



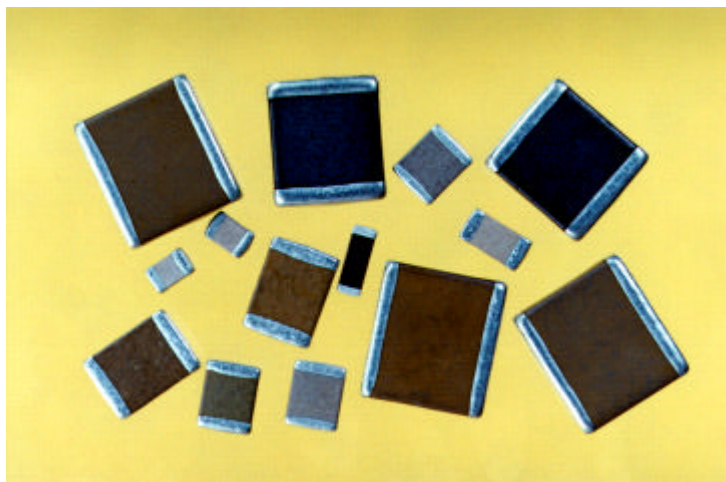
## HIGH VOLTAGE CHIP CAPACITORS 1-10kV

### APPLICATION








- DC-DC converters
- Voltage multipliers
- Radio and TV receiver
- Modems, Interfaces
- Other electrical appliances where high voltage is present

### FEATURES

- Ceramic capacitor specially designed for high voltage applications
- Capacitance range: up to 1  $\mu$ F
- Rated voltage: up to 10kVdc
- Sizes: from 1515 up to 7565
- CG(NPO) and 2R1 (X7R) temperature characteristics
- Operating temperature range - 55°C to +125°C
- Compliant to Standard IEC 384-10



NOTE: High voltage chips require more precautions be taken in applying these chips at surface mounting.

Chip														
<b>Size</b>	<b>1515</b>	<b>2020</b>	<b>2225</b>	<b>2520</b>	<b>3530</b>	<b>4020</b>	<b>4040</b>							
<b>L (mm)</b>	3.81 $\pm$ 0.38	5.08 $\pm$ 0.51	5.7 $\pm$ 0.6	6.35 $\pm$ 0.64	8.89 $\pm$ 0.89	10.2 $\pm$ 1.0	10.2 $\pm$ 1.0							
<b>W (mm)</b>	3.81 $\pm$ 0.38	5.08 $\pm$ 0.51	6.3 $\pm$ 0.6	5.08 $\pm$ 0.51	7.62 $\pm$ 0.76	5.08 $\pm$ 0.51	10.2 $\pm$ 1.0							
<b>T (mm)</b>	3.5	3.9	4.0	4.5	5.1	5.1	5.1							
Maximum capacitance code														
<b>Rated Voltage</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>	<b>CG</b>	<b>2R1</b>
1 kV	392	333	682	683	123	124	103	104	183	274	123	184	333	474
2 kV	222	392	472	103	103	183	682	153	123	683	822	333	223	104
3 kV	561	122	122	332	102	562	222	822	682	333	392	223	123	393
4 kV			821	182	681	272	152	392	472	183	272	123	822	273
5 kV			391	102	561	152	561	222	222	822	152	562	332	183
6 kV							680		122	472	821	322	182	123
7 kV									821	332	471	222	152	822
8 kV													152	562
9 kV														
10 kV														

## Technical Data

PARAMETER	CG(NPO) dielectric	2R1(X7R) dielectric
Capacitance Tolerance *	J,K,M,S	K,M,S,Z
Dissipation Factor $\tan\delta$	$15 \cdot 10^{-4}$	$350 \cdot 10^{-4}$
Measuring Voltage (C, $\tan\delta$ )	1 Vrms	0,3 Vrms
Rated Voltage	1kV – 10kV	
Test Voltage **	1,2xUr	
Insulating Resistance Ri	$\geq 10G\Omega$ or $RiXC \geq 100\Omega F$ whichever is less	$\geq 4G\Omega$ or $RiXC \geq 100\Omega F$ whichever is less
Measuring Voltage (for Ri)	500V	500V
Temperature Range	-55°C to +125°C	-55°C to +125°C
Temperature Characteristics	$0 \pm 30 \text{ ppm}/^\circ\text{C}$	$\pm 15\%$
Climatic Category	55 / 125 / 56	55 / 125 / 56
Reference Temperature	23°C	
Voltage Dependence	No	Yes
Aging (per hour decade)	0	<2%
Termination	AgPd or Ni barrier or Cu/Sn	
Packaging	Bulk	
Standard	IEC 384-10	

\* Capacitance tolerance, see Ordering Code

\*\* Units rated above 1000V may require conformal coating in use to preclude arcing over the chip surface

Chip														
<b>Size</b>	<b>4540</b>	<b>5040</b>	<b>5440</b>	<b>5550</b>	<b>6560</b>	<b>6660</b>	<b>7565</b>							
<b>L (mm)</b>	$11.4 \pm 1.1$	$12.7 \pm 1.3$	$13.7 \pm 1.4$	$14.0 \pm 1.4$	$16.5 \pm 1.7$	$16.8 \pm 1.7$	$19.0 \pm 1.9$							
<b>W (mm)</b>	$10.2 \pm 1.0$	$10.2 \pm 1.0$	$10.2 \pm 1.0$	$12.7 \pm 1.3$	$15.2 \pm 1.5$	$15.2 \pm 1.5$	$16.5 \pm 1.7$							
<b>T (mm)</b>	5.1	5.1	6.4	6.4	6.4	6.4	6.4							
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Maximum capacitance code</div>														
Rated Voltage	CG	2R1	CG	2R1	CG	2R1	CG	2R1	CG	2R1	CG	2R1	CG	2R1
1 kV	393	564	393	474	473	684	563	824	104	125	104	125	124	185
2 kV	273	124	273	823	333	124	393	184	683	334	683	334	823	474
3 kV	153	563	153	563	183	823	223	104	393	184	393	184	473	224
4 kV	103	333	103	273	123	393	153	563	223	104	223	104	393	154
5 kV	392	223	392	153	472	223	562	393	123	473	123	473	153	823
6 kV	222	123	272	123	332	153	392	223	682	333	682	333	103	563
7 kV	182	822	182	822	222	103	272	153	562	223	562	223	822	393
8 kV	152	682	152	562	182	822	272	123	392	153	392	153	562	333
9 kV	152	562	122	472	182	682	222	103	332	123	332	123	472	273
10 kV	122	392	102	332	152	472	222	822	272	103	272	103	392	223