

Radial Lead Type

Series: **NHG** Type: **A**



■ Features

- Endurance : 105 °C 1000 h to 2000 h
- RoHS directive compliant

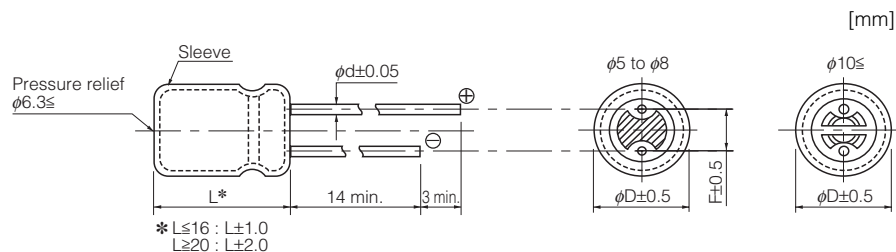
■ Specifications

| | | |
|-----------------------|---|---|
| Category Temp. Range | -55 °C to +105 °C | -25 °C to +105 °C |
| Rated W.V. Range | 6.3 V.DC to 100 V.DC | 160 V.DC to 450 V.DC |
| Nominal Cap. Range | 0.1 μF to 22000 μF | 1.0 μF to 330 μF |
| Capacitance Tolerance | ±20 % (120 Hz/+20 °C) | |
| DC Leakage Current | $I \leq 0.01 CV$ or $3 (\mu A)$ After 2 minutes (Which is greater) | $I \leq 0.06 CV + 10 (\mu A)$ After 2 minutes |
| tan δ | Please see the attached standard products list | |
| Endurance | <p>After following life test with DC voltage and +105 °C±2 °C ripple current value applied (The sum of DC and ripple peak voltage shall not exceed the rated working voltage), When the capacitors are restored to 20 °C, the capacitors shall meet the limits specified below.</p> <p>Duration : 6.3 V.DC to 100 V.DC : (φ5 to φ8)=1000 hours, (φ10 to φ18)=2000 hours 160 V.DC to 450 V.DC : 2000 hours</p> | |
| | 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 +105 °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) | |

■ Frequency correction factor for ripple current

| W.V.(V.DC) | Cap. (μF) | Frequency (Hz) | | | | |
|------------|---------------|----------------|------|------|------|-------|
| | | 60 | 120 | 1 k | 10 k | 100 k |
| 6.3 to 100 | 0.1 to 33 | 0.75 | 1.00 | 1.55 | 1.80 | 2.00 |
| | 47 to 470 | 0.80 | 1.00 | 1.35 | 1.50 | 1.50 |
| | 1000 to 22000 | 0.85 | 1.00 | 1.10 | 1.15 | 1.15 |
| 160 to 450 | 1 to 330 | 0.80 | 1.00 | 1.35 | 1.50 | 1.50 |

■ Dimensions in mm (not to scale)



(mm)

| | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|--------------|-----|-----|-----|-----|------|-----|-----|
| Body Dia. φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
| Lead Dia. φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |
| Lead space F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

00 Sep. 2010

■ Standard Products

| W.V. (V) | Cap. (±20 %) (μF) | Case size | | Specification | | | Lead Length | | | | Part No. | Min. Packaging Q'ty | |
|-------------|-------------------------|--------------|----------------|--|-------------------------------|----------------------|-------------------|------------------|----------------------|----------------------|---------------|-------------------------|-----------------|
| | | Dia. (mm) | Length (mm) | Ripple Current (120 Hz) (+105 °C) (mA r.m.s.) | tan δ (120 Hz) (+20 °C) | Endurance (hours) | Lead Dia. (mm) | Lead Space | | | | Straight Leads (pcs) | Taping (pcs) |
| | | | | | | | | Straight (mm) | Taping *B (mm) | Taping *i (mm) | | | |
| 6.3 | 220 | 5 | 11 | 140 | 0.28 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA0JHG221() | 200 | 2000 |
| | 470 | 6.3 | 11.2 | 230 | 0.28 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA0JHG471() | 200 | 2000 |
| | 1000 | 8 | 11.5 | 380 | 0.28 | 1000 | 0.6 | 3.5 | 5.0 | | ECA0JHG102() | 200 | 1000 |
| | 2200 | 10 | 16 | 710 | 0.30 | 2000 | 0.6 | 5.0 | 5.0 | | ECA0JHG222() | 200 | 500 |
| | 3300 | 10 | 20 | 840 | 0.32 | 2000 | 0.6 | 5.0 | 5.0 | | ECA0JHG332() | 200 | 500 |
| | 4700 | 12.5 | 20 | 1090 | 0.34 | 2000 | 0.6 | 5.0 | 5.0 | | ECA0JHG472() | 200 | 500 |
| | 6800 | 12.5 | 25 | 1350 | 0.38 | 2000 | 0.6 | 5.0 | 5.0 | | ECA0JHG682() | 200 | 500 |
| | 10000 | 16 | 25 | 1650 | 0.46 | 2000 | 0.8 | 7.5 | 7.5 | | ECA0JHG103() | 100 | 250 |
| | 15000 | 16 | 31.5 | 2010 | 0.56 | 2000 | 0.8 | 7.5 | | | ECA0JHG153 | 100 | |
| 22000 | 18 | 35.5 | 2350 | 0.70 | 2000 | 0.8 | 7.5 | | | ECA0JHG223 | 50 | | |
| 10 | 330 | 6.3 | 11.2 | 200 | 0.24 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1AHG331() | 200 | 2000 |
| | 470 | 8 | 11.5 | 250 | 0.24 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1AHG471() | 200 | 1000 |
| | 1000 | 10 | 12.5 | 460 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1AHG102() | 200 | 500 |
| | 2200 | 10 | 20 | 760 | 0.26 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1AHG222() | 200 | 500 |
| | 3300 | 12.5 | 20 | 1000 | 0.28 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1AHG332() | 200 | 500 |
| | 4700 | 12.5 | 25 | 1260 | 0.30 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1AHG472() | 200 | 500 |
| | 6800 | 16 | 25 | 1570 | 0.34 | 2000 | 0.8 | 7.5 | 7.5 | | ECA1AHG682() | 100 | 250 |
| | 10000 | 16 | 31.5 | 1890 | 0.42 | 2000 | 0.8 | 7.5 | | | ECA1AHG103 | 100 | |
| 15000 | 18 | 35.5 | 2180 | 0.52 | 2000 | 0.8 | 7.5 | | | ECA1AHG153 | 50 | | |
| 16 | 100 | 5 | 11 | 110 | 0.20 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1CHG101() | 200 | 2000 |
| | 220 | 6.3 | 11.2 | 180 | 0.20 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1CHG221() | 200 | 2000 |
| | 330 | 8 | 11.5 | 260 | 0.20 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1CHG331() | 200 | 1000 |
| | 470 | 8 | 11.5 | 310 | 0.20 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1CHG471() | 200 | 1000 |
| | 1000 | 10 | 16 | 560 | 0.20 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1CHG102() | 200 | 500 |
| | 2200 | 12.5 | 20 | 920 | 0.22 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1CHG222() | 200 | 500 |
| | 3300 | 12.5 | 25 | 1170 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1CHG332() | 200 | 500 |
| | 4700 | 16 | 25 | 1480 | 0.26 | 2000 | 0.8 | 7.5 | 7.5 | | ECA1CHG472() | 100 | 250 |
| | 6800 | 16 | 31.5 | 1780 | 0.30 | 2000 | 0.8 | 7.5 | | | ECA1CHG682 | 100 | |
| 10000 | 18 | 35.5 | 2060 | 0.38 | 2000 | 0.8 | 7.5 | | | ECA1CHG103 | 50 | | |
| 25 | 47 | 5 | 11 | 91 | 0.16 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1EHG470() | 200 | 2000 |
| | 100 | 6.3 | 11.2 | 130 | 0.16 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1EHG101() | 200 | 2000 |
| | 220 | 8 | 11.5 | 230 | 0.16 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1EHG221() | 200 | 1000 |
| | 330 | 8 | 11.5 | 310 | 0.16 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1EHG331() | 200 | 1000 |
| | 470 | 10 | 12.5 | 380 | 0.16 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1EHG471() | 200 | 500 |
| | 1000 | 10 | 20 | 680 | 0.16 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1EHG102() | 200 | 500 |
| | 2200 | 12.5 | 25 | 1090 | 0.18 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1EHG222() | 200 | 500 |
| | 3300 | 16 | 25 | 1400 | 0.20 | 2000 | 0.8 | 7.5 | 7.5 | | ECA1EHG332() | 100 | 250 |
| | 4700 | 16 | 31.5 | 1750 | 0.22 | 2000 | 0.8 | 7.5 | | | ECA1EHG472 | 100 | |
| 6800 | 18 | 35.5 | 2040 | 0.26 | 2000 | 0.8 | 7.5 | | | ECA1EHG682 | 50 | | |
| 35 | 47 | 5 | 11 | 90 | 0.14 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1VHG470() | 200 | 2000 |
| | 100 | 6.3 | 11.2 | 150 | 0.14 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1VHG101() | 200 | 2000 |
| | 220 | 8 | 11.5 | 270 | 0.14 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1VHG221() | 200 | 1000 |
| | 330 | 10 | 12.5 | 350 | 0.14 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1VHG331() | 200 | 500 |
| | 470 | 10 | 16 | 460 | 0.14 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1VHG471() | 200 | 500 |
| | 1000 | 12.5 | 20 | 810 | 0.14 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1VHG102() | 200 | 500 |
| | 2200 | 16 | 25 | 1260 | 0.16 | 2000 | 0.8 | 7.5 | 7.5 | | ECA1VHG222() | 100 | 250 |
| | 3300 | 16 | 31.5 | 1610 | 0.18 | 2000 | 0.8 | 7.5 | | | ECA1VHG332 | 100 | |
| 4700 | 18 | 35.5 | 1910 | 0.20 | 2000 | 0.8 | 7.5 | | | ECA1VHG472 | 50 | | |

When requesting taped product, please put the letter "B" or "i" between the "()". Lead wire pitch B=5 mm, 7.5 mm, i=2.5 mm. The taping dimensions are explained on EE189 of our Catalog. Please use it as a reference guide.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Standard Products

| W.V. | Cap. (±20 %) | Case size | | Specification | | | Lead Length | | | Part No. | Min. Packaging Q'ty | | |
|------|-----------------|-----------|--------|---|-------------------------------|----------------|--------------|------------|--------------|---------------|---------------------|--------|--------------|
| | | Dia. | Length | Ripple Current (120 Hz) (+105 °C) | tan δ (120 Hz) (+20 °C) | Endur- ance | Lead Dia. | Lead Space | | | Straight Leads | Taping | |
| | | | | | | | | Straight | Taping *B | | | | Taping *i |
| (V) | (μF) | (mm) | (mm) | (mA r.m.s.) | | (hours) | (mm) | (mm) | (mm) | | | | |
| 50 | 0.1 | 5 | 11 | 1.1 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG0R1() | 200 | 2000 |
| | 0.22 | 5 | 11 | 2.3 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHGR22() | 200 | 2000 |
| | 0.33 | 5 | 11 | 3.5 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHGR33() | 200 | 2000 |
| | 0.47 | 5 | 11 | 5 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHGR47() | 200 | 2000 |
| | 1 | 5 | 11 | 10 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG010() | 200 | 2000 |
| | 2.2 | 5 | 11 | 18 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG2R2() | 200 | 2000 |
| | 3.3 | 5 | 11 | 22 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG3R3() | 200 | 2000 |
| | 4.7 | 5 | 11 | 26 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG4R7() | 200 | 2000 |
| | 10 | 5 | 11 | 39 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG100() | 200 | 2000 |
| | 22 | 5 | 11 | 65 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG220() | 200 | 2000 |
| | 33 | 5 | 11 | 90 | 0.12 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1HHG330() | 200 | 2000 |
| | 47 | 6.3 | 11.2 | 110 | 0.12 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1HHG470() | 200 | 2000 |
| | 100 | 8 | 11.5 | 180 | 0.12 | 1000 | 0.6 | 3.5 | 5.0 | | ECA1HHG101() | 200 | 1000 |
| | 220 | 10 | 12.5 | 300 | 0.12 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1HHG221() | 200 | 500 |
| | 330 | 10 | 16 | 410 | 0.12 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1HHG331() | 200 | 500 |
| | 470 | 10 | 20 | 530 | 0.12 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1HHG471() | 200 | 500 |
| | 1000 | 12.5 | 25 | 950 | 0.12 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1HHG102() | 200 | 500 |
| 2200 | 16 | 31.5 | 1470 | 0.14 | 2000 | 0.8 | 7.5 | | | ECA1HHG222 | 100 | | |
| 3300 | 18 | 35.5 | 1770 | 0.16 | 2000 | 0.8 | 7.5 | | | ECA1HHG332 | 50 | | |
| 63 | 10 | 5 | 11 | 46 | 0.10 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1JHG100() | 200 | 2000 |
| | 22 | 5 | 11 | 71 | 0.10 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA1JHG220() | 200 | 2000 |
| | 33 | 6.3 | 11.2 | 100 | 0.10 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1JHG330() | 200 | 2000 |
| | 47 | 6.3 | 11.2 | 120 | 0.10 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA1JHG470() | 200 | 2000 |
| | 100 | 10 | 12.5 | 215 | 0.10 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1JHG101() | 200 | 500 |
| | 220 | 10 | 16 | 335 | 0.10 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1JHG221() | 200 | 500 |
| | 330 | 10 | 20 | 510 | 0.10 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1JHG331() | 200 | 500 |
| | 470 | 12.5 | 20 | 640 | 0.10 | 2000 | 0.6 | 5.0 | 5.0 | | ECA1JHG471() | 200 | 500 |
| | 1000 | 16 | 25 | 930 | 0.10 | 2000 | 0.8 | 7.5 | 7.5 | | ECA1JHG102() | 100 | 250 |
| 2200 | 18 | 35.5 | 1610 | 0.12 | 2000 | 0.8 | 7.5 | | | ECA1JHG222 | 50 | | |
| 100 | 0.47 | 5 | 11 | 9 | 0.08 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA2AHGR47() | 200 | 2000 |
| | 1 | 5 | 11 | 14 | 0.08 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA2AHG010() | 200 | 2000 |
| | 2.2 | 5 | 11 | 21 | 0.08 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA2AHG2R2() | 200 | 2000 |
| | 3.3 | 5 | 11 | 31 | 0.08 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA2AHG3R3() | 200 | 2000 |
| | 4.7 | 5 | 11 | 38 | 0.08 | 1000 | 0.5 | 2.0 | 5.0 | 2.5 | ECA2AHG4R7() | 200 | 2000 |
| | 10 | 6.3 | 11.2 | 54 | 0.08 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2AHG100() | 200 | 2000 |
| 22 | 6.3 | 11.2 | 93 | 0.08 | 1000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2AHG220() | 200 | 2000 | |

When requesting taped product, please put the letter "B" or "i" between the "()". Lead wire pitch B=5 mm, 7.5 mm, i=2.5 mm. The taping dimensions are explained on EE189 of our Catalog. Please use it as a reference guide.

■ Standard Products

| W.V. (V) | Cap. (±20 %) (μF) | Case size | | Specification | | | Lead Length | | | | Part No. | Min. Packaging Q'ty | |
|-------------|-------------------------|--------------|----------------|--|-------------------------------|----------------------|-------------------|------------------|----------------------|----------------------|---------------|-------------------------|-----------------|
| | | Dia. (mm) | Length (mm) | Ripple Current (120 Hz) (+105 °C) (mA r.m.s.) | tan δ (120 Hz) (+20 °C) | Endurance (hours) | Lead Dia. (mm) | Lead Space | | | | Straight Leads (pcs) | Taping (pcs) |
| | | | | | | | | Straight (mm) | Taping *B (mm) | Taping *i (mm) | | | |
| 100 | 33 | 8 | 11.5 | 130 | 0.08 | 1000 | 0.6 | 3.5 | 5.0 | | ECA2AHG330() | 200 | 1000 |
| | 47 | 10 | 12.5 | 165 | 0.08 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2AHG470() | 200 | 500 |
| | 100 | 10 | 20 | 265 | 0.08 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2AHG101() | 200 | 500 |
| | 220 | 12.5 | 25 | 440 | 0.08 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2AHG221() | 200 | 500 |
| | 330 | 16 | 25 | 540 | 0.08 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2AHG331() | 100 | 250 |
| | 470 | 16 | 25 | 715 | 0.08 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2AHG471() | 100 | 250 |
| | 1000 | 18 | 35.5 | 985 | 0.08 | 2000 | 0.8 | 7.5 | | | ECA2AHG102 | 50 | |
| 160 | 1 | 6.3 | 11.2 | 17 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2CHG010() | 200 | 2000 |
| | 2.2 | 6.3 | 11.2 | 25 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2CHG2R2() | 200 | 2000 |
| | 3.3 | 6.3 | 11.2 | 36 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2CHG3R3() | 200 | 2000 |
| | 4.7 | 6.3 | 11.2 | 43 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2CHG4R7() | 200 | 2000 |
| | 10 | 10 | 12.5 | 70 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2CHG100() | 200 | 500 |
| | 22 | 10 | 20 | 130 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2CHG220() | 200 | 500 |
| | 33 | 10 | 20 | 180 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2CHG330() | 200 | 500 |
| | 47 | 12.5 | 20 | 220 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2CHG470() | 200 | 500 |
| | 100 | 16 | 25 | 335 | 0.15 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2CHG101() | 100 | 250 |
| | 220 | 16 | 31.5 | 540 | 0.15 | 2000 | 0.8 | 7.5 | | | ECA2CHG221 | 100 | |
| 330 | 18 | 31.5 | 705 | 0.15 | 2000 | 0.8 | 7.5 | | | ECA2CHG331 | 50 | | |
| 200 | 1 | 6.3 | 11.2 | 17 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2DHG010() | 200 | 2000 |
| | 2.2 | 6.3 | 11.2 | 25 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2DHG2R2() | 200 | 2000 |
| | 3.3 | 6.3 | 11.2 | 36 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2DHG3R3() | 200 | 2000 |
| | 4.7 | 8 | 11.5 | 50 | 0.15 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2DHG4R7() | 200 | 1000 |
| | 10 | 10 | 16 | 80 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2DHG100() | 200 | 500 |
| | 22 | 10 | 20 | 140 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2DHG220() | 200 | 500 |
| | 33 | 12.5 | 20 | 190 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2DHG330() | 200 | 500 |
| | 47 | 12.5 | 20 | 220 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2DHG470() | 200 | 500 |
| | 100 | 16 | 25 | 335 | 0.15 | 2000 | 0.8 | 7.5 | 7.5 | 2.5 | ECA2DHG101() | 100 | 250 |
| | 220 | 18 | 31.5 | 575 | 0.15 | 2000 | 0.8 | 7.5 | | | ECA2DHG221 | 50 | |
| 250 | 1 | 6.3 | 11.2 | 17 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2EHG010() | 200 | 2000 |
| | 2.2 | 6.3 | 11.2 | 29 | 0.15 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2EHG2R2() | 200 | 2000 |
| | 3.3 | 8 | 11.5 | 42 | 0.15 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2EHG3R3 | 200 | 1000 |
| | 4.7 | 8 | 11.5 | 50 | 0.15 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2EHG4R7() | 200 | 1000 |
| | 10 | 10 | 16 | 88 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2EHG100() | 200 | 500 |
| | 22 | 12.5 | 20 | 155 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2EHG220() | 200 | 500 |
| | 33 | 12.5 | 20 | 190 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2EHG330() | 200 | 500 |
| | 47 | 12.5 | 25 | 230 | 0.15 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2EHG470() | 200 | 500 |
| | 100 | 16 | 31.5 | 365 | 0.15 | 2000 | 0.8 | 7.5 | | | ECA2EHG101 | 100 | |
| 350 | 1 | 6.3 | 11.2 | 18 | 0.20 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2VHG010() | 200 | 2000 |
| | 2.2 | 8 | 11.5 | 31 | 0.20 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2VHG2R2() | 200 | 1000 |
| | 3.3 | 10 | 12.5 | 38 | 0.20 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2VHG3R3() | 200 | 500 |
| | 4.7 | 10 | 16 | 50 | 0.20 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2VHG4R7() | 200 | 500 |
| | 10 | 10 | 20 | 82 | 0.20 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2VHG100() | 200 | 500 |
| | 22 | 12.5 | 20 | 130 | 0.20 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2VHG220() | 200 | 500 |
| | 33 | 16 | 25 | 195 | 0.20 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2VHG330() | 100 | 250 |
| | 47 | 16 | 25 | 230 | 0.20 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2VHG470() | 100 | 250 |
| 100 | 18 | 31.5 | 375 | 0.20 | 2000 | 0.8 | 7.5 | | | ECA2VHG101 | 50 | | |

When requesting taped product, please put the letter "B" or "i" between the "()". Lead wire pitch B=5 mm, 7.5 mm, i=2.5 mm. The taping dimensions are explained on EE189 of our Catalog. Please use it as a reference guide.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Standard Products

| W.V. (V) | Cap. (±20 %) (μ F) | Case size | | Specification | | | Lead Length | | | Part No. | Min. Packaging Q'ty | | |
|-------------|-------------------------------|--------------|----------------|--|--------------------------------------|---------------------------|-------------------|------------------|----------------------|----------|-------------------------|-----------------|----------------------|
| | | Dia. (mm) | Length (mm) | Ripple Current (120 Hz) (+105 °C) (mA r.m.s.) | tan δ (120 Hz) (+20 °C) | Endur- ance (hours) | Lead Dia. (mm) | Lead Space | | | Straight Leads (pcs) | Taping (pcs) | |
| | | | | | | | | Straight (mm) | Taping *B (mm) | | | | Taping *i (mm) |
| 400 | 1 | 6.3 | 11.2 | 18 | 0.24 | 2000 | 0.5 | 2.5 | 5.0 | 2.5 | ECA2GHG010() | 200 | 2000 |
| | 2.2 | 8 | 11.5 | 30 | 0.24 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2GHG2R2() | 200 | 1000 |
| | 3.3 | 10 | 12.5 | 40 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2GHG3R3() | 200 | 500 |
| | 4.7 | 10 | 16 | 50 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2GHG4R7() | 200 | 500 |
| | 10 | 10 | 20 | 80 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2GHG100() | 200 | 500 |
| | 22 | 12.5 | 25 | 145 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2GHG220() | 200 | 500 |
| | 33 | 16 | 25 | 195 | 0.24 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2GHG330() | 100 | 250 |
| 450 | 1 | 8 | 11.5 | 18 | 0.24 | 2000 | 0.6 | 3.5 | 5.0 | | ECA2WHG010() | 200 | 1000 |
| | 2.2 | 10 | 12.5 | 29 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2WHG2R2() | 200 | 500 |
| | 3.3 | 10 | 16 | 41 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2WHG3R3() | 200 | 500 |
| | 4.7 | 10 | 20 | 49 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2WHG4R7() | 200 | 500 |
| | 10 | 12.5 | 20 | 75 | 0.24 | 2000 | 0.6 | 5.0 | 5.0 | | ECA2WHG100() | 200 | 500 |
| | 22 | 16 | 25 | 115 | 0.24 | 2000 | 0.8 | 7.5 | 7.5 | | ECA2WHG220() | 100 | 250 |
| | 33 | 16 | 31.5 | 155 | 0.24 | 2000 | 0.8 | 7.5 | | | ECA2WHG330 | 100 | |

When requesting taped product, please put the letter "B" or "i" between the "()". Lead wire pitch B=5 mm, 7.5 mm, i=2.5 mm. The taping dimensions are explained on EE189 of our Catalog. Please use it as a reference guide.