

# 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

<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 (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									
<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

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