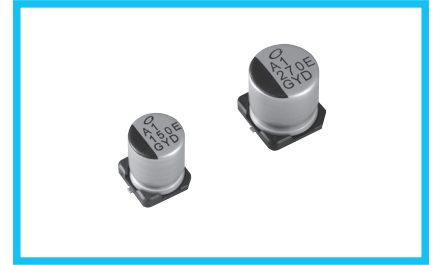
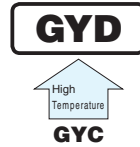


GYD Chip Type, 150°C High Reliability



- High Reliability, Low ESR, High ripple current.
- Long life of 1000 hours at 150°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.

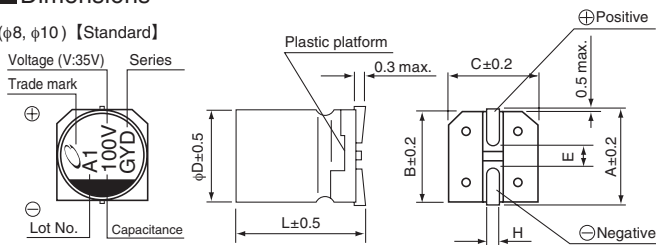


Specifications

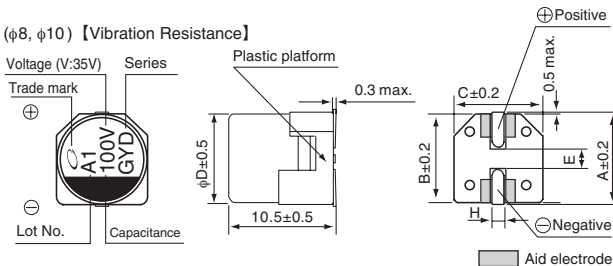
| Item | Performance Characteristics | | | | | | | | | | | |
|---|---|------|------------|--|--------------------|---|-------|---|-----------------|---|-----------------|---|
| Category Temperature Range | -55 to +150°C | | | | | | | | | | | |
| Rated Voltage Range | 25 to 35V | | | | | | | | | | | |
| Rated Capacitance Range | 100 to 270μF | | | | | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | | | | | | |
| Tangent of loss angle (tan δ) | <table><tr><td>Rated voltage (V)</td><td>25</td><td>35</td><td rowspan="2">120Hz 20°C</td></tr><tr><td>tan δ (max.)</td><td>0.14</td><td>0.12</td></tr></table> | | | | Rated voltage (V) | 25 | 35 | 120Hz 20°C | tan δ (max.) | 0.14 | 0.12 | |
| Rated voltage (V) | 25 | 35 | 120Hz 20°C | | | | | | | | | |
| tan δ (max.) | 0.14 | 0.12 | | | | | | | | | | |
| ESR | Less than or equal to the specified value at 100kHz, 20°C | | | | | | | | | | | |
| Leakage Current ※ | After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV(μA). | | | | | | | | | | | |
| Temperature Characteristics (Max.Impedance Ratio) | $Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$ $Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (100kHz) | | | | | | | | | | | |
| Endurance | The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 1000 hours at 150°C, the peak voltage shall not exceed the rated voltage. | | | <table><tr><td>Capacitance change</td><td>Within ± 30% of initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr><tr><td>ESR</td><td>200% or less of the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table> | Capacitance change | Within ± 30% of initial capacitance value | tan δ | 200% or less of the initial specified value | ESR | 200% or less of the initial specified value | Leakage current | Less than or equal to the initial specified value |
| Capacitance change | Within ± 30% of initial capacitance value | | | | | | | | | | | |
| tan δ | 200% or less of the initial specified value | | | | | | | | | | | |
| ESR | 200% or less of the initial specified value | | | | | | | | | | | |
| Leakage current | Less than or equal to the initial specified value | | | | | | | | | | | |
| Shelf Life | After storing the capacitors under no load at 150°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. | | | | | | | | | | | |
| Damp Heat (Steady State) | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C, 85% RH. | | | <table><tr><td>Capacitance change</td><td>Within±30% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>200% or less of the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table> | Capacitance change | Within±30% of the initial capacitance value | tan δ | 200% or less of the initial specified value | Leakage current | Less than or equal to the initial specified value | | |
| Capacitance change | Within±30% of the initial capacitance value | | | | | | | | | | | |
| tan δ | 200% or less of the initial specified value | | | | | | | | | | | |
| Leakage current | Less than or equal to the initial specified value | | | | | | | | | | | |
| Resistance to Soldering Heat | The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C. | | | <table><tr><td>Capacitance change</td><td>Within±10% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>Less than or equal to the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table> | Capacitance change | Within±10% of the initial capacitance value | tan δ | Less than or equal to the initial specified value | Leakage current | Less than or equal to the initial specified value | | |
| Capacitance change | Within±10% of the initial capacitance value | | | | | | | | | | | |
| tan δ | Less than or equal to the initial specified value | | | | | | | | | | | |
| Leakage current | Less than or equal to the initial specified value | | | | | | | | | | | |
| Marking | Black print on the case top. | | | | | | | | | | | |

Dimensions

(φ8, φ10) 【Standard】

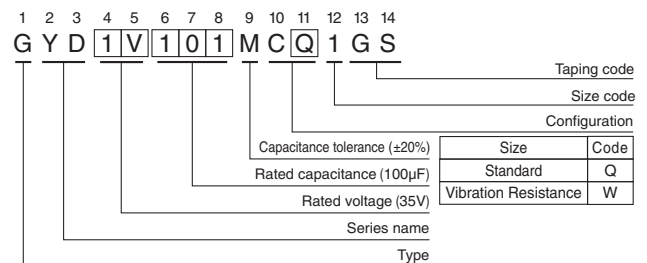


(φ8, φ10) 【Vibration Resistance】



※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

Type numbering system (Example : 35V 100μF)



| Standard (mm) | | | Vibration Resistance (mm) | | |
|---------------|------------|------------|---------------------------|------------|------------|
| φD×L | 8 × 10 | 10 × 10 | φD×L | 8 × 10 | 10 × 10 |
| A | 9.0 | 11.0 | A | 9.0 | 11.0 |
| B | 8.3 | 10.3 | B | 8.3 | 10.3 |
| C | 8.3 | 10.3 | C | 8.3 | 10.3 |
| E | 3.1 | 4.5 | E | 3.1 | 4.5 |
| L | 10.3 | 10.3 | L | 10.5 | 10.5 |
| H | 0.8 to 1.1 | 0.8 to 1.1 | H | 1.1 to 1.5 | 1.1 to 1.5 |

Frequency coefficient of rated ripple current

| Frequency | 120Hz | 1kHz | 10kHz | 100kHz or more |
|-------------|-------|------|-------|----------------|
| Coefficient | 0.15 | 0.40 | 0.75 | 1.00 |

● Dimension table in next page.

GYD
■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μ F) | Case Size ϕ D \times L (mm) | $\tan \delta$ | Leakage Current (μ A) (at 20°C after 2 minutes) | ESR (m Ω) max. (20°C/100kHz) | Rated Ripple (mA _{rms}) (150°C/100kHz) | Part Number |
|--------------------------------|------------------------------------|---------------------------------------|---------------|---|---|--|----------------|
| 25 (1E) | 150 | 8 \times 10 | 0.14 | 37.5 | 27 | 1400 | GYD1E151MC□1GS |
| | 270 | 10 \times 10 | 0.14 | 67.5 | 20 | 1800 | GYD1E271MC□1GS |
| 35 (1V) | 100 | 8 \times 10 | 0.12 | 35.0 | 27 | 1400 | GYD1V101MC□1GS |
| | 150 | 10 \times 10 | 0.12 | 52.5 | 20 | 1800 | GYD1V151MC□1GS |

□ : Enter the appropriate configuration code.

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.