

Supercapacitors

KSL 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

- Eco-friendly
- Compatible with lead free reflow solder (260°C Peak)
- 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 Specification S | | | | | | | | |
|--|----------|---------------------|--|--|--|--|--|--|
| Working Voltage | | 3.3V | | | | | | |
| Surge Voltage | | 3.3V | | | | | | |
| Nominal Capacitance | | 0.07F | | | | | | |
| Capacitance Tolerance | <u> </u> | -20% to +80% (20°C) | | | | | | |
| Operating Temperature Range | | -25°C to 60°C | | | | | | |

| Standard Product | | | | | | | | | | |
|------------------|-------------|-----|---|--------------|--------------|---------------|--|--|--|--|
| Nominal | | | Nominal ESR (Ω) (Equivalent Series Resistance) | Nominal Dime | Typical Mass | | | | | |
| Capacitance (F) | Part Number | er | Measured @1kHz | Diameter | Thickness | (grams/piece) | | | | |
| 0.07 | KSL-3R3703 | S-R | 100 | 4.8 | 1.4 | 0.08 | | | | |

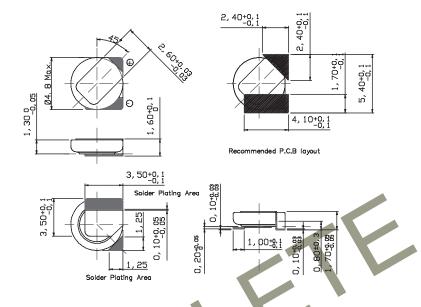
| Performance | | | | | | | |
|--|-------------------------------|--------------------------|--|--|--|--|--|
| | Capacitance Change | $ESR\left(\Omega\right)$ | | | | | |
| Parameter | (% of initial measured value) | Measured @ 1kHz | | | | | |
| Life (500 hrs @ 60°C @ 3.3Vdc) | ≤ 30 % | ≤ 2000 | | | | | |
| Storage - Low and High Temperature (1000 hrs @ -25°C and 60°C) | ≤ 30 % | ≤ 2000 | | | | | |

0910 BU-SB10998 Page 1 of 2



Data Sheet: 4304

Dimensions - mm



| Part Numbering System | | | | | | | | | | | | | | |
|-----------------------|------------|---|-------------|-------------|----|------------------|---|-------|-----------|---|------------|------|---|---|
| K | SL | - | 3 | R | | 3 | | 70 | | | 3 | S | - | R |
| Series | Version | | Voltage (V) | | Ι, | Capacitance (μF) | | | Terminal | | | | | |
| Code | Dimensions | | | R is Decima | al | | , | Value | | | Multiplier | Туре | | |
| K = | SL = SMT | | 3R3 = 3.3V | | | Example | | | S = Small | 1 | RoHS | | | |
| Coin Cell | Miniature | | | | | | $703 = 70 \times 10^{3} \mu F \text{ or } 0.07 F$ | | | | Compliant | | | |

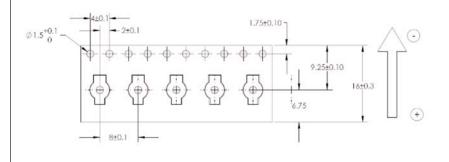
Packaging Information

Standard packaging: Tape & Reel, 4000 units per reel.

Part Marking

Manufacturer **Product Series & Size**

Tape Dimensions



North America

Cooper Bussmann 1225 Broken Sound Parkway NW 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







Data Sheet: 4304



0910 BU-SB10998 Page 2 of 2