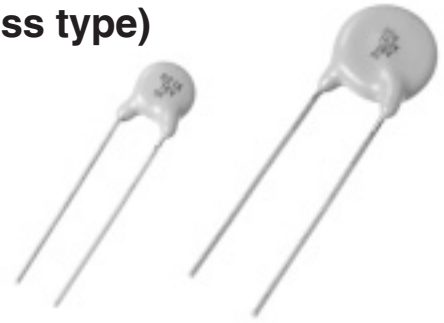


High Voltage Ceramic Disc Capacitors (Low loss type)

- Series: **HT-KG/Char. SL/GP, 500 VDC**
- Series: **KGE/Char. SL/GP, 1 to 6 kVDC**
- Series: **HT-KB/Char. B/Y5P, 500 VDC**
- Series: **KBP/Char. B/Y5P, 1 to 3 kVDC**
- Series: **HD/Char. B/Y5P, 2 kVDC**
- Series: **HT-KC/Char. C/Y5S, 500 VDC**
- Series: **KRP/Char. R/Y5R 1 to 3 kVDC**



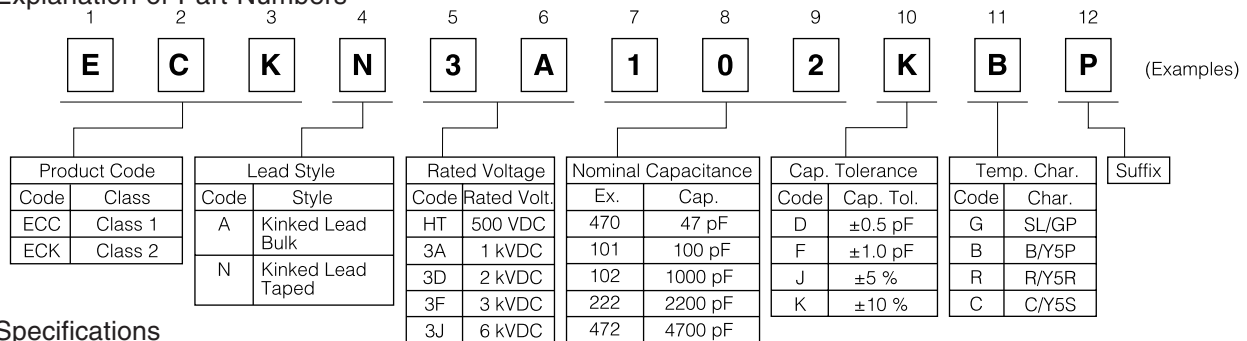
■ Features

- Wide operating temperature range:
(-25 to 105 °C or -25 to 125 °C)
- Improved Voltage vs. Temperature Rise
- Flame-retardant insulated coating
- Easy mounting through kinked leads and radial taping

■ Recommended Applications

- Snubber circuit for switching power supply
- Horizontal resonance circuitry for TVs and CRT displays
- Inverter type lighting apparatus
- Ballast circuit for LCD backlighting inverter
(For series KGE)
- Other high voltage pulse and DC circuitry

■ Explanation of Part Numbers



■ Specifications

| Characteristic | Series HT-KG and KGE | Series HT-KB, KBP, HD, HT-KC and KRP | | | |
|---------------------------------|--|--|--------------|----------------|--------------|
| Operating Temperature Range | -25 to 105 °C | Series HT-KB: -25 to 105 °C Series KBP, HD, HT-KC and KRP: -25 to 125 °C | | | |
| Rated Voltage | 500VDC to 6 kVDC | 500 VDC to 3 kVDC | | | |
| Dielectric Withstanding Voltage | Rated Voltage 500VDC: 1500 VDC for 1 to 5 seconds Rated Voltage 1 to 3 kVDC: 200 % of Rated Voltage for 1 to 5 seconds Rated Voltage 6 kVDC: 150 % of Rated Voltage for 1 to 5 seconds | Rated Voltage 500VDC: 1250 VDC for 1 to 5 seconds Rated Voltage 1 to 3 kVDC: 200 % of Rated Voltage for 1 to 5 seconds | | | |
| Capacitance | Within the specified tolerance, when measured at 1 MHz ± 20 %, 1 to 5 Vrms, and 20 °C | Within the specified tolerance, when measured at 1 kHz ± 20 %, 1 to 5 Vrms, and 20 °C | | | |
| Q or Dissipation Factor (tanδ) | 30 pF or under Q ≥ 400+20 C (C: Cap.pF) over 30 pF Q ≥ 1000 at 1 MHz ± 20 %, 1 to 5 Vrms. and 20 °C | Series HT-KB, KBP and HD: tanδ ≥ 0.025 Series HT-KC: tanδ ≥ 0.003 Series KRP: tanδ ≥ 0.002 at 1 kHz ± 20 %, 1 to 5 Vrms. and 20 °C | | | |
| Insulation Resistance | 10000 M Ω min. at 500 VDC 1 minute electrification | | | | |
| Temperature Characteristics | Temperature Coefficient: +350 to -1000 ppm/°C (Temperature Range: 20 to 85 °C) | Series | Temp.Char | max.Cap.Change | Temp. Range |
| | | HT-KB | B/Y5P | ±10 % | -25 to 85 °C |
| | | KBP, HD | B/Y5P | ±10 % | -25 to 85 °C |
| | | HT-KC | C/Y5S | ±20 % | -25 to 85 °C |
| KRP | R/Y5R | ±15 % | -25 to 85 °C | | |

■ Handling Precautions

See Page 93 to 95

■ Packaging Specifications

See Page 96 to 97

■ Rated Voltage and Capacitance Range

| Series Name | Temp. Char. | Rated Voltage | Capacitance Range in pF | | | | Typical Applications |
|--------------|-------------|---------------|-------------------------|-----|------|-------|---|
| | | | 10 | 100 | 1000 | 10000 | |
| Series HT-KG | SL | 500 VDC | 470 | | | | Snubber circuit of switching power supply |
| Series KGE | | 1 kVDC | 470 | | | | Ballast circuit of LCD backlighting inverter Snubber circuit of switching power supply |
| | | 2 kVDC | 220 | | | | |
| | | 3 kVDC | 150 | | | | |
| | | 6 kVDC | 150 | | | | |
| Series HT-KB | B | 500 VDC | 4700 | | | | Snubber circuit of switching power supply |
| Series KBP | | 1 kVDC | 5600 | | | | Horizontal resonance circuit of TV and CRT display |
| | | 2 kVDC | 5600 | | | | |
| | | 3 kVDC | 2700 | | | | |
| Series HD | | 2 kVDC | 680 | | | | Horizontal resonance circuit |
| Series HT-KC | C | 500 VDC | 4700 | | | | Snubber circuit of switching power supply |
| Series KRP | R | 1 kVDC | 4700 | | | | |
| | | 2 kVDC | 4700 | | | | |
| | | 3 kVDC | 2200 | | | | |

■ Dimensions "D" (Body Diameter)

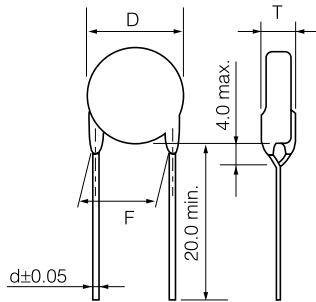
unit : mm

| Cap. in pF | HT-KG | KGE | | | | HT-KB | KBP | | | HD | HT-KC | KRP | | |
|------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|
| | 500V | 1 kV | 2 kV | 3 kV | 6 kV | 500 V | 1 kV | 2 kV | 3 kV | 2 kV | 500 V | 1 kV | 2 kV | 3 kV |
| 12 to 22 | 6.0 | 6.0 | 7.0 | 7.0 | 7.0 | | | | | | | | | |
| 22 to 33 | 6.0 | 6.0 | 7.0 | 7.0 | 8.0 | | | | | | | | | |
| 39 | 6.0 | 6.0 | 7.0 | 7.0 | 9.0 | | | | | | | | | |
| 47 | 6.0 | 6.0 | 7.0 | 7.0 | 9.0 | | | | | | | | | |
| 56 | 6.0 | 6.0 | 7.0 | 8.0 | 10.0 | | | | | | | | | |
| 68 | 6.0 | 6.0 | 7.0 | 8.0 | 11.0 | | | | | | | | | |
| 82 | 6.0 | 6.0 | 7.0 | 9.0 | 11.0 | | | | | | | | | |
| 100 | 7.0 | 7.0 | 8.0 | 10.0 | 13.0 | 6.0 | 6.0 | 7.0 | 7.5 | 7.0 | 6.0 | 6.0 | 7.0 | 7.5 |
| 120 | 7.0 | 7.0 | 8.0 | 10.0 | 13.0 | 6.0 | 6.0 | 7.0 | 7.5 | | 6.0 | 6.0 | 7.0 | 7.5 |
| 150 | 8.0 | 8.0 | 9.0 | 11.0 | 15.0 | 6.0 | 6.0 | 7.0 | 7.5 | 7.0 | 6.0 | 6.0 | 7.0 | 7.5 |
| 180 | 8.0 | 8.0 | 10.0 | | | 6.0 | 6.0 | 7.0 | 7.5 | | 6.0 | 6.0 | 7.0 | 7.5 |
| 220 | 9.0 | 9.0 | 10.0 | | | 6.0 | 6.0 | 7.0 | 7.5 | 7.0 | 6.0 | 6.0 | 7.0 | 8.0 |
| 270 | 9.0 | 9.0 | | | | 6.0 | 6.0 | 7.0 | 7.5 | | 6.0 | 6.0 | 7.0 | 8.0 |
| 330 | 11.0 | 11.0 | | | | 6.0 | 6.0 | 7.0 | 8.0 | 7.0 | 6.0 | 6.0 | 7.5 | 8.5 |
| 390 | 11.0 | 11.0 | | | | 6.0 | 6.0 | 7.0 | 9.0 | | 6.0 | 7.0 | 7.5 | 9.5 |
| 470 | 13.0 | 13.0 | | | | 6.0 | 6.0 | 7.5 | 9.5 | 7.5 | 6.0 | 7.0 | 9.0 | 9.5 |
| 560 | | | | | | 6.0 | 7.0 | 8.0 | 10.0 | | 7.0 | 7.0 | 9.0 | 10.5 |
| 680 | | | | | | 7.0 | 7.0 | 9.0 | 11.0 | 9.0 | 7.0 | 7.5 | 10.0 | 10.5 |
| 820 | | | | | | 7.0 | 7.5 | 9.0 | 11.0 | | 7.0 | 7.5 | 10.0 | 12.5 |
| 1000 | | | | | | 7.0 | 9.0 | 10.0 | 12.5 | | 7.0 | 9.0 | 12.0 | 12.5 |
| 1200 | | | | | | 8.5 | 9.0 | 10.5 | 14.5 | | 8.5 | 9.0 | 12.0 | 14.5 |
| 1500 | | | | | | 8.5 | 9.5 | 12.0 | 14.5 | | 8.5 | 10.5 | 12.0 | 14.5 |
| 1800 | | | | | | 10.0 | 12.0 | 12.5 | 16.0 | | 10.0 | 10.5 | 14.0 | 16.5 |
| 2200 | | | | | | 10.0 | 12.0 | 14.0 | 17.0 | | 10.0 | 11.5 | 16.0 | 17.0 |
| 2700 | | | | | | 10.0 | 13.5 | 16.0 | 18.5 | | 11.0 | 13.0 | 16.0 | |
| 3300 | | | | | | 11.0 | 13.5 | 17.0 | | | 13.0 | 13.0 | 19.0 | |
| 3900 | | | | | | 13.0 | 15.5 | 18.0 | | | 13.0 | 14.0 | 20.0 | |
| 4700 | | | | | | 13.0 | 15.5 | 25.0 | | | 14.0 | 16.5 | 21.0 | |
| 5600 | | | | | | | 17.0 | 25.0 | | | | | | |

■ Dimensions in mm (not to scale)

Standard lead styles are available in Kinked Lead and Kinked Lead Taping shown below.

● Kinked Lead Type

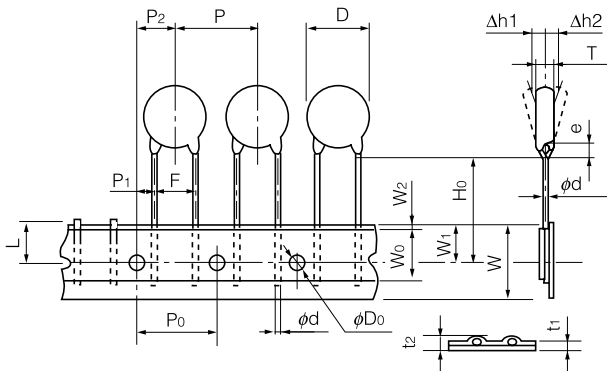


Note: Tolerance of Lead Space

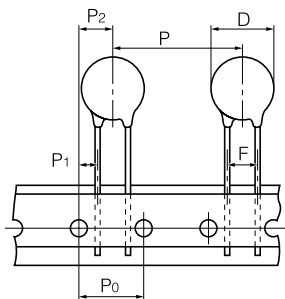
| Dim. F (Nominal) | Tolerance of Dim. F |
|------------------|---------------------|
| 5.0 | ± 1.0 |
| 7.5 | ± 1.5 |
| 10.0 | ± 1.5 |

● Kinked Lead Taping

Type N0, N1



Type N2 *



* Same dimensions as Type N0, N1 except for special dimensions.

| Taping Type | N0 | N1 | N2 |
|--------------------------|--|-----------------|----------------|
| Symbol | | | |
| P | 12.7 ± 1.0 | 15.0 ± 2.0 | 30.0 ± 2.0 |
| P_0 | 12.7 ± 0.3 | 15.0 ± 0.3 | |
| F | 5.0 ± 0.8 | 7.5 ± 1.0 | |
| P_1 | 3.85 ± 0.70 | 3.75 ± 0.80 | |
| P_2 | 6.35 ± 1.30 | 7.5 ± 1.5 | |
| D | To comply with each individual specification | | |
| W | $18.0^{+1.0}_{-0.5}$ | | |
| W_0 | 10.0 min. | | |
| W_1 | 9.0 ± 0.5 | | |
| W_2 | 3.0 max. | | |
| H_0 | $18.0^{+2.0}_0$ | | |
| e | 4.0 max. | | |
| ϕD_0 | 4.0 ± 0.2 | | |
| ϕd | 0.60 ± 0.05 | 0.65 ± 0.05 | |
| t_1 | 0.6 ± 0.3 | | |
| t_2 | 1.5 max. | | |
| T | To comply with each individual specification | | |
| $\Delta h_1, \Delta h_2$ | 2.0 max. | | |
| L | 11.0 max. | | |

■ Ratings and Characteristics

- Series HT-KG (Class 1, Temp. Char. SL/GP, 500VDC)

| Rated Volt. | Cap. in pF | Capacitance Tolerance (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------------------|------------------|-------------|-------------------------|------------------|-------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 500 VDC | 10 | ±0.5pF or ±1pF | 6.0 | 4.0 | ECCAHT100□G | 5.0 | 0.60 | ECCNHT100□G | N0 | 5.0 | 0.60 |
| | 12 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT120□G | 5.0 | 0.60 | ECCNHT120□G | N0 | 5.0 | 0.60 |
| | 15 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT150□G | 5.0 | 0.60 | ECCNHT150□G | N0 | 5.0 | 0.60 |
| | 18 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT180□G | 5.0 | 0.60 | ECCNHT180□G | N0 | 5.0 | 0.60 |
| | 22 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT220□G | 5.0 | 0.60 | ECCNHT220□G | N0 | 5.0 | 0.60 |
| | 27 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT270□G | 5.0 | 0.60 | ECCNHT270□G | N0 | 5.0 | 0.60 |
| | 33 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT330□G | 5.0 | 0.60 | ECCNHT330□G | N0 | 5.0 | 0.60 |
| | 39 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT390□G | 5.0 | 0.60 | ECCNHT390□G | N0 | 5.0 | 0.60 |
| | 47 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT470□G | 5.0 | 0.60 | ECCNHT470□G | N0 | 5.0 | 0.60 |
| | 56 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT560□G | 5.0 | 0.60 | ECCNHT560□G | N0 | 5.0 | 0.60 |
| | 68 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT680□G | 5.0 | 0.60 | ECCNHT680□G | N0 | 5.0 | 0.60 |
| | 82 | ±5 or ±10 | 6.0 | 4.0 | ECCAHT820□G | 5.0 | 0.60 | ECCNHT820□G | N0 | 5.0 | 0.60 |
| | 100 | ±5 or ±10 | 7.0 | 4.0 | ECCAHT101□G | 5.0 | 0.60 | ECCNHT101□G | N0 | 5.0 | 0.60 |
| | 120 | ±5 or ±10 | 7.0 | 4.0 | ECCAHT121□G | 5.0 | 0.60 | ECCNHT121□G | N0 | 5.0 | 0.60 |
| | 150 | ±5 or ±10 | 8.0 | 4.0 | ECCAHT151□G | 5.0 | 0.60 | ECCNHT151□G | N0 | 5.0 | 0.60 |
| | 180 | ±5 or ±10 | 8.0 | 4.0 | ECCAHT181□G | 5.0 | 0.60 | ECCNHT181□G | N0 | 5.0 | 0.60 |
| | 220 | ±5 or ±10 | 9.0 | 4.0 | ECCAHT221□G | 5.0 | 0.60 | ECCNHT221□G | N0 | 5.0 | 0.60 |
| | 270 | ±5 or ±10 | 9.0 | 4.0 | ECCAHT271□G | 5.0 | 0.60 | ECCNHT271□G | N0 | 5.0 | 0.60 |
| 330 | ±5 or ±10 | 11.0 | 4.0 | ECCAHT331□G | 5.0 | 0.60 | ECCNHT331□G | N0 | 5.0 | 0.60 | |
| 390 | ±5 or ±10 | 11.0 | 4.0 | ECCAHT391□G | 5.0 | 0.60 | ECCNHT391□G | N0 | 5.0 | 0.60 | |
| 470 | ±5 or ±10 | 13.0 | 4.0 | ECCAHT471□G | 7.5 | 0.65 | ECCNHT471□G | N1 | 7.5 | 0.65 | |

Note : □...Capacitance Tolerance Code D (± 0.5pF) or F (± 1pF) or J (± 5%) or K (± 10%)
 Capacitance 9pF and under are available by special order.

■ Ratings and Characteristics

- Series KGE (Class 1, Temp. Char. SL/GP, 1 kVDC to 3 kVDC)

| Rated Volt. | Cap. in pF | Capacitance Tolerance (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------------------|------------------|--------------|-------------------------|------------------|--------------|--------------|-------------------------|------------------|------|--|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | | |
| | | | | | | F | d | | | F | d | |
| 1 kVDC | 12 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A120□GE | 5.0 | 0.60 | ECCN3A120□GE | N0 | 5.0 | 0.60 | |
| | 15 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A150□GE | 5.0 | 0.60 | ECCN3A150□GE | N0 | 5.0 | 0.60 | |
| | 18 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A180□GE | 5.0 | 0.60 | ECCN3A180□GE | N0 | 5.0 | 0.60 | |
| | 22 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A220□GE | 5.0 | 0.60 | ECCN3A220□GE | N0 | 5.0 | 0.60 | |
| | 27 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A270□GE | 5.0 | 0.60 | ECCN3A270□GE | N0 | 5.0 | 0.60 | |
| | 33 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A330□GE | 5.0 | 0.60 | ECCN3A330□GE | N0 | 5.0 | 0.60 | |
| | 39 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A390□GE | 5.0 | 0.60 | ECCN3A390□GE | N0 | 5.0 | 0.60 | |
| | 47 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A470□GE | 5.0 | 0.60 | ECCN3A470□GE | N0 | 5.0 | 0.60 | |
| | 56 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A560□GE | 5.0 | 0.60 | ECCN3A560□GE | N0 | 5.0 | 0.60 | |
| | 68 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A680□GE | 5.0 | 0.60 | ECCN3A680□GE | N0 | 5.0 | 0.60 | |
| | 82 | ±5 or ±10 | 6.0 | 5.0 | ECCA3A820□GE | 5.0 | 0.60 | ECCN3A820□GE | N0 | 5.0 | 0.60 | |
| | 100 | ±5 or ±10 | 7.0 | 5.0 | ECCA3A101□GE | 5.0 | 0.60 | ECCN3A101□GE | N0 | 5.0 | 0.60 | |
| | 120 | ±5 or ±10 | 7.0 | 5.0 | ECCA3A121□GE | 5.0 | 0.60 | ECCN3A121□GE | N0 | 5.0 | 0.60 | |
| | 150 | ±5 or ±10 | 8.0 | 5.0 | ECCA3A151□GE | 5.0 | 0.60 | ECCN3A151□GE | N0 | 5.0 | 0.60 | |
| | 180 | ±5 or ±10 | 8.0 | 5.0 | ECCA3A181□GE | 5.0 | 0.60 | ECCN3A181□GE | N0 | 5.0 | 0.60 | |
| | 220 | ±5 or ±10 | 9.0 | 5.0 | ECCA3A221□GE | 5.0 | 0.60 | ECCN3A221□GE | N0 | 5.0 | 0.60 | |
| | 270 | ±5 or ±10 | 9.0 | 5.0 | ECCA3A271□GE | 5.0 | 0.60 | ECCN3A271□GE | N0 | 5.0 | 0.60 | |
| | 330 | ±5 or ±10 | 11.0 | 5.0 | ECCA3A331□GE | 5.0 | 0.60 | ECCN3A331□GE | N0 | 5.0 | 0.60 | |
| | 390 | ±5 or ±10 | 11.0 | 5.0 | ECCA3A391□GE | 5.0 | 0.60 | ECCN3A391□GE | N0 | 5.0 | 0.60 | |
| | 470 | ±5 or ±10 | 13.0 | 5.0 | ECCA3A471□GE | 7.5 | 0.65 | ECCN3A471□GE | N1 | 7.5 | 0.65 | |
| 2 kVDC | 12 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D120□GE | 7.5 | 0.65 | ECCN3D120□GE | N1 | 7.5 | 0.65 | |
| | 15 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D150□GE | 7.5 | 0.65 | ECCN3D150□GE | N1 | 7.5 | 0.65 | |
| | 18 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D180□GE | 7.5 | 0.65 | ECCN3D180□GE | N1 | 7.5 | 0.65 | |
| | 22 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D220□GE | 7.5 | 0.65 | ECCN3D220□GE | N1 | 7.5 | 0.65 | |
| | 27 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D270□GE | 7.5 | 0.65 | ECCN3D270□GE | N1 | 7.5 | 0.65 | |
| | 33 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D330□GE | 7.5 | 0.65 | ECCN3D330□GE | N1 | 7.5 | 0.65 | |
| | 39 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D390□GE | 7.5 | 0.65 | ECCN3D390□GE | N1 | 7.5 | 0.65 | |
| | 47 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D470□GE | 7.5 | 0.65 | ECCN3D470□GE | N1 | 7.5 | 0.65 | |
| | 56 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D560□GE | 7.5 | 0.65 | ECCN3D560□GE | N1 | 7.5 | 0.65 | |
| | 68 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D680□GE | 7.5 | 0.65 | ECCN3D680□GE | N1 | 7.5 | 0.65 | |
| | 82 | ±5 or ±10 | 7.0 | 5.5 | ECCA3D820□GE | 7.5 | 0.65 | ECCN3D820□GE | N1 | 7.5 | 0.65 | |
| | 100 | ±5 or ±10 | 8.0 | 5.5 | ECCA3D101□GE | 7.5 | 0.65 | ECCN3D101□GE | N1 | 7.5 | 0.65 | |
| | 120 | ±5 or ±10 | 8.0 | 5.5 | ECCA3D121□GE | 7.5 | 0.65 | ECCN3D121□GE | N1 | 7.5 | 0.65 | |
| | 150 | ±5 or ±10 | 9.0 | 5.5 | ECCA3D151□GE | 7.5 | 0.65 | ECCN3D151□GE | N1 | 7.5 | 0.65 | |
| 180 | ±5 or ±10 | 10.0 | 5.5 | ECCA3D181□GE | 7.5 | 0.65 | ECCN3D181□GE | N1 | 7.5 | 0.65 | | |
| 220 | ±5 or ±10 | 10.0 | 5.5 | ECCA3D221□GE | 7.5 | 0.65 | ECCN3D221□GE | N1 | 7.5 | 0.65 | | |
| 3 kVDC | 12 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F120□GE | 7.5 | 0.65 | ECCN3F120□GE | N1 | 7.5 | 0.65 | |
| | 15 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F150□GE | 7.5 | 0.65 | ECCN3F150□GE | N1 | 7.5 | 0.65 | |
| | 18 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F180□GE | 7.5 | 0.65 | ECCN3F180□GE | N1 | 7.5 | 0.65 | |
| | 22 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F220□GE | 7.5 | 0.65 | ECCN3F220□GE | N1 | 7.5 | 0.65 | |
| | 27 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F270□GE | 7.5 | 0.65 | ECCN3F270□GE | N1 | 7.5 | 0.65 | |
| | 33 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F330□GE | 7.5 | 0.65 | ECCN3F330□GE | N1 | 7.5 | 0.65 | |
| | 39 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F390□GE | 7.5 | 0.65 | ECCN3F390□GE | N1 | 7.5 | 0.65 | |
| | 47 | ±5 or ±10 | 7.0 | 6.0 | ECCA3F470□GE | 7.5 | 0.65 | ECCN3F470□GE | N1 | 7.5 | 0.65 | |
| | 56 | ±5 or ±10 | 8.0 | 6.0 | ECCA3F560□GE | 7.5 | 0.65 | ECCN3F560□GE | N1 | 7.5 | 0.65 | |
| | 68 | ±5 or ±10 | 8.0 | 6.0 | ECCA3F680□GE | 7.5 | 0.65 | ECCN3F680□GE | N1 | 7.5 | 0.65 | |
| | 82 | ±5 or ±10 | 9.0 | 6.0 | ECCA3F820□GE | 7.5 | 0.65 | ECCN3F820□GE | N1 | 7.5 | 0.65 | |
| | 100 | ±5 or ±10 | 10.0 | 6.0 | ECCA3F101□GE | 7.5 | 0.65 | ECCN3F101□GE | N1 | 7.5 | 0.65 | |
| | 120 | ±5 or ±10 | 10.0 | 6.0 | ECCA3F121□GE | 7.5 | 0.65 | ECCN3F121□GE | N1 | 7.5 | 0.65 | |
| | 150 | ±5 or ±10 | 11.0 | 6.0 | ECCA3F151□GE | 7.5 | 0.65 | ECCN3F151□GE | N1 | 7.5 | 0.65 | |

■---Capacitance Tolerance Code J (± 5%) or K (± 10%)

Note: Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 2 kVDC and 3 kVDC capacitors that are 11.0 mm or less in body diameter (Dim. D) by special order.

■ Ratings and Characteristics

- Series KGE (Class 1, Temp. Char. SL, 6 kVDC)

| Rated Volt. | Cap. in pF | Capacitance Tolerance (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------------------|------------------|--------------|-------------------------|------------------|--------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 6 kVDC | 5 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J050□GE | 7.5 | 0.65 | ECCN3J050□GE | N1 | 7.5 | 0.65 |
| | 6 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J060□GE | 7.5 | 0.65 | ECCN3J060□GE | N1 | 7.5 | 0.65 |
| | 7 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J070□GE | 7.5 | 0.65 | ECCN3J070□GE | N1 | 7.5 | 0.65 |
| | 8 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J080□GE | 7.5 | 0.65 | ECCN3J080□GE | N1 | 7.5 | 0.65 |
| | 9 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J090□GE | 7.5 | 0.65 | ECCN3J090□GE | N1 | 7.5 | 0.65 |
| | 10 | ±0.5pF or ±1pF | 7.0 | 6.0 | ECCA3J100□GE | 7.5 | 0.65 | ECCN3J100□GE | N1 | 7.5 | 0.65 |
| | 12 | ±5 or ±10 | 7.0 | 6.0 | ECCA3J120□GE | 7.5 | 0.65 | ECCN3J120□GE | N1 | 7.5 | 0.65 |
| | 15 | ±5 or ±10 | 7.0 | 6.0 | ECCA3J150□GE | 7.5 | 0.65 | ECCN3J150□GE | N1 | 7.5 | 0.65 |
| | 18 | ±5 or ±10 | 7.0 | 6.0 | ECCA3J180□GE | 7.5 | 0.65 | ECCN3J180□GE | N1 | 7.5 | 0.65 |
| | 22 | ±5 or ±10 | 7.0 | 6.0 | ECCA3J220□GE | 7.5 | 0.65 | ECCN3J220□GE | N1 | 7.5 | 0.65 |
| | 27 | ±5 or ±10 | 8.0 | 6.0 | ECCA3J270□GE | 7.5 | 0.65 | ECCN3J270□GE | N1 | 7.5 | 0.65 |
| | 33 | ±5 or ±10 | 8.0 | 6.0 | ECCA3J330□GE | 7.5 | 0.65 | ECCN3J330□GE | N1 | 7.5 | 0.65 |
| | 39 | ±5 or ±10 | 9.0 | 6.0 | ECCA3J390□GE | 7.5 | 0.65 | ECCN3J390□GE | N1 | 7.5 | 0.65 |
| | 47 | ±5 or ±10 | 9.0 | 6.0 | ECCA3J470□GE | 7.5 | 0.65 | ECCN3J470□GE | N1 | 7.5 | 0.65 |
| | 56 | ±5 or ±10 | 10.0 | 6.0 | ECCA3J560□GE | 7.5 | 0.65 | ECCN3J560□GE | N1 | 7.5 | 0.65 |
| | 68 | ±5 or ±10 | 11.0 | 6.0 | ECCA3J680□GE | 7.5 | 0.65 | ECCN3J680□GE | N1 | 7.5 | 0.65 |
| | 82 | ±5 or ±10 | 11.0 | 6.0 | ECCA3J820□GE | 7.5 | 0.65 | ECCN3J820□GE | N1 | 7.5 | 0.65 |
| | 100 | ±5 or ±10 | 13.0 | 6.0 | ECCA3J101□GE | 7.5 | 0.65 | ECCN3J101□GE | N1 | 7.5 | 0.65 |
| 120 | ±5 or ±10 | 13.0 | 6.0 | ECCA3J121□GE | 7.5 | 0.65 | ECCN3J121□GE | N1 | 7.5 | 0.65 | |
| 150 | ±5 or ±10 | 15.0 | 6.0 | ECCA3J151□GE | 7.5 | 0.65 | ECCN3J151□GE | N2 | 7.5 | 0.65 | |

Note : Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 2 kVDC and 3 kVDC capacitors that are 11.0 mm or less in body diameter (Dim. D) by Special order.

Note : □...Capacitance Tolerance Code D (± 0.5pF) or F (± 1pF) or J (± 5%) or K (± 10%)
Capacitance 9pF and under are available for special order.

■ Ratings and Characteristics

● Series HT-KB (Class 2, Temp. Char. B/Y5P, 500 VDC)

| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|-------------|-------------------------|------------------|-------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 500 VDC | 100 | ±10 | 6.0 | 4.0 | ECKAHT101KB | 5.0 | 0.60 | ECKNHT101KB | NO | 5.0 | 0.60 |
| | 120 | ±10 | 6.0 | 4.0 | ECKAHT121KB | 5.0 | 0.60 | ECKNHT121KB | NO | 5.0 | 0.60 |
| | 150 | ±10 | 6.0 | 4.0 | ECKAHT151KB | 5.0 | 0.60 | ECKNHT151KB | NO | 5.0 | 0.60 |
| | 180 | ±10 | 6.0 | 4.0 | ECKAHT181KB | 5.0 | 0.60 | ECKNHT181KB | NO | 5.0 | 0.60 |
| | 220 | ±10 | 6.0 | 4.0 | ECKAHT221KB | 5.0 | 0.60 | ECKNHT221KB | NO | 5.0 | 0.60 |
| | 270 | ±10 | 6.0 | 4.0 | ECKAHT271KB | 5.0 | 0.60 | ECKNHT271KB | NO | 5.0 | 0.60 |
| | 330 | ±10 | 6.0 | 4.0 | ECKAHT331KB | 5.0 | 0.60 | ECKNHT331KB | NO | 5.0 | 0.60 |
| | 390 | ±10 | 6.0 | 4.0 | ECKAHT391KB | 5.0 | 0.60 | ECKNHT391KB | NO | 5.0 | 0.60 |
| | 470 | ±10 | 6.0 | 4.0 | ECKAHT471KB | 5.0 | 0.60 | ECKNHT471KB | NO | 5.0 | 0.60 |
| | 560 | ±10 | 6.0 | 4.0 | ECKAHT561KB | 5.0 | 0.60 | ECKNHT561KB | NO | 5.0 | 0.60 |
| | 680 | ±10 | 7.0 | 4.0 | ECKAHT681KB | 5.0 | 0.60 | ECKNHT681KB | NO | 5.0 | 0.60 |
| | 820 | ±10 | 7.0 | 4.0 | ECKAHT821KB | 5.0 | 0.60 | ECKNHT821KB | NO | 5.0 | 0.60 |
| | 1000 | ±10 | 7.0 | 4.0 | ECKAHT102KB | 5.0 | 0.60 | ECKNHT102KB | NO | 5.0 | 0.60 |
| | 1200 | ±10 | 8.5 | 4.0 | ECKAHT122KB | 5.0 | 0.60 | ECKNHT122KB | NO | 5.0 | 0.60 |
| | 1500 | ±10 | 8.5 | 4.0 | ECKAHT152KB | 5.0 | 0.60 | ECKNHT152KB | NO | 5.0 | 0.60 |
| | 1800 | ±10 | 10.0 | 4.0 | ECKAHT182KB | 5.0 | 0.60 | ECKNHT182KB | NO | 5.0 | 0.60 |
| | 2200 | ±10 | 10.0 | 4.0 | ECKAHT222KB | 5.0 | 0.60 | ECKNHT222KB | NO | 5.0 | 0.60 |
| | 2700 | ±10 | 10.0 | 4.0 | ECKAHT272KB | 5.0 | 0.60 | ECKNHT272KB | NO | 5.0 | 0.60 |
| 3300 | ±10 | 11.0 | 4.0 | ECKAHT332KB | 5.0 | 0.60 | ECKNHT332KB | NO | 5.0 | 0.60 | |
| 3900 | ±10 | 13.0 | 4.0 | ECKAHT392KB | 10.0 | 0.65 | ECKNHT392KB | N1 | 7.5 | 0.65 | |
| 4700 | ±10 | 13.0 | 4.0 | ECKAHT472KB | 10.0 | 0.65 | ECKNHT472KB | N1 | 7.5 | 0.65 | |

● Series KBP (Class 2, Temp. Char. B/Y5P, 1 to 3 kVDC)

| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|--------------|-------------------------|------------------|--------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 1 kVDC | 100 | ±10 | 6.0 | 4.5 | ECKA3A101KBP | 5.0 | 0.60 | ECKN3A101KBP | NO | 5.0 | 0.60 |
| | 120 | ±10 | 6.0 | 4.5 | ECKA3A121KBP | 5.0 | 0.60 | ECKN3A121KBP | NO | 5.0 | 0.60 |
| | 150 | ±10 | 6.0 | 4.5 | ECKA3A151KBP | 5.0 | 0.60 | ECKN3A151KBP | NO | 5.0 | 0.60 |
| | 180 | ±10 | 6.0 | 4.5 | ECKA3A181KBP | 5.0 | 0.60 | ECKN3A181KBP | NO | 5.0 | 0.60 |
| | 220 | ±10 | 6.0 | 4.5 | ECKA3A221KBP | 5.0 | 0.60 | ECKN3A221KBP | NO | 5.0 | 0.60 |
| | 270 | ±10 | 6.0 | 4.5 | ECKA3A271KBP | 5.0 | 0.60 | ECKN3A271KBP | NO | 5.0 | 0.60 |
| | 330 | ±10 | 6.0 | 4.5 | ECKA3A331KBP | 5.0 | 0.60 | ECKN3A331KBP | NO | 5.0 | 0.60 |
| | 390 | ±10 | 6.0 | 4.5 | ECKA3A391KBP | 5.0 | 0.60 | ECKN3A391KBP | NO | 5.0 | 0.60 |
| | 470 | ±10 | 6.0 | 4.5 | ECKA3A471KBP | 5.0 | 0.60 | ECKN3A471KBP | NO | 5.0 | 0.60 |
| | 560 | ±10 | 7.0 | 4.5 | ECKA3A561KBP | 5.0 | 0.60 | ECKN3A561KBP | NO | 5.0 | 0.60 |
| | 680 | ±10 | 7.0 | 4.5 | ECKA3A681KBP | 5.0 | 0.60 | ECKN3A681KBP | NO | 5.0 | 0.60 |
| | 820 | ±10 | 7.5 | 4.5 | ECKA3A821KBP | 5.0 | 0.60 | ECKN3A821KBP | NO | 5.0 | 0.60 |
| | 1000 | ±10 | 9.0 | 4.5 | ECKA3A102KBP | 5.0 | 0.60 | ECKN3A102KBP | NO | 5.0 | 0.60 |
| | 1200 | ±10 | 9.0 | 4.5 | ECKA3A122KBP | 5.0 | 0.60 | ECKN3A122KBP | NO | 5.0 | 0.60 |
| | 1500 | ±10 | 9.5 | 4.5 | ECKA3A152KBP | 5.0 | 0.60 | ECKN3A152KBP | NO | 5.0 | 0.60 |
| | 1800 | ±10 | 10.0 | 4.5 | ECKA3A182KBP | 5.0 | 0.60 | ECKN3A182KBP | NO | 5.0 | 0.60 |
| | 2200 | ±10 | 12.0 | 4.5 | ECKA3A222KBP | 5.0 | 0.60 | ECKN3A222KBP | NO | 5.0 | 0.60 |
| | 2700 | ±10 | 12.0 | 4.5 | ECKA3A272KBP | 5.0 | 0.60 | ECKN3A272KBP | NO | 5.0 | 0.60 |
| 3300 | ±10 | 13.5 | 4.5 | ECKA3A332KBP | 10.0 | 0.65 | ECKN3A332KBP | N1 | 7.5 | 0.65 | |
| 3900 | ±10 | 13.5 | 4.5 | ECKA3A392KBP | 10.0 | 0.65 | ECKN3A392KBP | N1 | 7.5 | 0.65 | |
| 4700 | ±10 | 15.5 | 4.5 | ECKA3A472KBP | 10.0 | 0.65 | ECKN3A472KBP | N2 | 7.5 | 0.65 | |
| 5600 | ±10 | 17.0 | 4.5 | ECKA3A562KBP | 10.0 | 0.65 | ECKN3A562KBP | N2 | 7.5 | 0.65 | |

■ Ratings and Characteristics

● Series KBP (Class 2, Temp. Char. B/Y5P, 1 to 3 kVDC) (Continuation)

| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|--------------|-------------------------|------------------|--------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 2 kVDC | 100 | ±10 | 7.0 | 5.0 | ECKA3D101KBP | 7.5 | 0.65 | ECKN3D101KBP | N1 | 7.5 | 0.65 |
| | 120 | ±10 | 7.0 | 5.0 | ECKA3D121KBP | 7.5 | 0.65 | ECKN3D121KBP | N1 | 7.5 | 0.65 |
| | 150 | ±10 | 7.0 | 5.0 | ECKA3D151KBP | 7.5 | 0.65 | ECKN3D151KBP | N1 | 7.5 | 0.65 |
| | 180 | ±10 | 7.0 | 5.0 | ECKA3D181KBP | 7.5 | 0.65 | ECKN3D181KBP | N1 | 7.5 | 0.65 |
| | 220 | ±10 | 7.0 | 5.0 | ECKA3D221KBP | 7.5 | 0.65 | ECKN3D221KBP | N1 | 7.5 | 0.65 |
| | 270 | ±10 | 7.0 | 5.0 | ECKA3D271KBP | 7.5 | 0.65 | ECKN3D271KBP | N1 | 7.5 | 0.65 |
| | 330 | ±10 | 7.0 | 5.0 | ECKA3D331KBP | 7.5 | 0.65 | ECKN3D331KBP | N1 | 7.5 | 0.65 |
| | 390 | ±10 | 7.0 | 5.0 | ECKA3D391KBP | 7.5 | 0.65 | ECKN3D391KBP | N1 | 7.5 | 0.65 |
| | 470 | ±10 | 7.5 | 5.0 | ECKA3D471KBP | 7.5 | 0.65 | ECKN3D471KBP | N1 | 7.5 | 0.65 |
| | 560 | ±10 | 8.0 | 5.0 | ECKA3D561KBP | 7.5 | 0.65 | ECKN3D561KBP | N1 | 7.5 | 0.65 |
| | 680 | ±10 | 9.0 | 5.0 | ECKA3D681KBP | 7.5 | 0.65 | ECKN3D681KBP | N1 | 7.5 | 0.65 |
| | 820 | ±10 | 9.0 | 5.0 | ECKA3D821KBP | 7.5 | 0.65 | ECKN3D821KBP | N1 | 7.5 | 0.65 |
| | 1000 | ±10 | 10.0 | 5.0 | ECKA3D102KBP | 7.5 | 0.65 | ECKN3D102KBP | N1 | 7.5 | 0.65 |
| | 1200 | ±10 | 10.5 | 5.0 | ECKA3D122KBP | 7.5 | 0.65 | ECKN3D122KBP | N1 | 7.5 | 0.65 |
| | 1500 | ±10 | 12.0 | 5.0 | ECKA3D152KBP | 7.5 | 0.65 | ECKN3D152KBP | N1 | 7.5 | 0.65 |
| | 1800 | ±10 | 12.5 | 5.0 | ECKA3D182KBP | 7.5 | 0.65 | ECKN3D182KBP | N1 | 7.5 | 0.65 |
| | 2200 | ±10 | 14.0 | 5.0 | ECKA3D222KBP | 10.0 | 0.65 | ECKN3D222KBP | N2 | 7.5 | 0.65 |
| | 2700 | ±10 | 16.0 | 5.0 | ECKA3D272KBP | 10.0 | 0.65 | ECKN3D272KBP | N2 | 7.5 | 0.65 |
| | 3300 | ±10 | 17.0 | 5.0 | ECKA3D332KBP | 10.0 | 0.65 | ECKN3D332KBP | N2 | 7.5 | 0.65 |
| | 3900 | ±10 | 18.0 | 5.0 | ECKA3D392KBP | 10.0 | 0.65 | ECKN3D392KBP | N2 | 7.5 | 0.65 |
| 4700 | ±10 | 25.0 | 5.0 | ECKA3D472KBP | 10.0 | 0.65 | — | — | — | — | |
| 5600 | ±10 | 25.0 | 5.0 | ECKA3D562KBP | 10.0 | 0.65 | — | — | — | — | |
| 3 kVDC | 100 | ±10 | 7.5 | 6.0 | ECKA3F101KBP | 7.5 | 0.65 | ECKN3F101KBP | N1 | 7.5 | 0.65 |
| | 120 | ±10 | 7.5 | 6.0 | ECKA3F121KBP | 7.5 | 0.65 | ECKN3F121KBP | N1 | 7.5 | 0.65 |
| | 150 | ±10 | 7.5 | 6.0 | ECKA3F151KBP | 7.5 | 0.65 | ECKN3F151KBP | N1 | 7.5 | 0.65 |
| | 180 | ±10 | 7.5 | 6.0 | ECKA3F181KBP | 7.5 | 0.65 | ECKN3F181KBP | N1 | 7.5 | 0.65 |
| | 220 | ±10 | 7.5 | 6.0 | ECKA3F221KBP | 7.5 | 0.65 | ECKN3F221KBP | N1 | 7.5 | 0.65 |
| | 270 | ±10 | 7.5 | 6.0 | ECKA3F271KBP | 7.5 | 0.65 | ECKN3F271KBP | N1 | 7.5 | 0.65 |
| | 330 | ±10 | 8.0 | 6.0 | ECKA3F331KBP | 7.5 | 0.65 | ECKN3F331KBP | N1 | 7.5 | 0.65 |
| | 390 | ±10 | 9.0 | 6.0 | ECKA3F391KBP | 7.5 | 0.65 | ECKN3F391KBP | N1 | 7.5 | 0.65 |
| | 470 | ±10 | 9.5 | 6.0 | ECKA3F471KBP | 7.5 | 0.65 | ECKN3F471KBP | N1 | 7.5 | 0.65 |
| | 560 | ±10 | 10.0 | 6.0 | ECKA3F561KBP | 7.5 | 0.65 | ECKN3F561KBP | N1 | 7.5 | 0.65 |
| | 680 | ±10 | 11.0 | 6.0 | ECKA3F681KBP | 7.5 | 0.65 | ECKN3F681KBP | N1 | 7.5 | 0.65 |
| | 820 | ±10 | 11.0 | 6.0 | ECKA3F821KBP | 7.5 | 0.65 | ECKN3F821KBP | N1 | 7.5 | 0.65 |
| | 1000 | ±10 | 12.5 | 6.0 | ECKA3F102KBP | 7.5 | 0.65 | ECKN3F102KBP | N1 | 7.5 | 0.65 |
| | 1200 | ±10 | 14.5 | 6.0 | ECKA3F122KBP | 10.0 | 0.65 | ECKN3F122KBP | N1 | 7.5 | 0.65 |
| | 1500 | ±10 | 14.5 | 6.0 | ECKA3F152KBP | 10.0 | 0.65 | ECKN3F152KBP | N1 | 7.5 | 0.65 |
| | 1800 | ±10 | 16.0 | 6.0 | ECKA3F182KBP | 10.0 | 0.65 | ECKN3F182KBP | N2 | 7.5 | 0.65 |
| 2200 | ±10 | 17.0 | 6.0 | ECKA3F222KBP | 10.0 | 0.65 | ECKN3F222KBP | N2 | 7.5 | 0.65 | |
| 2700 | ±10 | 18.5 | 6.0 | ECKA3F272KBP | 10.0 | 0.65 | ECKN3F272KBP | N2 | 7.5 | 0.65 | |

Note: Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 2 kVDC and 3 kVDC capacitors that are 11.0 mm or less in body diameter (Dim. D) by special order.

● Series HD (Class 2, Temp. Char. B/Y5P, 2 kVDC)

| Rated Volt. | Cap. in pF | Capacitance Tolerance in % | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|----------------------------|------------------|--------|-------------------------|------------------|------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 2 kVDC | 100 | ±5 or ±10 | 7.0 | 5.0 | ECKAHD101□B | 7.5 | 0.65 | ECKNHD101□B | N1 | 7.5 | 0.65 |
| | 150 | ±5 or ±10 | 7.0 | 5.0 | ECKAHD151□B | 7.5 | 0.65 | ECKNHD151□B | N1 | 7.5 | 0.65 |
| | 220 | ±5 or ±10 | 7.0 | 5.0 | ECKAHD221□B | 7.5 | 0.65 | ECKNHD221□B | N1 | 7.5 | 0.65 |
| | 330 | ±5 or ±10 | 7.0 | 5.0 | ECKAHD331□B | 7.5 | 0.65 | ECKNHD331□B | N1 | 7.5 | 0.65 |
| | 470 | ±5 or ±10 | 7.5 | 5.0 | ECKAHD471□B | 7.5 | 0.65 | ECKNHD471□B | N1 | 7.5 | 0.65 |
| | 680 | ±5 or ±10 | 9.0 | 5.0 | ECKAHD681□B | 7.5 | 0.65 | ECKNHD681□B | N1 | 7.5 | 0.65 |

Note: □--Capacitance Tolerance Code J (± 5%) or K (± 10%). Other capacitance values are available by special order.

■ Ratings and Characteristics

● Series HT-KC (Class 2, Temp. Char. C/Y5S, 500 VDC)

| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|-------------|-------------------------|------------------|-------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 500 VDC | 100 | ±10 | 6.0 | 4.0 | ECKAHT101KC | 5.0 | 0.60 | ECKNHT101KC | NO | 5.0 | 0.60 |
| | 120 | ±10 | 6.0 | 4.0 | ECKAHT121KC | 5.0 | 0.60 | ECKNHT121KC | NO | 5.0 | 0.60 |
| | 150 | ±10 | 6.0 | 4.0 | ECKAHT151KC | 5.0 | 0.60 | ECKNHT151KC | NO | 5.0 | 0.60 |
| | 180 | ±10 | 6.0 | 4.0 | ECKAHT181KC | 5.0 | 0.60 | ECKNHT181KC | NO | 5.0 | 0.60 |
| | 220 | ±10 | 6.0 | 4.0 | ECKAHT221KC | 5.0 | 0.60 | ECKNHT221KC | NO | 5.0 | 0.60 |
| | 270 | ±10 | 6.0 | 4.0 | ECKAHT271KC | 5.0 | 0.60 | ECKNHT271KC | NO | 5.0 | 0.60 |
| | 330 | ±10 | 6.0 | 4.0 | ECKAHT331KC | 5.0 | 0.60 | ECKNHT331KC | NO | 5.0 | 0.60 |
| | 390 | ±10 | 6.0 | 4.0 | ECKAHT391KC | 5.0 | 0.60 | ECKNHT391KC | NO | 5.0 | 0.60 |
| | 470 | ±10 | 6.0 | 4.0 | ECKAHT471KC | 5.0 | 0.60 | ECKNHT471KC | NO | 5.0 | 0.60 |
| | 560 | ±10 | 7.0 | 4.0 | ECKAHT561KC | 5.0 | 0.60 | ECKNHT561KC | NO | 5.0 | 0.60 |
| | 680 | ±10 | 7.0 | 4.0 | ECKAHT681KC | 5.0 | 0.60 | ECKNHT681KC | NO | 5.0 | 0.60 |
| | 820 | ±10 | 7.0 | 4.0 | ECKAHT821KC | 5.0 | 0.60 | ECKNHT821KC | NO | 5.0 | 0.60 |
| | 1000 | ±10 | 7.0 | 4.0 | ECKAHT102KC | 5.0 | 0.60 | ECKNHT102KC | NO | 5.0 | 0.60 |
| | 1200 | ±10 | 8.5 | 4.0 | ECKAHT122KC | 5.0 | 0.60 | ECKNHT122KC | NO | 5.0 | 0.60 |
| | 1500 | ±10 | 8.5 | 4.0 | ECKAHT152KC | 5.0 | 0.60 | ECKNHT152KC | NO | 5.0 | 0.60 |
| | 1800 | ±10 | 10.0 | 4.0 | ECKAHT182KC | 5.0 | 0.60 | ECKNHT182KC | NO | 5.0 | 0.60 |
| | 2200 | ±10 | 10.0 | 4.0 | ECKAHT222KC | 5.0 | 0.60 | ECKNHT222KC | NO | 5.0 | 0.60 |
| | 2700 | ±10 | 11.0 | 4.0 | ECKAHT272KC | 5.0 | 0.60 | ECKNHT272KC | NO | 5.0 | 0.60 |
| | 3300 | ±10 | 13.0 | 4.0 | ECKAHT332KC | 7.5 | 0.65 | ECKNHT332KC | N1 | 7.5 | 0.65 |
| 3900 | ±10 | 13.0 | 4.0 | ECKAHT392KC | 7.5 | 0.65 | ECKNHT392KC | N1 | 7.5 | 0.65 | |
| 4700 | ±10 | 14.0 | 4.0 | ECKAHT472KC | 7.5 | 0.65 | ECKNHT472KC | N1 | 7.5 | 0.65 | |

● Series KRP (Class 2, Temp. Char. R/Y5R, 1 to 3 kVDC)

| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|--------------|-------------------------|------------------|--------------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 1 kVDC | 100 | ±10 | 6.0 | 4.5 | ECKA3A101KRP | 5.0 | 0.60 | ECKN3A101KRP | NO | 5.0 | 0.60 |
| | 120 | ±10 | 6.0 | 4.5 | ECKA3A121KRP | 5.0 | 0.60 | ECKN3A121KRP | NO | 5.0 | 0.60 |
| | 150 | ±10 | 6.0 | 4.5 | ECKA3A151KRP | 5.0 | 0.60 | ECKN3A151KRP | NO | 5.0 | 0.60 |
| | 180 | ±10 | 6.0 | 4.5 | ECKA3A181KRP | 5.0 | 0.60 | ECKN3A181KRP | NO | 5.0 | 0.60 |
| | 220 | ±10 | 6.0 | 4.5 | ECKA3A221KRP | 5.0 | 0.60 | ECKN3A221KRP | NO | 5.0 | 0.60 |
| | 270 | ±10 | 6.0 | 4.5 | ECKA3A271KRP | 5.0 | 0.60 | ECKN3A271KRP | NO | 5.0 | 0.60 |
| | 330 | ±10 | 6.0 | 4.5 | ECKA3A331KRP | 5.0 | 0.60 | ECKN3A331KRP | NO | 5.0 | 0.60 |
| | 390 | ±10 | 7.0 | 4.5 | ECKA3A391KRP | 5.0 | 0.60 | ECKN3A391KRP | NO | 5.0 | 0.60 |
| | 470 | ±10 | 7.0 | 4.5 | ECKA3A471KRP | 5.0 | 0.60 | ECKN3A471KRP | NO | 5.0 | 0.60 |
| | 560 | ±10 | 7.0 | 4.5 | ECKA3A561KRP | 5.0 | 0.60 | ECKN3A561KRP | NO | 5.0 | 0.60 |
| | 680 | ±10 | 7.5 | 4.5 | ECKA3A681KRP | 5.0 | 0.60 | ECKN3A681KRP | NO | 5.0 | 0.60 |
| | 820 | ±10 | 7.5 | 4.5 | ECKA3A821KRP | 5.0 | 0.60 | ECKN3A821KRP | NO | 5.0 | 0.60 |
| | 1000 | ±10 | 9.0 | 4.5 | ECKA3A102KRP | 5.0 | 0.60 | ECKN3A102KRP | NO | 5.0 | 0.60 |
| | 1200 | ±10 | 9.0 | 4.5 | ECKA3A122KRP | 5.0 | 0.60 | ECKN3A122KRP | NO | 5.0 | 0.60 |
| | 1500 | ±10 | 10.5 | 4.5 | ECKA3A152KRP | 5.0 | 0.60 | ECKN3A152KRP | NO | 5.0 | 0.60 |
| | 1800 | ±10 | 10.5 | 4.5 | ECKA3A182KRP | 5.0 | 0.60 | ECKN3A182KRP | NO | 5.0 | 0.60 |
| | 2200 | ±10 | 11.5 | 4.5 | ECKA3A222KRP | 5.0 | 0.60 | ECKN3A222KRP | NO | 5.0 | 0.60 |
| | 2700 | ±10 | 13.0 | 4.5 | ECKA3A272KRP | 7.5 | 0.65 | ECKN3A272KRP | N1 | 7.5 | 0.65 |
| | 3300 | ±10 | 13.0 | 4.5 | ECKA3A332KRP | 7.5 | 0.65 | ECKN3A332KRP | N1 | 7.5 | 0.65 |
| 3900 | ±10 | 14.0 | 4.5 | ECKA3A392KRP | 7.5 | 0.65 | ECKN3A392KRP | N1 | 7.5 | 0.65 | |
| 4700 | ±10 | 16.5 | 4.5 | ECKA3A472KRP | 7.5 | 0.65 | — | — | — | — | |

■ Ratings and Characteristics

● Series KRP (Class 2, Temp. Char. R/Y5R, 1 to 3 kVDC) (Continuation)

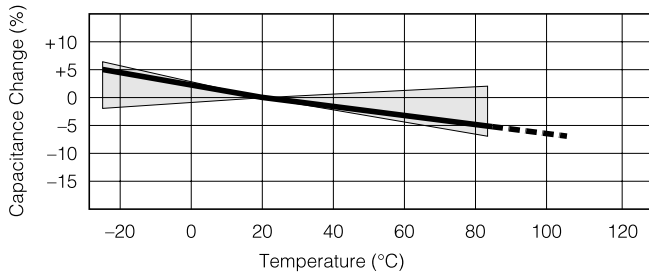
| Rated Volt. | Cap. in pF | Cap. Tol. (%) | Dimensions in mm | | Kinked Lead Type (Bulk) | | | Kinked Lead Taping Type | | | |
|-------------|------------|---------------|------------------|--------------|-------------------------|------------------|------|-------------------------|------------|------------------|------|
| | | | D max. | T max. | Part Number | Dimensions in mm | | Part Number | Taped Type | Dimensions in mm | |
| | | | | | | F | d | | | F | d |
| 2 kVDC | 100 | ±10 | 7.0 | 5.0 | ECKA3D101KRP | 7.5 | 0.65 | ECKN3D101KRP | N1 | 7.5 | 0.65 |
| | 120 | ±10 | 7.0 | 5.0 | ECKA3D121KRP | 7.5 | 0.65 | ECKN3D121KRP | N1 | 7.5 | 0.65 |
| | 150 | ±10 | 7.0 | 5.0 | ECKA3D151KRP | 7.5 | 0.65 | ECKN3D151KRP | N1 | 7.5 | 0.65 |
| | 180 | ±10 | 7.0 | 5.0 | ECKA3D181KRP | 7.5 | 0.65 | ECKN3D181KRP | N1 | 7.5 | 0.65 |
| | 220 | ±10 | 7.0 | 5.0 | ECKA3D221KRP | 7.5 | 0.65 | ECKN3D221KRP | N1 | 7.5 | 0.65 |
| | 270 | ±10 | 7.0 | 5.0 | ECKA3D271KRP | 7.5 | 0.65 | ECKN3D271KRP | N1 | 7.5 | 0.65 |
| | 330 | ±10 | 7.5 | 5.0 | ECKA3D331KRP | 7.5 | 0.65 | ECKN3D331KRP | N1 | 7.5 | 0.65 |
| | 390 | ±10 | 7.5 | 5.0 | ECKA3D391KRP | 7.5 | 0.65 | ECKN3D391KRP | N1 | 7.5 | 0.65 |
| | 470 | ±10 | 9.0 | 5.0 | ECKA3D471KRP | 7.5 | 0.65 | ECKN3D471KRP | N1 | 7.5 | 0.65 |
| | 560 | ±10 | 9.0 | 5.0 | ECKA3D561KRP | 7.5 | 0.65 | ECKN3D561KRP | N1 | 7.5 | 0.65 |
| | 680 | ±10 | 10.0 | 5.0 | ECKA3D681KRP | 7.5 | 0.65 | ECKN3D681KRP | N1 | 7.5 | 0.65 |
| | 820 | ±10 | 10.0 | 5.0 | ECKA3D821KRP | 7.5 | 0.65 | ECKN3D821KRP | N1 | 7.5 | 0.65 |
| | 1000 | ±10 | 12.0 | 5.0 | ECKA3D102KRP | 7.5 | 0.65 | ECKN3D102KRP | N1 | 7.5 | 0.65 |
| | 1200 | ±10 | 12.0 | 5.0 | ECKA3D122KRP | 7.5 | 0.65 | ECKN3D122KRP | N1 | 7.5 | 0.65 |
| | 1500 | ±10 | 12.0 | 5.0 | ECKA3D152KRP | 7.5 | 0.65 | ECKN3D152KRP | N1 | 7.5 | 0.65 |
| | 1800 | ±10 | 14.0 | 5.0 | ECKA3D182KRP | 10.0 | 0.65 | — | — | — | — |
| | 2200 | ±10 | 16.0 | 5.0 | ECKA3D222KRP | 10.0 | 0.65 | — | — | — | — |
| | 2700 | ±10 | 16.0 | 5.0 | ECKA3D272KRP | 10.0 | 0.65 | — | — | — | — |
| | 3300 | ±10 | 19.0 | 5.0 | ECKA3D332KRP | 10.0 | 0.65 | — | — | — | — |
| | 3900 | ±10 | 20.0 | 5.0 | ECKA3D392KRP | 10.0 | 0.65 | — | — | — | — |
| 4700 | ±10 | 21.0 | 5.0 | ECKA3D472KRP | 10.0 | 0.65 | — | — | — | — | |
| 3 kVDC | 100 | ±10 | 7.5 | 5.5 | ECKA3F101KRP | 7.5 | 0.65 | ECKN3F101KRP | N1 | 7.5 | 0.65 |
| | 120 | ±10 | 7.5 | 5.5 | ECKA3F121KRP | 7.5 | 0.65 | ECKN3F121KRP | N1 | 7.5 | 0.65 |
| | 150 | ±10 | 7.5 | 5.5 | ECKA3F151KRP | 7.5 | 0.65 | ECKN3F151KRP | N1 | 7.5 | 0.65 |
| | 180 | ±10 | 7.5 | 5.5 | ECKA3F181KRP | 7.5 | 0.65 | ECKN3F181KRP | N1 | 7.5 | 0.65 |
| | 220 | ±10 | 8.0 | 5.5 | ECKA3F221KRP | 7.5 | 0.65 | ECKN3F221KRP | N1 | 7.5 | 0.65 |
| | 270 | ±10 | 8.0 | 5.5 | ECKA3F271KRP | 7.5 | 0.65 | ECKN3F271KRP | N1 | 7.5 | 0.65 |
| | 330 | ±10 | 8.5 | 5.5 | ECKA3F331KRP | 7.5 | 0.65 | ECKN3F331KRP | N1 | 7.5 | 0.65 |
| | 390 | ±10 | 9.5 | 5.5 | ECKA3F391KRP | 7.5 | 0.65 | ECKN3F391KRP | N1 | 7.5 | 0.65 |
| | 470 | ±10 | 9.5 | 5.5 | ECKA3F471KRP | 7.5 | 0.65 | ECKN3F471KRP | N1 | 7.5 | 0.65 |
| | 560 | ±10 | 10.5 | 5.5 | ECKA3F561KRP | 7.5 | 0.65 | ECKN3F561KRP | N1 | 7.5 | 0.65 |
| | 680 | ±10 | 10.5 | 5.5 | ECKA3F681KRP | 7.5 | 0.65 | ECKN3F681KRP | N1 | 7.5 | 0.65 |
| | 820 | ±10 | 12.5 | 5.5 | ECKA3F821KRP | 7.5 | 0.65 | ECKN3F821KRP | N1 | 7.5 | 0.65 |
| | 1000 | ±10 | 12.5 | 5.5 | ECKA3F102KRP | 10.0 | 0.65 | — | — | — | — |
| | 1200 | ±10 | 14.5 | 5.5 | ECKA3F122KRP | 10.0 | 0.65 | — | — | — | — |
| | 1500 | ±10 | 14.5 | 5.5 | ECKA3F152KRP | 10.0 | 0.65 | — | — | — | — |
| | 1800 | ±10 | 16.5 | 5.5 | ECKA3F182KRP | 10.0 | 0.65 | — | — | — | — |
| 2200 | ±10 | 17.0 | 5.5 | ECKA3F222KRP | 10.0 | 0.65 | — | — | — | — | |

Note: Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 2 kVDC and 3 kVDC capacitors that are 10.5 mm or less in body diameter (Dim. D) by special order.

■ Typical Temperature Characteristics

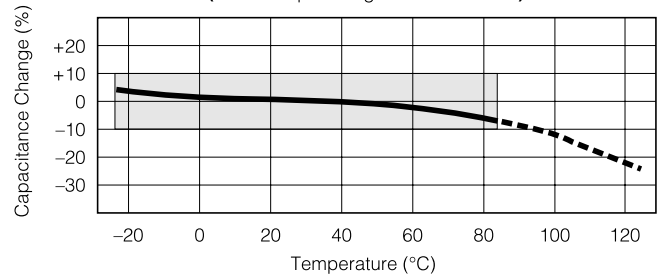
Series HT-KG, KGE (Char. SL/GP)

(Temp. Coeff. : +350 to -1000 ppm/°C)



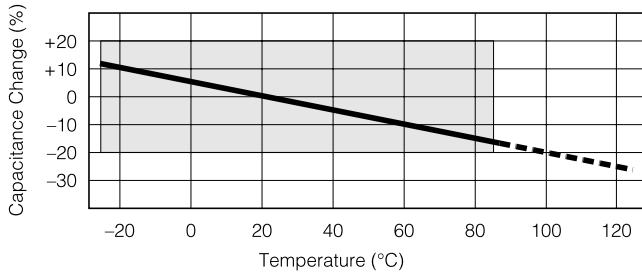
Series HT-KB, KBP (Char. B/Y5P)

(Temp. Range : -25 to 85 °C
max. Cap. Change : ±10 %)



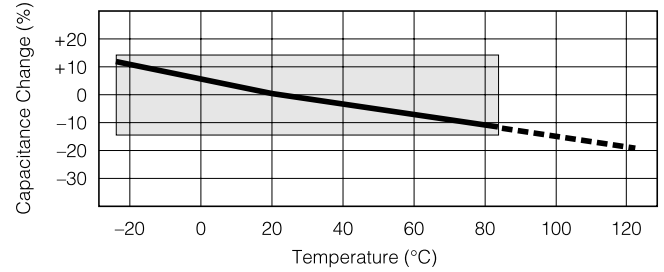
Series HT-KC (Char. C/Y5S)

(Temp. Range : -25 to 85 °C
max. Cap. Change : ±20 %)



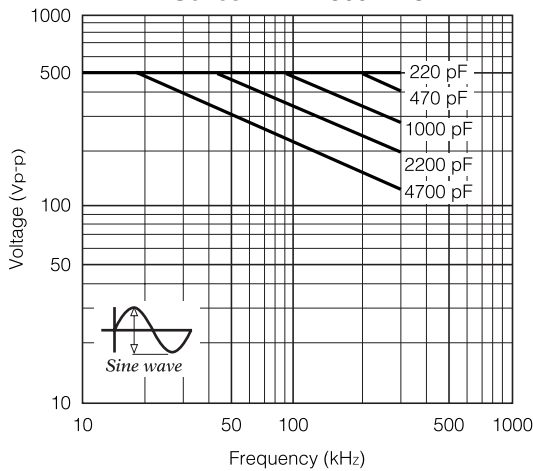
Series KRP (Char. R/Y5R)

(Temp. Range : -25 to 85 °C
max. Cap. Change : ±15 %)

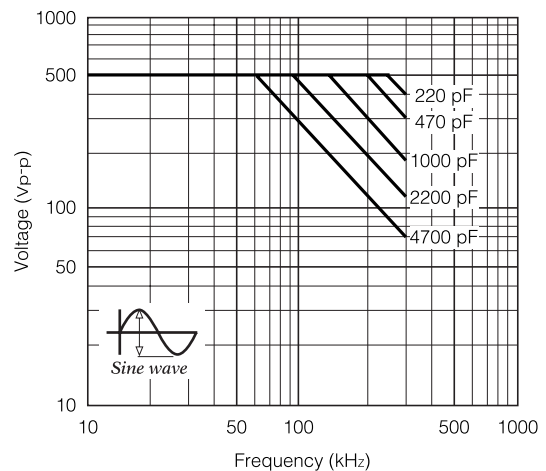


■ Characteristics of Voltage-Frequency

Series HT-KB 500 VDC

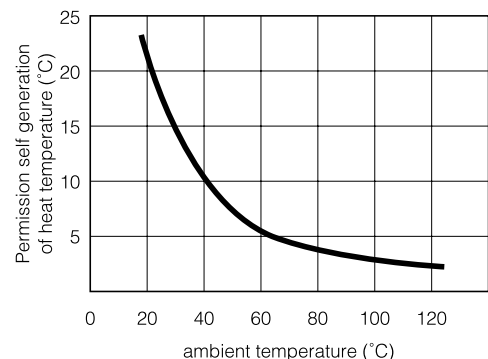


Series HT-KC 500 VDC

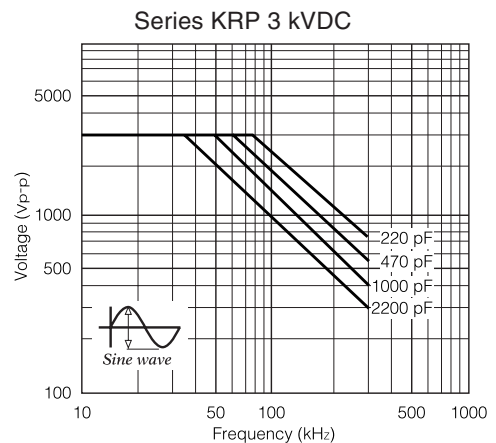
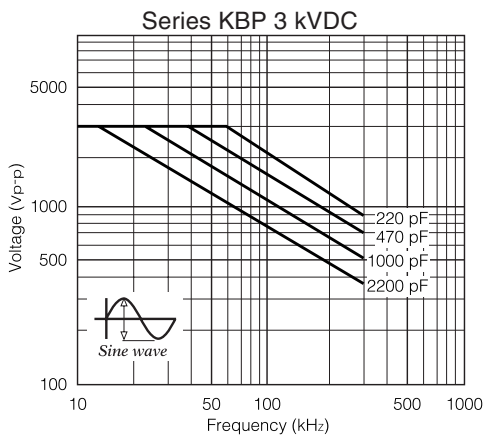
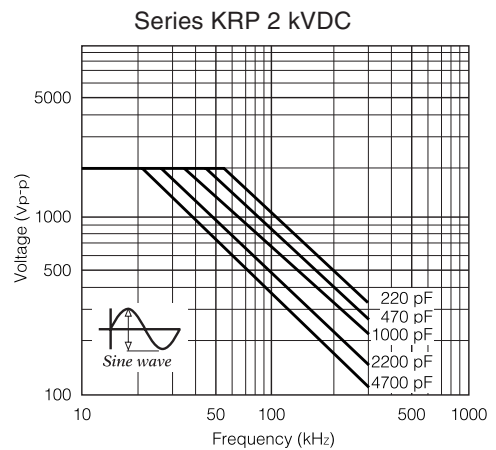
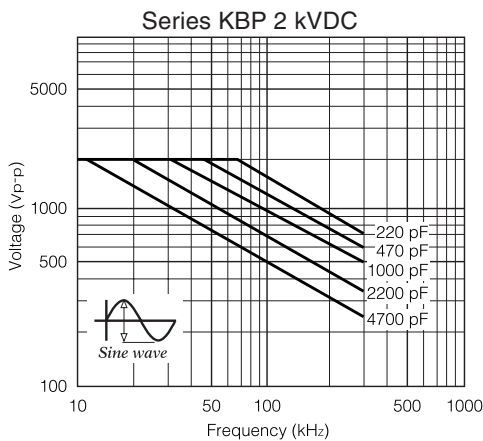
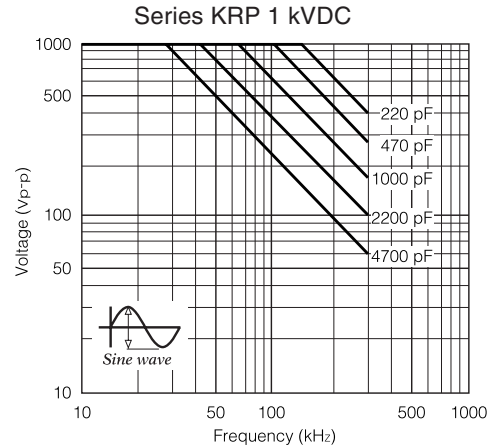
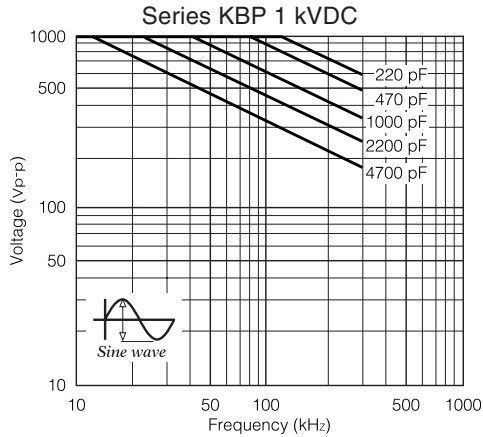


The graphs above show the maximum permissible voltage when using a capacitor with an AC sine wave voltage. When measuring this voltage in room temperature (25 °C), the capacitor self-heat generation will rise a maximum of 20 °C. When using a pulse voltage or an AC voltage other than a sine wave, confirm that the capacitor self-heat generation is less than 20 °C in an ambient room temperature of 25 °C. The self-heat generation temperature is the difference between the surface temperature and the ambient room temperature. As for the situation when the self-heat generation temperature is more than 25 °C, refer to the figure on the right.

Permission self generation of heat temperature vs. ambient temperature



■ Characteristics of Voltage – Frequency (Continuation)



The graphs above show the maximum permissible voltage when using a capacitor with an AC sine wave voltage. When measuring this voltage in room temperature (25 °C), the capacitor self-heat generation will rise a maximum of 20 °C. When using a pulse voltage or an AC voltage other than a sine wave, confirm that the capacitor self-heat generation is less than 20 °C in an ambient room temperature of 25 °C. The self-heat generation temperature is the difference between the surface temperature and the ambient room temperature. As for the situation when the self-heat generation temperature is more than 25 °C, refer to the figure on the previous page.

