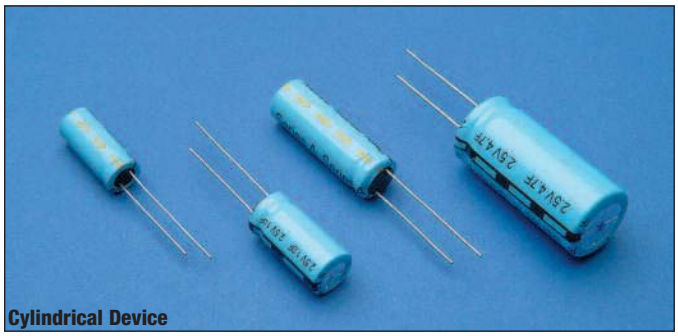
PowerStor®

Supercapacitors
A Series


Cylindrical Device

Description

RoHS 2002/95/EC

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

- Very low ESR
- Low leakage current
- Long cycle life
- High useable capacity
- Very high specific capacitance also available (B Series)

Applications

- Pulse power
- Hold-up power
- DC/DC converters
- Hybrid battery packs
- Valve / solenoid actuation

Not for New Designs
See HV Series, Data Sheet 4376

Specifications	
Working Voltage	2.5V
Surge Voltage	3.0V
Nominal Capacitance Range	0.47 to 4.7F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

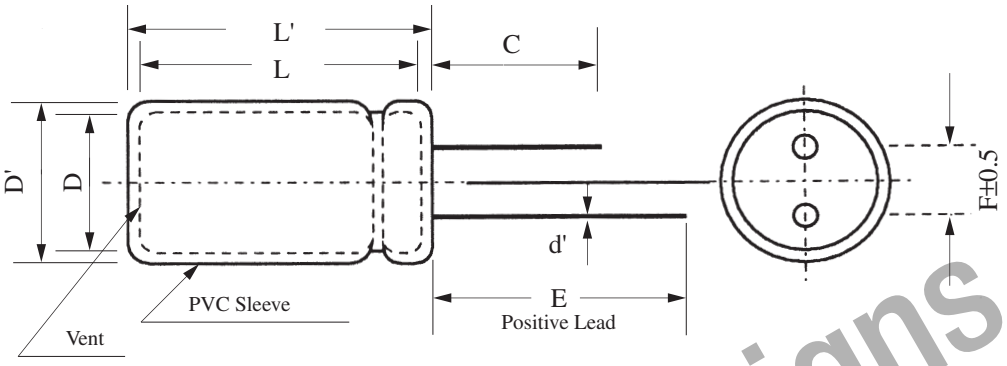
Standard Products

Nominal Capacitance (F)	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)		Typical Mass (grams/1 piece)
			Diameter	Length	
0.47	A0820-2R5474-R	0.150	8	20	1.8
1.0	A1020-2R5105-R	0.090	10	20.5	2.6
1.5	A1030-2R5155-R	0.060	10	30	3.8
4.7	A1635-2R5475-R	0.025	16	35	10.7

Performance

Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 2.5Vdc)	≤ 30	≤ 300
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30	≤ 300

Dimensions (mm)								
Part Number	**D**	**D'**	**L**	**L'**	**F**	**d'**	**C**	**E**
A0820-2R5474-R	8.0	8.5	20.5	21.0	3.5	0.50	20.0	25.0
A1020-2R5105-R	10.0	10.5	21.8	22.3	5.0	0.60	20.0	25.0
A1030-2R5155-R	10.0	10.5	31.0	31.5	5.0	0.60	20.0	25.0
A1635-2R5475-R	16.0	16.5	37.5	38.0	7.5	0.80	20.0	25.0
Tolerances	Maximum				± 0.5	± 0.02	Minimum	



Part Numbering System										
A	☐	☐	☐	☐	**-**	**2**	**R**	**5**	☐ ☐	☐
Series Code	Dimensions (mm)					Voltage (V) R is decimal			Capacitance (µF)	
B = Very Low ESR	Diameter		Length			2R5 = 2.5V			Value	Multiplier
									Example: 475 = 47 x 10^5µF or 4.7F	

Packaging Information

Standard packaging: Bulk, 100 units per package.

Special packaging available upon request. Contact factory.

Part Marking

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

Not for New Designs
See HV Series, Data Sheet 4376

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COILTRONICS® COOPER Bussmann® PowerStor®

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