

Chip Type, 105 Use, Low Impedance Capacitors

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 105 .



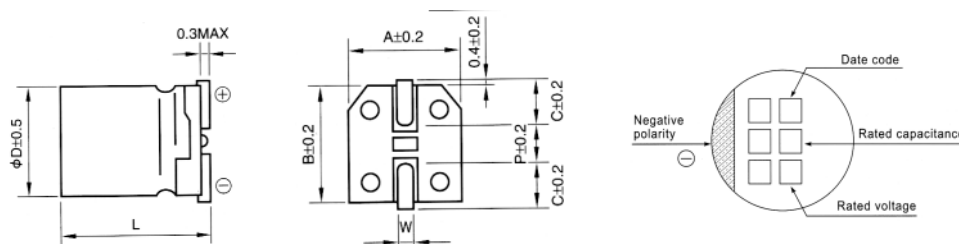
Marking color : Black print ($\phi 4 \times 5.3L - \phi 8 \times 6.5L$)
White print on a brown sleeve ($\phi 8 \times 10L - \phi 10 \times 10L$)

SPECIFICATIONS

| Item | Performance | | | | | | |
|---|---|---|------|------|------|------|---|
| Category temperature range () | -55~+105 | | | | | | |
| Tolerance at rated capacitance (%) | ± 20 (20 , 120Hz) | | | | | | |
| Leakage current (μA) | Less than 0.01CV or 3 whichever is larger (after 2 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20) | | | | | | |
| Tangent of loss angle ($\tan \delta$) | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | |
| | $\tan \delta$ (max.) | 0.28 | 0.24 | 0.20 | 0.16 | 0.14 | |
| Characteristics at high and low temperature | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | |
| | Impedance ratio (max.) | Z25 /Z+20 | 4 | 3 | 2 | 2 | 2 |
| | | Z55 /Z+20 | 8 | 5 | 4 | 3 | 3 |
| Endurance (105) (Applied ripple current) | Test time | 2000 hours (8x6.5 or less : 1000 hours) | | | | | |
| | Leakage current | The initial specified value or less | | | | | |
| | Percentage of capacitance change | Within $\pm 25\%$ of initial value | | | | | |
| | Tangent of the loss angle | 200% or less of the initial specified value | | | | | |
| Shelf life (105) | Test time : 2000 hours; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1 | | | | | | |
| Coefficient of Frequency for Rated Ripple Current | Frequency (Hz) | 120 | 1k | 10k | 100k | | |
| | Rated voltage (V) | 0.5 | 0.75 | 0.9 | 1.0 | | |
| Applicable standards | JIS C5101-1, -18 1998 (IEC 60384-1 1992, -18 1993) | | | | | | |

OUTLINE DRAWING

Unit : mm



| ϕD | L | A | B | C | W | P |
|----------|----------------|------|------|-----|------------|-----|
| 4 | 5.3 ± 0.2 | 4.3 | 4.3 | 2.0 | 0.5 to 0.8 | 1.0 |
| 4 | 5.8 ± 0.3 | 4.3 | 4.3 | 2.0 | 0.5 to 0.8 | 1.0 |
| 5 | 5.3 ± 0.2 | 5.3 | 5.3 | 2.3 | 0.5 to 0.8 | 1.5 |
| 5 | 5.8 ± 0.3 | 5.3 | 5.3 | 2.3 | 0.5 to 0.8 | 1.5 |
| 6.3 | 5.3 ± 0.2 | 6.6 | 6.6 | 2.7 | 0.5 to 0.8 | 2.0 |
| 6.3 | 5.8 ± 0.3 | 6.6 | 6.6 | 2.7 | 0.5 to 0.8 | 2.0 |
| 6.3 | 7.7 ± 0.3 | 6.6 | 6.6 | 2.7 | 0.5 to 0.8 | 2.5 |
| 8 | 6.5 ± 0.3 | 8.4 | 8.4 | 3.4 | 0.5 to 0.8 | 2.3 |
| 8 | 10 ± 0.5 | 8.4 | 8.4 | 3.0 | 0.7 to 1.1 | 3.1 |
| 8 | 10.5 ± 0.5 | 8.4 | 8.4 | 3.0 | 0.7 to 1.1 | 3.1 |
| 10 | 10 ± 0.5 | 10.4 | 10.4 | 3.3 | 0.7 to 1.1 | 4.7 |
| 10 | 10.5 ± 0.5 | 10.4 | 10.4 | 3.3 | 0.7 to 1.1 | 4.7 |

NOTE

Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.

STANDARD RATINGS

| Rated voltage (V) | | 6.3 | | | 10 | | | 16 | | | 25 | | | 35 | | |
|-------------------|---------|-----------|----------------------|---------|------|----------------------|---------|------|----------------------|---------|------|----------------------|---------|------|----------------------|--|
| Item | Case | Impedance | Rated ripple current | Case | ESR | Rated ripple current | Case | ESR | Rated ripple current | Case | ESR | Rated ripple current | Case | ESR | Rated ripple current | |
| | φD (mm) | Ω | mArms | φD (mm) | Ω | mArms | φD (mm) | Ω | mArms | φD (mm) | Ω | mArms | φD (mm) | Ω | mArms | |
| 4.7 | | | | | | | | | | 4×5.3 | 3.20 | 65 | 4×5.3 | 3.20 | 65 | |
| 10 | | | | 4×5.3 | 3.20 | 65 | 4×5.3 | 3.20 | 65 | 4×5.8 | 1.80 | 80 | 5×5.3 | 1.50 | 110 | |
| | | | | | | | | | | 5×5.3 | 1.50 | 110 | 5×5.8 | 0.76 | 150 | |
| 15 | | | | | | | 4×5.8 | 1.80 | 80 | 5×5.8 | 0.76 | 150 | 5×5.8 | 0.76 | 150 | |
| 22 | 4×5.3 | 3.20 | 65 | 4×5.8 | 1.80 | 80 | 5×5.3 | 1.50 | 110 | 5×5.8 | 0.76 | 150 | 5×5.8 | 0.76 | 150 | |
| | 4×5.8 | 1.80 | 80 | 5×5.3 | 1.50 | 110 | 5×5.8 | 0.76 | 150 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | |
| 33 | 5×5.3 | 1.50 | 110 | 5×5.3 | 1.50 | 110 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | |
| | 5×5.8 | 0.76 | 150 | 5×5.8 | 0.76 | 150 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | |
| 47 | 5×5.3 | 1.50 | 110 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | 6.3×5.8 | 0.44 | 230 | |
| | | | | | | | | | | | | | 6.3×7.7 | 0.50 | 255 | |
| | 5×5.8 | 0.76 | 150 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 8×6.5 | 0.60 | 200 | |
| 68 | | | | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 6.3×7.7 | 0.34 | 280 | |
| | | | | | | | | | | | | | 8×6.5 | 0.34 | 280 | |
| 100 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | 6.3×5.3 | 0.85 | 170 | 6.3×7.7 | 0.34 | 280 | 8×10 | 0.20 | 450 | |
| | | | | | | | | | | | | | | | | |
| | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 6.3×5.8 | 0.44 | 230 | 8×6.5 | 0.60 | 200 | 8×10.5 | 0.17 | 450 | |
| 150 | | | | 6.3×5.8 | 0.44 | 230 | 6.3×7.7 | 0.34 | 280 | 8×10 | 0.20 | 450 | 8×10.5 | 0.17 | 450 | |
| | | | | | | | 8×6.5 | 0.60 | 200 | 8×10.5 | 0.17 | 450 | 10×10 | 0.10 | 670 | |
| 220 | 6.3×5.8 | 0.44 | 230 | 6.3×7.7 | 0.34 | 280 | 6.3×7.7 | 0.34 | 280 | 8×10.5 | 0.17 | 450 | 8×10.5 | 0.17 | 450 | |
| | | | | 8×6.5 | 0.34 | 280 | | | | | | | | | | |
| | 6.3×7.7 | 0.34 | 280 | 8×10 | 0.20 | 450 | 8×10 | 0.20 | 450 | 10×10 | 0.10 | 670 | 10×10 | 0.10 | 670 | |
| 330 | 6.3×7.7 | 0.34 | 280 | 8×10.5 | 0.17 | 450 | 8×10.5 | 0.17 | 450 | 8×10.5 | 0.17 | 450 | 10×10.5 | 0.09 | 670 | |
| | 8×6.5 | 0.34 | 200 | | | | | | | | | | | | | |
| | 8×10 | 0.20 | 450 | 10×10 | 0.10 | 670 | 10×10 | 0.10 | 670 | 10×10 | 0.10 | 670 | | | | |
| 470 | 8×10.5 | 0.17 | 450 | 8×10.5 | 0.17 | 450 | 8×10.5 | 0.17 | 450 | 10×10.5 | 0.09 | 670 | | | | |
| | 10×10 | 0.10 | 670 | 10×10 | 0.10 | 670 | 10×10 | 0.10 | 670 | | | | | | | |
| 680 | 8×10.5 | 0.17 | 450 | 10×10.5 | 0.09 | 670 | 10×10.5 | 0.09 | 670 | | | | | | | |
| 1000 | 8×10.5 | 0.17 | 450 | 10×10.5 | 0.09 | 670 | | | | | | | | | | |
| | 10×10 | 0.10 | 670 | | | | | | | | | | | | | |
| 1500 | 10×10.5 | 0.09 | 670 | | | | | | | | | | | | | |

(Note) Rated ripple current : 105 , 100kHz ; Impedance : 20 , 100kHz