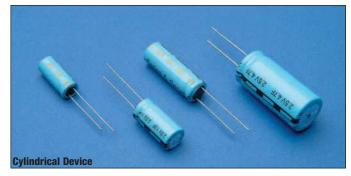
PowerStor

Supercapacitors

A Series



Description

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

Į	Sp	ecifi	icati	ons	

Description	Hybrid battery packs
Cooper Bussmann [®] PowerStor [®] supercapacitors	Valve / solenoid actuation
are unique, ultra-high capacitance devices utilizing	
electrochemical double layer capacitor (EDLC) construction	CIVI OIV
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.	
Specif	ications
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
	· · · · · · · · · · · · · · · · · · ·

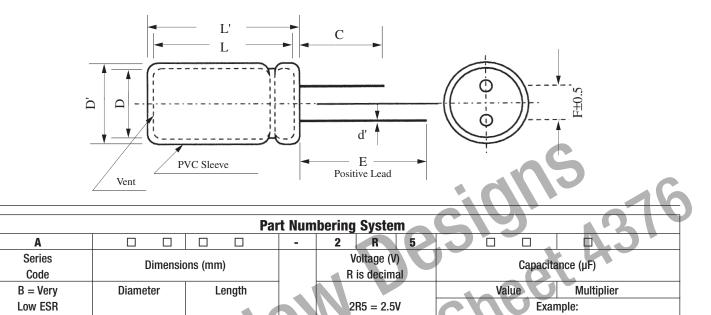
Standard Products						
Nominal Part		Nominal ESR (Ω)	Nominal Dimensions (mm)		Typical Mass	
Capacitance Number		(Equivalent Series Resistance)		1	(grams/1 piece)	
(F)		Measured @ 1kHz	Diameter	Length		
0.47	A0820-2R5474-R	0.150	8	20	1.8	
1.0	A1020-2R5105-R	0.090	10	20.5	2.6	
1.5	A1030-2R5155-R	0.060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

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

Data Sheet 4302



Dimensions (mm)								
Part Number	D	D'	L	Ľ	F	ď	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	Mini	mum			



Packaging Information

Standard packaging: Bulk, 100 units per package.

Special packaging available upon request. Contact factory.

Part Marking

475 = 47 x 10⁵µF or 4.7F

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

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 Tei: +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

This bulletin is intended to present product design solutions and technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

© 2007 Cooper Bussmann St. Louis, MO 63178 www.cooperbussmann.com

1207 BU-SB07352



Page 2 of 2



