



**THE DATASHEET OF
CGH172T250V2L**



Type CGH Inverter Grade Screw Terminal Aluminum Electrolytic

85 °C, Screw Terminal Capacitors



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 ≤10% from initial limits
- DC leakage current meets initial limits
- ESR ≤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

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)							
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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Ratings

Cap (μ F)	Catalog Part Number	Typical ESR		Max Ripple		Dia. (In.)	Length (In.)
		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	CGH272T350W3L	54.3	34.8	6.5	8.1	2.5	3.625
2,900	CGH292T350W3L	53.1	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

Cap (μ F)	Catalog Part Number	Typical ESR		Max Ripple		Dia. (In.)	Length (In.)
		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	93.9	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	78.4	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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