

# Type CGS High Cap Screw Terminal Aluminum Electrolytic Capacitor

## High CV, Screw Terminal Capacitors



Type CGS screw terminal, aluminum electrolytic capacitors have a high CV rating and are suitable for use in most demanding applications requiring high current filtering or energy storage.

### Highlights

- High CV rating
- High current filtering
- Screw terminal

### Specifications

**Capacitance Range:** 75 to 1,500,000  $\mu\text{F}$

**Voltage Range:** 6.3 to 500 WVdc

**Capacitance Tolerance:** -10% +75% (6.3 - 150 WVdc)  
-10% +50% (200 - 450 WVdc)

**Operating Temperature:** -40  $^{\circ}\text{C}$  to +85  $^{\circ}\text{C}$

**Ripple Current Multipliers:** Ambient Temperature



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

+45 $^{\circ}\text{C}$	+55 $^{\circ}\text{C}$	+65 $^{\circ}\text{C}$	+75 $^{\circ}\text{C}$	+85 $^{\circ}\text{C}$
2.24	2.00	1.73	1.41	1.00

Rated Voltage	Ripple Multiplier				
	60 Hz	120 Hz	300 Hz	1000 Hz	10 kHz
16 to 150	0.9	1.0	1.15	1.25	1.30
200 to 500	0.9	1.0	1.25	1.40	1.50

**DC Leakage Current:**  $I = .006 \sqrt{CV}$

Not to exceed 6.0 mA max. after 5 minutes

C = Capacitance in  $\mu\text{F}$

V = Rated Voltage

I = Leakage current in mA

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

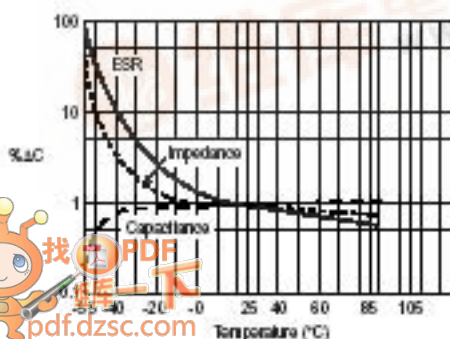
**QA Stability Test:** Apply WVdc for 2000 h @ 85  $^{\circ}\text{C}$

- Capacitance change  $\pm 10\%$  from initial limits
- DC leakage current: 200% of limit
- ESR: 175% of limit

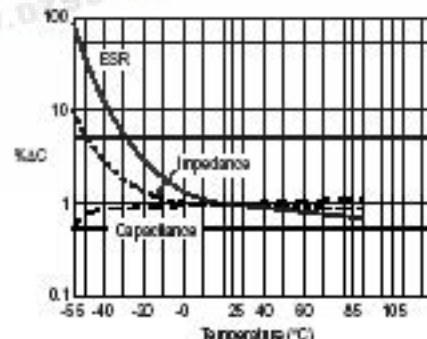
[Click here to see: Mechanical Details](#)

## Typical Performance Curves

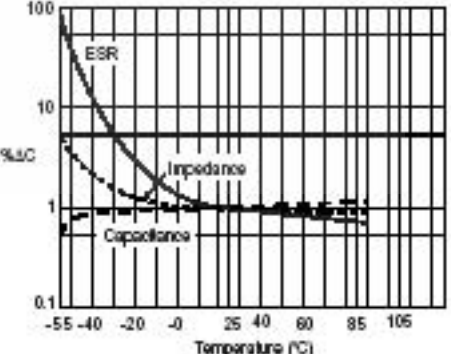
Temperature Characteristics - 100,000  $\mu\text{F}$  10 Vdc



Temperature Characteristics - 29,000  $\mu\text{F}$  50 Vdc



Temperature Characteristics - 4600  $\mu\text{F}$  100 Vdc













# Type CGS High-Cap Screw Terminal Aluminum Electrolytic Capacitor

## Ratings

Cap (µF)	Catalog Part Number	Typical Max Ripple		Dia. (Inches)	Length (Inches)
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS		
<b>400 WVdc ( 450 Vdc Surge )</b>					
1,700	CGS172T400V4C	0.060	5.7	2.0	4.125
2,600	CGS262T400V5L	0.040	7.8	2.0	5.625
2,800	CGS282T400W4C	0.042	7.8	2.5	4.125
4,200	CGS422T400W5L	0.035	9.6	3.0	4.125
4,300	CGS432T400W5L	0.028	10.8	2.5	5.625
5,700	CGS572T400X5C	0.026	11.9	3.0	5.125
6,400	CGS642T400X5L	0.024	13.0	3.0	5.625
7,000	CGS702T400X5R	0.022	13.5	3.0	5.875
11,000	CGS113T400X8L	0.015	19.8	3.0	8.265
<b>450 WVdc ( 525 Vdc Surge )</b>					
75	CGS750T450R2C	0.835	0.9	1.375	2.125
100	CGS101T450R2C	0.737	1.0	1.375	2.125
140	CGS141T450R3C	0.496	1.4	1.375	3.125
170	CGS171T450R3C	0.456	1.5	1.375	3.125
210	CGS211T450R4C	0.332	1.9	1.375	4.125
240	CGS241T450R2C	0.416	1.3	1.375	2.125
250	CGS251T450R4C	0.308	2.0	1.375	4.125
320	CGS321T450V3C	0.253	2.5	2.000	3.125
350	CGS351T450R2L	0.288	1.7	1.375	2.625
350	CGS351T450R5C	0.226	3.2	1.375	5.125
400	CGS401T450R5L	0.198	2.9	1.375	5.625
450	CGS451T450V3C	0.188	2.9	2.000	3.125
460	CGS461T450R3C	0.221	2.1	1.375	3.125
480	CGS481T450V4C	0.171	3.4	2.000	4.125
620	CGS621T450V2L	0.201	2.6	2.000	2.625
650	CGS651T450V4C	0.154	3.7	2.000	4.125
680	CGS681T450R4C	0.151	2.9	1.375	4.125
800	CGS801T450V4L	0.108	4.4	2.000	4.625
930	CGS931T450V3C	0.116	3.7	2.000	3.125
970	CGS971T450V4C	0.096	4.5	2.000	4.125
1,000	CGS102T450R5L	0.103	4.0	1.375	5.625
1,000	CGS102T450V3L	0.100	4.1	2.000	3.625
1,000	CGS102T450W4C	0.082	5.5	2.500	4.125
1,100	CGS112T450U4C	0.094	4.1	1.750	4.125
1,100	CGS112T450X4C	0.076	6.5	3.000	4.125
1,400	CGS142T450V4C	0.076	5.0	2.000	4.125
1,400	CGS142T450V4L	0.069	5.5	2.000	4.625
1,400	CGS142T450V5L	0.059	6.5	2.000	5.625
1,400	CGS142T450W5C	0.060	7.1	2.500	5.125
1,500	CGS152T450X4C	0.059	7.4	3.000	4.125
1,500	CGS152T450X5C	0.057	8.1	3.000	5.125
1,700	CGS172T450W3L	0.063	6.0	2.500	3.625
1,800	CGS182T450V5L	0.054	5.4	2.000	5.625
1,800	CGS182T450X5R	0.048	9.3	3.000	5.875
1,900	CGS192T450X5L	0.052	7.6	3.000	5.625
2,000	CGS202T450X5C	0.045	9.1	3.000	5.125
2,200	CGS222T450V5L	0.051	6.9	2.000	5.625
2,200	CGS222T450X4C	0.045	8.4	3.000	4.125
2,300	CGS232T450W4C	0.052	7.0	2.500	4.125
2,400	CGS242T450W4C	0.048	7.2	2.500	4.125
2,400	CGS242T450W4L	0.055	7.1	2.500	4.625
2,400	CGS242T450X5L	0.038	10.3	3.000	5.625

Cap (µF)	Catalog Part Number	Typical Max Ripple		Dia. (Inches)	Length (Inches)
		ESR 120 Hz (Ω)	120 Hz +85 °C (A) RMS		
<b>450 WVdc ( 525 Vdc Surge )</b>					
2,500	CGS252T450X3L	0.058	7.0	3.0	3.625
3,100	CGS312T450W5L	0.043	7.2	2.5	5.625
3,300	CGS332T450X5L	0.031	11.4	3.0	5.625
3,500	CGS352T450W5L	0.042	8.8	3.0	4.125
3,600	CGS362T450W5L	0.035	9.7	2.5	5.625
3,600	CGS362T450X4L	0.041	9.2	3.0	4.625
4,600	CGS462T450X5L	0.032	9.6	3.0	5.625
4,700	CGS472T450X5C	0.031	10.9	3.0	5.125
5,300	CGS532T450X5L	0.028	12.0	3.0	5.625
5,800	CGS582T450X5R	0.026	12.4	3.0	5.875
7,700	CGS772T450X8L	0.020	16.7	3.0	8.625
9,000	CGS902T450X8L	0.017	18.2	3.0	8.625
<b>500 WVdc ( 550 Vdc Surge )</b>					
160	CGS161T500R2C	0.610	1.1	1.375	2.125
240	CGS241T500R2L	0.422	1.4	1.375	2.625
240	CGS241T500U2C	0.416	1.6	1.750	2.125
310	CGS311T500R3C	0.323	1.8	1.375	3.125
310	CGS311T500V2C	0.322	2.0	2.000	2.125
361	CGS361T500U2L	0.282	2.1	1.750	2.625
380	CGS381T500R3L	0.262	2.1	1.375	3.625
450	CGS451T500R4C	0.220	2.4	1.375	4.125
460	CGS461T500V2L	0.225	2.6	2.000	2.625
530	CGS531T500R4L	0.190	2.7	1.375	4.625
600	CGS601T500R5C	0.167	3.0	1.375	5.125
620	CGS621T500U3L	0.164	3.2	1.750	3.625
620	CGS621T500V3C	0.165	3.2	2.000	3.125
670	CGS671T500R5L	0.150	3.5	1.375	5.625
750	CGS751T500U4C	0.136	3.6	1.750	4.125
790	CGS791T500V3L	0.131	3.8	2.000	3.625
880	CGS881T500U4L	0.116	4.1	1.750	4.625
950	CGS951T500V4C	0.108	4.4	2.000	4.125
1000	CGS102T500U5C	0.101	4.6	1.750	5.125
1000	CGS102T500W3C	0.101	4.7	2.500	3.125
1100	CGS112T500U5L	0.089	5.1	1.750	5.625
1100	CGS112T500V4L	0.092	5.0	2.000	4.625
1300	CGS132T500V5C	0.081	5.6	2.000	5.125
1300	CGS132T500W3L	0.080	5.6	2.500	3.625
1500	CGS152T500V5L	0.072	6.1	2.000	5.625
1600	CGS162T500W4C	0.066	6.5	2.500	4.125
1800	CGS182T500W4L	0.057	7.3	2.500	4.625
1900	CGS192T500X3L	0.057	7.5	3.000	3.625
2100	CGS212T500W5C	0.049	8.2	2.500	5.125
2300	CGS232T500X4C	0.047	8.7	3.000	4.125
2400	CGS242T500W5L	0.044	9.0	2.500	5.625
2700	CGS272T500Y3L	0.041	9.8	3.500	3.625
2800	CGS282T500X4L	0.040	9.8	3.000	4.625
3200	CGS322T500X5C	0.035	20.3	3.000	5.125
3300	CGS332T500Y4C	0.034	11.2	3.500	4.125
3500	CGS352T500X5L	0.030	12.1	3.000	5.625
4400	CGS442T500Y5C	0.025	14.1	3.500	5.125
4800	CGS482T500Y5L	0.023	15.2	3.500	5.625
6000	CGS602T500X8L	0.018	18.7	3.000	8.625
8300	CGS832T500Y8L	0.014	23.1	3.500	8.625