

Supercapacitors

PA Series



Description

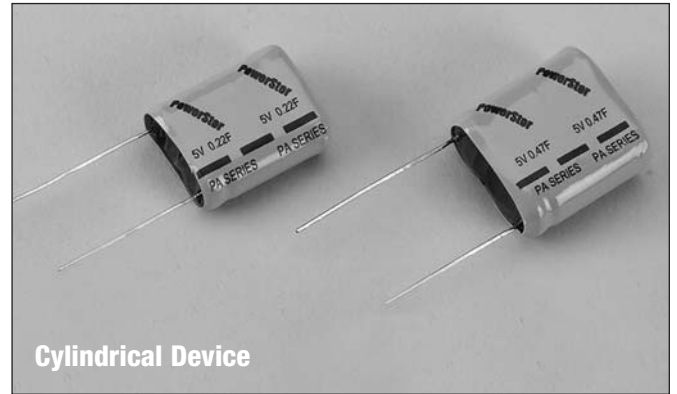
Cooper Bussmann PowerStor® supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor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

Features & Benefits

- 5.0 Volts
- Ultra-low ESR
- High capacitance
- Long cycle life
- Low leakage currents

Applications

- Pulse power
- Bridge or hold-up power



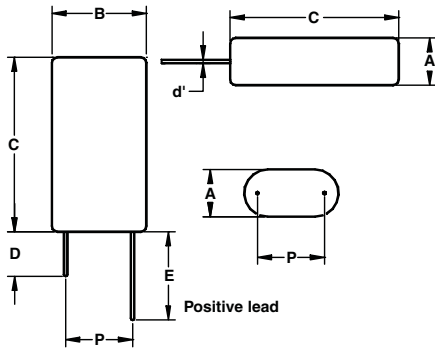
Specifications	
Working Voltage	5.0V
Surge Voltage	6.0V
Capacitance	0.22F to 0.47F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

Standard Product					
Nominal Capacitance (F)	Part Numbers		Nominal ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)	Typical Mass (grams/piece)
	Vertical	Horizontal			
0.22	PA-5R0V224-R	PA-5R0H224-R	0.30	8.5 x 16.8 x 21.5	3.5
0.47	PA-5R0V474-R	PA-5R0H474-R	0.20	10.5 x 20.8 x 22.5	5.4

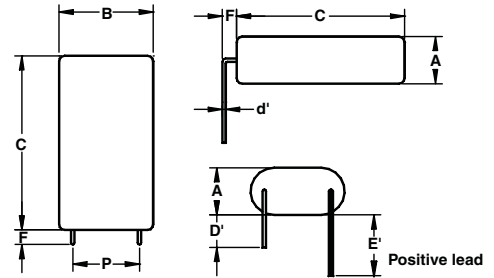
Performance		
Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 5.0Vdc)	≤ 30 %	≤ 300 %
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30 %	≤ 300 %

Dimensions (mm)											
Vertical Part #	Horizontal Part #	A	B	C	d'	D	D'	E	E'	F	P
PA-5ROV224-R	PA-5ROH224-R	9.0	17.3	22.0	0.5	20	15	25	20	2.0	11.8
PA-5ROV474-R	PA-5ROH474-R	11.0	21.3	23.0	0.6	20	15	25	20	2.0	5.3
Tolerances		Maximum			± 0.02	Minimum			± 0.5		

Note: Longer lead is positive.



Vertical



Horizontal

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

Packaging Information

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

Part Marking

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

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