

Supercapacitors

KSR Series



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**

- r cataros a Dont
- Eco-friendly Long cycle life
- High-rated voltage
- Small-sized and large capacity

Applications

• RTC Back-up (MP3, PMP, MD player, DSC, wireless phone, pagers, PDA, cellular phone, etc.)

• Solar watch, solar calculators





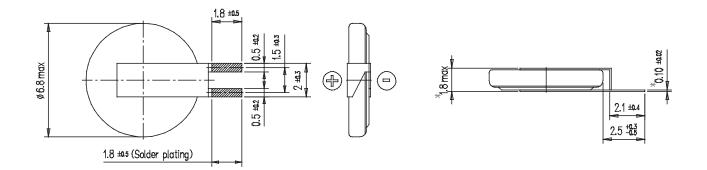
| Specifications | | | | | | | |
|-----------------------------|--|--|---------------------|---------------------|--|--|--|
| | | | KSR-2R8334-R | KSR-3R3204-R | | | |
| Working Voltage | | | 2.8V | 3.3V | | | |
| Surge Voltage | | | 2.8V | 3.3V | | | |
| Nominal Capacitance | | | 0.33F | 0.22F | | | |
| Capacitance Tolerance | | | -20% to +80% (20°C) | -20% to +80% (20°C) | | | |
| Operating Temperature Range | | | -10°C to 60°C | -10°C to 60°C | | | |
| | | | • | | | | |

| Standard Product | | | | | | | | |
|------------------|------------|----|---|--------------|--------------------------------|---------------|--|--|
| Nominal | Nominal | | Nominal ESR (Ω) (Equivalent Series Resistance) | Nominal Dime | Nominal Dimensions (mm) Typica | | | |
| Capacitance (F) | Part Numbe | er | Measured @1kHz | Diameter | Thickness | (grams/piece) | | |
| 0.22 | KSR-3R3204 | -R | 200 | 6.8 | 1.4 | 0.19 | | |
| 0.33 | KSR-2R8334 | -R | 200 | 6.8 | 1.4 | 0.19 | | |

| Performance | | | | |
|---|-------------------------------|--------------------------------|--|--|
| | Capacitance Change | ESR (Ω) | | |
| Parameter | (% of initial measured value) | (% of initial specified value) | | |
| Life (0.22F = 1000 hrs @ 60°C @ 3.3Vdc) (0.33F = 1000 hrs @ 60°C @ 2.8Vdc) | <u>≤</u> 30 % | <u>≤</u> 400 | | |
| Storage - Low and High Temperature (1000 hrs @ -10°C and 60°C) | ≤ 30 % | ≤ 400 | | |







Note: These parts are not suitable for reflow solder.

| | | | Part Numbering System | | | | | |
|-----------|-------------|---|-----------------------|------------------------------|------------|---------------|---|-----------|
| K | SR | - | 3 R | 3 | 20 | 4 | - | R |
| Series | | | Voltage (V) | Voltage (V) Capacitance (µF) | | | | |
| Code | | | R is Decimal | | Value | Multiplier | | |
| Κ = | SR = SMT | 1 | 3R3 = 3.3V | | Exa | ample | | RoHS |
| Coin Cell | Low-Profile | | | | 204 = 20 x | 10⁴µF or 0.2F | | Compliant |
| | | | | | | | | i |

Packaging Information

Standard packaging: Bulk, 1000 units per pack.

Part Marking

Manufacturer **Product Series & Size**

