Type CGO Ultra Low ESR Screw Terminal Aluminum Electrolytic

Extremely Low ESR, Low Voltage, Screw Terminal Capacitors

Type CGO low voltage, low ESR, screw terminal aluminum electrolytic capacitors have extremely low ESR and are suitable for output filtering in switch mode power supply applications.

Highlights

- Extremely low ESR
- Low voltage
- Screw Terminal
- 35 mm diameter

RoHS Compliant

Specifications

Capacitance Range: 2,800 to 45,000 µF

Voltage Range: 5 to 55 WVdc

Capacitance Tolerance: ±20%

Operating Temperature: –40 to +85 °C

Ripple Current Multipliers: The maximum ripple current at 85 °C and 20 kHz for CGO capacitors is shown in the standard Ratings Tables. Maximum ripple current may be adjusted by the multipliers in the tables below.

Ambient Temperature / Ripple Multiplier

+35 °C	+45 °C	+55 °C	+65 °C	+75 °C	+85 °C
2.15	1.93	1.73	1.50	1.30	1.00

Rated	Frequency / Ripple Multiplier				
Voltage	120 Hz	400 Hz	1000 Hz	2500 Hz	10 kHz
5 to 55	.84	.85	.86	.87	.95

DC Leakage Current: $I \leq 1.5 \sqrt{CV}$ after 5 minutes
C = Capacitance in µF
V = Rated Voltage
I = Leakage current in µA

QA Stability Test: Apply WVdc for 1000 h @ 85 °C
Capacitance change ≤15% from initial limits
DC leakage current meets initial limits
ESR ≤175% of initial measured value

Click here to see: Hardware & Mounting Options

Click here to see: Mechanical Details

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Ratings

Cap (µF)	Catalog Part Number	Typical ESR 120 Hz (Ω)	Typical ESR 20 kHz (Ω)	Max Ripple 20 kHz (A) RMS	Dia. (In.)	Length (In.)
5 WVdc (6 Vdc Surge)						
18000	CGO183M005L	0.016	0.009	9.8	1.375	2.125
7.5 WVdc (9 Vdc Surge)						
15000	CGO153M7R5L	.0158	0.010	9.4	1.375	2.125
21000	CGO213M7R5L	0.013	0.008	10.9	1.375	2.625
27000	CGO273M7R5L	0.011	0.007	12.7	1.375	3.125
33000	CGO333M7R5L	0.009	0.006	14.2	1.375	3.625
39000	CGO393M7R5L	0.009	0.006	15.5	1.375	4.125
45000	CGO453M7R5L	0.008	0.005	17.5	1.375	4.625
10 WVdc (12 Vdc Surge)						
14000	CGO143M010L	0.018	0.010	9.8	1.375	2.125
19000	CGO193M010L	0.013	0.008	10.9	1.375	2.625
16 WVdc (18 Vdc Surge)						
10000	CGO103M016L	.0167	0.010	9.3	1.375	2.125
14000	CGO143M016L	0.008	0.006	10.9	1.375	2.625
18000	CGO183M016L	0.011	0.007	12.6	1.375	3.125
22000	CGO223M016L	0.010	0.006	14.2	1.375	3.625
20 WVdc (22 Vdc Surge)						
12000	CGO123M020L	.0142	0.009	10.8	1.375	2.625
16000	CGO163M020L	0.012	0.007	12.6	1.375	3.125
20000	CGO203M020L	0.010	0.007	14.1	1.375	3.625
22000	CGO223M020L	0.009	0.006	15.4	1.375	4.125
27000	CGO273M020L	0.008	0.005	17.4	1.375	4.625
34000	CGO343M020L	0.007	0.005	19.6	1.375	5.625

Cap (µF)	Catalog Part Number	Typical ESR 120 Hz (Ω)	Typical ESR 20 kHz (Ω)	Max Ripple 20 kHz (A) RMS	Dia. (In.)	Length (In.)
28 WVdc (32 Vdc Surge)						
6300	CGO632M028L	0.021	0.012	8.3	1.375	2.125
8800	CGO882M028L	0.017	0.010	9.9	1.375	2.625
8900	CGO892M028L	0.017	0.010	10.1	1.375	2.625
14000	CGO143M028L	0.012	0.008	13.1	1.375	3.625
35 WVdc (40 Vdc Surge)						
4,500	CGO452M035L	0.024	0.012	8.2	1.375	2.125
6300	CGO632M035L	0.019	0.010	9.8	1.375	2.625
8100	CGO812M035L	0.015	0.009	11.5	1.375	3.125
10000	CGO103M035L	0.013	0.008	13.0	1.375	3.625
14000	CGO143M035L	0.010	0.006	16.1	1.375	4.625
45 WVdc (50 Vdc Surge)						
3800	CGO382M045L	0.032	0.018	8.1	1.375	2.125
4600	CGO462M045L	0.024	0.013	9.7	1.375	2.625
10000	CGO103M045L	0.022	0.013	15.6	1.375	4.625
55 WVdc (64 Vdc Surge)						
2800	CGO282M055L	.0302	0.015	7.5	1.375	2.125
3900	CGO392M055L	0.023	0.012	9.0	1.375	2.625
5000	CGO502M055L	0.019	0.010	10.6	1.375	3.125
10000	CGO103M055L	0.011	0.006	17.2	1.375	5.625

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