

Type CGH Inverter Grade Screw Terminal Aluminum Electrolytic

85 °C, Screw Terminal Capacitors

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Type CGH screw terminal, aluminum electrolytic capacitors have excellent reliability and a high ripple current capability making them suitable for most AC drive and UPS applications.

Highlights

- High ripple current
 - High reliability at 85 °C
 - Screw Terminal
- [RoHS Compliant](#)

Specifications

| | |
|------------------------------------|---------------------|
| Capacitance Range: | 350 to 22,000 µF |
| Voltage Range: | 250 to 500 WVdc |
| Capacitance Tolerance: | -10% +50% |
| Operating Temperature: | -40 to +85 °C |
| Ripple Current Multipliers: | Ambient Temperature |

| +35 °C | +45 °C | +55 °C | +65 °C | +75 °C | +85 °C |
|--------|--------|--------|--------|--------|--------|
| 2.45 | 2.25 | 2.00 | 1.70 | 1.40 | 1.00 |

| Rated Voltage | Frequency / Ripple Multiplier | | | | |
|---------------|-------------------------------|--------|---------|---------|--------|
| | 120 Hz | 400 Hz | 1000 Hz | 2500 Hz | 10 kHz |
| 250 to 450 | 1.000 | 1.080 | 1.113 | 1.175 | 1.230 |

DC Leakage Current: $I \leq 6 \sqrt{CV}$ after 5 minutes

Not to exceed 6.0 mA
 C = Capacitance in µF
 V = Rated Voltage
 I = Leakage current in µA

[Click here to see: Hardware & Mounting Options](#)

QA Stability Test: Apply WVdc for 1000 h @ 85 °C

- Capacitance change $\leq 10\%$ from initial limits
- DC leakage current meets initial limits
- ESR $\leq 175\%$ of initial measured value

[Click here to see: Mechanical Details](#)

Ratings

| Cap (µF) | Catalog Part Number | Typical ESR | | Max Ripple | | Dia. (In.) | Length (In.) |
|-----------------------------------|------------------------|----------------|----------------|-------------------------------|-------------------------------|---------------|-----------------|
| | | 120 Hz (mΩ) | 20 kHz (mΩ) | 120 Hz (A _{rms}) | 20 kHz (A _{rms}) | | |
| 250 WVdc (300 Vdc Surge) | | | | | | | |
| 1,700 | CGH172T250V2L | 65.8 | 42.1 | 4.0 | 5.0 | 2.0 | 2.625 |
| 2,900 | CGH292T250V3L | 53.1 | 34.0 | 5.7 | 7.1 | 2.0 | 3.625 |
| 4,100 | CGH412T250V4L | 25.7 | 16.4 | 9.1 | 11.4 | 2.0 | 4.625 |
| 5,000 | CGH502T250W3L | 26.9 | 17.2 | 9.2 | 11.5 | 2.5 | 3.625 |
| 5,300 | CGH532T250V5L | 20.6 | 13.2 | 11.0 | 13.8 | 2.0 | 5.625 |
| 7,000 | CGH702T250W4L | 20.1 | 12.9 | 11.7 | 14.6 | 2.5 | 4.625 |

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| 250 WVdc (300 Vdc Surge) | | | | | | | |
| 7,400 | CGH742T250X3L | 27.1 | 17.3 | 10.3 | 12.9 | 3.0 | 3.625 |
| 9,000 | CGH902T250W5L | 16.3 | 10.4 | 14.1 | 17.6 | 2.5 | 5.625 |
| 10,000 | CGH103T250X4L | 20.4 | 13.1 | 13.0 | 16.3 | 3.0 | 4.625 |
| 13,000 | CGH133T250X5L | 16.8 | 10.8 | 15.6 | 19.5 | 3.0 | 5.625 |
| 22,000 | CGH223T250X8L | 11.5 | 7.4 | 22.3 | 27.9 | 3.0 | 8.625 |

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|-----------------------------------|------------------------|---------------|---------------|---------------------|---------------------|---------------|-----------------|
| | | 120 Hz | 20 kHz | 120 Hz | 20 kHz | | |
| | | (m Ω) | (m Ω) | (A _{rms}) | (A _{rms}) | | |
| 350 WVdc (400 Vdc Surge) | | | | | | | |
| 1,000 | CGH102T350V2L | 162.6 | 104.1 | 2.9 | 3.6 | 2.0 | 2.625 |
| 1,700 | CGH172T350V3L | 81.9 | 52.4 | 4.6 | 5.8 | 2.0 | 3.625 |
| 2,400 | CGH242T350V4L | 58.8 | 37.6 | 6.0 | 7.5 | 2.0 | 4.625 |
| 2,700 | CGH272T350V3L | 54.3 | 34.8 | 6.5 | 8.1 | 2.5 | 3.625 |
| 2,900 | CGH292T350W3L | 58.1 | 34.0 | 6.8 | 8.5 | 2.5 | 3.625 |
| 3,100 | CGH312T350V5L | 46.2 | 29.6 | 7.4 | 9.3 | 2.0 | 5.625 |
| 3,800 | CGH382T350W4L | 39.3 | 25.2 | 8.4 | 10.5 | 2.5 | 4.625 |
| 4,000 | CGH402T350X3L | 44.3 | 28.4 | 8.1 | 10.1 | 3.0 | 3.625 |
| 4,100 | CGH412T350W4L | 38.6 | 24.7 | 8.6 | 10.8 | 2.5 | 4.625 |
| 4,300 | CGH432T350X3L | 43.5 | 27.8 | 8.4 | 10.5 | 3.0 | 3.625 |
| 4,900 | CGH492T350W5L | 31.5 | 20.2 | 10.1 | 12.6 | 2.5 | 5.625 |
| 5,200 | CGH522T350W5L | 31.1 | 19.9 | 10.3 | 12.9 | 2.5 | 5.625 |
| 5,700 | CGH572T350X4L | 32.5 | 20.8 | 10.3 | 12.9 | 3.0 | 4.625 |
| 6,000 | CGH602T350X4L | 32.3 | 20.7 | 10.6 | 13.3 | 3.0 | 4.625 |
| 7,300 | CGH732T350X5L | 25.9 | 16.6 | 12.5 | 15.6 | 3.0 | 5.625 |
| 7,800 | CGH782T350X5L | 25.6 | 16.4 | 12.8 | 16.0 | 3.0 | 5.625 |
| 10,000 | CGH103T350X8L | 20.7 | 13.2 | 16.6 | 20.8 | 3.0 | 8.625 |
| 450 WVdc (525 Vdc Surge) | | | | | | | |
| 620 | CGH621T450V2L | 159.6 | 102.1 | 2.9 | 3.6 | 2.0 | 2.625 |
| 1,000 | CGH102T450V3L | 83.4 | 53.4 | 4.8 | 6.0 | 2.0 | 3.625 |
| 1,400 | CGH142T450V4L | 60.3 | 38.6 | 5.9 | 7.4 | 2.0 | 4.625 |
| 1,700 | CGH172T450W3L | 55.3 | 35.4 | 6.4 | 8.0 | 2.5 | 3.625 |
| 1,800 | CGH182T450V5L | 47.6 | 30.5 | 7.2 | 9.0 | 2.0 | 5.625 |
| 2,400 | CGH242T450W4L | 40.1 | 25.7 | 8.3 | 10.4 | 2.5 | 4.625 |
| 2,500 | CGH252T450X3L | 44.9 | 28.7 | 8.0 | 10.0 | 3.0 | 3.625 |

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| | | 120 Hz | 20 kHz | 120 Hz | 20 kHz | | |
| | | (m Ω) | (m Ω) | (A _{rms}) | (A _{rms}) | | |
| 450 WVdc (525 Vdc Surge) | | | | | | | |
| 3,100 | CGH312T450W5L | 31.7 | 20.3 | 10.1 | 12.6 | 2.5 | 5.625 |
| 3,600 | CGH362T450X4L | 32.6 | 20.9 | 10.3 | 12.9 | 3 | 4.625 |
| 4,600 | CGH462T450X5L | 26.2 | 16.8 | 12.4 | 15.5 | 3 | 5.625 |
| 7,700 | CGH772T450X8L | 17.3 | 11.1 | 18.2 | 22.8 | 3 | 8.625 |
| 500 WVdc (550 Vdc Surge) | | | | | | | |
| 350 | CGH351T500V2 C | 692.0 | 612.0 | 1.3 | 1.5 | 2.0 | 2.125 |
| 520 | CGH521T500V2L | 470.0 | 416.0 | 1.7 | 1.9 | 2.0 | 2.625 |
| 710 | CGH711T500V3 C | 345.0 | 305.0 | 2.1 | 2.4 | 2.0 | 3.125 |
| 900 | CGH901T500V3L | 272.0 | 241.0 | 2.5 | 2.8 | 2.0 | 3.625 |
| 1100 | CGH112T500V4 C | 225.0 | 199.0 | 3.1 | 3.3 | 2.0 | 4.125 |
| 1200 | CGH122T500W3 C | 218.0 | 196.0 | 3.1 | 3.4 | 2.5 | 3.125 |
| 1300 | CGH132T500V4L | 192.0 | 170.0 | 3.3 | 3.7 | 2.0 | 4.625 |
| 1500 | CGH152T500V5 C | 168.0 | 148.0 | 3.7 | 4.1 | 2.0 | 5.125 |
| 1500 | CGH152T500W3L | 172.0 | 153.0 | 3.6 | 4.1 | 2.5 | 3.625 |
| 1700 | CGH172T500V5L | 149.0 | 132.0 | 4.0 | 4.5 | 2.0 | 5.625 |
| 1800 | CGH182T500W4 C | 142.0 | 126.0 | 4.2 | 4.7 | 2.5 | 4.125 |
| 2100 | CGH212T500W4L | 121.0 | 108.0 | 4.8 | 5.3 | 2.5 | 4.625 |
| 2200 | CGH222T500X3L | 124.0 | 111.0 | 4.8 | 5.4 | 3.0 | 3.625 |
| 2400 | CGH242T500W5 C | 106.0 | 99.1 | 5.3 | 6.0 | 2.5 | 5.125 |
| 2700 | CGH272T500W5L | 93.8 | 83.5 | 5.9 | 6.6 | 2.5 | 5.625 |
| 2700 | CGH272T500X4 C | 103.0 | 91.8 | 5.6 | 6.3 | 3.0 | 4.125 |
| 3100 | CGH312T500X4L | 87.4 | 78.3 | 6.3 | 7.0 | 3.0 | 4.625 |
| 3600 | CGH362T500X5 C | 76.3 | 68.4 | 7.0 | 7.8 | 3.0 | 5.125 |
| 4100 | CGH412T500X5L | 67.8 | 60.8 | 7.7 | 8.6 | 3.0 | 5.625 |
| 6900 | CGH692T500X8L | 41.0 | 36.9 | 11.9 | 13.2 | 3.0 | 8.625 |

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