Type CGO Ultra Low ESR Screw Terminal Aluminum Electrolytic

Extremely Low ESR, Low Voltage, Screw Terminal Capacitors

NOT PRECOMMENDED TO

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**

Capacitance Range: Voltage Range: pacitance Tolerance: erating Temperature:

 $2,800 \text{ to } 45,000 \ \mu\text{F}$ 5 to 55 WVdc

±20%

-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	7_	Frequenc	y / Ripple	Multiplier	
Voltage *	(20 Hz	400 Hz	1000 Hz	2500 Hz	10 kHz
5 to 55	.84	.85	.86	.87	.95

DC Leakage Current: $1 \le 1.5 \sqrt{\text{CV}}$ after 5 minutes

C = Capacitance in E

V = Rated Voltage

I = Leakage current in

QA Stability Test: Apply WVdc for 1000 h @ 85 %

Capacitance change ≤ 10 / Capacitance change c

Click here to see: Hardware & Mounting **Options**

Click here to see: Mechanical Details

Type CGO Ultra Low ESR Screw Terminal Aluminum Electrolytic

Ratings

							l [
				Max			
	Catalog	Typica	I ESR	Ripple			
Cap	Part Number	120 Hz	20 kHz	20 kHz	Dia.	Length	
(<u>ĮŲ</u> F)		(Ω)	(Ω)	(A) RMS	(ln.)	(ln.)	
	5 W	Vdc (6 \	/dc Sur	ge)			
18000	€ 6 9183M005L	0.016	0.009	9.8	1.375	2.125	
	7.5 V	VVdc (9	Vdc Sui	rge)			
15000	CGO153177R5L	.0158	0.010	9.4	1.375	2.125	
21000	CGO213M7R5	0.013	0.008	10.9	1.375	2.625	
27000	CGO273M7R5	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 W	Vdc (12	Vdc Su	rbe)			
14000	CGO143M010L	0.018	0.010	981	1.375	2.125	
19000	CGO193M010L	0.013	0.008	10.9	375	2.625	
	16 W	Vdc (18	Vdc Su	rge)		\	
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	2
22000	CGO223M016L	0.010	0.006	14.2	1.375	3.625	S
	20 W	Vdc (22	Vdc Su	rge)			
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	

Cape (μF) Part Number (μF) 120 Hz (Ω) 20 kHz (Ω) 20 kHz (In.) Dia. (In.) Length (In.) 6300 CGO632M028L (In.) 0.021 (In.) 0.012 (In.) 8.3 (In.) 1.375 (In.) 2.125 (In.) 8800 CGO882M028L (In.) 0.017 (In.) 0.010 (In.) 9.9 (In.) 1.375 (In.) 2.625 (In.) 8900 CGO892M028L (In.) 0.017 (In.) 0.010 (In.) 1.375 (In.) 2.625 (In.) 14000 CGO452M035L (In.) 0.012 (In.) 0.013 (In.) 1.375 (In.) 2.625 (In.) 8100 CGO632M035L (In.) 0.010 (In.) 0.012 (In.)		т					
Cap (μF) Part Number (μβ) 120 Hz (Ω) 20 kHz (Ω) 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 2.625 35 WVdc (40 Vdc Surge) 4,500 CGO452M035L 0.024 0.012 8.2 1.375 2.625 8100 CGO632M035L 0.019 0.010 9.8 1.375 2.625 8100 CGO632M035L 0.019 0.010 9.8 1.375 3.625 45 WVdc (50 Vdc Surge) 3800 CGO3103M035L 0.013 0.008 13.0 1.375 3.625 45 WVdc (50 Vdc Surge) 3800 CGO382M045L					Max		
(μF) (Ω) (Ω) (A) RMS (In.) (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 3.625 45 WVdc (50 Vdc Surge) 3800 CGO103M035L 0.013 0.008 13.0 1.375 2.625 4600 CGO382M045L 0.032 0.018 8.1 1.375 2.625		Catalog	Typical ESR				
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 3.625 45 WVdc (50 Vdc Surge) 3800 CGO103M035L 0.013 0.008 13.0 1.375 3.625 45 WVdc (50 Vdc Surge) 3800 CGO382M045L 0.024 0.013 9.7 1.375 2.625 10000 CGO103M045L 0.022	Cap	Part Number	120 Hz 20 kHz		20 kHz	Dia.	Length
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 CGO632M035L 0.015 0.009 11.5 1.375 3.125 10000 CGO103M035L 0.015 0.009 11.5 1.375 3.625 45 WVdc (50 Vdc Surge) 3800 CGO382M045L 0.032 0.018 8.1 1.375 2.625 4600 CGO462M045L 0.024 0.013 9.7 1.375 2.625 10000 CGO103M045L	(µF)		(Ω)	(Ω)	(A) RMS	(ln.)	(ln.)
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 2.625 8100 CGO632M035L 0.019 0.010 9.8 1.375 2.625 8100 CGO812M035L 0.015 0.009 11.5 1.375 3.625 10000 CGO103M035L 0.013 0.008 13.0 1.375 3.625 14000 CGO143M035L 0.013 0.008 13.0 1.375 3.625 45 WVdc (50 Vdc Surge) 3800 CGO382M045L 0.032 0.018 8.1 1.375 2.625 10000 CGO103M045L 0.024 0.013 9.7 1.375 2.625 10000 CGO282M055L 0.023 <	ļ	28 W\	/dc (32	Vdc Su	rge)		1
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 CGO133M045L 0.022 0.015 7.5 1.375 2.125 3900 CGO282M055L	6300	CGO632M028L	0.021	0.012	8.3	1.375	2.125
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 0.023 0.015 7.5 1.375 2.125 3900 CGO392M055L 0.023 0.012 9.0 1.375 <t< td=""><td>8800</td><td>CGO882M028L</td><td>0.017</td><td>0.010</td><td>9.9</td><td>1.375</td><td>2.625</td></t<>	8800	CGO882M028L	0.017	0.010	9.9	1.375	2.625
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 0.023 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	8900	CGO892M028L	0.017	0.010	10.1	1.375	2.625
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 0.032 0.015 7.5 1.375 2.625 3900 CGO392M055L 0.023 0.012 9.0 1.375 2.625 5000 CGO502M055L	14000	CGO143M028L	0.012	0.008	13.1	1.375	3.625
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 0.023 0.015 7.5 1.375 2.125 3900 CGO392M055L 0.023 0.012 9.0 1.375 2.625 5000 CGG502M055L 0.019 0.010 10.6 1.375 3.125		35 W\	/dc (40	Vdc Su	rge)		
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 0.023 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	4,500	CGO452M035L	0.024	0.012	8.2	1.375	2.125
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 0.0302 0.015 7.5 1.375 2.125 3900 CGO392M055L 0.023 0.012 9.0 1.375 2.625 5000 CGC502M055L 0.019 0.010 10.6 1.375 3.125	6300	CGO632M035L	0.019	0.010	9.8	1.375	2.625
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 0.0302 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	8100	CGO812M035L	0.015	0.009	11.5	1.375	3.125
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 0.0302 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	CGO103M035L	0.013	0.008	13.0	1.375	3.625
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 2800 CGO282M055L 0.0302 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	14000	CGO143M035L	0.010	0.006	16.1	1.375	4.625
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 0.0302 0.015 7.5 1.375 2.125 3900 CGO392M055L 0.023 0.012 9.0 1.375 2.625 5000 CGC502M055L 0.019 0.010 10.6 1.375 3.125	45 WVdc (50 Vdc Surge)						
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 CGC502M055L 0.019 0.010 10.6 1.375 3.125	3800	CGO382M045L	0.032	0.018	8.1	1.375	2.125
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	4600	CGO462M045L	0.024	0.013	9.7	1.375	2.625
280 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	CGO103M045L	0.022	0.013	15.6	1.375	4.625
3900 CG0392M055L 0.023 0.012 9.0 1.375 2.625 5000 CG0502M055L 0.019 0.010 10.6 1.375 3.125	%	55 W\	/dc (64	Vdc Su	rge)		
5000 CGO502M055L 0.019 0.010 10.6 1.375 3.125	280	CGO282M055L	.0302	0.015	7.5	1.375	2.125
	3900	€€0392M055L	0.023	0.012	9.0	1.375	2.625
10000 CGO103M055L 0.011 0.006 17.2 1.375 5.625	5000	CG0502M055L	0.019	0.010	10.6	1.375	3.125
PROSSIBILITARIA CENTRAL	10000	CGO103M055L	0.011	0.006	17.2	1.375	5.625

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It such application..., ling any such matter – a.
It propresentation concerning.
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In Dubliler strives to about the most stringent quality and sai.
In an infacturing of its products, in light of the current state of the ar.
In occur. Accordingly, customer applications which require a high degree and proportive protective measures (such as installation of protective cr.
In other appropriate protective measures) in order to ensure that the failure of an ele.
In oes not result in a risk of personal injury experpetry damage. Although all product-relax.
It is autions and notes must be observed, the customer should not assume that all safety measure cated in such warnings, cautions and notes, or this other safety measures may not be required. tee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability For certain applications are based on the knowledge that the Cornell Dubilier company providing such