

CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

YG Lead type, High Temperature Series

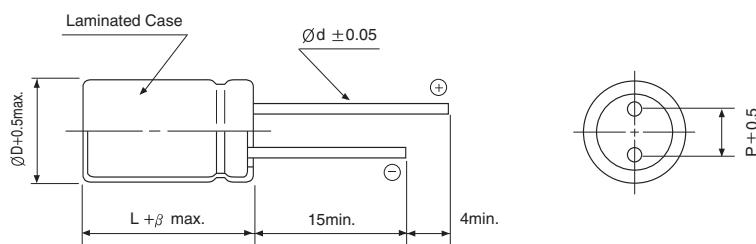
- High temperature range, for 125°C use
- Complied to the RoHS directive



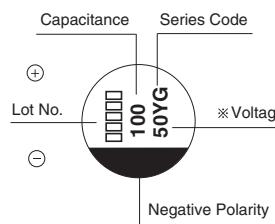
| Item | Characteristics | | | | | |
|--|--|---------------------------------------|------|------|------|----------|
| Operating temperature range | -55 ~ +125°C | | | | | |
| Leakage current max. | $I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes) | | | | | |
| Capacitance tolerance | $\pm 20\%$ at 120Hz, 20°C | | | | | |
| Dissipation factor max. (at 120Hz, 20°C) | WV | 16 | 25 | 35 | 50 | 63 ~ 100 |
| | $\tan\delta$ | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 |
| Low temperature characteristics (Impedance ratio at 100kHz) | $Z(-25°C) / Z(+20°C) \leq 1.5$ $Z(-55°C) / Z(+20°C) \leq 2.0$ | | | | | |
| Load life | After an application of DC bias voltage plus the rated AC ripple current for 4000 hours at 125°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage. | | | | | |
| | Capacitance change | Within $\pm 30\%$ of initial value | | | | |
| | $\tan\delta$ | Less than 200% of the specified value | | | | |
| | ESR | Less than 200% of the specified value | | | | |
| | Leakage current | Less than specified value | | | | |
| Shelf life(at 125°C) | After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4 | | | | | |

DRAWING

Unit : mm



| Size | ØD | L | P | Ød | β |
|---------|------|------|-----|------|-----|
| 6.3×7.5 | 6.3 | 7.5 | 2.5 | 0.45 | 1.5 |
| 8×9.5 | 8 | 9.5 | 3.5 | 0.60 | 1.5 |
| 10×9.5 | 10.0 | 9.5 | 5.0 | 0.60 | 1.5 |
| 10×12 | 10.0 | 12.0 | 5.0 | 0.60 | 1.5 |



PACKING & TAPING (See page 88~90)

YG series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

| μF | WV | 16 | | | 25 | | | 35 | | |
|---------------|---------|----|------|---------|----|------|---------|---------|------|------|
| 47 | | | | | | | | 6.3×7.5 | 35 | 1400 |
| 68 | | | | 6.3×7.5 | 30 | 1400 | 6.3×7.5 | 35 | 1400 | |
| 100 | | | | 6.3×7.5 | 30 | 1400 | 8×9.5 | 27 | 1600 | |
| 150 | 6.3×7.5 | 27 | 1450 | 8×9.5 | 27 | 1600 | 8×9.5 | 27 | 1600 | |
| | | | | | | | 10×9.5 | 20 | 2000 | |
| | | | | | | | | | | |
| 220 | | | | 8×9.5 | 27 | 1600 | | | | |
| 270 | 8×9.5 | 22 | 1700 | 10×9.5 | 20 | 2000 | 10×9.5 | 20 | 2000 | |
| 330 | | | | 10×9.5 | 20 | 2000 | 10×12 | 17 | 2260 | |
| 470 | 10×9.5 | 18 | 2100 | 10×12 | 16 | 2260 | | | | |
| 560 | 10×12 | 14 | 2320 | | | | | | | |

| μF | WV | 50 | | | 63 | | | 80 | | |
|---------------|---------|----|------|--------|---------|------|------|--------|----|------|
| 10 | | | | | 6.3×7.5 | 80 | 900 | | | |
| 15 | 6.3×7.5 | 40 | 1100 | | | | | | | |
| 22 | | | | | 6.3×7.5 | 80 | 900 | 8×9.5 | 45 | 1100 |
| | | | | | 8×9.5 | 40 | 1100 | | | |
| 33 | 6.3×7.5 | 40 | 1100 | | 8×9.5 | 40 | 1100 | | | |
| | | | | | 10×9.5 | 30 | 1400 | | | |
| 39 | | | | | | | | 10×9.5 | 35 | 1200 |
| 47 | 8×9.5 | 30 | 1250 | | | | | 10×12 | 32 | 1400 |
| 56 | 10×9.5 | 25 | 1600 | 10×9.5 | 30 | 1400 | | | | |
| 68 | 10×9.5 | 25 | 1600 | 10×12 | 22 | 1650 | | | | |
| 100 | 10×9.5 | 25 | 1600 | | | | | | | |
| 150 | 10×12 | 19 | 1820 | | | | | | | |

| μF | WV | 100 | | |
|---------------|--------|-----|------|--|
| 10 | 8×9.5 | 60 | 900 | |
| 15 | 10×9.5 | 45 | 1120 | |
| 18 | 10×12 | 40 | 1220 | |

↑ Ripple current (mA rms) at 125°C, 100kHz
 ↑ ESR (mΩ) at 20°C, 100kHz
 ↑ Case size ØD×L (mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| Frequency | 120Hz | 1kHz | 10kHz | 100kHz |
|-------------|-------|------|-------|--------|
| Coefficient | 0.05 | 0.30 | 0.70 | 1.00 |