3.95mmL MAX. Chip Type, Bi-polarized











• Chip type with 3.95mmL MAX, height.

- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).

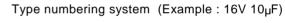


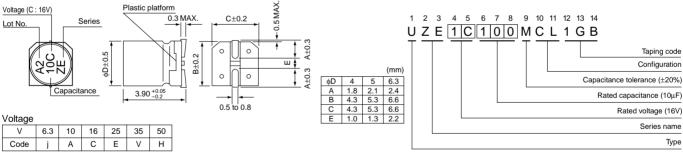


Specifications

| Item | Performance Characteristics | | | | | | | | | | | | | | | |
|-------------------------------|--|-------------|-------|--------|--------|-----|------|-----------|---|--------------|----------------------------------|---|--|--|--|--|
| Category Temperature Range | -40 to +85°C | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 50V | | | | | | | | | | | | | | | |
| Rated Capacitance Range | 0.1 to 47µF | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | | | | | | | | | |
| Leakage Current | After 2 minutes' application of rated voltage, leakage current is not more than 0.05 CV or 10 (µA) , whichever is greater. | | | | | | | | | | | | | | | |
| | Measurement frequency : 120Hz at 20°C | | | | | | | | | | | | | | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | | 6.3 | 1 | 10 | | 16 | 25 | 35 | | 50 | | | | | |
| | tan δ (M/ | AX.) | 0.30 | 0. | .24 | 0 | .20 | 0.18 | 0.1 | 6 | 0.16 | | | | | |
| | Measurement frequency : 120Hz | | | | | | | | | | | | | | | |
| | Rated voltage (V) | | | 6.3 | 10 |) | 16 | 25 | | 35 | 50 | | | | | |
| Stability at Low Temperature | Impedance ratio | Z-25°C / Z+ | +20°C | 4 | 3 | | 2 | 2 | | 2 | 2 | | | | | |
| | ZT / Z20 (MAX.) | Z-40°C / Z- | +20°C | 8 | 8 | | 4 | 4 | | 3 | 3 |] | | | | |
| Endurance | The specifications listed at right shall be met when Capa | | | | | | | citance c | tance change Within ±30% of the initial capacitance value | | | | | | | |
| | the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C with the | | | | | | | | 300 | 0% or less t | than the initial specified value | | | | | |
| | polarity inverted ev | | | with ر | tne | | Leak | age curre | nt | Les | ss than or e | equal to the initial specified value | | | | |
| Shelf Life | After storing the ca | | | | | | | | | | | e treatment based on JIS C 5101-4 ed above. | | | | |
| Resistance to soldering | The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are | | | | | | | Capaci | Capacitance change Within ±10% of the initial capacitance value | | | | | | | |
| | | | | | | | | tan δ | | | | | | | | |
| heat | removed from the | | | | ı tney | are | | Leakag | je curre | ent | | an or equal to the initial specified value | | | | |
| Marking | Black print on the case top. | | | | | | | | | | | | | | | |

■Chip Type





Dimensions

| | V | 6 | .3 | 1 | 0 | 1 | 6 | 2 | 5 | 3 | 5 | 5 | 0 |
|----------------|-----|-----|------|-----|----|-----|------|-----|----|-----|-----|-----------|--------------|
| Cap. (µF) Code | | 0J | | 1A | | 1C | | 1E | | 1V | | 1H | |
| 0.1 | 0R1 | | | | | | | | | | | 4 | 1.0 |
| 0.22 | R22 | | i | | | | | | | | | 4 | 2.0 |
| 0.33 | R33 | | | | | | | | | | | 4 | 2.8 |
| 0.47 | R47 | | i | | | | | | | | | 4 | 4.0 |
| 1 | 010 | | | | | | | | | | | 4 | 8.4 |
| 2.2 | 2R2 | | i | | | | | | | 4 | 8.4 | 5 | 13 |
| 3.3 | 3R3 | | ! | | | | | 5 | 12 | 5 | 16 | 5 | 17 |
| 4.7 | 4R7 | | i | | | 4 | 12 | 5 | 16 | 5 | 18 | 6.3 | 20 |
| 10 | 100 | | ! | 4 | 17 | 5 | 23 | 6.3 | 27 | 6.3 | 29 | | |
| 22 | 220 | 5 | 28 | 6.3 | 33 | 6.3 | 37 | | | | | | |
| 33 | 330 | 6.3 | 37 | 6.3 | 41 | 6.3 | 49 | | | | | | |
| 47 | 470 | 6.3 | 45 | | | | | | | | I | Case size | Rated ripple |

Rated ripple current (mArms) at 85°C 120Hz

Frequency coefficient of rated ripple current

| Frequency | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10 kHz or more |
|-------------|-------|--------|--------|-------|----------------|
| Coefficient | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |

- Taping specifications are given in page 23.
- Recommended land size soldering by reflow are given
- Please refer to page 3 for the minimum order quantity.