

KG Wide Temperature, High Ripple Series

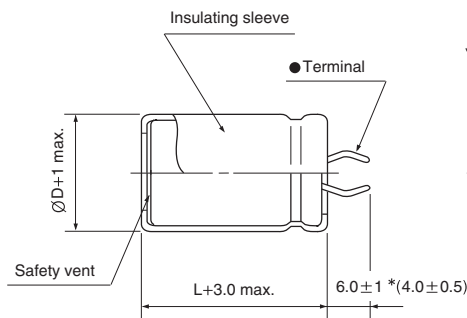
- High ripple current compared with HG series
- Load life of 3000 hours at 105°C
- Complied to the RoHS directive



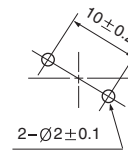
| Item | Characteristics | | | | | | | | |
|--|--|-----------------------------------|------|-----|-----|------|------|------|------|
| Operating temperature range | -40 ~ +105°C | | | | | | | | |
| Capacitance tolerance | ±20% at 120Hz, 20°C | | | | | | | | |
| Leakage current max. | $I=3\sqrt{CV}$ (µA) (after 5 minutes) | | | | | | | | |
| Dissipation factor max. (at 120Hz, 20°C) | Capacitance > 1000µF : tanδ increases by 0.01 for each 1000µF from below value. | | | | | | | | |
| | <table border="1"> <tr> <td>WV</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>tanδ</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table> | WV | 400 | 420 | 450 | tanδ | 0.15 | 0.20 | 0.20 |
| | WV | 400 | 420 | 450 | | | | | |
| tanδ | 0.15 | 0.20 | 0.20 | | | | | | |
| | | | | | | | | | |
| Load life (after application of the rated voltage for 3000 hours at 105°C) | Leakage current | Less than specified value | | | | | | | |
| | Capacitance change | Within ±20% of initial value | | | | | | | |
| | tanδ | Less than 200% of specified value | | | | | | | |
| Shelf life (at 105°C) | After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4 | | | | | | | | |

DRAWING

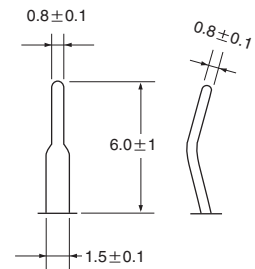
Unit : mm



PC Board Mounting Holes



Terminal



* Shorter terminal(4.0±0.5) is also available upon request.
Terminal length of height 20mm products is applied shorter terminal to standard terminal type.

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

| WV µF | ØD | 400 | | | | 420 | | | | 450 | | | |
|----------|----|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|
| | | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 | 22 | 25.4 | 30 | 35 |
| 100 | | | | | | 22×30 0.77 | 25.4×25 0.75 | | | 22×30 0.77 | 25.4×25 0.98 | | |
| 120 | | 22×30 0.90 | 25.4×25 0.86 | | | 22×30 0.86 | 25.4×25 0.84 | | | 22×35 0.95 | 25.4×25 1.07 | | |
| 150 | | 22×35 1.05 | 25.4×25 1.01 | | | 22×35 1.07 | 25.4×30 1.06 | 30×25 1.14 | | 22×40 1.16 | 25.4×30 1.16 | 30×25 1.09 | |
| 180 | | 22×40 1.32 | 25.4×30 1.31 | 30×25 1.35 | | 22×40 1.27 | 25.4×35 1.28 | 30×25 1.24 | | 22×45 1.39 | 25.4×35 1.39 | 30×30 1.36 | |
| 220 | | 22×45 1.53 | 25.4×35 1.54 | 30×30 1.50 | | 22×50 1.58 | 25.4×40 1.52 | 30×30 1.50 | 35×25 1.39 | | 25.4×40 1.60 | 30×30 1.58 | 35×25 1.53 |
| 270 | | 22×50 1.78 | 25.4×40 1.71 | 30×30 1.81 | 35×25 1.63 | | 25.4×45 1.77 | 30×35 1.67 | 35×30 1.69 | | 25.4×50 2.02 | 30×35 1.80 | 35×30 2.04 |
| 330 | | | 25.4×50 2.05 | 30×35 2.03 | 35×30 1.98 | | | 30×40 2.06 | 35×30 1.81 | | | 30×45 2.13 | 35×35 2.12 |
| 390 | | | | 30×40 2.14 | 35×35 2.21 | | | 30×45 2.33 | 35×35 2.10 | | | 30×50 2.40 | 35×40 2.37 |
| 470 | | | | 30×50 2.54 | 35×40 2.60 | | | 30×50 2.63 | 35×45 2.65 | | | | 35×45 2.72 |

Case size ØD×L (mm)
Ripple current (Arms) at 105°C, 120Hz

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

| WV | Frequency | 50Hz | 120Hz | 300Hz | 1kHz | 10kHz ≤ |
|-----------|-----------|------|-------|-------|------|---------|
| 400 ~ 450 | | 0.85 | 1.00 | 1.15 | 1.20 | 1.40 |