

Radial Lead Type

Series: GA    Type : A

■ Features    Endurance:105°C 1000 h

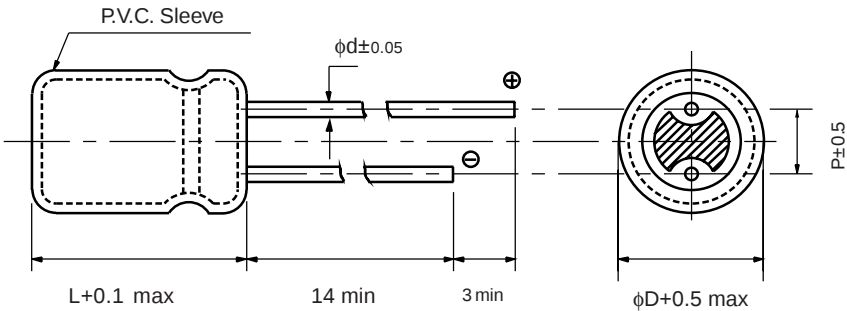
Country of Origin  
Japan  
Malaysia  
China  
Taiwan



■ Specifications

|                       |                                                                                                                                                                                                                                |                                    |  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--|
| Category temp. range  | -55 to + 105°C                                                                                                                                                                                                                 |                                    |  |
| Rated W.V. Range      | 10 to 50 V .DC                                                                                                                                                                                                                 |                                    |  |
| Nominal Cap. Range    | 0.1 to 220 μ F                                                                                                                                                                                                                 |                                    |  |
| Capacitance Tolerance | ±20 % (120Hz/+20°C)                                                                                                                                                                                                            |                                    |  |
| DC Leakage Current    | I ≤ 0.01 CV or 3(μ A) after 2 minutes                                                                                                                                                                                          |                                    |  |
| tan δ                 | Please see the attached standard products list                                                                                                                                                                                 |                                    |  |
| Endurance             | After following life test with DC voltage and +105±2°C ripple current value applied (The sum of DC and ripple peak voltage shall not exceed the rated working voltage), the capacitors shall meet the limits specified bellow. |                                    |  |
|                       | Capacitance change                                                                                                                                                                                                             | ± 20% of initial measured value    |  |
|                       | tan δ                                                                                                                                                                                                                          | ≤ 200 % of initial specified value |  |
|                       | DC leakage current                                                                                                                                                                                                             | ≤ initial specified value          |  |
| Shelf Life            | After storage for 1000hours at +105±2 °C with no voltage applied and then being stabilized at +20 °C, capacitor shall meet the limits specified in “Endurance”.(With voltage treatment)                                        |                                    |  |

■ Dimensions in mm (not to scale)



|              | L = 7 |      |      |      |
|--------------|-------|------|------|------|
| Body Dia. φD | 4     | 5    | 6.3  | 8    |
| Lead Dia. φd | 0.45  | 0.45 | 0.45 | 0.45 |
| Lead space P | 1.5   | 2.0  | 2.5  | 2.5  |

■ Standard Products(L:7mm)

| W.V.<br><br>(V) | Cap.<br>(±20%)<br><br>(μF) | Case size |        | Specification                                    |                             |                               | Lead Length               |                       |                      |                       | Part No.      | Min. Packaging Q'ty            |                     |
|-----------------|----------------------------|-----------|--------|--------------------------------------------------|-----------------------------|-------------------------------|---------------------------|-----------------------|----------------------|-----------------------|---------------|--------------------------------|---------------------|
|                 |                            | Dia.      | Length | Ripple<br>current<br>(120Hz)<br>(+105°C)<br>(mA) | tan δ<br>(120Hz)<br>(+20°C) | Endur-<br>ance<br><br>(hours) | Lead<br>Dia.<br><br>(m m) | Lead Space            |                      |                       |               | Straight<br>Leads<br><br>(pcs) | Taping<br><br>(pcs) |
|                 |                            |           |        |                                                  |                             |                               |                           | Straight<br><br>(m m) | Taping<br>*B<br>(mm) | Taping<br>*H<br>(m m) |               |                                |                     |
| 10              | 22                         | 4         | 7      | 30                                               | 0.22                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1A220( ) | 200                            | 2000                |
|                 | 33                         | 5         | 7      | 50                                               | 0.22                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1A330( ) | 200                            | 2000                |
|                 | 47                         | 6.3       | 7      | 65                                               | 0.22                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1A470( ) | 200                            | 2000                |
|                 | 68                         | 6.3       | 7      | 75                                               | 0.22                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1A680( ) | 200                            | 2000                |
|                 | 100                        | 6.3       | 7      | 110                                              | 0.22                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1A101( ) | 200                            | 2000                |
|                 | 220                        | 8         | 7      | 160                                              | 0.22                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1A221( ) | 200                            | 1000                |
| 16              | 10                         | 4         | 7      | 30                                               | 0.18                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1C100( ) | 200                            | 2000                |
|                 | 15                         | 4         | 7      | 33                                               | 0.18                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1C150( ) | 200                            | 2000                |
|                 | 22                         | 5         | 7      | 50                                               | 0.18                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1C220( ) | 200                            | 2000                |
|                 | 33                         | 6.3       | 7      | 65                                               | 0.18                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1C330( ) | 200                            | 2000                |
|                 | 47                         | 6.3       | 7      | 77                                               | 0.18                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1C470( ) | 200                            | 2000                |
|                 | 100                        | 8         | 7      | 120                                              | 0.18                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1C101( ) | 200                            | 1000                |
| 25              | 10                         | 4         | 7      | 33                                               | 0.16                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1E100( ) | 200                            | 2000                |
|                 | 15                         | 5         | 7      | 45                                               | 0.16                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1E150( ) | 200                            | 2000                |
|                 | 22                         | 5         | 7      | 50                                               | 0.16                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1E220( ) | 200                            | 2000                |
|                 | 33                         | 6.3       | 7      | 75                                               | 0.16                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1E330( ) | 200                            | 2000                |
|                 | 68                         | 8         | 7      | 100                                              | 0.16                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1E680( ) | 200                            | 1000                |
| 35              | 6.8                        | 4         | 7      | 33                                               | 0.13                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1V6R8( ) | 200                            | 2000                |
|                 | 10                         | 5         | 7      | 35                                               | 0.13                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1V100( ) | 200                            | 2000                |
|                 | 15                         | 6.3       | 7      | 50                                               | 0.13                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1V150( ) | 200                            | 2000                |
|                 | 22                         | 6.3       | 7      | 70                                               | 0.13                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1V220( ) | 200                            | 2000                |
|                 | 47                         | 8         | 7      | 96                                               | 0.13                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1V470( ) | 200                            | 1000                |
| 50              | 0.1                        | 4         | 7      | 1.1                                              | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR10( ) | 200                            | 2000                |
|                 | 0.15                       | 4         | 7      | 1.7                                              | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR15( ) | 200                            | 2000                |
|                 | 0.22                       | 4         | 7      | 2.3                                              | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR22( ) | 200                            | 2000                |
|                 | 0.33                       | 4         | 7      | 3.5                                              | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR33( ) | 200                            | 2000                |
|                 | 0.47                       | 4         | 7      | 5                                                | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR47( ) | 200                            | 2000                |
|                 | 0.68                       | 4         | 7      | 7                                                | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1HR68( ) | 200                            | 2000                |
|                 | 1                          | 4         | 7      | 10                                               | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1H1R0( ) | 200                            | 2000                |
|                 | 1.5                        | 4         | 7      | 16                                               | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1H1R5( ) | 200                            | 2000                |
|                 | 2.2                        | 4         | 7      | 18                                               | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1H2R2( ) | 200                            | 2000                |
|                 | 3.3                        | 4         | 7      | 22                                               | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1H3R3( ) | 200                            | 2000                |
|                 | 4.7                        | 4         | 7      | 26                                               | 0.10                        | 1000                          | 0.45                      | 1.5                   | 5.0                  | 2.5                   | EEAGA1H4R7( ) | 200                            | 2000                |
|                 | 6.8                        | 5         | 7      | 35                                               | 0.10                        | 1000                          | 0.45                      | 2.0                   | 5.0                  | 2.5                   | EEAGA1H6R8( ) | 200                            | 2000                |
|                 | 10                         | 6.3       | 7      | 39                                               | 0.10                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1H100( ) | 200                            | 2000                |
|                 | 15                         | 6.3       | 7      | 55                                               | 0.10                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1H150( ) | 200                            | 2000                |
|                 | 22                         | 8         | 7      | 70                                               | 0.10                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1H220( ) | 200                            | 1000                |
|                 | 33                         | 8         | 7      | 91                                               | 0.10                        | 1000                          | 0.45                      | 2.5                   | 5.0                  | 2.5                   | EEAGA1H330( ) | 200                            | 1000                |

When requesting taped product, please put the letter "B" or "H" between the "( )". Lead wire pitch B=5mm, H=2.5mm.

Suffix "BQ" for φ8×7, 5mm pitch products

The taping dimensions are explained on p.188 of our Catalog. Please use it as a reference guide.