

Type CGR 105 °C High Temp Screw Terminal Aluminum Electrolytic

105 °C, Screw Terminal Capacitors



Type CGR screw terminal, aluminum electrolytic capacitors have excellent reliability and are good for 2000 hours at 105 °C at full rated voltage.

Highlights

- High reliability - 2000 hours at 105 °C
- Screw Terminal
- Commercial Equivalent of MIL-C-350 18/04, 06, 10

[RoHS Compliant](#)

Specifications

Capacitance Range:	330 to 100,000 μ F
Voltage Range:	7.5 to 200 WVdc
Capacitance Tolerance:	-10% +75% (7.5 - 50 WVdc) -10% +50% (51 - 200 WVdc)
Operating Temperature:	-40 °C to +105 °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	Frequency / 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

DC Leakage Current: $I \leq 6\sqrt{CV}$ after 5 minutes
Not to exceed 4.0 mA
C = Capacitance in μ F
V = Rated Voltage
I = Leakage current in μ A

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

QA Stability Test:

- Apply WVdc for 2000 h @ 105 °C
- Capacitance change $\pm 15\%$ from initial limits
 - DC leakage current meets initial limits
 - ESR: $\leq 175\%$ of initial measured value

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

Ratings

		Typical	Max Ripple		
Catalog	ESR	120 Hz		Dia.	Length
Cap Part Number	120 Hz	+85 °C		(Inches)	(Inches)
(μ F)	(Ω)	(A) RMS			
7.5 WVdc (12 Vdc Surge)					
34,000 CGR343U7R5U3C	0.0128	14.4		1.75	3.125
47,000 CGR473U7R5V3C	0.0098	17.8		2.00	3.125
66,000 CGR663U7R5V4C	0.0068	23.8		2.00	4.125
10 WVdc (12 Vdc Surge)					
24,000 CGR243U010R3C	0.011	9.5		1.375	3.125

		Typical	Max Ripple		
Catalog	ESR	120 Hz		Dia.	Length
Cap Part Number	120 Hz	+85 °C		(Inches)	(Inches)
(μ F)	(Ω)	(A) RMS			
12 WVdc (15 Vdc Surge)					
12,000 CGR123U012R2L	0.0154	10.6		1.375	2.625
100,000 CGR104U012W5C	0.0043	30.0		2.500	5.125
16 WVdc (15 Vdc Surge)					
7,700 CGR772U016R2C	0.0231	7.9		1.375	2.125
11,000 CGR113U016R2L	0.0161	10.3		1.375	2.625

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Ratings

Cap (μF)	Catalog Part Number	Typical	Max Ripple	Dia. (Inches)	Length (Inches)
		ESR	120 Hz		
		120 Hz (Ω)	+85 °C (A) RMS		
16 WVdc (20 Vdc Surge)					
14,000	CGR143U016R3C	0.0119	12.9	1.375	3.125
16,000	CGR163U016U2L	0.0173	11.6	1.750	2.625
20,000	CGR203U016R4C	0.0084	17.2	1.375	4.125
30,000	CGR303U016V3C	0.0098	17.8	2.000	3.125
42,000	CGR423U016V4C	0.0075	22.7	2.000	4.125
51,000	CGR513U016W3C	0.0085	22.0	2.500	3.125
20 WVdc (30 Vdc Surge)					
4,600	CGR462U020R2C	0.022	8.1	1.375	2.125
10,000	CGR103U020R3L	0.011	14.6	1.375	3.625
21,000	CGR213U020V3L	0.009	19.7	2.000	3.625
30 WVdc (45 Vdc Surge)					
2,200	CGR222U030R1N	0.035	5.9	1.375	1.875
4,900	CGR492U030U2C	0.025	10.3	1.750	2.125
7,400	CGR742U030R3L	0.011	14.6	1.375	3.625
10,000	CGR103U030R4L	0.008	18.9	1.375	4.625
12,000	CGR123U030V3C	0.010	17.8	2.000	3.125
15,000	CGR153U030V3L	0.009	19.7	2.000	3.625
27,000	CGR273U030V5L	0.005	30.0	2.000	5.625
30,000	CGR303U030W4C	0.006	29.1	2.500	4.125
40 WVdc (60 Vdc Surge)					
2,100	CGR212U040R2C	0.025	7.7	1.375	2.125
3,900	CGR392U040R3C	0.013	12.2	1.375	3.125
5,600	CGR562U040R4C	0.009	16.6	1.375	4.125
7,400	CGR742U040R5C	0.010	12.3	1.375	5.125
9,600	CGR962U040V3L	0.009	19.7	2.000	3.625
13,000	CGR133U040V4L	0.007	25.0	2.000	4.625
22,000	CGR223U040W4L	0.006	30.0	2.500	4.625
31,000	CGR313U040X4L	0.005	30.0	3.000	4.625

Cap (μF)	Catalog Part Number	Typical ESR	Max Ripple 120 Hz	Dia. (Inches)	Length (Inches)
		120 Hz (Ω)	+85 °C (A) RMS		
50 WVdc (75 Vdc Surge)					
1,000	CGR102U050R1N	0.1001	3.5	1.375	1.875
1,500	CGR152U050R2C	0.0672	4.7	1.375	2.125
2,900	CGR292U050R3C	0.0357	7.4	1.375	3.125
4,100	CGR412U050R4C	0.0180	8.3	1.375	4.125
6,200	CGR622U050R5L	0.0168	14.0	1.375	5.625
7,600	CGR762U050V3C	0.0165	13.7	2.000	3.125
10,000	CGR103U050V4C	0.0113	18.5	2.000	4.125
16,000	CGR163U050V5L	0.0085	24.2	2.000	5.625
21,000	CGR213U050W4L	0.0077	26.8	2.500	4.625
27,000	CGR273U050W5L	0.0060	30.0	2.500	5.625
37,000	CGR373U050X5L	0.0051	30.0	3.000	5.625
75 WVdc (100 Vdc Surge)					
1,200	CGR122T075R2L	0.0497	5.9	1.375	2.625
1,800	CGR182T075R3L	0.0329	8.2	1.375	3.625
2,000	CGR202U075R3C	0.0220	6.7	1.375	3.125
2,200	CGR222T075R4C	0.0200	7.9	1.375	4.125
3,100	CGR312T075V2L	0.0350	11.0	2.000	2.625
4,100	CGR412T075U4C	0.0140	10.9	1.750	4.125
4,700	CGR472T075V3L	0.0150	15.2	2.000	3.625
7,500	CGR752U075V5L	0.0095	16.2	2.000	5.625
8,000	CGR802T075W3L	0.0085	16.4	2.500	3.625
9,600	CGR962T075W4C	0.0094	23.2	2.500	4.125
11,000	CGR113T075X3L	0.0102	23.8	3.000	3.625
19,000	CGR193T075X5L	0.0056	30.0	3.000	5.625
100 WVdc (135 Vdc Surge)					
330	CGR331T100R2C	0.0940	2.8	1.375	2.125
2,700	CGR272T100V4L	0.0120	18.8	2.000	4.625
4,500	CGR452T100W4L	0.0094	24.3	2.500	4.625
8,000	CGR802T100X5L	0.0085	21.8	3.000	5.625
200 WVdc (250 Vdc Surge)					
3,500	CGR352T200X4C	0.024	11.5	3	4.125
5,200	CGR522T200X5L	0.017	15.4	3	5.625

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See Type 550C for New Designs