

Type CG Computer Grade Capacitors

MALLORY



- High Reliability 85°C
- Screw Terminals
- Long Life
- Custom Designs Available Upon Request

GENERAL SPECIFICATIONS

Operating Temperature:
-40°C to +85°C

Voltage Range:
10 WVDC to 450 WVDC

Capacitance Range:
40 µF to 160,000 µF

Capacitance Tolerance:
-10% +75% (10 - 150 WVDC)
-10% +50% (151 - 450 WVDC)

DC Leakage Current:
 $I = 6 \times 10^{-6} CV$ after 30 minutes
Not to exceed 4.0mA
C = Capacitance in µF
V = Rated Voltage
I = Leakage Current in mA

QA Stability Test:
Apply WVDC for 2,000 hrs at 85°C

- Capacitance change ≤15% from initial limits
- DC leakage current meets initial limits
- ESR ≤ 175% of initial measured value

The maximum ripple current at 85°C and 120 Hz for CG 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				
	120 Hz	400 Hz	1000 Hz	2500Hz	10KHz
10 to 75	1.0	1.050	1.085	1.135	1.150
76 to 250	1.0	1.075	1.125	1.155	1.210
251 to 450	1.0	1.080	1.130	1.175	1.230

Cap µF	Max ESR (ohms) @ 120Hz	Max Ripple RMS Amps @ 120Hz +85°C	Dia	Length	Catalog Number
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10 WVDC; 15 VDC Surge

160,000	.006	27.10	3.000	5.625	CG164U010X5L
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16 WVDC; 20 VDC Surge

2,500	.047	3.90	1.375	2.125	CG252U016R2C
6,500	.039	4.30	1.375	2.125	CG652U016R2C
10,500	.027	7.60	2.000	3.125	CG1052U016V3C
12,000	.024	6.40	1.375	3.125	CG123U016R3C
18,000	.018	8.30	1.375	4.125	CG183U016R4C
21,000	.012	10.50	1.750	3.125	CG213U016U3C
27,000	.012	11.40	2.000	3.125	CG273U016V3C
40,000	.009	14.70	2.000	4.125	CG403U016V4C

25 WVDC; 40 VDC Surge

1,500	.058	3.50	1.375	2.125	CG152U025R2C
2,800	.036	5.20	1.375	3.125	CG282U025R3C
3,300	.043	4.10	1.375	2.125	CG332U025R2C
4,500	.006	14.80	1.750	3.125	CG452U025U3C
6,000	.029	7.30	2.000	3.125	CG602U025V3C
6,300	.028	5.90	1.375	3.125	CG632U025R3C
8,500	.022	9.40	2.000	4.125	CG852U025V4C
9,200	.022	7.50	1.375	4.125	CG922U025R4C
10,000	.026	7.10	1.750	3.125	CG103U025U3C
13,000	.024	8.00	2.000	3.125	CG133U025V3C
20,000	.019	10.10	2.000	4.125	CG203U025V4C
20,000	.019	12.90	3.000	4.125	CG203U025X4C
32,000	.010	15.90	2.500	4.125	CG323U025W4C
48,000	.005	25.20	3.000	4.125	CG483U025X4C

35 WVDC; 50 VDC Surge

1,100	0.063	3.40	1.375	2.125	CG112U035R2C
2,100	0.039	5.00	1.375	3.125	CG212U035R3C
2,300	0.051	3.80	1.375	2.125	CG232U035R2C
4,300	0.030	5.70	1.375	3.125	CG432U035R3C
9,500	0.025	7.90	2.000	3.125	CG952U035V3C

Ambient Temperature	Ripple Multiplier
+85°C	1.00
+65°C	1.42
+55°C	1.58
+45°C	1.72
+35°C	1.88
+25°C	2.00

Cap µF	Max ESR (ohms) @ 120Hz	Max Ripple RMS Amps @ 120Hz +85°C	Dia	Length	Catalog Number
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35 WVDC; 50 VDC Surge

11,000	0.021	11.00	2.500	4.125	CG113U035W4C
11,000	0.020	9.10	1.750	4.125	CG113U035U4C
14,000	0.018	10.40	2.000	4.125	CG143U035V4C
22,000	0.011	15.20	2.500	4.125	CG223U035W4C
33,000	0.006	23.00	3.000	4.125	CG333U035X4C

50 WVDC; 75 VDC Surge

800	0.072	3.20	1.375	2.125	CG801U050R2C
1,500	0.058	3.50	1.375	2.125	CG152U050R2C
1,500	0.044	4.70	1.375	3.125	CG152U050R3C
2,000	0.033	6.10	1.375	4.125	CG202U050R4C
2,500	0.037	6.00	1.750	3.125	CG252U050U3C
2,900	0.036	5.20	1.375	3.125	CG292U050R3C
3,300	0.035	6.70	2.000	3.125	CG332U050V3C
4,300	0.026	6.90	1.375	4.125	CG432U050R4C
4,500	0.026	8.60	2.000	4.125	CG452U050V4C
5,000	0.029	6.70	1.750	3.125	CG502U050U3C
6,500	0.017	9.60	2.000	3.125	CG652U050V3C
7,300	0.023	10.50	2.500	4.125	CG732U050W4C
7,400	0.022	8.70	1.750	4.125	CG742U050U4C
9,500	0.013	12.20	2.000	4.125	CG952U050V4C
10,000	0.013	15.60	3.000	4.125	CG103U050X4C
15,000	0.009	16.80	2.500	4.125	CG153U050W4C
16,500	0.010	20.50	3.000	5.625	CG1652U050X5L
22,000	0.006	22.50	3.000	4.125	CG223U050X4C
33,000	0.005	29.00	3.000	5.625	CG333U050X5L

75 WVDC; 100 VDC Surge

600	0.085	2.90	1.375	2.125	CG601U075R2C
800	0.072	3.20	1.375	2.125	CG801U075R2C
1,000	0.053	4.30	1.375	3.125	CG102U075R3C
1,500	0.037	5.80	1.375	4.125	CG152U075R4C
1,500	0.045	4.70	1.375	3.125	CG152U075R3C
2,000	0.039	5.80	1.750	3.125	CG202U075U3C
2,500	0.036	6.60	2.000	3.125	CG252U075V3C

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Cap μF	Max ESR (ohms) @ 120Hz	Max Ripple RMS Amps @ 120Hz +85°C	Dia	Length	Catalog Number
75 WVDC; 100 VDC Surge					
2,600	0.035	6.10	1.750	3.125	CG262U075U3C
3,300	0.022	8.40	2.000	3.125	CG332U075V3C
3,450	0.027	8.50	2.000	4.125	CG345U075V4C
4,900	0.015	11.30	2.000	4.125	CG492U075V4C
7,900	0.012	14.50	2.500	4.125	CG792U075W4C
8,200	0.012	16.30	3.000	4.125	CG822U075X4C
11,000	0.009	18.80	3.000	4.125	CG113U075X4C
12,500	0.009	21.80	3.000	5.625	CG1252U075X5L
100 WVDC; 135 VDC Surge					
400	0.180	2.00	1.375	2.125	CG401U100R2C
1,000	0.068	4.30	1.375	4.125	CG102U100R4C
1,300	0.066	4.50	1.750	3.125	CG132U100U3C
1,700	0.050	5.70	1.750	4.125	CG172U100W4C
2,250	0.036	7.30	2.000	4.125	CG225U100V4C
2,500	0.030	8.00	2.000	4.125	CG252U100V4C
3,600	0.020	11.30	2.500	4.125	CG362U100W4C
4,000	0.019	11.50	2.500	4.125	CG402U100W4C
150 WVDC; 185 VDC Surge					
275	0.170	2.10	1.375	2.125	CG275U150R2C
500	0.103	3.10	1.375	3.125	CG501U150R3C
1,550	0.052	6.10	2.000	4.125	CG1551U150V4C
2,500	0.030	9.20	2.500	4.125	CG252U150W4C
3,600	0.022	9.40	3.000	4.125	CG362U150X4C
5,600	0.014	17.00	3.000	3.625	CG562U150X3L
200 WVDC; 250 VDC Surge					
180	0.280	1.60	1.375	2.125	CG181T200R2C
450	0.120	3.20	1.375	4.125	CG451T200R4C
550	0.150	3.00	1.750	3.125	CG551T200U3C
750	0.085	4.80	2.000	3.125	CG751T200V3C
1,000	0.050	7.10	2.000	4.125	CG102T200V4C
1,650	0.102	3.90	2.500	4.125	CG1651T200W4C
2,450	0.034	9.70	3.000	4.125	CG2451T200X4C
3,800	0.023	13.20	3.000	5.625	CG382T200X5L

Cap μF	Max ESR (ohms) @ 120Hz	Max Ripple RMS Amps @ 120Hz +85°C	Dia	Length	Catalog Number
250 WVDC; 300 VDC Surge					
140	0.310	1.50	1.375	2.125	CG141T250R2C
375	0.130	3.10	1.375	4.125	CG3750T250R4C
600	0.091	4.10	2.000	3.125	CG601T250V3C
800	0.072	4.60	2.000	4.125	CG801T250V4C
3,000	0.020	14.20	3.000	5.625	CG302T250X5L
300 WVDC; 350 VDC Surge					
525	0.095	4.00	2.000	3.125	CG5250T300V3C
350 WVDC; 400 VDC Surge					
100	0.720	1.00	1.375	2.125	CG101T350R2C
180	0.500	1.40	1.375	3.125	CG181T350R3C
250	0.290	2.10	1.375	4.125	CG251T350R4C
400	0.260	2.40	2.000	3.125	CG401T350V3C
550	0.180	3.30	2.000	4.125	CG551T350V4C
2,000	0.061	8.10	3.000	5.625	CG202T350X5L
400 WVDC; 475 VDC Surge					
325	0.220	3.00	2.000	4.125	CG3250T400V4C
450 WVDC; 525 VDC Surge					
40	3.240	0.50	1.375	2.125	CG400T450R2C
110	1.220	1.00	1.375	4.125	CG111T450R4C
240	0.330	2.40	2.000	4.125	CG241T450V4C

Aluminum Capacitors