

HIGH VOLTAGE MULTILAYER CERAMIC CHIP CAPACITORS



FEATURES

- Capacitance ranging from 10pF to 1.5μF
- Voltage rating of 250V~3kV
- Operating temperature rang of -55°C to +125°C
- Lead-free terminations, RoHS and Reach Compliant

»» APPLICATIONS

Typical applications include DC/DC, high voltage coupling/DC blocking, Back-lighting inverters, LAN/WLAN interface, power supplies.

»» ORDERING INFORMATION

Series	Case size	Dielectric	Rated voltage	Capacitance	Capacitance tolerance	Termination finish
CC48-class I	0603 0805 1206 1210 1808 1812	CG	250V 500V 630V 1KV 2KV 3KV	Refer to Capacitance and Rated Voltage Range	<10pF C=±0.25pF D=±0.50pF ≥10pF J=±5%	N=100%Sn G=Gold Plated end
CT48-class II	2220 2225	2X1			K=±10% M=±20%	

»» DIMENSIONS

Appearance	Case Size	0603	0805	1206	1210	1808	1812	2220	2225
	L	1.60 ± 0.20	2.00 ± 0.30	3.20 ± 0.30	3.20 ± 0.40	4.50 ± 0.40	4.50 ± 0.40	5.70 ± 0.50	5.70 ± 0.50
	W	0.80 ± 0.20	1.25 ± 0.20	1.60 ± 0.30	2.50 ± 0.30	2.00 ± 0.30	3.20 ± 0.30	5.00 ± 0.50	6.50 ± 0.60
	Tmax	1.00	1.45	1.90	2.80	2.30	3.50	4.20	4.20
	t	0.35 ± 0.25	0.50 ± 0.25	0.50 ± 0.35	0.60 ± 0.30	0.64 ± 0.38	0.90 ± 0.60	0.90 ± 0.60	0.90 ± 0.60

Unit:mm

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» ELECTRICAL CHARACTERISTICS

NO.	Item		Specification Limits	Measuring Conditions
1	Capacitance		Within specified tolerance	CG: $C_R \leq 1000\text{pF}$ $1\text{MHz} \pm 10\%$ $0.5\text{V} \sim 5\text{V}$ $C_R > 1000\text{pF}$ $1\text{kHz} \pm 10\%$ $1\text{V} \pm 0.2\text{V}$
2	Dissipation Factor	CG	$\text{tg } \delta \leq 0.1\%$	2X1: $C_R \leq 10\mu\text{F}$ $1\text{kHz} \pm 10\%$ $1\text{V} \pm 0.2\text{V}$ $C_R > 10\mu\text{F}$ $120\text{Hz} \pm 10\%$ $0.5\text{V} \pm 0.2\text{V}$
		2X1	$\text{tg } \delta \leq 2.5\%$	
3	Insulation Resistance	10000M Ω or 500M $\Omega \cdot \mu\text{F}$ whichever is less		$C_R \leq 0.01\mu\text{F}$ $\text{IR} \geq 10^4\text{M}\Omega$ $C_R > 0.01\mu\text{F}$ $\text{IR} \geq \frac{100}{C_R} \text{M}\Omega$
4	Dielectric Strength	No breakdown or visual defects		Voltage shall be applied with follow conditions for 5 seconds: $U_R = 250\text{V}$ $2.0U_R$ $U_R = 500\text{V}$ $1.5U_R$ $U_R \geq 630\text{V}$ $1.2U_R$ Charging and discharging current shall be 50mA or less.

» CAPCITANCE AND RATED VOLTAGE RANGE

CC48

Case Size	0603			0805			1206			1210			1808			1812			2220			2225														
Rated Voltage(V)	250	500	250	500	630	1k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k
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CG

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CT48

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Rated Voltage(V)	250	500	250	500	630	1k	250	500	630	1k	2k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k	250	500	630	1k	2k	3k					
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