

Type CGH Computer Grade Capacitors

MALLORY



- High Ripple Current
- Very High Capacitance
- High Reliability
- Suitable for Use in Most AC Drive and UPS Applications

GENERAL SPECIFICATIONS

Operating Temperature:
-40°C to +85°C

Voltage Range:
250 WVDC to 500 WVDC

Capacitance Range:
350 μ F to 22,000 μ F

Capacitance Tolerance:
-10% +50%

DC Leakage Current:

$I = .006 \sqrt{CV}$ after 5 minutes
Not to exceed 6mA

C = Capacitance in μ F

V = Rated Voltage

I = Leakage Current in mA

QA Stability Test:

Apply WVDC for 1,000 hrs at 85°C

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

The maximum ripple current at 85°C and 120 Hz for CGH capacitors is shown in the Standard Rating Table. Maximum ripple current may be adjusted by the multipliers in the following tables.

Rated WVDC	Ripple Multipliers				
	120Hz	400Hz	1000Hz	2500Hz	10kHz
250 to 500	1.00	1.08	1.113	1.175	1.23

Ambient Temperature	Ripple Multiplier
+85°C	1.0
+75°C	1.4
+65°C	1.7
+55°C	2.0
+45°C	2.25
+35°C	2.45

Aluminum Capacitors

Cap μF	Max ESR (mOHMS)		Max Ripple RMS Amps		Dia	Length	Catalog Number High Post
	120 Hz	20 kHz	120 Hz	20 kHz			
250 WVDC; 300 VDC Surge							
1,700	65.8	42.1	4.0	5.0	2.000	2.625	CGH172T250V2L
2,900	53.1	34.0	5.7	7.1	2.000	3.625	CGH292T250V3L
4,100	25.7	16.4	9.1	11.4	2.000	4.625	CGH412T250V4L
5,000	26.9	17.2	9.2	11.5	2.500	3.625	CGH502T250W3L
5,300	20.6	13.2	11.0	13.8	2.000	5.625	CGH532T250V5L
7,000	20.1	12.9	11.7	14.6	2.500	4.625	CGH702T250W4L
7,400	27.1	17.3	10.3	12.9	3.000	3.625	CGH742T250X3L
9,000	16.3	10.4	14.1	17.6	2.500	5.625	CGH902T250W5L
10,000	20.4	13.1	13.0	16.3	3.000	4.625	CGH103T250X4L
13,000	16.8	10.8	15.6	19.5	3.000	5.625	CGH133T250X5L
22,000	11.5	7.4	22.3	27.9	3.000	8.625	CGH223T250X8L

350 WVDC; 400 VDC Surge							
1,000	162.6	104.1	2.9	3.6	2.000	2.625	CGH102T350V2L
1,700	81.9	52.4	4.6	5.8	2.000	3.625	CGH172T350V3L
2,400	58.8	37.6	6.0	7.5	2.000	4.625	CGH242T350V4L
2,700	54.3	34.8	6.5	8.1	2.500	3.625	CGH272T350W3L
2,900	53.1	34.0	6.8	8.5	2.500	3.625	CGH292T350W3L
3,100	46.2	29.6	7.4	9.3	2.000	5.625	CGH312T350V5L
3,800	39.3	25.2	8.4	10.5	2.500	4.625	CGH382T350W4L
4,000	44.3	28.4	8.1	10.1	3.000	3.625	CGH402T350X3L
4,100	38.6	24.7	8.6	10.8	2.500	4.625	CGH412T350W4L
4,300	43.5	27.8	8.4	10.5	3.000	3.625	CGH432T350X3L
4,900	31.5	20.2	10.1	12.6	2.500	5.625	CGH492T350W5L
5,200	31.1	19.9	10.3	12.9	2.500	5.625	CGH522T350W5L
5,700	32.5	20.8	10.3	12.9	3.000	4.625	CGH572T350X4L
6,000	32.3	20.7	10.6	13.3	3.000	4.625	CGH602T350X4L
7,300	25.9	16.6	12.5	15.6	3.000	5.625	CGH732T350X5L
7,800	25.6	16.4	12.8	16.0	3.000	5.625	CGH782T350X5L
10,000	20.7	13.2	16.6	20.8	3.000	8.625	CGH103T350X8L

Cap μF	Max ESR (mOHMS)		Max Ripple RMS Amps		Dia	Length	Catalog Number High Post
	120 Hz	20 kHz	120 Hz	20 kHz			
450 WVDC; 525 VDC Surge							
620	159.6	102.1	2.9	3.6	2.000	2.625	CGH621T450V2L
1,000	83.4	53.4	4.8	6.0	2.000	3.625	CGH102T450V3L
1,400	60.3	38.6	5.9	7.4	2.000	4.625	CGH142T450V4L
1,700	55.3	35.4	6.4	8.0	2.500	3.625	CGH172T450W3L
1,800	47.6	30.5	7.2	9.0	2.000	5.625	CGH182T450V5L
2,400	40.1	25.7	8.3	10.4	2.500	4.625	CGH242T450W4L
2,500	44.9	28.7	8.0	10.0	3.000	3.625	CGH252T450X3L
3,100	31.7	20.3	10.1	12.6	2.500	5.625	CGH312T450W5L
3,600	32.6	20.9	10.3	12.9	3.000	4.625	CGH362T450X4L
4,600	26.2	16.8	12.4	15.5	3.000	5.625	CGH462T450X5L
7,700	17.3	11.1	18.2	22.8	3.000	8.625	CGH772T450X8L

500 WVDC; 550 VDC Surge							
350	692.0	612.0	1.3	1.5	2.000	2.125	CGH351T500V2C
520	470.0	416.0	1.7	1.9	2.000	2.625	CGH521T500V2L
710	345.0	305.0	2.1	2.4	2.000	3.125	CGH711T500V3C
900	272.0	241.0	2.5	2.8	2.000	3.625	CGH901T500V3L
1100	225.0	199.0	3.1	3.3	2.000	4.125	CGH112T500X4C
1200	218.0	196.0	3.1	3.4	2.500	3.125	CGH122T500W3C
1300	192.0	170.0	3.3	3.7	2.000	4.625	CGH132T500V4L
1500	168.0	148.0	3.7	4.1	2.000	5.125	CGH152T500V5C
1500	172.0	153.0	3.6	4.1	2.500	3.625	CGH152T500X3L
1700	149.0	132.0	4.0	4.5	2.000	5.625	CGH172T500V5L
1800	142.0	126.0	4.2	4.7	2.500	4.125	CGH182T500W4C
2100	121.0	108.0	4.8	5.3	2.500	4.625	CGH212T500W4L
2200	124.0	111.0	4.8	5.4	3.000	3.625	CGH222T500X3L
2400	106.0	94.1	5.3	6.0	2.500	5.125	CGH242T500W5C
2700	93.9	83.5	5.9	6.6	2.500	5.625	CGH272T500W5L
2700	103.0	91.8	5.6	6.3	3.000	4.125	CGH272T500X4C
3100	87.4	78.4	6.3	7.0	3.000	4.625	CGH312T500X4L
3600	76.3	68.4	7.0	7.8	3.000	5.125	CGH362T500X5C
4100	67.8	60.8	7.7	8.6	3.000	5.625	CGH412T500X5L
6900	41.0	36.9	11.9	13.2	3.000	8.625	CGH692T500X8L