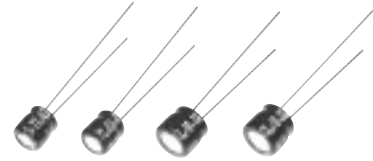


Radial Lead Type

Series: **KS(Bi-polar)** Type: **A**



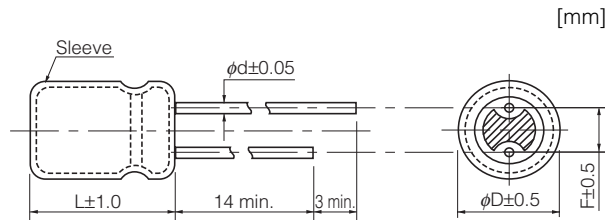
■ Features

- Endurance : 85° C 1000 h
- 5 mm height
- RoHS directive compliant

■ Specifications

| | | |
|-----------------------|---|-----------------------------------|
| Category Temp. Range | -40 °C to +85 °C | |
| Rated W.V. Range | 63 V.DC to 50 V.DC | |
| Nominal Cap. Range | 0.1 μF to 47 μF | |
| Capacitance Tolerance | ±20 % (120 Hz/+20 °C) | |
| DC Leakage Current | I ≤ 0.05 CV or 10 (μA) After 2 minutes (Whichever is greater) | |
| tan δ | Please see the attached standard products list | |
| Endurance | After 1000 hours application of DC working voltage (500 hours for each polarity) at +85 °C±2 °C, when the capacitors are restored to 20 °C, the capacitors shall meet the following limits. | |
| | 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 1000 hours at +85 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance (With voltage treatment) | |

■ Dimensions in mm (not to scale)



(mm)

| | | | |
|--------------|------|------|------|
| Body Dia. φD | 4 | 5 | 6.3 |
| Lead Dia. φd | 0.45 | 0.45 | 0.45 |
| Lead space F | 1.5 | 2.0 | 2.5 |

■ Standard Products (Bi-polar)

| W.V. | Cap. (±20%) | Case size | | Specification | | Lead Length | | | Part No. | Min. Packaging Q'ty | | |
|------|----------------|-----------|--------|---|-------------------------------|-------------|------------|--------------|----------|---------------------|--------|--------------|
| | | Dia. | Length | Ripple Current (120 Hz) (+85 °C) (mA r.m.s.) | tan δ (120 Hz) (+20 °C) | Lead Dia. | Lead Space | | | Straight Leads | Taping | |
| | | | | | | | Straight | Taping *B | | | | Taping *i |
| (V) | (μF) | (mm) | (mm) | (mA r.m.s.) | (mm) | (mm) | (mm) | (mm) | (pcs) | (pcs) | | |
| 6.3 | 22 | 5 | 5 | 29 | 0.24 | 0.45 | 2.0 | 5.0 | 2.5 | ECEA0JSN220() | 200 | 2000 |
| | 33 | 6.3 | 5 | 38 | 0.24 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA0JSN330() | 200 | 2000 |
| | 47 | 6.3 | 5 | 46 | 0.24 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA0JSN470() | 200 | 2000 |
| 10 | 10 | 4 | 5 | 25 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1ASN100() | 200 | 2000 |
| | 22 | 6.3 | 5 | 35 | 0.20 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA1ASN220() | 200 | 2000 |
| | 33 | 6.3 | 5 | 43 | 0.20 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA1ASN330() | 200 | 2000 |
| 16 | 4.7 | 4 | 5 | 20 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1CSN4R7() | 200 | 2000 |
| | 10 | 5 | 5 | 25 | 0.20 | 0.45 | 2.0 | 5.0 | 2.5 | ECEA1CSN100() | 200 | 2000 |
| | 22 | 6.3 | 5 | 39 | 0.20 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA1CSN220() | 200 | 2000 |
| 25 | 3.3 | 5 | 5 | 18 | 0.20 | 0.45 | 2.0 | 5.0 | 2.5 | ECEA1ESN3R3() | 200 | 2000 |
| | 4.7 | 5 | 5 | 21 | 0.20 | 0.45 | 2.0 | 5.0 | 2.5 | ECEA1ESN4R7() | 200 | 2000 |
| | 10 | 6.3 | 5 | 28 | 0.20 | 0.45 | 2.5 | 5.0 | 2.5 | ECEA1ESN100() | 200 | 2000 |
| 35 | 2.2 | 4 | 5 | 12 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1VSN2R2() | 200 | 2000 |
| 50 | 0.1 | 4 | 5 | 1 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1HSN0R1() | 200 | 2000 |
| | 0.22 | 4 | 5 | 2 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1HSNR22() | 200 | 2000 |
| | 0.33 | 4 | 5 | 3 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1HSNR33() | 200 | 2000 |
| | 0.47 | 4 | 5 | 5 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1HSNR47() | 200 | 2000 |
| | 1 | 4 | 5 | 10 | 0.20 | 0.45 | 1.5 | 5.0 | 2.5 | ECEA1HSN010() | 200 | 2000 |
| | 2.2 | 5 | 5 | 16 | 0.20 | 0.45 | 2.0 | 5.0 | 2.5 | ECEA1HSN2R2() | 200 | 2000 |

Endurance : 85 °C 1000 h (500hours for each polarity)

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

The taping dimensions are explained on p.178 of our Catalog. Please use it as a reference guide.