

# Supercapacitors

## KS Series



### Surface Mount Device

#### Description

Cooper Bussmann<sup>®</sup> PowerStor<sup>®</sup> 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

<b>Working Voltage</b>	2.8V	3.3V
<b>Surge Voltage</b>	2.8V	3.3V
<b>Nominal Capacitance Range</b>	0.33F	0.22F
<b>Capacitance Tolerance</b>	-20% to +80% (20°C)	-20% to +80% (20°C)
<b>Operating Temperature Range</b>	-25°C to 70°C	-10°C to 60°C

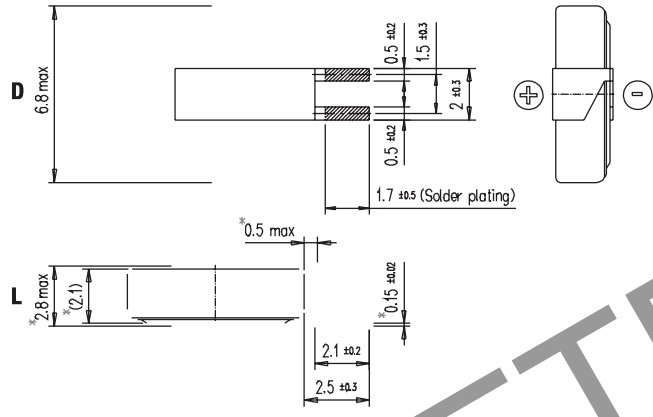
### Standard Products

Nominal Capacitance (F)	Part Number	Nominal ESR ( $\Omega$ ) (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									
<b>K</b>	<b>S</b>	-	<b>3</b>	<b>R</b>	<b>3</b>	<b>22</b>	<b>4</b>	-	<b>R</b>
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 <sup>4</sup> 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.



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9