

Supercapacitors

KS Series



Surface Mount Device

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

- Eco-friendly
- Long cycle life
- High-rated voltage
- Small-sized and large capacity

Applications

- RTC back-up (MP3, PMP, MD player) DSC Wireless & cellular phones
- Pagers & PDAs
- Solar watch, solar calculators

Specifications

Working Voltage	2.8V	3.3V
Surge Voltage	2.8V	3.3V
Nominal Capacitance Range	0.33F	0.22F
Capacitance Tolerance	-20% to +80% (20°C)	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C	-10°C to 60°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	Thickness	
0.33	KS-2R8334-R	100	6.8	2.1	0.25
0.22	KS-3R3224-R	200	6.8	2.1	0.25

Performance

Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 3.3Vdc)	≤ 30	≤ 400
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30	≤ 400

Dimensions (mm)		
Part Number	D	L
KS-2R8334-R	6.8	2.1
KS-3R3224-R	6.8	2.1



Part Numbering System									
K	S	-	3	R	3	22	4	-	R
Series Code	Version		Voltage (V) R is decimal		Capacitance (µF)				RoHS Compliant
K = Coin Cell	S = SMT		3R3 = 3.3V		Value	Multiplier			
Example: 224 = 22 x 10 ⁴ µF or 0.22F									

Packaging Information

Standard packaging: Bulk, 1000 units per pack with 100 units per tray

Part Marking

Manufacturer
Product Series & Size

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
Tel: +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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide 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.