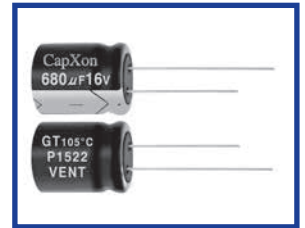


GT Series 105°C Miniaturized, Long Life

Features

- ◆ Long Life: 105°C 10000hours.
- ◆ RoHS compliance.



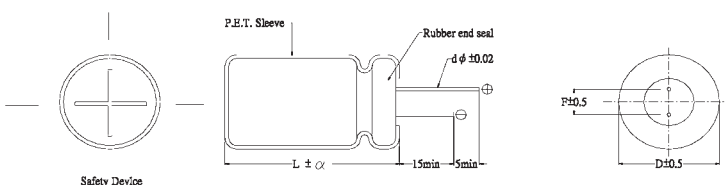
Specifications

| Item | Performance Characteristics | | | | | | |
|--|--|----|----|----|----|----|----|
| Operating Temperature Range | -40 to +105°C | | | | | | |
| Rated Voltage Range | 10~63V.DC | | | | | | |
| Capacitance Tolerance | ±20%(120Hz, +20°C) | | | | | | |
| Leakage Current (+20°C, max.) | $I \leq 0.01CV$ or $3\mu A$ whichever is greater. (After 2 minutes) I= Leakage Current(μA) C= Rated Capacitance V= Rated voltage(V) | | | | | | |
| Dissipation Factor ($\tan \delta$, at 20°C , 120Hz) | Working Voltage(VDC) | 10 | 16 | 25 | 35 | 50 | 63 |
| | D.F.(%)max. | 45 | 35 | 30 | 22 | 19 | 17 |
| Low Temperature Characteristics (at 120Hz) | Impedance ratio max | | | | | | |
| | Rated voltage(VDC) | 10 | 16 | 25 | 35 | 50 | 63 |
| | Z-25°C / Z+20°C | 10 | 8 | 6 | 6 | 5 | 5 |
| | For capacitance > 1000 μF , add 1 per another 1000 μF for -40°C/+20°C. | | | | | | |
| Endurance | Duration time :10000Hrs Ambient temperature :+105°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : $\leq \pm 25\%$ of the initial measured value Dissipation factor : $\leq 300\%$ of the initial specified value Leakage current : \leq The initial specified value | | | | | | |
| Shelf Life | Test condition Duration time :1000 Hrs Ambient temperature :+105°C Applied voltage :None After test requirement at +20°C:Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes. | | | | | | |

Multiplier for Ripple Current vs. Frequency

| CAP(μF)\Frequency(Hz) | 120 | 1K | 10K | 100K \leq |
|------------------------------|------|------|------|-------------|
| 1~10 μF | 0.42 | 0.60 | 0.80 | 1.00 |
| 22~33 μF | 0.55 | 0.75 | 0.90 | 1.00 |
| 47~330 μF | 0.70 | 0.85 | 0.95 | 1.00 |

Diagram of Dimensions:(unit:mm)



| DΦ | 5 | 6.3 | 8 |
|----|--------------------|-----|-------------|
| F | 2.0 | 2.5 | 3.5 |
| dΦ | 0.5 | | L<20 0.5 |
| α | L \geq 20 0.6 | | |
| | L \leq 16: α=1.5 | | |

Case Size

φ DxL(mm)

| Cap(μF) | WV | 10 | | 16 | | 25 | | 35 | |
|---------|----|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 33 | | | | | | 5x11 | 140 | 5x11 | 90 |
| 47 | | | | 5x11 | 140 | 5x11 | 140 | 6.3x11 | 220 |
| 100 | | 5x11 | 140 | 6.3x11 | 220 | 6.3x11 | 220 | 8x11.5 | 340 |
| 220 | | 6.3x11 | 220 | 8x11.5 | 340 | | | | |
| 330 | | 8x11.5 | 340 | | | | | | |

| Cap(μF) | WV | 50 | | 63 | |
|---------|----|--------|--------|--------|--------|
| | | Size | Ripple | Size | Ripple |
| 1 | | 5x11 | 26 | | |
| 2.2 | | 5x11 | 36 | | |
| 3.3 | | 5x11 | 75 | | |
| 4.7 | | 5x11 | 85 | | |
| 10 | | 5x11 | 95 | 5x11 | 85 |
| 22 | | 5x11 | 140 | 6.3x11 | 180 |
| 33 | | 6.3x11 | 200 | 6.3x11 | 180 |
| 47 | | 6.3x11 | 200 | 8x11.5 | 250 |
| 100 | | 8x11.5 | 280 | | |

Ripple Current (mA, rms) at 105°C 100KHz