

Chip Type, 105°C Use, Low Impedance Capacitors

GREEN CAP

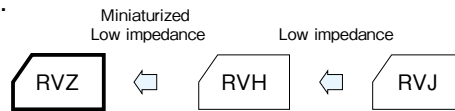
SMD

Low z

105°C
2000hours

Anti-
cleaning
solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 105°C.
($\phi 8 \times 6.5L$ or less : 1000hours)
($\phi 12.5 \times 13.5L$: 5000hours)



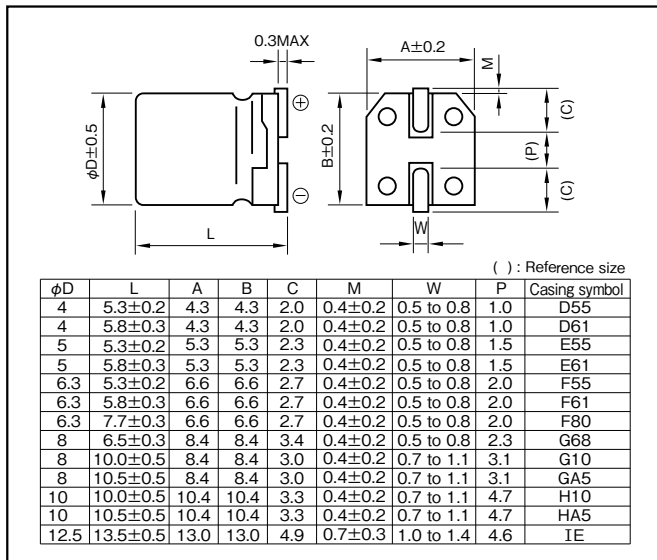
Marking color : Black print ($\phi 4 \times 5.3L - \phi 8 \times 6.5L, \phi 12.5 \times 13.5L$)
: White print on a brown sleeve ($\phi 8 \times 10L - \phi 10 \times 10.5L$)

Specifications

| Item | Performance | | | | | | |
|---|--|---|------|------|------|------|---|
| Category temperature range (°C) | -55 to +105 | | | | | | |
| Tolerance at rated capacitance (%) | ±20 (20°C, 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°C) | | | | | | |
| Tangent of loss angle (tanδ) | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | |
| | tanδ (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.) | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 |
| | | Z-55°C/Z+20°C | 8 | 5 | 4 | 3 | 3 |
| 0.02 is added to every 1000µF increase over 1000µF. (120Hz) | | | | | | | |
| Endurance (105°C) (Applied ripple current) | Test time | 1000 hours ($\phi 8 \times 6.5L$ or less) 2000 hours ($\phi 8 \times 10L$ to $\phi 10 \times 10.5L$) 5000 hours ($\phi 12.5 \times 13.5L$) | | | | | |
| | Leakage current | The initial specified value or less | | | | | |
| | Percentage of capacitance change | Within ±25% of initial value | | | | | |
| | Tangent of the loss angle | 200% or less of initial specified value | | | | | |
| Shelf life (105°C) | Test time : 1000 hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1 | | | | | | |
| Applicable standards | JIS C5101-1 1998, -18 1999 (IEC 60384-1 1992, -18 1993) | | | | | | |

Outline Drawing

Unit : mm



- Soldering conditions are described on page 13.
- Land pattern size are described on page 11.
- The taping specifications are described on page 14.

Coefficient of Frequency for Rated Ripple Current

| Frequency (Hz) | 120 | 1k | 10k | 100k | |
|-------------------|-----------|------|------|------|---|
| Rated voltage (V) | 6.3 to 35 | 0.50 | 0.75 | 0.90 | 1 |

Part numbering system

$\phi 10 \times 10.5L$ or less 6.3V1500µF

| | | | | | | | | | |
|-------------|---|----------------------|---|--------------------------|------------------------------|---------------|---|---|---------------|
| RVZ | — | 6 | V | 152 | M | HA5 | U | — | □ |
| Series code | | Rated voltage symbol | | Rated capacitance symbol | Capacitance tolerance symbol | Casing symbol | | | Taping symbol |

In the case of "for High Temperature Reflow" type, a series name is "RZA".

$\phi 12.5 \times 13.5L$ 6.3V2700µF

| | | | | | | | | | |
|-------------|---|----------------------|---|--------------------------|------------------------------|---------------|---|---|---------------|
| RVZ | — | 6 | V | 272 | M | IE | T | — | R5 |
| Series code | | Rated voltage symbol | | Rated capacitance symbol | Capacitance tolerance symbol | Casing symbol | | | Taping symbol |

Standard Ratings

| Rated voltage (V) | Item | 6.3 | | | | 10 | | | | 16 | | | | 25 | | | | 35 | | | |
|-------------------|-----------|-----------|---------------|-----------|----------------------|-----------|---------------|-----------|----------------------|-----------|---------------|-----------|----------------------|-----------|---------------|-----------|----------------------|-----------|---------------|-----------|----------------------|
| | | Case | Casing symbol | Impedance | Rated ripple current | Case | Casing symbol | Impedance | Rated ripple current | Case | Casing symbol | Impedance | Rated ripple current | Case | Casing symbol | Impedance | Rated ripple current | Case | Casing symbol | Impedance | Rated ripple current |
| | | φDXL (mm) | | (Ω) | (mAmps) | φDXL (mm) | | (Ω) | (mAmps) | φDXL (mm) | | (Ω) | (mAmps) | φDXL (mm) | | (Ω) | (mAmps) | φDXL (mm) | | (Ω) | (mAmps) |
| 4.7 | — | — | — | — | — | — | — | — | — | — | — | — | 4×5.3 | D55 | 3.20 | 65 | 4×5.3 | D55 | 3.20 | 65 | |
| 10 | — | — | — | — | 4×5.3 | D55 | 3.20 | 65 | 4×5.3 | D55 | 3.20 | 65 | 4×5.8 | D61 | 1.80 | 80 | 5×5.3 | E55 | 1.50 | 110 | |
| | — | — | — | — | — | — | — | — | — | — | — | — | 5×5.3 | E55 | 1.50 | 110 | 5×5.8 | E61 | 0.76 | 150 | |
| 15 | — | — | — | — | — | — | — | — | 4×5.8 | D61 | 1.80 | 80 | 5×5.8 | E61 | 0.76 | 150 | 5×5.8 | E61 | 0.76 | 150 | |
| 22 | 4×5.3 | D55 | 3.20 | 65 | 4×5.8 | D61 | 1.80 | 80 | 5×5.3 | E55 | 1.50 | 110 | 5×5.8 | E61 | 0.76 | 150 | 6.3×5.3 | F55 | 0.85 | 170 | |
| | 4×5.8 | D61 | 1.80 | 80 | 5×5.3 | E55 | 1.50 | 110 | 5×5.8 | E61 | 0.76 | 150 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | |
| 33 | 5×5.3 | E55 | 1.50 | 110 | 5×5.3 | E55 | 1.50 | 110 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | |
| | 5×5.8 | E61 | 0.76 | 150 | 5×5.8 | E61 | 0.76 | 150 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | |
| 47 | 5×5.3 | E55 | 1.50 | 110 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.8 | F61 | 0.44 | 230 | |
| | 5×5.8 | E61 | 0.76 | 150 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×7.7 | F80 | 0.34 | 280 | |
| 68 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 8×6.5 | G68 | 0.34 | 280 | |
| | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×7.7 | F80 | 0.34 | 280 | 8×6.5 | G68 | 0.34 | 280 | |
| 100 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 8×6.5 | G68 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | |
| | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×5.3 | F55 | 0.85 | 170 | 6.3×7.7 | F80 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| 150 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×7.7 | F80 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×5.8 | F61 | 0.44 | 230 | 8×6.5 | G68 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| 220 | 6.3×5.8 | F61 | 0.44 | 230 | 6.3×7.7 | F80 | 0.34 | 280 | 6.3×7.7 | F80 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| | 6.3×7.7 | F80 | 0.34 | 280 | 8×6.5 | G68 | 0.34 | 280 | 8×10 | G10 | 0.20 | 450 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| 330 | 6.3×7.7 | F80 | 0.34 | 280 | 8×10.5 | GA5 | 0.17 | 450 | 8×10.5 | GA5 | 0.17 | 450 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | |
| | 8×6.5 | G68 | 0.34 | 280 | 10×10 | H10 | 0.10 | 670 | 10×10 | H10 | 0.10 | 670 | 10×10 | H10 | 0.10 | 670 | 10×10.5 | HA5 | 0.09 | 670 | |
| 470 | 8×10.5 | GA5 | 0.17 | 450 | 8×10.5 | GA5 | 0.17 | 450 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | 12.5×13.5 | IE | 0.06 | 1100 | |
| | 10×10 | H10 | 0.10 | 670 | 10×10 | H10 | 0.10 | 670 | 10×10 | H10 | 0.10 | 670 | 10×10.5 | HA5 | 0.09 | 670 | 12.5×13.5 | IE | 0.06 | 1100 | |
| 680 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | 10×10.5 | HA5 | 0.09 | 670 | 12.5×13.5 | IE | 0.06 | 1100 | 12.5×13.5 | IE | 0.06 | 1100 | |
| 1000 | 8×10.5 | GA5 | 0.17 | 450 | 10×10.5 | HA5 | 0.09 | 670 | 12.5×13.5 | IE | 0.06 | 1100 | 12.5×13.5 | IE | 0.06 | 1100 | — | — | — | — | |
| | 10×10 | H10 | 0.10 | 670 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| 1500 | 10×10.5 | HA5 | 0.09 | 670 | 12.5×13.5 | IE | 0.06 | 1100 | 12.5×13.5 | IE | 0.06 | 1100 | — | — | — | — | — | — | — | — | |
| 2200 | 12.5×13.5 | IE | 0.06 | 1100 | 12.5×13.5 | IE | 0.06 | 1100 | — | — | — | — | — | — | — | — | — | — | — | — | |
| 2700 | 12.5×13.5 | IE | 0.06 | 1100 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |

CHIP ALUMINUM

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