 hrs @ -40°C and 85°C)	≤ 30 %	≤ 200 %					

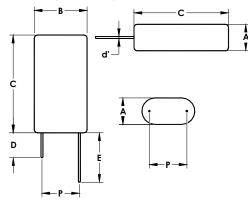


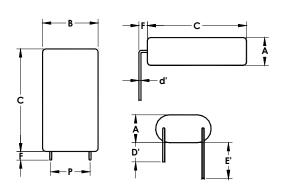




DIMENSIONS (mm)										
Part Number	Α	В	С	ď	D	D'	Е	E'	F	Р
PM-5R0V104-R PM-5R0H104-R 6.0		11.3	13.0	0.5	20	15	25	20	2.0	7.3
PM-5R0V474-R PM-5R0H474-R	9.0	17.3	14.5	0.5	20	15	25	20	2.0	11.8
PM-5R0V105-R PM-5R0H105-R	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
PM-5R0V155-R PM-5R0H155-R	11.0	21.3	23.0	0.6	20	15	25	20	2.0	5.3
PM-5R0V305-R PM-5R0H305-R	11.0	21.3	32.5	0.6	20	15	25	20	2.0	5.3
Tolerances Maximum			± 0.02	Minimum ± 0.5				.5		

Note (1): Longer lead is positive.





# **VERTICAL**

### **HORIZONTAL**

PART NUMBERING SYSTEM											
Р	М	-	5	R	0					-	R
Series Code	Version		Voltage (V) R is decimal			Configuration	Capacitance (μ F)			D 110	
						V = Vertical	Va	Value Multiplier			RoHS Complaint
P = Pack			5R0 = 5.0V		5R0 = 5.0V -		- or - H = Horizontal	Example: $474 = 47 \times 10^4 \mu \text{ F or } 0.47 \text{ F}$			Complaint

PACKAGING INFORMATION	PART MARKING
Standard packaging: Bulk, 100 units per package. Larger bulk packages available upon request.	Manufacturer Capacitance (F) Max. Operating Voltage (V) Series Code (or part number) Polarity

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## Visit us on the Web at www.cooperet.com

© Cooper Electronic Technologies 2008 1225 Broken Sound Parkway, NW, Suite F, Boca Raton, Florida 33487-3533 Tel: +1-561-998-4100 Toll Free: +1-888-414-2645 Fax: +1-561-241-6640

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