



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Supercapacitors

PHB Series



Description

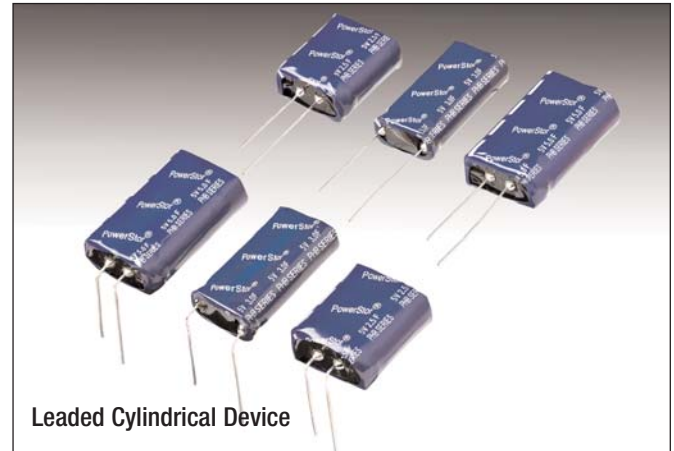
Cooper Bussmann PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor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

Features & Benefits

- Large capacitance for high energy density
- Low ESR for high power density

Applications

- Bridging or hold-up power
- Memory back-up
- Battery Swap out



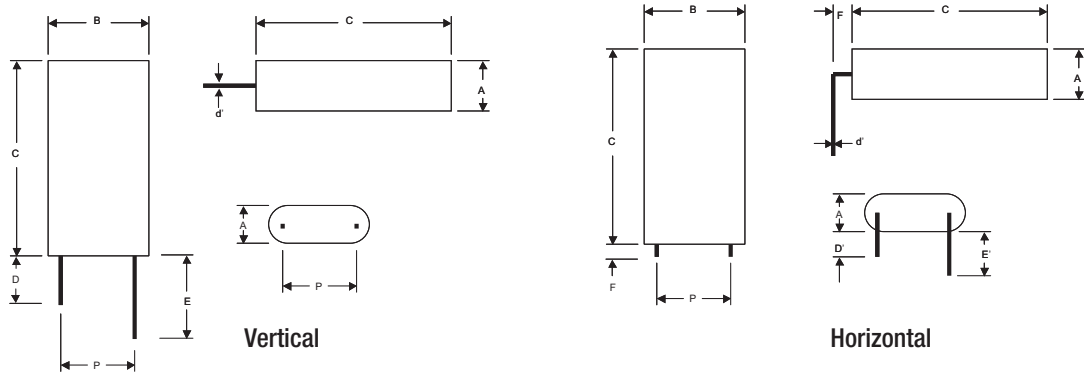
Specifications	
Working Voltage (Maximum)	5.0V
Surge Voltage	5.5V
Nominal Capacitance Range	1.5F to 5F
Capacitance Tolerance	-10% to +30% (20°C)
Operating Temperature Range	-25°C to 70°C
Extended Operating Temperature Range	-25°C to 85°C (with linear voltage derating to 4.0V @ 85°C)

Standard Product							
Nominal Capacitance (F)	Part Number		Maximum 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			
1.5	PHB-5ROV155-R	PHB-5ROH155-R	0.31	0.33	10	8.5 x 16.8 x 21.5	3.3
2.5	PHB-5ROV255-R	PHB-5ROH255-R	0.19	0.20	14	10.5 x 20.8 x 22.5	5.0
3.0	PHB-5ROV305-R	PHB-5ROH305-R	0.19	0.20	16	8.5 x 16.8 x 31.5	5.3
5.0	PHB-5ROV505-R	PHB-5ROH505-R	0.12	0.13	25	10.5 x 20.8 x 32	7.5

Performance		
Parameter	Capacitance Change (% of initial specified value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 5Vdc)	$\leq 30 \%$	$\leq 200 \%$
Storage - Low and High Temperature (1000 hrs @ -25°C and 85°C)	$\leq 30 \%$	$\leq 200 \%$

Dimensions (mm)											
Vertical Part#	Horizontal Part#	A	B	C	d'	D	D'	E	E'	F	P
PHB-5ROV155-R	PHB-5ROH155-R	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
PHB-5ROV255-R	PHB-5ROH255-R	11.0	21.3	23.0	0.6	20	15	25	20	2.0	5.3
PHB-5ROV305-R	PHB-5ROH305-R	9.0	17.3	32.5	0.5	20	15	25	20	2.0	11.8
PHB-5ROV505-R	PHB-5ROH505-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	HB	-	5	R	0	□	□	□	-	R	
Series Code	Version		Voltage (V)			Configuration	Capacitance (μF)			RoHS Compliant	
			R = Decimal				Value	Multiplier			
P = Pack			5R0 = 5.0V			V = Vertical H = Horizontal	Example: 155 = 15 x 10 ⁵ μF or 1.5F				

Packaging Information

Standard packaging: Bulk, 100 units per package.

Large, bulk packaging available upon request.

Part Marking

Manufacturer
Capacitance (F)
Max. Operating Voltage (V)
Series Code (or part number)
Polarity

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