

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

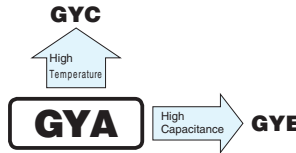
# GYA

Chip Type, 125°C High Reliability



Expanded

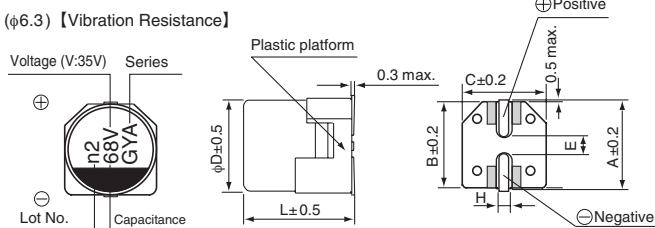
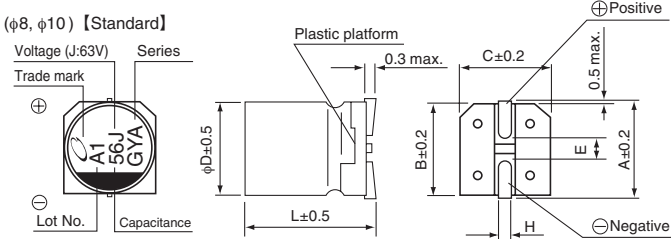
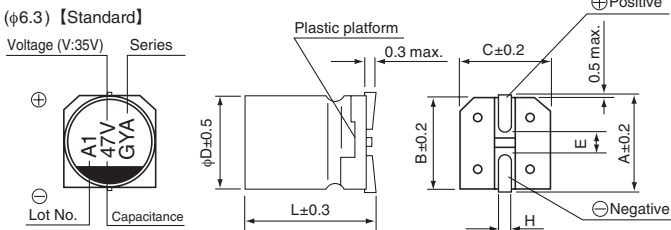
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



## ■ Specifications

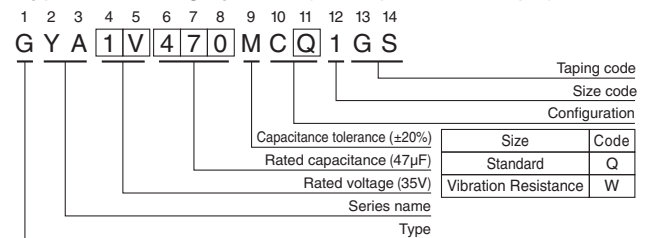
| Item   | Performance Characteristics   |  |
|--|---|--|
| Category Temperature Range                         | -55 to +125°C   |  |
| Rated Voltage Range                                | 16 to 80V   |  |
| Rated Capacitance Range                            | 10 to 470μF   |  |
| Capacitance Tolerance                              | ±20% at 120Hz, 20°C   |  |
| Tangent of loss angle (tan δ)                      | Rated voltage (V)   | 16    25    35    50    63    80             |
|  | tan δ (max.)  | 0.16    0.14    0.12    0.10    0.08    0.08 |
| 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).<br>80V: After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.05CV(μA).                         |  |
| Temperature Characteristics (Max. Impedance Ratio) | Z(-25°C) / Z(+20°C) ≤ 2<br>Z(-55°C) / Z(+20°C) ≤ 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 4000 hours at 125°C, the peak voltage shall not exceed the rated voltage.             | Capacitance change                           |
|  |   | tan δ  |
| Shelf Life   | After storing the capacitors under no load at 125°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. | ESR  |
|  |   | Leakage current                              |
| 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.   | Capacitance change                           |
|  |   | tan δ  |
| 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.               | ESR  |
|  |   | Leakage current                              |
| Marking  | Black print on the case top.  |  |

## ■ Dimensions



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

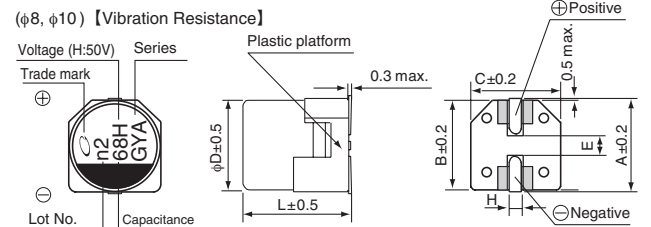
### Type numbering system (Example : 35V 47μF)



|    | Standard (mm) |            |            |            |            | Vibration Resistance (mm) |            |            |            |            |
|----|---------------|------------|------------|------------|------------|---------------------------|------------|------------|------------|------------|
| φD | 6.3×5.8       | 6.3×7.7    | 8×10       | 10×10      | 10×12.5    | φD                        | 6.3×7.7    | 8×10       | 10×10      | 10×12.5    |
| A  | 7.3           | 7.3        | 9.0        | 11.0       | 11.0       | A                         | 7.3        | 9.0        | 11.0       | 11.0       |
| B  | 6.6           | 6.6        | 8.3        | 10.3       | 10.3       | B                         | 6.6        | 8.3        | 10.3       | 10.3       |
| C  | 6.6           | 6.6        | 8.3        | 10.3       | 10.3       | C                         | 6.6        | 8.3        | 10.3       | 10.3       |
| E  | 2.2           | 2.2        | 3.1        | 4.5        | 4.5        | E                         | 2.2        | 3.1        | 4.5        | 4.5        |
| L  | 5.8           | 7.7        | 10.3       | 10.3       | 12.5       | L                         | 7.7        | 10.5       | 10.5       | 12.8       |
| H  | 0.5 to 0.8    | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1 | H                         | 0.5 to 0.8 | 1.1 to 1.5 | 1.1 to 1.5 | 1.1 to 1.5 |

● Frequency coefficient of rated ripple current

| Voltage | Frequency   | 120Hz | 1kHz | 10kHz | 100kHz or more |   |   |
|---------|-------------|-------|------|-------|----------------|---|---|
| V       | Code        | C     | E    | V     | H              | J | K |
|         | Code        | C     | E    | V     | H              | J | K |
|         | Coefficient | 0.15  | 0.40 | 0.75  | 1.00           |   |   |



● Dimension table in next page.

CAT.8100L



■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L(mm) | tan δ       | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mArms) (125°C/100kHz) | Part Number           |
|--------------------------|------------------------|--------------------|-------------|--|-----------------------------|-------------------------------------|-----------------------|
| 16 (1C)                  | 82                     | 6.3×5.8            | 0.16        | 13.12  | 50                          | 1000                                | GYA1C820MC□1GS        |
|                          | 150                    | 6.3×7.7            | 0.16        | 24.00  | 30                          | 1500                                | GYA1C151MC□1GS        |
|                          | 270                    | 8×10               | 0.16        | 43.20  | 25                          | 1700                                | GYA1C271MC□1GS        |
|                          | 470                    | 10×10              | 0.16        | 75.20  | 20                          | 2100                                | GYA1C471MC□1GS        |
| 25 (1E)                  | 47                     | 6.3×5.8            | 0.14        | 11.75  | 50                          | 900                                 | GYA1E470MC□1GS        |
|                          | 56                     | 6.3×5.8            | 0.14        | 14.00  | 50                          | 900                                 | GYA1E560MC□1GS        |
|                          | 68                     | 6.3×7.7            | 0.14        | 17.00  | 30                          | 1400                                | GYA1E680MC□1GS        |
|                          | 100                    | 6.3×7.7            | 0.14        | 25.00  | 30                          | 1400                                | GYA1E101MC□1GS        |
|                          | 150                    | 8×10               | 0.14        | 37.50  | 27                          | 1600                                | GYA1E151MC□1GS        |
|                          | 220                    | 8×10               | 0.14        | 55.00  | 27                          | 1600                                | GYA1E221MC□1GS        |
|                          | 270                    | 10×10              | 0.14        | 67.50  | 20                          | 2000                                | GYA1E271MC□1GS        |
|                          | <b>470</b>             | <b>10×12.5</b>     | <b>0.14</b> | <b>117.50</b>                                  | <b>16</b>                   | <b>2300</b>                         | <b>GYA1E471MC□1GS</b> |
| 35 (1V)                  | 33                     | 6.3×5.8            | 0.12        | 11.55  | 60                          | 900                                 | GYA1V330MC□1GS        |
|                          | 47                     | 6.3×5.8            | 0.12        | 16.45  | 60                          | 900                                 | GYA1V470MC□1GS        |
|                          | 68                     | 6.3×7.7            | 0.12        | 23.80  | 35                          | 1400                                | GYA1V680MC□1GS        |
|                          | 100                    | 8×10               | 0.12        | 35.00  | 27                          | 1600                                | GYA1V101MC□1GS        |
|                          | 150                    | 8×10               | 0.12        | 52.50  | 27                          | 1600                                | GYA1V151MC□1GS        |
|                          | 220                    | 10×10              | 0.12        | 77.00  | 20                          | 2000                                | GYA1V221MC□1GS        |
|                          | 270                    | 10×10              | 0.12        | 94.50  | 20                          | 2000                                | GYA1V271MC□1GS        |
|                          | <b>330</b>             | <b>10×12.5</b>     | <b>0.12</b> | <b>115.50</b>                                  | <b>16</b>                   | <b>2300</b>                         | <b>GYA1V331MC□1GS</b> |
| 50 (1H)                  | 22                     | 6.3×5.8            | 0.10        | 11.00  | 80                          | 750                                 | GYA1H220MC□1GS        |
|                          | 33                     | 6.3×7.7            | 0.10        | 16.50  | 40                          | 1100                                | GYA1H330MC□1GS        |
|                          | 47                     | 8×10               | 0.10        | 23.50  | 30                          | 1250                                | GYA1H470MC□1GS        |
|                          | 68                     | 8×10               | 0.10        | 34.00  | 30                          | 1250                                | GYA1H680MC□1GS        |
|                          | 100                    | 10×10              | 0.10        | 50.00  | 28                          | 1600                                | GYA1H101MC□1GS        |
|                          | 120                    | 10×10              | 0.10        | 60.00  | 28                          | 1600                                | GYA1H121MC□1GS        |
|                          | <b>150</b>             | <b>10×12.5</b>     | <b>0.10</b> | <b>75.00</b>                                   | <b>18</b>                   | <b>2000</b>                         | <b>GYA1H151MC□1GS</b> |
| 63 (1J)                  | 10                     | 6.3×5.8            | 0.08        | 6.30   | 120                         | 700                                 | GYA1J100MC□1GS        |
|                          | 22                     | 6.3×7.7            | 0.08        | 13.86  | 80                          | 900                                 | GYA1J220MC□1GS        |
|                          | 33                     | 8×10               | 0.08        | 20.79  | 40                          | 1100                                | GYA1J330MC□1GS        |
|                          | 47                     | 8×10               | 0.08        | 29.61  | 40                          | 1100                                | GYA1J470MC□1GS        |
|                          | 56                     | 10×10              | 0.08        | 35.28  | 30                          | 1400                                | GYA1J560MC□1GS        |
|                          | 68                     | 10×10              | 0.08        | 42.84  | 30                          | 1400                                | GYA1J680MC□1GS        |
|                          | 82                     | 10×10              | 0.08        | 51.66  | 30                          | 1400                                | GYA1J820MC□1GS        |
|                          | <b>100</b>             | <b>10×12.5</b>     | <b>0.08</b> | <b>63.00</b>                                   | <b>20</b>                   | <b>1900</b>                         | <b>GYA1J101MC□1GS</b> |
| 80 (1K)                  | 22                     | 8×10               | 0.08        | 88.00  | 45                          | 1100                                | GYA1K220MC□1GS        |
|                          | 33                     | 10×10              | 0.08        | 132.00   | 36                          | 1300                                | GYA1K330MC□1GS        |
|                          | 47                     | 10×10              | 0.08        | 188.00   | 36                          | 1300                                | GYA1K470MC□1GS        |

□ : Enter the appropriate configuration code.

Blue : New product (as of October 2022)

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

# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

## GYB

 Chip Type, 105°C High Reliability


Expanded

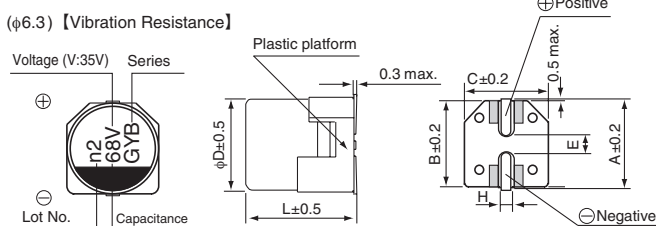
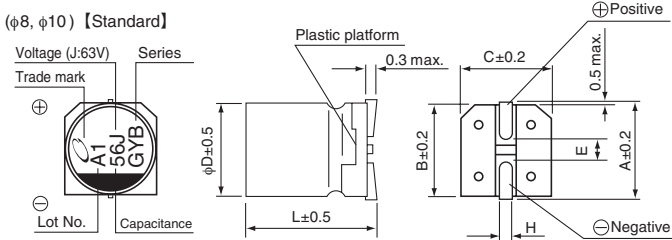
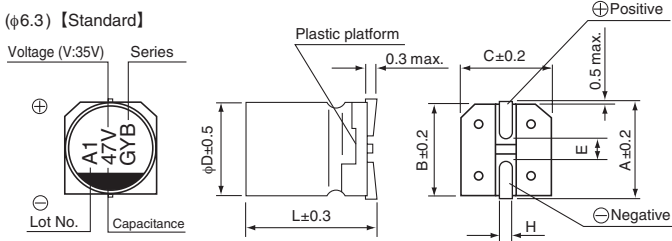
- High Reliability, Low ESR, High ripple current.
- Long life of 10000 hours at 105°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



### Specifications

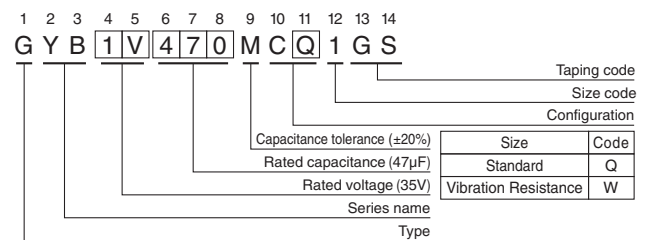
| Item   | Performance Characteristics   |   |
|--|---|---|
| Category Temperature Range                         | -55 to +105°C   |   |
| Rated Voltage Range                                | 16 to 63V   |   |
| Rated Capacitance Range                            | 10 to 470μF   |   |
| Capacitance Tolerance                              | ±20% at 120Hz, 20°C   |   |
| Tangent of loss angle (tan δ)                      | Rated voltage (V)   | 16    25    35    50    63                        |
|  | tan δ (max.)  | 0.16    0.14    0.12    0.10    0.08              |
| 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°C) / Z(+20°C) ≤ 2   |   |
|  | Z(-55°C) / Z(+20°C) ≤ 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 10000 hours at 105°C, the peak voltage shall not exceed the rated voltage.            |   |
|  | 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 105°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.   |   |
|  | Capacitance change  | Within ±30% of the initial capacitance 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.               |   |
|  | Capacitance change  | Within ±10% of the initial capacitance value      |
|  | Leakage current   | Less than or equal to the initial specified value |
| Marking  | Black print on the case top.  |   |

### Dimensions



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

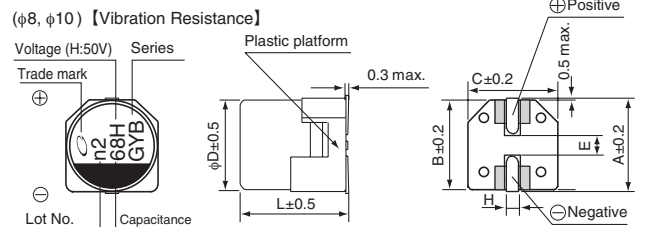
### Type numbering system (Example : 35V 47μF)



|   | Standard (mm) |            |            |            |            | Vibration Resistance (mm) |            |            |            |  |
|---|---------------|------------|------------|------------|------------|---------------------------|------------|------------|------------|--|
|   | 6.3×5.8       | 6.3×7.7    | 8×10       | 10×10      | 10×12.5    | 6.3×7.7                   | 8×10       | 10×10      | 10×12.5    |  |
| A | 7.3           | 7.3        | 9.0        | 11.0       | 11.0       | 7.3                       | 9.0        | 11.0       | 11.0       |  |
| B | 6.6           | 6.6        | 8.3        | 10.3       | 10.3       | 6.6                       | 8.3        | 10.3       | 10.3       |  |
| C | 6.6           | 6.6        | 8.3        | 10.3       | 10.3       | 6.6                       | 8.3        | 10.3       | 10.3       |  |
| E | 2.2           | 2.2        | 3.1        | 4.5        | 4.5        | 2.2                       | 3.1        | 4.5        | 4.5        |  |
| L | 5.8           | 7.7        | 10.3       | 10.3       | 12.5       | 7.7                       | 10.5       | 10.5       | 12.8       |  |
| H | 0.5 to 0.8    | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1 | 0.5 to 0.8                | 1.1 to 1.5 | 1.1 to 1.5 | 1.1 to 1.5 |  |

### Frequency coefficient of rated ripple current

| Voltage | V | 16 | 25 | 35 | 50 | 63 | Frequency   | 120Hz | 1kHz | 10kHz | 100kHz or more |
|---------|---|----|----|----|----|----|-------------|-------|------|-------|----------------|
|         |   |    |    |    |    |    | Coefficient | 0.15  | 0.40 | 0.75  | 1.00           |
| Code    | C | E  | V  | H  | J  |    |             |       |      |       |                |



● Dimension table in next page.



■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mA <sub>rms</sub> ) (105°C/100kHz) | Part Number    |
|--------------------------|------------------------|---------------------|-------|--|-----------------------------|--|----------------|
| 16 (1C)                  | 82                     | 6.3×5.8             | 0.16  | 13.12  | 50                          | 1400   | GYB1C820MC□1GS |
|                          | 150                    | 6.3×7.7             | 0.16  | 24.0   | 30                          | 2100   | GYB1C151MC□1GS |
|                          | 270                    | 8×10                | 0.16  | 43.2   | 25                          | 2400   | GYB1C271MC□1GS |
|                          | 470                    | 10×10               | 0.16  | 75.2   | 20                          | 2600   | GYB1C471MC□1GS |
| 25 (1E)                  | 47                     | 6.3×5.8             | 0.14  | 11.75  | 50                          | 1300   | GYB1E470MC□1GS |
|                          | 56                     | 6.3×5.8             | 0.14  | 14.00  | 50                          | 1300   | GYB1E560MC□1GS |
|                          | 68                     | 6.3×7.7             | 0.14  | 17.00  | 30                          | 2000   | GYB1E680MC□1GS |
|                          | 100                    | 6.3×7.7             | 0.14  | 25.00  | 30                          | 2000   | GYB1E101MC□1GS |
|                          | 150                    | 8×10                | 0.14  | 37.50  | 27                          | 2300   | GYB1E151MC□1GS |
|                          | 220                    | 8×10                | 0.14  | 55.00  | 27                          | 2300   | GYB1E221MC□1GS |
|                          | 270                    | 10×10               | 0.14  | 67.50  | 20                          | 2500   | GYB1E271MC□1GS |
|                          | 330                    | 10×10               | 0.14  | 82.50  | 20                          | 2500   | GYB1E331MC□1GS |
| 35 (1V)                  | 33                     | 6.3×5.8             | 0.12  | 11.55  | 60                          | 1300   | GYB1V330MC□1GS |
|                          | 47                     | 6.3×5.8             | 0.12  | 16.45  | 60                          | 1300   | GYB1V470MC□1GS |
|                          | 68                     | 6.3×7.7             | 0.12  | 23.80  | 35                          | 2000   | GYB1V680MC□1GS |
|                          | 100                    | 8×10                | 0.12  | 35.00  | 27                          | 2300   | GYB1V101MC□1GS |
|                          | 150                    | 8×10                | 0.12  | 52.50  | 27                          | 2300   | GYB1V151MC□1GS |
|                          | 220                    | 10×10               | 0.12  | 77.00  | 20                          | 2500   | GYB1V221MC□1GS |
|                          | 270                    | 10×10               | 0.12  | 94.50  | 20                          | 2500   | GYB1V271MC□1GS |
|                          | 330                    | 10×12.5             | 0.12  | 115.50   | 16                          | 3500   | GYB1V331MC□1GS |
| 50 (1H)                  | 22                     | 6.3×5.8             | 0.10  | 11.00  | 80                          | 1100   | GYB1H220MC□1GS |
|                          | 33                     | 6.3×7.7             | 0.10  | 16.50  | 40                          | 1600   | GYB1H330MC□1GS |
|                          | 47                     | 8×10                | 0.10  | 23.50  | 30                          | 1800   | GYB1H470MC□1GS |
|                          | 68                     | 8×10                | 0.10  | 34.00  | 30                          | 1800   | GYB1H680MC□1GS |
|                          | 100                    | 10×10               | 0.10  | 50.00  | 28                          | 2000   | GYB1H101MC□1GS |
|                          | 120                    | 10×10               | 0.10  | 60.00  | 28                          | 2000   | GYB1H121MC□1GS |
|                          | 150                    | 10×12.5             | 0.10  | 75.00  | 18                          | 3200   | GYB1H151MC□1GS |
| 63 (1J)                  | 10                     | 6.3×5.8             | 0.08  | 6.30   | 120                         | 1000   | GYB1J100MC□1GS |
|                          | 22                     | 6.3×7.7             | 0.08  | 13.86  | 80                          | 1500   | GYB1J220MC□1GS |
|                          | 33                     | 8×10                | 0.08  | 20.79  | 40                          | 1600   | GYB1J330MC□1GS |
|                          | 47                     | 8×10                | 0.08  | 29.61  | 40                          | 1600   | GYB1J470MC□1GS |
|                          | 56                     | 10×10               | 0.08  | 35.28  | 30                          | 1800   | GYB1J560MC□1GS |
|                          | 68                     | 10×10               | 0.08  | 42.84  | 30                          | 1800   | GYB1J680MC□1GS |
|                          | 82                     | 10×10               | 0.08  | 51.66  | 30                          | 1800   | GYB1J820MC□1GS |
|                          | 100                    | 10×12.5             | 0.08  | 63.00  | 20                          | 3000   | GYB1J101MC□1GS |

□ : Enter the appropriate configuration code.

Blue : New product (as of October 2022)

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

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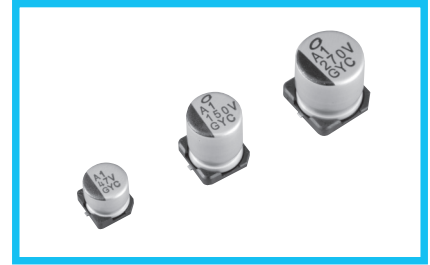
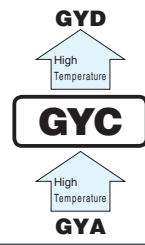
## GYC

Chip Type, 135°C High Reliability



Expanded

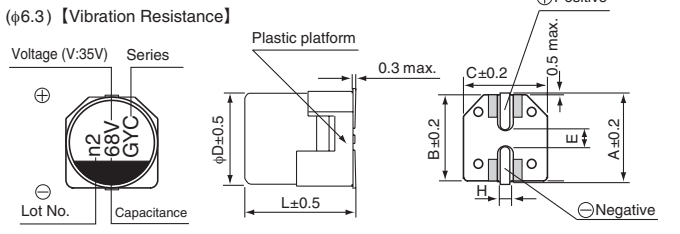
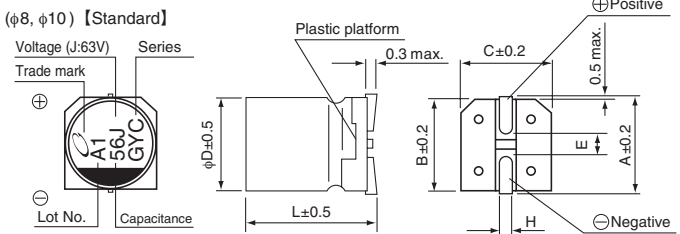
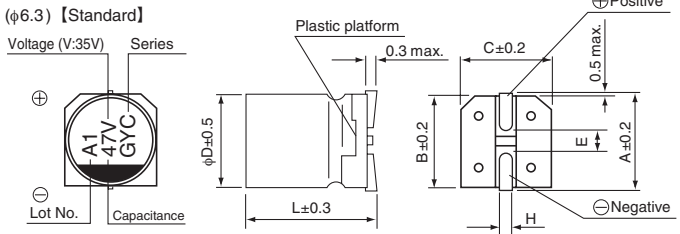
- High Reliability, Low ESR, High ripple current.
- Long life of 2000 to 4000 hours at 135°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



### Specifications

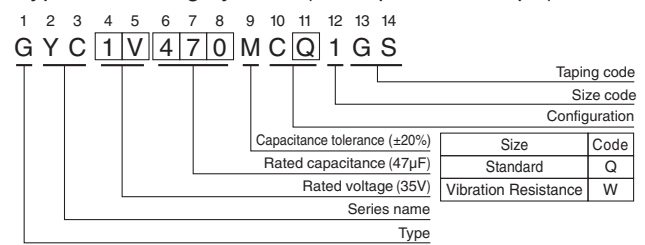
| Item   | Performance Characteristics  |                                      |
|--|--|--------------------------------------|
| Category Temperature Range                         | -55 to +135°C  |                                      |
| Rated Voltage Range                                | 16 to 63V  |                                      |
| Rated Capacitance Range                            | 10 to 470μF  |                                      |
| Capacitance Tolerance                              | ±20% at 120Hz, 20°C  |                                      |
| Tangent of loss angle (tan δ)                      | Rated voltage (V)  | 16    25    35    50    63           |
|  | tan δ (max.)   | 0.16    0.14    0.12    0.10    0.08 |
| 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) | $Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$<br>$Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (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 4000 hours (2000 hours for ϕD = 6.3) at 125°C or 135°C, the peak voltage shall not exceed the rated voltage. | Capacitance change                   |
|  |  | tan δ                                |
| Shelf Life   | After storing the capacitors under no load at 135°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.                        | ESR                                  |
|  |  | Leakage current                      |
| 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.  | Capacitance change                   |
|  |  | tan δ                                |
| 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.                                      | Leakage current                      |
|  |  | Capacitance change                   |
| Marking  | Black print on the case top.   | tan δ                                |
|  |  | Leakage current                      |

### Dimensions



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

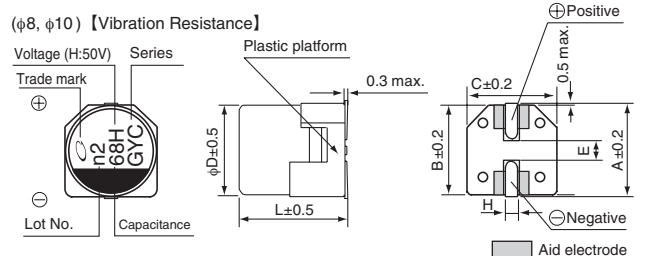
### Type numbering system (Example : 35V 47μF)



| Standard (mm) |            |            |            |            | Vibration Resistance (mm) |        |            |            |            |            |
|---------------|------------|------------|------------|------------|---------------------------|--------|------------|------------|------------|------------|
| Series        | 6.3x5.8    | 6.3x7.7    | 8x10       | 10x10      | 10x12.5                   | Series | 6.3x7.7    | 8x10       | 10x10      | 10x12.5    |
| A             | 7.3        | 7.3        | 9.0        | 11.0       | 11.0                      | A      | 7.3        | 9.0        | 11.0       | 11.0       |
| B             | 6.6        | 6.6        | 8.3        | 10.3       | 10.3                      | B      | 6.6        | 8.3        | 10.3       | 10.3       |
| C             | 6.6        | 6.6        | 8.3        | 10.3       | 10.3                      | C      | 6.6        | 8.3        | 10.3       | 10.3       |
| E             | 2.2        | 2.2        | 3.1        | 4.5        | 4.5                       | E      | 2.2        | 3.1        | 4.5        | 4.5        |
| L             | 5.8        | 7.7        | 10.3       | 10.3       | 12.5                      | L      | 7.7        | 10.5       | 10.5       | 12.8       |
| H             | 0.5 to 0.8 | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1                | H      | 0.5 to 0.8 | 1.1 to 1.5 | 1.1 to 1.5 | 1.1 to 1.5 |

### Frequency coefficient of rated ripple current

| Voltage     | Frequency |      |       |                |    |
|-------------|-----------|------|-------|----------------|----|
|             | 120Hz     | 1kHz | 10kHz | 100kHz or more |    |
| V           | 16        | 25   | 35    | 50             | 63 |
| Code        | C         | E    | V     | H              | J  |
| Coefficient | 0.15      | 0.40 | 0.75  | 1.00           |    |



● Dimension table in next page.



■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mArms) |              | Part Number    |
|--------------------------|------------------------|---------------------|-------|--|-----------------------------|----------------------|--------------|----------------|
|                          |                        |                     |       |  |                             | 125°C/100kHz         | 135°C/100kHz |                |
| 16 (1C)                  | 82                     | 6.3×5.8             | 0.16  | 13.12  | 50                          | 1500                 | 950          | GYC1C820MC□1GS |
|                          | 150                    | 6.3×7.7             | 0.16  | 24.0   | 30                          | 2000                 | 1500         | GYC1C151MC□1GS |
|                          | 270                    | 8×10                | 0.16  | 43.2   | 25                          | 3100                 | 1700         | GYC1C271MC□1GS |
|                          | 470                    | 10×10               | 0.16  | 75.2   | 20                          | 3400                 | 2100         | GYC1C471MC□1GS |
| 25 (1E)                  | 47                     | 6.3×5.8             | 0.14  | 11.75  | 50                          | 1400                 | 900          | GYC1E470MC□1GS |
|                          | 56                     | 6.3×5.8             | 0.14  | 14.00  | 50                          | 1400                 | 900          | GYC1E560MC□1GS |
|                          | 68                     | 6.3×7.7             | 0.14  | 17.00  | 30                          | 1900                 | 1400         | GYC1E680MC□1GS |
|                          | 100                    | 6.3×7.7             | 0.14  | 25.00  | 30                          | 1900                 | 1400         | GYC1E101MC□1GS |
|                          | 150                    | 8×10                | 0.14  | 37.50  | 27                          | 2900                 | 1600         | GYC1E151MC□1GS |
|                          | 220                    | 8×10                | 0.14  | 55.00  | 27                          | 2900                 | 1600         | GYC1E221MC□1GS |
|                          | 270                    | 8×10                | 0.14  | 67.50  | 20                          | 3300                 | 2000         | GYC1E271MC□1GS |
|                          | 330                    | 10×10               | 0.14  | 82.50  | 20                          | 3300                 | 2000         | GYC1E331MC□1GS |
| 35 (1V)                  | 33                     | 6.3×5.8             | 0.12  | 11.55  | 60                          | 1400                 | 900          | GYC1V330MC□1GS |
|                          | 47                     | 6.3×5.8             | 0.12  | 16.45  | 60                          | 1400                 | 900          | GYC1V470MC□1GS |
|                          | 68                     | 6.3×7.7             | 0.12  | 23.80  | 35                          | 1900                 | 1400         | GYC1V680MC□1GS |
|                          | 100                    | 8×10                | 0.12  | 35.00  | 27                          | 2900                 | 1600         | GYC1V101MC□1GS |
|                          | 150                    | 8×10                | 0.12  | 52.50  | 27                          | 2900                 | 1600         | GYC1V151MC□1GS |
|                          | 220                    | 10×10               | 0.12  | 77.00  | 20                          | 3300                 | 2000         | GYC1V221MC□1GS |
|                          | 270                    | 10×10               | 0.12  | 94.50  | 20                          | 3300                 | 2000         | GYC1V271MC□1GS |
|                          | 330                    | 10×12.5             | 0.12  | 115.50   | 16                          | 3500                 | 2300         | GYC1V331MC□1GS |
| 50 (1H)                  | 22                     | 6.3×5.8             | 0.10  | 11.00  | 80                          | 1100                 | 750          | GYC1H220MC□1GS |
|                          | 33                     | 6.3×7.7             | 0.10  | 16.50  | 40                          | 1600                 | 1100         | GYC1H330MC□1GS |
|                          | 47                     | 8×10                | 0.10  | 23.50  | 30                          | 2200                 | 1250         | GYC1H470MC□1GS |
|                          | 68                     | 8×10                | 0.10  | 34.00  | 30                          | 2200                 | 1250         | GYC1H680MC□1GS |
|                          | 100                    | 10×10               | 0.10  | 50.00  | 28                          | 2600                 | 1600         | GYC1H101MC□1GS |
|                          | 120                    | 10×10               | 0.10  | 60.00  | 28                          | 2600                 | 1600         | GYC1H121MC□1GS |
|                          | 150                    | 10×12.5             | 0.10  | 75.00  | 18                          | 3200                 | 2000         | GYC1H151MC□1GS |
| 63 (1J)                  | 10                     | 6.3×5.8             | 0.08  | 6.30   | 120                         | 1000                 | 700          | GYC1J100MC□1GS |
|                          | 22                     | 6.3×7.7             | 0.08  | 13.86  | 80                          | 1300                 | 900          | GYC1J220MC□1GS |
|                          | 33                     | 8×10                | 0.08  | 20.79  | 40                          | 1900                 | 1100         | GYC1J330MC□1GS |
|                          | 47                     | 8×10                | 0.08  | 29.61  | 40                          | 1900                 | 1100         | GYC1J470MC□1GS |
|                          | 56                     | 10×10               | 0.08  | 35.28  | 30                          | 2300                 | 1400         | GYC1J560MC□1GS |
|                          | 68                     | 10×10               | 0.08  | 42.84  | 30                          | 2300                 | 1400         | GYC1J680MC□1GS |
|                          | 82                     | 10×10               | 0.08  | 51.66  | 30                          | 2300                 | 1400         | GYC1J820MC□1GS |
|                          | 100                    | 10×12.5             | 0.08  | 63.00  | 20                          | 3000                 | 1900         | GYC1J101MC□1GS |

□ : Enter the appropriate configuration code.

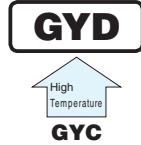
Blue : New product (as of October 2022)

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

**GYD** Chip Type, 150°C High Reliability



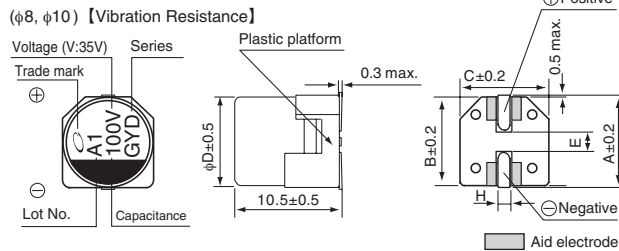
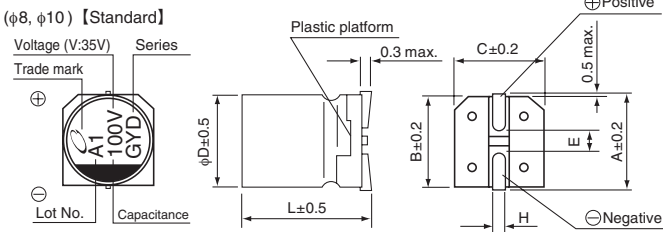
- High Reliability, Low ESR, High ripple current.
- Long life of 1000 hours at 150°C.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



■ Specifications

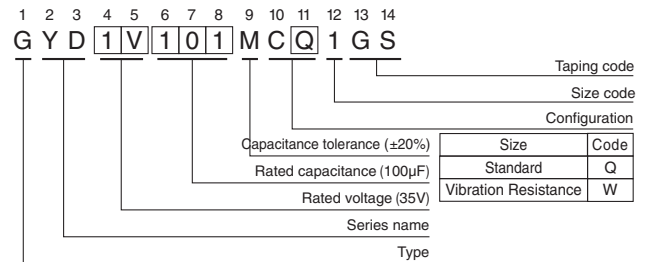
| Item  | Performance Characteristics   |  |                    |   |       |   |                 |   |                 |   |
|---|---|--|--------------------|---|-------|---|-----------------|---|-----------------|---|
| Category Temperature Range                        | -55 to +150°C   |  |                    |   |       |   |                 |   |                 |   |
| 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 border="1"> <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) | $Z(-25°C) / Z(+20°C) \leq 2$<br>$Z(-55°C) / Z(+20°C) \leq 2.5$ (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 border="1"> <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 border="1"> <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 border="1"> <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



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

Type numbering system (Example : 35V 100μF)



| Standard | (mm)       |            | Voltage             | Vibration Resistance (mm) |            |      |
|----------|------------|------------|---------------------|---------------------------|------------|------|
|          | φD×L       | 8×10       |                     | 10×10                     | φD×L       | 8×10 |
| A        | 9.0        | 11.0       | V 25 35<br>Code E V | 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.



■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mA <sub>rms</sub> ) (150°C/100kHz) | Part Number    |
|--------------------------|------------------------|---------------------|-------|--|-----------------------------|--|----------------|
| 25 (1E)                  | 150                    | 8×10                | 0.14  | 37.5   | 27                          | 1400   | GYD1E151MC□1GS |
|                          | 270                    | 10×10               | 0.14  | 67.5   | 20                          | 1800   | GYD1E271MC□1GS |
| 35 (1V)                  | 100                    | 8×10                | 0.12  | 35.0   | 27                          | 1400   | GYD1V101MC□1GS |
|                          | 150                    | 10×10               | 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.

## GYE

Chip Type, 125°C High Reliability



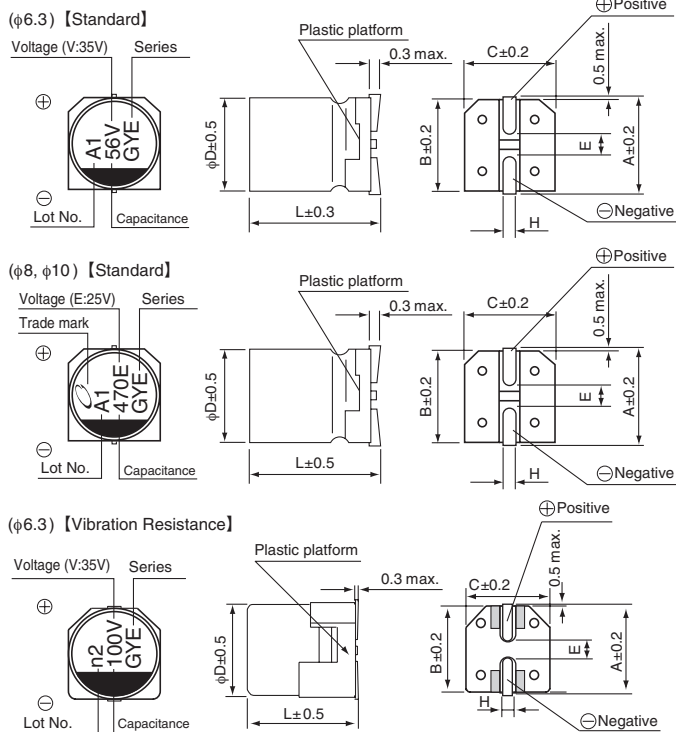
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



### Specifications

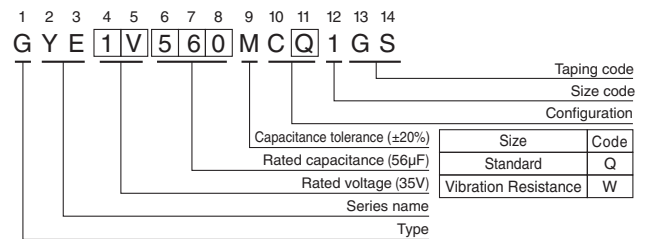
| Item  | Performance Characteristics   |   |
|---|---|---|
| Category Temperature Range                        | -55 to +125°C   |   |
| Rated Voltage Range                               | 25 to 35V   |   |
| Rated Capacitance Range                           | 56 to 470μF   |   |
| Capacitance Tolerance                             | ±20% at 120Hz, 20°C   |   |
| Tangent of loss angle (tan δ)                     | Rated voltage (V)   | 25    35  |
|   | 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°C) / Z(+20°C) ≤ 2<br>Z(-55°C) / Z(+20°C) ≤ 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 4000 hours at 125°C, the peak voltage shall not exceed the rated voltage.             |   |
|   | 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       |
| Shelf Life  | After storing the capacitors under no load at 125°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. |   |
|   | Capacitance change  | Within±30% of the initial capacitance value       |
|   | Leakage current   | Less than or equal to the initial specified value |
| 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.   |   |
|   | Capacitance change  | Within±10% of the initial capacitance 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.               |   |
|   | Capacitance change  | Within±10% of the initial capacitance value       |
|   | Leakage current   | Less than or equal to the initial specified value |
| Marking   | Black print on the case top.  |   |

### Dimensions

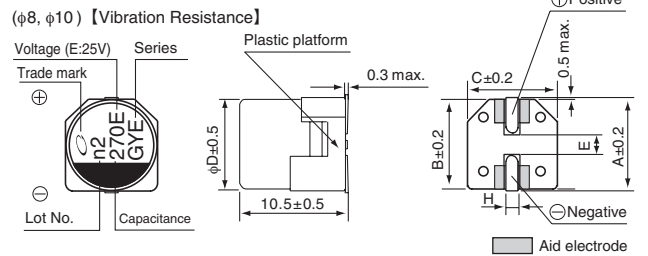


※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

### Type numbering system (Example : 35V 56μF)



| Standard | (mm)       |            |            |            | Vibration Resistance (mm) |            |            |            |
|----------|------------|------------|------------|------------|---------------------------|------------|------------|------------|
|          | 6.3x5.8    | 6.3x7.7    | 8x10       | 10x10      | φ6.3                      | 8x10       | 10x10      |            |
| A        | 7.3        | 7.3        | 9.0        | 11.0       | A                         | 7.3        | 9.0        | 11.0       |
| B        | 6.6        | 6.6        | 8.3        | 10.3       | B                         | 6.6        | 8.3        | 10.3       |
| C        | 6.6        | 6.6        | 8.3        | 10.3       | C                         | 6.6        | 8.3        | 10.3       |
| E        | 2.2        | 2.2        | 3.1        | 4.5        | E                         | 2.2        | 3.1        | 4.5        |
| L        | 5.8        | 7.7        | 10.3       | 10.3       | L                         | 7.7        | 10.5       | 10.5       |
| H        | 0.5 to 0.8 | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | H                         | 0.5 to 0.8 | 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.

# GYE

■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mA rms) (125°C/100kHz) | Part Number    |
|--------------------------|------------------------|---------------------|-------|--|-----------------------------|--------------------------------------|----------------|
| 25 (1E)                  | 68                     | 6.3×5.8             | 0.14  | 17.0   | 50                          | 1100                                 | GYE1E680MCQ1GS |
|                          | 82                     | 6.3×5.8             | 0.14  | 20.5   | 50                          | 1100                                 | GYE1E820MCQ1GS |
|                          | 150                    | 6.3×7.7             | 0.14  | 37.5   | 30                          | 1700                                 | GYE1E151MC□1GS |
|                          | 270                    | 8×10                | 0.14  | 67.5   | 27                          | 2000                                 | GYE1E271MC□1GS |
|                          | 470                    | 10×10               | 0.14  | 117.5  | 20                          | 2800                                 | GYE1E471MC□1GS |
| 35 (1V)                  | 56                     | 6.3×5.8             | 0.12  | 19.6   | 60                          | 1100                                 | GYE1V560MCQ1GS |
|                          | 100                    | 6.3×7.7             | 0.12  | 35.0   | 35                          | 1700                                 | GYE1V101MC□1GS |
|                          | 180                    | 8×10                | 0.12  | 63.0   | 27                          | 2000                                 | GYE1V181MC□1GS |
|                          | 330                    | 10×10               | 0.12  | 115.5  | 20                          | 2800                                 | GYE1V331MC□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.

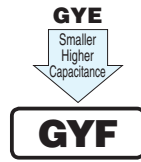
# CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS nichicon

## GYF

 Chip Type, 125°C High Reliability


## NEW

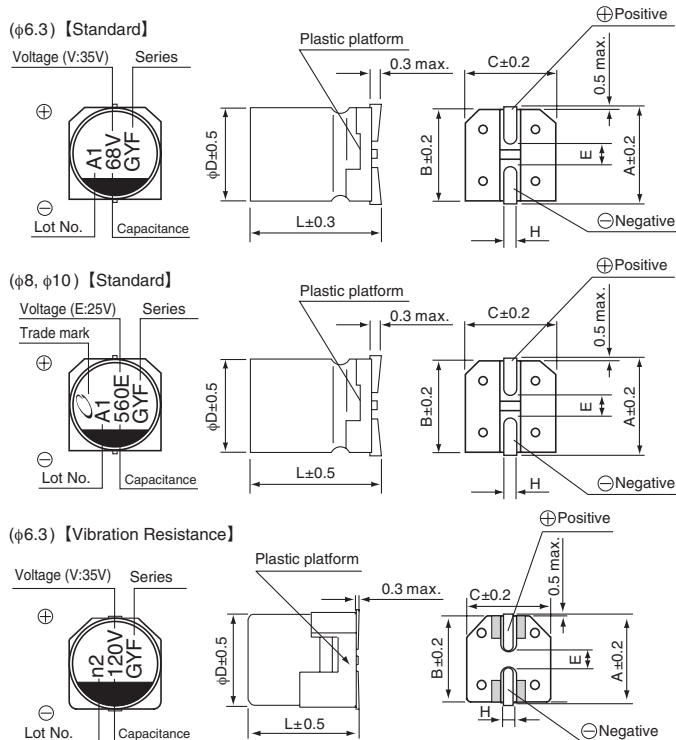
- High Reliability, Low ESR, High ripple current.
- Long life of 4000 hours at 125°C, High Capacitance.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



### Specifications

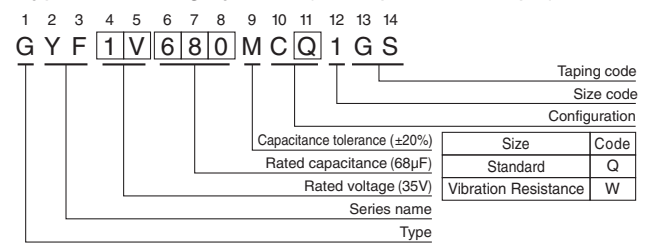
| Item  | Performance Characteristics   |   |                    |   |
|---|---|---|--------------------|---|
| Category Temperature Range                        | -55 to +125°C   |   |                    |   |
| Rated Voltage Range                               | 25 to 35V   |   |                    |   |
| Rated Capacitance Range                           | 68 to 560μF   |   |                    |   |
| Capacitance Tolerance                             | ±20% at 120Hz, 20°C   |   |                    |   |
| Tangent of loss angle (tan δ)                     | Rated voltage (V)   | 25      35  |                    |   |
|   | 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) | $Z(-25^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2$<br>$Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 2.5$ (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 4000 hours at 125°C, the peak voltage shall not exceed the rated voltage.             |   |                    |   |
|   |   |   | 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 |
| Shelf Life  | After storing the capacitors under no load at 125°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. |   |                    |   |
|   | Capacitance change  | Within ±30% of the initial capacitance value      |                    |   |
|   | Leakage current   | Less than or equal to the initial specified value |                    |   |
| 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.   |   |                    |   |
|   | Capacitance change  | Within ±10% of the initial capacitance 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.               |   |                    |   |
|   | Capacitance change  | 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

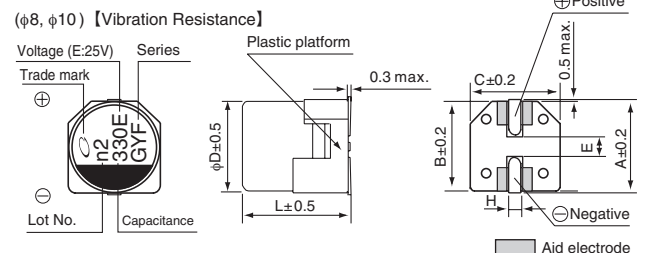


※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

### Type numbering system (Example : 35V 68μF)



| Standard | (mm)       |            |            |            | Voltage             | Vibration Resistance (mm) |            |            |      |
|----------|------------|------------|------------|------------|---------------------|---------------------------|------------|------------|------|
|          | φ6.3       | 6.3x5.8    | 6.3x7.7    | 8x10       |                     | 10x10                     | φ6.3       | 6.3x7.7    | 8x10 |
| A        | 7.3        | 7.3        | 9.0        | 11.0       | V 25 35<br>Code E V | A                         | 7.3        | 9.0        | 11.0 |
| B        | 6.6        | 6.6        | 8.3        | 10.3       |                     | B                         | 6.6        | 8.3        | 10.3 |
| C        | 6.6        | 6.6        | 8.3        | 10.3       | C                   | 6.6                       | 8.3        | 10.3       |      |
| E        | 2.2        | 2.2        | 3.1        | 4.5        | E                   | 2.2                       | 3.1        | 4.5        |      |
| L        | 5.8        | 7.7        | 10.3       | 10.3       | L                   | 7.7                       | 10.5       | 10.5       |      |
| H        | 0.5 to 0.8 | 0.5 to 0.8 | 0.8 to 1.1 | 0.8 to 1.1 | H                   | 0.5 to 0.8                | 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.

CAT.8100L

# GYF

■ Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (mΩ) max. (20°C/100kHz) | Rated Ripple (mA <sub>rms</sub> ) (125°C/100kHz) | Part Number    |
|--------------------------|------------------------|---------------------|-------|--|-----------------------------|--|----------------|
| 25 (1E)                  | 100                    | 6.3×5.8             | 0.14  | 25.0   | 50                          | 1300   | GYF1E101MC□1GS |
|                          | 180                    | 6.3×7.7             | 0.14  | 45.0   | 30                          | 1800   | GYF1E181MC□1GS |
|                          | 330                    | 8×10                | 0.14  | 82.5   | 27                          | 2000   | GYF1E331MC□1GS |
|                          | 560                    | 10×10               | 0.14  | 140.0  | 20                          | 2800   | GYF1E561MC□1GS |
| 35 (1V)                  | 68                     | 6.3×5.8             | 0.12  | 23.8   | 60                          | 1200   | GYF1V680MCQ1GS |
|                          | 120                    | 6.3×7.7             | 0.12  | 42.0   | 35                          | 1700   | GYF1V121MC□1GS |
|                          | 220                    | 8×10                | 0.12  | 77.0   | 27                          | 2000   | GYF1V221MC□1GS |
|                          | 390                    | 10×10               | 0.12  | 136.5  | 20                          | 2800   | GYF1V391MC□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.