

# GXA Series New!



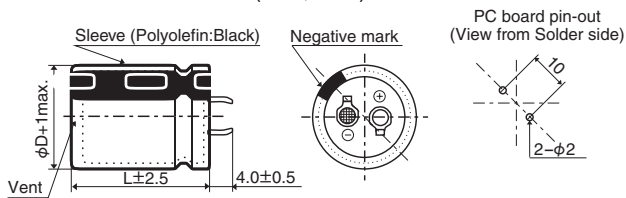
- Endurance with ripple current : 3,000 hours at 125°C
- Rated voltage range : 400 & 450V<sub>dc</sub>, Capacitance range : 220 to 820µF
- Suitable for the communication infrastructure power supply and other high temperature applications.
- Non solvent resistant type
- RoHS2 Compliant

## ◆ SPECIFICATIONS

| Items   | Characteristics   |                                       |
|---|---|---------------------------------------|
| <b>Category Temperature Range</b>                             | -40 to +125°C   |                                       |
| <b>Rated Voltage Range</b>                                    | 400 & 450V <sub>dc</sub>  |                                       |
| <b>Capacitance Tolerance</b>                                  | ±20% (M) (at 20°C, 120Hz)   |                                       |
| <b>Leakage Current</b>  | I ≤ 3/CV<br>Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)   |                                       |
| <b>Dissipation Factor (tan δ)</b>                             | Rated voltage (V <sub>dc</sub> )  | 400 & 450V                            |
|   | tan δ (Max.)  | 0.20 (at 20°C, 120Hz)                 |
| <b>Low Temperature Characteristics (Max. Impedance Ratio)</b> | Rated voltage (V <sub>dc</sub> )  | 400 & 450V                            |
|   | Z(-25°C)/Z(+20°C)   | 8 (at 120Hz)                          |
| <b>Endurance</b>  | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 125°C.   |                                       |
|   | Capacitance change  | ≤ ±20% of the initial value           |
|   | D.F. (tan δ)  | ≤ 200% of the initial specified value |
|   | Leakage current   | ≤ The initial specified value         |
| <b>Shelf Life</b>   | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. |                                       |
|   | Capacitance change  | ≤ ±15% of the initial value           |
|   | D.F. (tan δ)  | ≤ 150% of the initial specified value |
|   | Leakage current   | ≤ The initial specified value         |

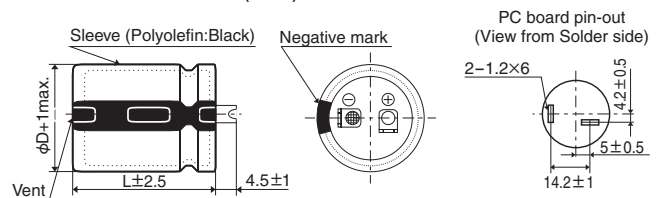
## ◆ DIMENSIONS [mm]

● Terminal Code : VS (φ30, φ35) : Standard

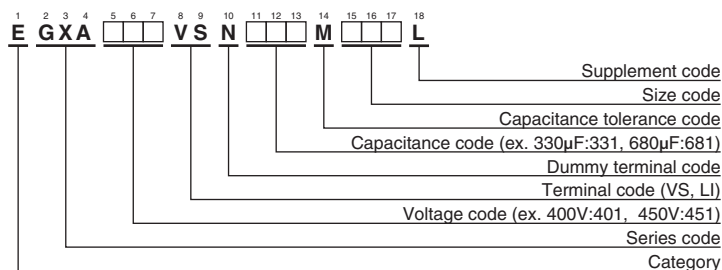


The standard design has no plastic disc.

● Terminal Code : LI (φ35)



## ◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

◆STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>125°C, 120Hz) | Part No.           | WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ              | Rated ripple<br>current<br>(Arms/<br>125°C, 120Hz) | Part No.           |
|--------------------------|-------------|-----------------------|-------|--|--------------------|--------------------------|-------------|-----------------------|--------------------|--|--------------------|
| 400                      | 270         | 30 × 30               | 0.20  | 1.24   | EGXA401VSN271MR30L | 450                      | 220         | 30 × 30               | 0.20               | 1.12   | EGXA451VSN221MR30L |
|                          | 330         | 30 × 35               | 0.20  | 1.41   | EGXA401VSN331MR35L |                          | 270         | 30 × 35               | 0.20               | 1.27   | EGXA451VSN271MR35L |
|                          | 330         | 35 × 30               | 0.20  | 1.48   | EGXA401VSN331MA30L |                          | 270         | 30 × 40               | 0.20               | 1.31   | EGXA451VSN271MR40L |
|                          | 390         | 30 × 40               | 0.20  | 1.57   | EGXA401VSN391MR40L |                          | 270         | 35 × 30               | 0.20               | 1.34   | EGXA451VSN271MA30L |
|                          | 390         | 30 × 45               | 0.20  | 1.61   | EGXA401VSN391MR45L |                          | 330         | 30 × 45               | 0.20               | 1.48   | EGXA451VSN331MR45L |
|                          | 390         | 35 × 35               | 0.20  | 1.64   | EGXA401VSN391MA35L |                          | 330         | 35 × 35               | 0.20               | 1.51   | EGXA451VSN331MA35L |
|                          | 470         | 30 × 50               | 0.20  | 1.80   | EGXA401VSN471MR50L |                          | 390         | 30 × 50               | 0.20               | 1.64   | EGXA451VSN391MR50L |
|                          | 470         | 35 × 40               | 0.20  | 1.86   | EGXA401VSN471MA40L |                          | 390         | 35 × 40               | 0.20               | 1.70   | EGXA451VSN391MA40L |
|                          | 560         | 30 × 55               | 0.20  | 2.01   | EGXA401VSN561MR55L |                          | 470         | 30 × 55               | 0.20               | 1.84   | EGXA451VSN471MR55L |
|                          | 560         | 30 × 60               | 0.20  | 2.04   | EGXA401VSN561MR60L |                          | 470         | 30 × 60               | 0.20               | 1.87   | EGXA451VSN471MR60L |
|                          | 560         | 35 × 45               | 0.20  | 2.08   | EGXA401VSN561MA45L |                          | 470         | 35 × 45               | 0.20               | 1.91   | EGXA451VSN471MA45L |
|                          | 680         | 35 × 50               | 0.20  | 2.34   | EGXA401VSN681MA50L |                          | 560         | 35 × 50               | 0.20               | 2.13   | EGXA451VSN561MA50L |
|                          | 680         | 35 × 55               | 0.20  | 2.39   | EGXA401VSN681MA55L |                          | 560         | 35 × 55               | 0.20               | 2.17   | EGXA451VSN561MA55L |
| 820                      | 35 × 60     | 0.20                  | 2.67  | EGXA401VSN821MA60L                                 | 680                | 35 × 60                  | 0.20        | 2.43                  | EGXA451VSN681MA60L |  |                    |

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

| Frequency(Hz)            | 50   | 120  | 300  | 1k   | 10k  | 50k  |
|--------------------------|------|------|------|------|------|------|
| 400 & 450V <sub>dc</sub> | 0.77 | 1.00 | 1.16 | 1.30 | 1.41 | 1.43 |