



**THE DATASHEET OF
CG502U050U3C**



Type CG Reliable Screw Terminal Aluminum Electrolytic Capacitor

85 °C, Screw Terminal Capacitors

Go to 500C datasheet



Type CG screw terminal, aluminum electrolytic capacitors have excellent reliability and are good for 2000 hours at 85 °C at full rated voltage.

Highlights

- High reliability at 85 °C
- Screw Terminal
- Long Life

[RoHS Compliant](#)

Specifications

Capacitance Range:	40 to 160,000 µF
Voltage Range:	10 to 450 WVdc
Capacitance Tolerance:	-10% +75% (10 - 150 WVdc) -10% +50% (151 - 450 WVdc)
Operating Temperature:	-40 °C to +85 °C
Ripple Current Multipliers:	Ambient Temperature

25 °C	35 °C	45 °C	55 °C	65 °C	85 °C
2.00	1.88	1.72	1.58	1.42	1.00

Rated Voltage	Ripple Multiplier				
	120 Hz	400 Hz	1000 Hz	2500 Hz	10 kHz
10 to 75	1.000	1.050	1.085	1.135	1.150
76 to 250	1.000	1.075	1.125	1.155	1.210
251 to 450	1.000	1.080	1.130	1.175	1.230

DC Leakage Current: $I \leq 3 \sqrt{CV}$ after 5 minutes
Not to exceed 4.0 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 2000 h @ 85 °C

- Capacitance change $\pm 15\%$ from initial limits
- DC leakage current: 200% of limit
- ESR: 175% of limit

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

Ratings

Cap (µF)	Catalog Part Number	Typical		Max Ripple	
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
10 WVdc (15 Vdc Surge)					
160,000	CG164U010X5L	0.006	27.1	3	5.625
16 WVdc (20 Vdc Surge)					
2,500	CG252U016R2C	0.047	3.9	1.375	2.125
6,500	CG652U016R2C	0.039	4.3	1.375	2.125
10,500	CG1052U016V3C	0.027	7.6	2.000	3.125

Cap (µF)	Catalog Part Number	Typical		Max Ripple	
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
16 WVdc (20 Vdc Surge)					
12,000	CG123U016R3C	0.024	6.4	1.375	3.125
18,000	CG183U016R4C	0.018	8.3	1.375	4.125
21,000	CG213U016U3C	0.012	10.5	1.750	3.125
27,000	CG273U016V3C	0.012	11.4	2.000	3.125
40,000	CG403U016V4C	0.009	14.7	2.000	4.125

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Ratings

Cap (μ F)	Catalog Part Number	Typical		Max Ripple	
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
25 WVdc (40 Vdc Surge)					
1,500	CG152U025R2C	.058	3.5	1.375	2.125
2,800	CG282U025R3C	0.036	5.2	1.375	3.125
3,300	CG332U025R2C	0.043	4.1	1.375	2.125
4,500	CG452U025U3C	0.006	14.8	1.750	3.125
6,000	CG602U025V3C	0.029	7.3	2.000	3.125
6,300	CG632U025R3C	0.028	5.9	1.375	3.125
8,500	CG852U025V4C	0.022	9.4	2.000	4.125
9,200	CG922U025R4C	0.022	7.5	1.375	4.125
10,000	CG103U025U3C	0.026	7.1	1.750	3.125
13,000	CG133U025V3C	0.024	8.0	2.000	3.125
20,000	CG203U025V4C	0.019	10.1	2.000	4.125
20,000	CG203U025X4C	0.019	12.9	3.000	4.125
32,000	CG323U025W4C	0.010	15.9	2.500	4.125
48,000	CG483U025X4C	0.005	25.2	3.000	4.125
35 WVdc (50 Vdc Surge)					
1,100	CG112U035R2C	0.063	3.4	1.375	2.125
2,100	CG212U035R3C	0.039	5.0	1.375	3.125
2,300	CG232U035R2C	0.051	3.8	1.375	2.125
4,300	CG432U035R3C	0.030	5.7	1.375	3.125
9,500	CG952U035V3C	0.025	7.9	2.000	3.125
11,000	CG113U035W4C	0.021	11.0	2.500	4.125
11,000	CG113U035U4C	0.020	9.1	1.750	4.125
14,000	CG143U035V4C	0.018	10.4	2.000	4.125
22,000	CG223U035W4C	0.011	15.2	2.500	4.125
33,000	CG333U035X4C	0.006	23.0	3.000	4.125
50 WVdc (75 Vdc Surge)					
800	CG801U050R2C	0.072	3.2	1.375	2.125
1,500	CG152U050R2C	0.058	3.5	1.375	2.125
1,500	CG152U050R3C	0.044	4.7	1.375	3.125
2,000	CG202U050R4C	0.033	6.1	1.375	4.125
2,500	CG252U050U3C	0.037	6.0	1.750	3.125
2,900	CG292U050R3C	0.036	5.2	1.375	3.125
3,300	CG332U050V3C	0.035	6.7	2.000	3.125
4,300	CG432U050R4C	0.026	6.9	1.375	4.125
4,500	CG452U050V4C	0.026	8.6	2.000	4.125
5,000	CG502U050U3C	0.029	6.7	1.750	3.125
6,500	CG652U050V3C	0.017	9.6	2.000	3.125
7,300	CG732U050W4C	0.023	10.5	2.500	4.125
7,400	CG742U050U4C	0.022	8.7	1.750	4.125
9,500	CG952U050V4C	0.013	12.2	2.000	4.125
10,000	CG103U050X4C	0.013	15.6	3.000	4.125
15,000	CG153U050W4C	0.009	16.8	2.500	4.125
16,500	CG1652U050X5L	0.010	20.5	3.000	5.625
22,000	CG223U050X4C	0.006	22.5	3.000	4.125
33,000	CG333U050X5L	0.005	29.0	3.000	5.625
75 WVdc (100 Vdc Surge)					
600	CG601U075R2C	0.085	2.9	1.375	2.125
800	CG801U075R2C	0.072	3.2	1.375	2.125
1,000	CG102U075R3C	0.053	4.3	1.375	3.125
1,500	CG152U075R4C	0.037	5.8	1.375	4.125
1,500	CG152U075R3C	0.045	4.7	1.375	3.125
2,000	CG202U075U3C	0.039	5.8	1.750	3.125
2,500	CG252U075V3C	0.036	6.6	2.000	3.125
2,600	CG262U075U3C	0.035	6.1	1.750	3.125

Cap (μ F)	Catalog Part Number	Typical		Max Ripple	
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS	Dia. (Inches)	Length (Inches)
75 WVdc (100 Vdc Surge)					
3,300	CG332U075V3C	0.022	8.4	2.000	3.125
3,450	CG3451U075V4C	0.027	8.5	2.000	4.125
4,900	CG492U075V4C	0.015	11.3	2.000	4.125
7,900	CG792U075W4C	0.012	14.5	2.500	4.125
8,200	CG822U075X4C	0.012	16.3	3.000	4.125
11,000	CG113U075X4C	0.009	18.8	3.000	4.125
12,500	CG1252U075X5L	0.009	21.8	3.000	5.625
100 WVdc (135 Vdc Surge)					
400	CG401U100R2C	0.180	2.0	1.375	2.125
1,000	CG102U100R4C	0.068	4.3	1.375	4.125
1,300	CG132U100U3C	0.066	4.5	1.750	3.125
1,700	CG172U100W4C	0.050	5.7	1.750	4.125
2,250	CG2251U100V4C	0.036	7.3	2.000	4.125
2,500	CG252U100V4C	0.030	8.0	2.000	4.125
3,600	CG362U100W4C	0.020	11.3	2.500	4.125
4,000	CG402U100W4C	0.019	11.5	2.500	4.125
150 WVdc (185 Vdc Surge)					
275	CG2750U150R2C	0.170	2.1	1.375	2.125
500	CG501U150R3C	0.103	3.1	1.375	3.125
1,550	CG1551U150V4C	0.052	6.1	2.000	4.125
2,500	CG252U150W4C	0.030	9.2	2.500	4.125
3,600	CG362U150X4C	0.022	9.4	3.000	4.125
5,600	CG562U150X3L	0.014	17.0	3.000	3.625
200 WVdc (250 Vdc Surge)					
180	CG181T200R2C	0.280	1.6	1.375	2.125
450	CG451T200R4C	0.120	3.2	1.375	4.125
550	CG551T200U3C	0.150	3.0	1.750	3.125
750	CG751T200V3C	0.102	3.9	2.000	3.125
1,000	CG102T200V4C	0.085	4.8	2.000	4.125
1,650	CG1651T200W4C	0.050	7.8	2.500	4.125
2,450	CG2451T200X4C	0.034	9.7	3.000	4.125
3,800	CG382T200X5L	0.023	13.2	3.000	5.625
250 WVdc (300 Vdc Surge)					
140	CG141T250R2C	0.310	1.5	1.375	2.125
375	CG3750T250R4C	0.130	3.1	1.375	4.125
600	CG601T250V3C	0.091	4.1	2.000	3.125
800	CG801T250V4C	0.072	4.6	2.000	4.125
3,000	CG302T250X5L	0.020	14.2	3.000	5.625
300 WVdc (350 Vdc Surge)					
525	CG5250T300V3C	0.095	4.0	2.000	3.125
350 WVdc (400 Vdc Surge)					
100	CG101T350R2C	0.720	1.0	1.375	2.125
180	CG181T350R3C	0.500	1.4	1.375	3.125
250	CG251T350R4C	0.290	2.1	1.375	4.125
400	CG401T350V3C	0.260	2.4	2.000	3.125
550	CG551T350V4C	0.180	3.3	2.000	4.125
2,000	CG202T350X5L	0.061	8.1	3.000	5.625
400 WVdc (475 Vdc Surge)					
325	CG3250T400V4C	0.220	3.0	2.000	4.125
450 WVdc (525 Vdc Surge)					
110	CG111T450R4C	1.220	1.0	1.375	4.125
240	CG241T450V4C	0.330	2.4	2.000	4.125

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