



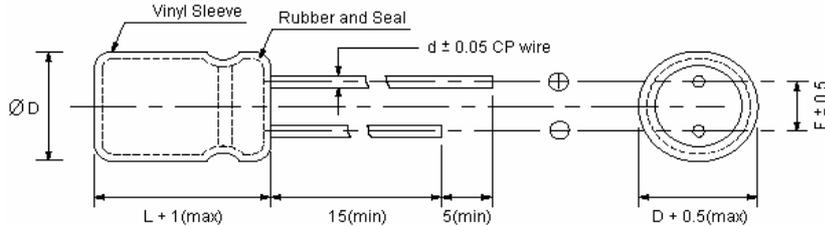
RoHS Compliant ALUMINIUM ELECTROLYTIC CAPACITOR

GS Series

■ **FEATURES**

Wide temperature range series with 7mm height.
 Load life of 1000 hours at 105°C.

■ **OUTLINE**



| | mm | | | |
|---|------|-----|------|-----|
| D | 4 | 5 | 6.3 | 8 |
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| d | 0.45 | | 0.50 | |

■ **SPECIFICATIONS**

| Items | Characteristics | | | | | | | |
|-------------------------------------|---|-----------------------------------|------|------|-------------------------|------|------|--|
| Capacitance Tolerance (120Hz, 25°C) | ± 20% (M) | | | | | | | |
| Rated Working Voltage Range | 6.3 ~ 50VDC | | | | | | | |
| Operation Temperature | -40°C ~ +105°C | | | | | | | |
| Leakage Current (25°C) | (After 2 minutes applying the DC working voltage) | | | | | | | |
| | I ≤ 0.01CV or 3 (µA) | | | | | | | |
| | I : Leakage Current (µA) | C : Rated Capacitance (µF) | | | V : Working Voltage (V) | | | |
| Surge Voltage (25°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | S.V. | 8 | 13 | 20 | 32 | 44 | 63 | |
| Dissipation Factor (120Hz, 25°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | tan d | 0.24 | 0.21 | 0.18 | 0.15 | 0.13 | 0.11 | |
| Temperature Characteristics | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | - 25°C / + 25°C | 4 | 3 | 2 | 2 | 2 | 2 | |
| | - 40°C / + 25°C | 8 | 6 | 4 | 4 | 3 | 3 | |
| Impedance ratio at 120Hz | | | | | | | | |
| Load Test | After 1000 hours application of WV at +105°C, the capacitor shall meet the following limits. | | | | | | | |
| | Capacitance Change | ≤ ± 25% of initial value | | | | | | |
| | tan d | ≤ 200% of initial specified value | | | | | | |
| | Leakage Current | ≤ initial specified value | | | | | | |
| Shelf Test | After 500 hours, no voltage applied at +105°C, the capacitor shall meet the following limits. | | | | | | | |
| | Capacitance Change | ≤ ± 25% of initial value | | | | | | |
| | tan d | ≤ 200% of initial specified value | | | | | | |
| | Leakage Current | ≤ 200% of initial specified value | | | | | | |



■ **DIMENSIONS**

D x L (mm)

| uF \ WV | 6.3 | 10 | 16 | 25 | 35 | 50 |
|---------|---------|---------|---------|---------|---------|---------|
| 0.1 | | | | | ⇒ | 4 x 7 |
| 0.22 | | | | | ⇒ | 4 x 7 |
| 0.33 | | | | | ⇒ | 4 x 7 |
| 0.47 | | | | | ⇒ | 4 x 7 |
| 1 | | | | | ⇒ | 4 x 7 |
| 2.2 | | | | | ⇒ | 4 x 7 |
| 3.3 | | | | | ⇒ | 4 x 7 |
| 4.7 | | | ⇒ | 4 x 7 | 4 x 7 | 5 x 7 |
| 10 | | ⇒ | 4 x 7 | 4 x 7 | 5 x 7 | 5 x 7 |
| 22 | ⇒ | 4 x 7 | 4 x 7 | 5 x 7 | 6.3 x 7 | 6.3 x 7 |
| 33 | ⇒ | 4 x 7 | 5 x 7 | 6.3 x 7 | 6.3 x 7 | 8 x 7 |
| 47 | 5 x 7 | 5 x 7 | 5 x 7 | 6.3 x 7 | 8 x 7 | |
| 100 | 6.3 x 7 | 6.3 x 7 | 6.3 x 7 | 8 x 7 | | |
| 220 | 8 x 7 | 8 x 7 | | | | |

■ **PERMISSIBLE RIPPLE CURRENT**

mA (rms) at 120Hz 105°C

| uF \ WV | 6.3 | 10 | 16 | 25 | 35 | 50 |
|---------|-----|-----|----|----|----|----|
| 0.1 | | | | | ⇒ | 1 |
| 0.22 | | | | | ⇒ | 2 |
| 0.33 | | | | | ⇒ | 3 |
| 0.47 | | | | | ⇒ | 5 |
| 1 | | | | | ⇒ | 10 |
| 2.2 | | | | | ⇒ | 19 |
| 3.3 | | | | | ⇒ | 24 |
| 4.7 | | | ⇒ | 15 | 24 | 29 |
| 10 | | ⇒ | 28 | 30 | 32 | 34 |
| 22 | ⇒ | 37 | 41 | 46 | 50 | 53 |
| 33 | ⇒ | 43 | 51 | 56 | 62 | 64 |
| 47 | 45 | 52 | 66 | 69 | 73 | |
| 100 | 65 | 89 | 91 | 96 | | |
| 220 | 120 | 130 | | | | |