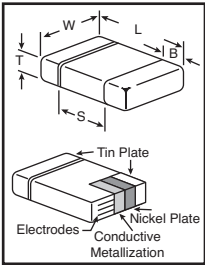


# KEMET SMD Ceramic Capacitors



DIMENSIONS: mm (in.)						
Metric Code	Style	L	W	T	B	S
2012	0805	2.0 (.079)	1.2 (.049)	1.3 (.051)	0.5 (.02)	0.75 (.030)
3216	1206	3.2 (.126)	1.6 (.063)	1.5 (.059)	0.5 (.02)	N/A
3225	1210	3.2 (.126)	2.5 (.098)	1.5 (.059)	0.5 (.02)	N/A
4520	1808	4.5 (.177)	2.0 (.079)	2.03 (.08)	0.6 (.024)	N/A
4532	1812	4.5 (.177)	3.2 (.126)	1.7 (.067)	0.6 (.024)	N/A
4564	1825	4.5 (.177)	6.4 (.250)	1.7 (.067)	0.6 (.024)	N/A
5664	2225	5.6 (.224)	6.4 (.250)	1.7 (.067)	0.6 (.024)	N/A

## KEMET TIP AND RING SMD CERAMIC CHIP CAPACITORS

KEMET's 250VDC or Tip & Ring MLCC capacitors are designed and rated for telecommunication ringer circuits where the capacitor is used to block -48 to -52 Volt DC of line voltage and pass a 16-25 Hz AC signal pulse of 70Vrms to 90Vrms. The surface mount ceramic capacitors are excellent replacements for high voltage leaded film devices. The smaller SMT footprints save valuable board space which is critical when creating new designs, and the capacitors are able to withstand today's higher lead-free reflow processing temperatures. The ceramic MLCC have excellent high frequency filtering characteristics, low ESR, and high temperature reflow capabilities. KEMET Tip and Ring capacitors are available in standard EIA case sizes and standard capacitance values from 0.001F to 1.2F. The capacitors have pure tin (100% Matte Sn) plated terminations and are 100% lead free which is ideal for new environmentally demanding designs.

### Applications:

- Telecommunication ringing circuits
- Switch mode power supply
- Snubber circuits
- High voltage DC blocking
- High voltage coupling

### Markets:

- Phone lines
- Analog and digital modems
- FAX machines
- Wireless base stations, ethernet
- Digital video recording set-top boxes
- Satellite dish
- Cable set-top boxes
- High voltage power supply, DC/DC converters
- Ethernet, POS, ATM hardware

MOUSER STOCK NO.	KEMET Part No.	Value (pF)	Tol.±	1	100	500	7 In. Reel Qty.	Price Per Piece
<b>Style 0805-Temperature Coef: C0G</b>								
80-C0805C122KAR	C0805C102KARACTU	1000	10%	.23	.20	.128	4000	.069
80-C0805C222KAR	C0805C222KARACTU	2200	10%	.12	.10	.091	4000	.07
80-C0805C272KAR	C0805C272KARACTU	2700	10%	.27	.24	.21	4000	.16
80-C0805C332KAR	C0805C332KARACTU	3300	10%	.27	.24	.21	4000	.16
80-C0805C472KAR	C0805C472KARACTU	4700	10%	.30	.21	.138	4000	.076
80-C0805C562KAR	C0805C562KARACTU	5600	10%	.27	.24	.21	4000	.16
80-C0805C682KAR	C0805C682KARACTU	6800	10%	.27	.24	.21	4000	.16
80-C0805C822KAR	C0805C822KARACTU	8200	10%	.27	.24	.21	4000	.16
80-C0805C103KAR	C0805C103KARACTU	0.01µF	10%	.08	.07	.043	4000	.021
80-C0805C223KAR	C0805C223KARACTU	0.022µF	10%	.30	.23	.148	4000	.08
80-C1206C562KAR	C1206C562KARACTU	5600	10%	.32	.29	.26	4000	.19
80-C1206C682KAR	C1206C682KARACTU	6800	10%	.32	.29	.26	4000	.19
80-C1206C822KAR	C1206C822KARACTU	8200	10%	.32	.29	.26	4000	.19
80-C1206C103KAR	C1206C103KARACTU	0.01µF	10%	.18	.16	.14	4000	.102
80-C1206C123KAR	C1206C123KARACTU	0.012µF	10%	.36	.33	.29	4000	.21
80-C1206C153KAR	C1206C153KARACTU	0.015µF	10%	.36	.33	.29	4000	.21
80-C1206C183KAR	C1206C183KARACTU	0.018µF	10%	.36	.33	.29	4000	.21
80-C1206C223KAR	C1206C223KARACTU	0.022µF	10%	.39	.33	.223	4000	.129
80-C1206C273KAR	C1206C273KARACTU	0.027µF	10%	.37	.34	.30	4000	.22
80-C1206C333KAR	C1206C333KARACTU	0.033µF	10%	.37	.34	.30	4000	.22
80-C1206C473KAR	C1206C473KARACTU	0.047µF	10%	.39	.34	.23	2500	.135
80-C1206C563KAR	C1206C563KARACTU	0.056µF	10%	.39	.35	.31	2500	.24
80-C1206C683KAR	C1206C683KARACTU	0.068µF	10%	.39	.36	.32	2500	.25
80-C1206C823KAR	C1206C823KARACTU	0.082µF	10%	.40	.36	.32	2500	.25
80-C1206C104KAR	C1206C104KARACTU	0.1µF	10%	.22	.20	.13	4000	.055
80-C1210C682KAR	C1210C682KARACTU	6800	10%	.67	.53	.43	4000	.39
80-C1210C822KAR	C1210C822KARACTU	8200	10%	.67	.53	.43	4000	.39
80-C1210C103KAR	C1210C103KARACTU	0.01µF	10%	.39	.34	.296	4000	.216
80-C1210C123KAR	C1210C123KARACTU	0.012µF	10%	.67	.53	.43	4000	.39
80-C1210C153KAR	C1210C153KARACTU	0.015µF	10%	.67	.53	.43	4000	.39
80-C1210C183KAR	C1210C183KARACTU	0.018µF	10%	.67	.53	.43	4000	.39
80-C1210C223KAR	C1210C223KARACTU	0.022µF	10%	.67	.53	.43	4000	.39
80-C1210C273KAR	C1210C273KARACTU	0.027µF	10%	.67	.53	.43	4000	.39
80-C1210C333KAR	C1210C333KARACTU	0.033µF	10%	.67	.53	.43	4000	.39
80-C1210C393KAR	C1210C393KARACTU	0.039µF	10%	.69	.55	.45	4000	.40
80-C1210C473KAR	C1210C473KARACTU	0.047µF	10%	.71	.57	.46	4000	.41
80-C1210C683KAR	C1210C683KARACTU	0.068µF	10%	.74	.59	.48	4000	.43
80-C1210C823KAR	C1210C823KARACTU	0.082µF	10%	.76	.61	.50	2500	.44
80-C1210C104KAR	C1210C104KARACTU	0.1µF	10%	.42	.37	.31	2500	.252
80-C1812C104JAR	C1812C104JARACTU	0.1µF	5%	1.97	1.67	1.07	1000	.684
80-C1812C104KAR	C1812C104KARACTU	0.1µF	10%	1.46	1.16	.754	1000	.455
80-C1812C124KAR	C1812C124KARACTU	0.12µF	10%	1.27	1.02	.83	1000	.79
80-C1812C224JAR	C1812C224JARACTU	0.22µF	5%	2.09	1.79	1.15	1000	.718
80-C1812C274KAR	C1812C274KARACTU	0.27µF	10%	1.33	1.07	.87	1000	.83
80-C1812C334JAR	C1812C334JARACTU	0.33µF	5%	2.09	1.79	1.15	1000	.718
80-C1812C334KAR	C1812C334KARACTU	0.33µF	10%	1.54	1.24	.807	1000	.478
80-C1812C474KAR	C1812C474KARACTU	0.47µF	10%	1.54	1.24	.807	1000	.478
80-C1825C474KAR	C1825C474KARACTU	0.47µF	10%	6.05	1.88	1.53	1000	.99
80-C1825C564KAR	C1825C564KARACTU	0.56µF	10%	2.75	2.20	1.79	1000	1.71
80-C1825C684KAR	C1825C684KARACTU	0.68µF	10%	2.88	2.58	1.68	1000	.99
80-C1825C105KAR	C1825C105KARACTU	1.0µF	10%	2.88	2.58	1.68	1000	.99
80-C2220C474KAR	C2220C474KARACTU	0.47µF	10%	3.15	2.85	1.86	1000	1.08
80-C2220C564KAR	C2220C564KARACTU	0.56µF	10%	2.75	2.20	1.79	1000	1.71
80-C2220C684KAR	C2220C684KARACTU	0.68µF	10%	6.60	2.12	1.73	1000	1.08
80-C2220C105KAR	C2220C105KARACTU	1.0µF	10%	3.15	2.85	1.86	1000	1.08
80-C2225C474KAR	C2225C474KARACTU	0.47µF	10%	7.26	2.36	1.92	1000	1.18
80-C2225C564KAR	C2225C564KARACTU	0.56µF	10%	3.30	2.64	2.15	1000	2.05
80-C2225C684KAR	C2225C684KARACTU	0.68µF	10%	3.00	2.45	1.75	1000	1.18
80-C2225C105KAR	C2225C105KARACTU	1.0µF	10%	3.44	3.14	2.05	1000	1.18
80-C2225C125KAR	C2225C125KARACTU	1.2µF	10%	3.54	3.24	2.13	1000	1.18

## KEMET SMD HIGH VOLTAGE CERAMIC CAPACITORS

KEMET's High Voltage Surface Mount Capacitors are designed to withstand high voltage applications. They offer high capacitance with low leakage current and low ESR at high frequency. The capacitors have pure tin (Sn) plated external electrodes for good solderability. X7R dielectrics are not designed for AC line filtering applications. An insulating coating may be required to prevent surface arcing. These components are RoHS compliant.

### Applications:

- Switch mode power supply
- Input filter
- Resonators
- Tank circuit
- Snubber circuit
- Output filter
- High voltage coupling
- High voltage DC blocking
- Lighting ballast
- Voltage multiplier circuits
- Coupling capacitors/CLK

MOUSER STOCK NO.	KEMET Part No.	Value (pF)	Volt (DC)	Tol.±	1	100	7 In. Reel Qty.	Price Per Piece
<b>Style 0805-Temperature Coef: C0G</b>								
80-C0805C100JCG	C0805C100JCGACTU	10	500	5%	.22	.18	2500	.13
80-C0805C100JGD	C0805C100JGDGACTU	10	500	5%	.24	.19	2500	.14
80-C0805C220JCG	C0805C220JCGACTU	22	500	5%	.23	.18	2500	.12
80-C0805C220JGD	C0805C220JGDGACTU	22	500	5%	.24	.19	2500	.14
80-C0805C101KCG	C0805C101KCGACTU	100	500	10%	.21	.17	2500	.13
80-C0805C101JCG	C0805C101JCGACTU	100	500	5%	.23	.18	2500	.076
<b>Style 0805-Temperature Coef: X7R</b>								
80-C0805C271KDR	C0805C271KDRACTU	270	1000	10%	.24	.19	2500	.14
80-C0805C471KDR	C0805C471KDRACTU	470	1000	10%	.24	.19	2500	.14
80-C0805C681KDR	C0805C681KDRACTU	680	1000	10%	.24	.19	2500	.14
80-C0805C102KCR	C0805C102KCRACTU	1000	500	10%	.24	.19	2500	.14
<b>Style 1206-Temperature Coef: C0G</b>								
80-C1206C220KCG	C1206C220KCGACTU	22	500	10%	.62	.49	2000	.37
80-C1206C330KCG	C1206C330KCGACTU	33	500	10%	.62	.50	2000	.37
80-C1206C330KDG	C1206C330KDGACTU	33	1000	10%	.66	.46	2000	.26
80-C1206C101KCG	C1206C101KCGACTU	100	500	10%	.63	.50	2000	.38
80-C1206C101JCG	C1206C101JCGACTU	100	500	5%	.68	.48	2000	.27
80-C1206C101KDG	C1206C101KDGACTU	100	1000	10%	.67	.47	2000	.27
80-C1206C101KGG	C1206C101KGGACTU	100	2000	10%	.75	.53	2000	.30
80-C1206C102JCG	C1206C102JCGACTU	1000	500	5%	.70	.49	2000	.28
<b>Style 1206-Temperature Coef: X7R</b>								
80-C1206C102KCR	C1206C102KCRACTU	1000	500	10%	.30	.21	2000	.072
80-C1206C102KDR	C1206C102KDRACTU	1000	1000	10%	.23	.18	2000	.058
80-C1206C103KCR	C1206C103KCRACTU	0.01µF	500	10%	.38	.30	2000	.126
<b>Style 1210-Temperature Coef: C0G</b>								
80-C1210C681KCG	C1210C681KCGACTU	680	500	10%	1.33	.93	2000	.53
80-C1210C681KDG	C1210C681KDGACTU	680	1000	10%	1.41	.99	2000	.56
80-C1210C102KCG	C1210C102KCGACTU	1000	500	10%	1.33	.93	2000	.53
80-C1210C102KDG	C1210C102KDGACTU	1000	1000	10%	1.41	.99	2000	.57
<b>Style 1210-Temperature Coef: X7R</b>								
80-C1210C101KGR	C1210C101KGRACTU	100	2000	10%	.68	.63	2000	.216
80-C1210C221KFR	C1210C221KFRACTU	220	1500	10%	.68	.63	2000	.216
80-C1210C681KGR	C1210C681KGRACTU	680	2000	10%	.68	.63	2000	.216
80-C1210C473KCR	C1210C473KCRACTU	0.047µF	500	10%	1.07	.75	2000	.43
<b>Style 1808-Temperature Coef: X7R</b>								
80-C1808C101KHR	C1808C101KHRACTU	100	3000	10%	1.23	.852	2000	.252
80-C1808C102KGR	C1808C102KGRACTU	1000	2000	10%	1.15	.926	2000	.27
80-C1808C103KDR	C1808C103KDRACTU	0.01µF	1000	10%	1.25	.852	2000	.26
<b>Style 1812-Temperature Coef: C0G</b>								
80-C1812C102KDG	C1812C102KDGACTU	1000	1000	10%	1.12	.826	1000	.363
<b>Style 1812-Temperature Coef: X7R</b>								
80-C1812C102KDR	C1812C102KDRACTU	1000	1000	10%	1.25	.70	1000	.364
80-C1812C102KGR	C1812C102KGRACTU	1000	2000	10%	1.12	.826	1000	.297
80-C1812C102KHR	C1812C102KHRACTU	1000	3000	10%	.98	.68	1000	.351
80-C1812C222JDR	C1812C222JDRACTU	2200	1000	5%	1.69	1.18	1000	1.01
80-C1812C472KDR	C1812C472KDRACTU	4700	1000	10%	1.02	.726	1000	.319
80-C1812C103KCR	C1812C103KCRACTU	0.01µF	500	10%	.97	.673	1000	.297
80-C1812C103KDR	C1812C103KDRACTU	0.01µF	1000	10%	.83	.63	1000	.33
80-C1812C473KCR	C1812C473KCRACTU	0.047µF	500	10%	1.05	.752	1000	.33
<b>Style 1825-Temperature Coef: X7R</b>								
80-C1825C102KZR	C1825C102KZRACTU	1000	2500	10%	3.85	2.69	10	