

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!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# 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



	Specific	ations	
Working Voltage	2.81	V 3.3V	
Surge Voltage	2.81	V 3.3V	
Nominal Capacitance Range	0.33	3F 0.22F	
Capacitance Tolerance	-20% to +80	0% (20°C) -20% to +80% (20°C)	
Operating Temperature Range	-25°C to	70°C -10°C to 60°C	

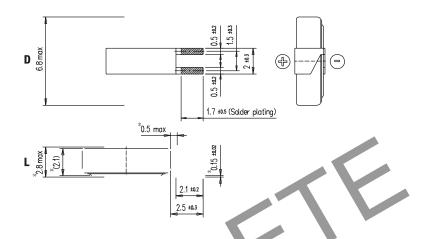
Standard Products							
Nominal Capacitance	Part Number	Nominal ESR ( $\Omega$ ) (Equivalent Series Resistance)	Nominal Dim	ensions (mm)	Typical Mass (grams/1 piece)		
(F)		Measured @ 1kHz	Diameter	Thickness	. ,		
0.33	KS-2R8334-R	100	6.8	2.1	0.25		
0.22	KS-3R3224-R	200	6.8	2.1	0.25		

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





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	Version		Voltage (V) Capacitance (µF)		Canacitance (uF)					
Code	10101011		R	is decima	al	Capacitatios (pir)				RoHS
						Value		Multiplier		Compliant
	K = Coin $S = SMT$			R3 = 3.3	V	Example:		Compilar	Compliant	
Cell			1		224 =	224 = 22 x 10⁴μF 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.

© 2010 Cooper Bussmann www.cooperbussmann.com









0910 BU-SB101000 Data Sheet: 4303 Page 2 of 2