

KEMET Ceramic Capacitors

The Capacitance Company



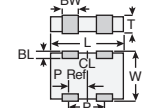
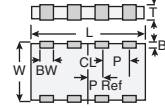
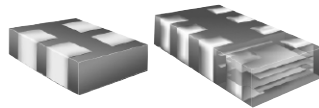
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SMD MLCC CAPACITOR ARRAY, COG & X7R

This product is RoHS compliant.

Kemet's Ceramic Chip Capacitor Array in X7R and COG dielectric is an advanced passive technology where multiple capacitor elements are integrated into one common monolithic structure. Array technology promotes reduced placement costs and increased throughout.



Features:

- Operating Temperature Range: -55°C to +125°C
- Saves both circuit board and inventory space
- Reduces placement costs and increases throughout
- Non-polar device, minimizing installation concerns
- Flexible termination option is standard on 0508 case size array

EIA Size Code	Metric Size Code	DIMENSIONS: mm (in.)							P/2 Reference
		L Length	W Width	BW Bandwidth	BL Bandlength	T Thickness	P Pitch	P/2 Reference	
0508	1220	1.30(.051)± t0.15(.006)	2.10(.083)± 0.15(.006)	0.53(.021)± 0.08(.003)	0.30(.012)± 0.20(.008)		0.80±0.10	1.00(.039)	0.50(.20)± 0.10(.004)

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	KEMET Part No.	Case Size	Value (pF)	Voltage	Dielectric	Price Each					Reel Qty.	Price Per Piece
						1	50	100	500	1000		
80-CA052X101J1G	CA052X101J1GACTU	0508	100	100	COG	.19	.11	.10	.09	.08	4000	.07
80-CA052X102K1G	CA052X102K1GACTU	0508	1000	100	COG	.19	.11	.10	.09	.08	4000	.07
80-CA052X103K5R	CA052X103K5RACTU	0508	2200	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X222K1G	CA052X222K1GACTU	0508	2200	100	COG	.20	.11	.11	.10	.08	4000	.07
80-CA052X472K5R	CA052X472K5RACTU	0508	4700	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X153K5R	CA052X153K5RACTU	0508	15000	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X223K5R	CA052X223K5RACTU	0508	22000	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X333K5R	CA052X333K5RACTU	0508	33000	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X473K5R	CA052X473K5RACTU	0508	47000	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X683K5R	CA052X683K5RACTU	0508	68000	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X104K5R	CA052X104K5RACTU	0508	0.10uF	50	X7R	.19	.11	.10	.09	.08	4000	.07
80-CA052X224K8R	CA052X224K8RACTU	0508	0.22uF	10	X7R	.20	.11	.11	.10	.08	4000	.07

KEMET Flexible Termination, SMD



FAIL-SAFE FLOATING ELECTRODE MLCC WITH FLEXIBLE TERMINATION FF-CAP

The FF-CAP incorporates two existing KEMET technologies; Floating Electrode (cascading electrode design) and Flexible Termination. The floating electrode component of these capacitors yields improved voltage and ESD performance over standard designs, and also mitigates the risk of low IR or short circuit failures associated with mechanical flex cracks. The flexible termination component incorporates a measure of flexibility to the capacitor, shifting flex stress away from the ceramic body and into the termination area. The combination of these technologies ensures an increased measure of protection from board flex, offering up to 5mm of flex-bend capability. This provides for an enhanced level of mechanical flex crack protection for low to mid capacitance part types.

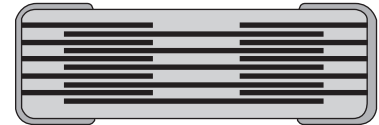
FF-CAPs technology combination will ensure an increased measure of protection from board flex, offering up to 5mm of flex-bend capability. This provides customer an enhanced level of mechanical flex crack protection for low- to mid-capacitance part types and complements KEMET's current Open Mode, Floating Electrode and Flexible Termination technologies. In addition, the new product meets the requirements of the Automotive Electronics Council's AEC-Q200-Rev C and is being offered with 100 percent pure matte tin-plated terminations that allow for excellent solderability.

Features:

- Operating range: -55°C to +125°C with no-bias capacitance shift limited to ±15% over that range
- Insulation resistance (IR) measured after 2 minutes at rated voltage @ 25°C: Limit is 1,000 megohm microfarads or 100 gohm, whichever is less
- Capacitance and dissipation factor (DF) measured at 1kHz and 1 Vrms

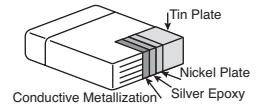
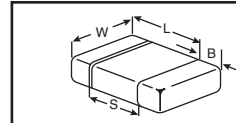
DF Limits are:

50 - 250 Volts	2.5%
16 - 25 Volts	3.5%
6.3 - 10 Volts	5.0%



EIA Size Code	Metric Size Code	DIMENSIONS: mm (in.)				S Separation
		L Length	W Width	B Bandwidth	S Separation	
0603	1608	1.8 (.071) ± 0.15 (.006)	0.8 (.032) ± 0.15 (.006)	0.35 (.014) ± 0.15 (.006)	0.70 (.028)	
0805	2012	2.2 (.087) ± 0.20 (.008)	1.25 (.049) ± 0.20 (.008)	0.05 (.02) ± 0.25 (.010)	0.75 (.030)	
1206	3216	3.4 (.134) ± 0.20 (.008)	1.6 (.063) ± 0.20 (.008)	0.50 (.02) ± .25 (.010)	N/A	
1210	3225	3.4 (.134) ± 0.20 (.008)	2.5 (.098) ± 0.20 (.008)	0.50 (.02) ± .25 (.010)	N/A	

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MOUSER STOCK NO.	KEMET Part No.	Value (pF)	Volt	Price Each					
				1	50	100	500	1000	4000
Style 0603									
80-C0603Y221K5R	C0603Y221K5RACTU	220	50	.45	.36	.29	.27	.16	.12
80-C0603Y221K1R	C0603Y221K1RACTU	220	100	.45	.38	.29	.22	.19	.14
80-C0603Y331K5R	C0603Y331K5RACTU	330	50	.45	.36	.29	.27	.16	.12
80-C0603Y331K1R	C0603Y331K1RACTU	330	100	.45	.38	.29	.22	.19	.14
80-C0603Y471K5R	C0603Y471K5RACTU	470	50	.45	.36	.29	.27	.16	.12
80-C0603Y471K1R	C0603Y471K1RACTU	470	100	.45	.38	.29	.22	.19	.14
80-C0603Y561K5R	C0603Y561K5RACTU	560	50	.45	.36	.29	.27	.16	.12
80-C0603Y681K3R	C0603Y681K3RACTU	680	25	.45	.36	.29	.27	.16	.12
80-C0603Y681K5R	C0603Y681K5RACTU	680	50	.45	.36	.29	.27	.16	.12
80-C0603Y821K5R	C0603Y821K5RACTU	820	50	.45	.36	.29	.27	.16	.12
80-C0603Y102K4R	C0603Y102K4RACTU	1000	16	.45	.36	.29	.27	.16	.12
80-C0603Y102K3R	C0603Y102K3RACTU	1000	25	.45	.36	.29	.27	.16	.12
80-C0603Y102K5R	C0603Y102K5RACTU	1000	50	.45	.36	.29	.27	.16	.12
80-C0603Y102K1R	C0603Y102K1RACTU	1000	100	.45	.38	.29	.22	.19	.14
80-C0603Y102K2R	C0603Y102K2RACTU	1000	200	.55	.46	.35	.26	.23	.16
80-C0603Y122K5R	C0603Y122K5RACTU	1200	50	.45	.36	.29	.27	.16	.12
80-C0603Y152K5R	C0603Y152K5RACTU	1500	50	.45	.36	.29	.27	.16	.12
80-C0603Y152K1R	C0603Y152K1RACTU	1500	100	.45	.38	.29	.22	.19	.14
80-C0603Y182K5R	C0603Y182K5RACTU	1800	50	.45	.36	.29	.27	.16	.12
80-C0603Y182K1R	C0603Y182K1RACTU	1800	100	.45	.38	.29	.22	.19	.14
80-C0603Y222K3R	C0603Y222K3RACTU	2200	25	.45	.36	.29	.27	.16	.12
80-C0603Y222K5R	C0603Y222K5RACTU	2200	50	.45	.36	.29	.27	.16	.12
80-C0603Y222K1R	C0603Y222K1RACTU	2200	100	.45	.38	.29	.22	.19	.14
80-C0603Y272K5R	C0603Y272K5RACTU	2700	50	.45	.36	.29	.27	.16	.12
80-C0603Y272K1R	C0603Y272K1RACTU	2700	100	.45	.38	.29	.22	.19	.14
80-C0603Y332K5R	C0603Y332K5RACTU	3300	50	.45	.36	.29	.27	.16	.12
80-C0603Y392K5R	C0603Y392K5RACTU	3900	50	.45	.36	.29	.27	.16	.12
80-C0603Y472K4R	C0603Y472K4RACTU	4700	16	.32	.27	.20	.15	.13	.09
80-C0603Y472K5R	C0603Y472K5RACTU	4700	50	.45	.36	.29	.27	.16	.12
80-C0603Y562K5R	C0603Y562K5RACTU	5600	50	.45	.36	.29	.27	.16	.12
80-C0603Y682K5R	C0603Y682K5RACTU	6800	50	.45	.36	.29	.27	.16	.12
80-C0603Y822K5R	C0603Y822K5RACTU	8200	50	.45	.36	.29	.27	.16	.12
80-C0603Y103K4R	C0603Y103K4RACTU	10000	16	.32	.27	.20	.15	.13	.09
80-C0603Y103K3R	C0603Y103K3RACTU	10000	25	.32	.27	.20	.15	.13	.09
80-C0603Y103K5R	C0603Y103K5RACTU	10000	50	.45	.36	.29	.27	.16	.12
80-C0603Y153K3R	C0603Y153K3RACTU	15000	25	.32	.27	.20	.15	.13	.09
80-C0603Y153K5R	C0603Y153K5RACTU	15000	50	.44	.37	.28	.21	.18	.13
80-C0603Y183K3R	C0603Y183K3RACTU	18000	25	.32	.27	.20	.15	.13	.09
80-C0603Y223K4R	C0603Y223K4RACTU	22000	16	.32	.27	.20	.15	.13	.09
80-C0603Y223K3R	C0603Y223K3RACTU	22000	25	.32	.27	.20	.15	.13	.09
80-C0603Y223K5R	C0603Y223K5RACTU	22000	50	.44	.37	.28	.21	.18	.13

Style 0805									
80-C0805Y221K5R	C0805Y221K5RACTU	220	50	.50	.42	.32	.24	.21	.15
80-C0805Y221K2R	C0805Y221K2RACTU	220	200	.69	.59	.45	.34	.29	.21
80-C0805Y471K5R	C0805Y471K5RACTU	470	50	.38	.32	.24	.18	.16	.11
80-C0805Y471K1R	C0805Y471K1RACTU	470	100	.44	.37	.28	.21	.18	.13

MOUSER STOCK NO.	KEMET Part No.	Value (pF)	Volt	Price Each					
				1	50	100	500	1000	4000
Style 0805 (Cont.)									
80-C0805Y102K5R	C0805Y102K5RACTU	1000	50	.38	.32	.24	.18	.16	.11
80-C0805Y102K1R	C0805Y102K1RACTU	1000	100	.44	.37	.28	.21	.18	.13
80-C0805Y102K2R	C0805Y102K2RACTU	1000	200	.53	.45	.34	.25	.22	.16
80-C0805Y222K5R	C0805Y222K5RACTU	2200	50	.38	.32	.24	.18	.16	.11
80-C0805Y222K1R	C0805Y222K1RACTU	2200	100	.44	.37	.28	.21	.18	.13
80-C0805Y222K2R	C0805Y222K2RACTU	2200	200	.53	.45	.34	.25	.22	.16
80-C0805Y332K5R	C0805Y332K5RACTU	3300	50	.38	.32	.24	.18	.16	.11
80-C0805Y472K5R	C0805Y472K5RACTU	4700	50	.38	.32	.24	.18	.16	.11
80-C0805Y472K1R	C0805Y472K1RACTU	4700	100	.44	.37	.28	.21	.18	.13
80-C0805Y472K2R	C0805Y472K2RACTU	4700	200	.53	.45	.34	.25	.22	.16
80-C0805Y682K5R	C0805Y682K5RACTU	6800	50	.38	.32	.24	.18	.16	.11
80-C0805Y103K5R	C0805Y103K5RACTU	10000	50	.38	.32	.25	.123	.097	.068
80-C0805Y103K1R	C0805Y103K1RACTU	10000	100	.44	.37	.28	.21	.18	.13
80-C0805Y123K1R	C0805Y123K1RACTU	12000	100	.48	.41	.31	.23	.20	.14
80-C0805Y153K5R	C0805Y153K5RACTU	15000	50	.42	.36	.27	.20	.18	.13
80-C0805Y183K5R	C0805Y183K5RACTU	18000	50	.42	.36	.27	.20	.18	.13
80-C0805Y223K5R	C0805Y223K5RACTU	22000	50	.42	.36	.27	.20	.18	.13
80-C0805Y223K1R	C0805Y223K1RACTU	22000	100	.48	.41	.31	.23	.20	.14
80-C0805Y273K5R	C0805Y273K5RACTU	27000	50	.42	.36	.27	.20	.18	.13
80-C0805Y333K5R	C0805Y333K5RACTU	33000	50	.46	.32	.29	.21	.12	.082
80-C0805Y473K5R	C0805Y473K5RACTU	47000	50	.50	.42	.32	.24	.21	.15

Style 1206									
80-C1206Y102K5R	C1206Y102K5RACTU	1000	50	.45	.38	.29	.22	.19	.14
80-C1206Y102K1R	C1206Y102K1RACTU	1000	100	.53	.45	.34	.25	.22	.16
80-C1206Y102K2R	C1206Y102K2RACTU	1000	200	.63	.54	.41	.31	.26	.19
80-C1206Y222K1R	C1206Y222K1RACTU	2200	100	.53	.45	.34	.25	.22	.16
80-C1206Y222K2R	C1206Y222K2RACTU	2200	200	.63	.54	.41	.31	.26	.19
80-C1206Y332K5R	C1206Y332K5RACTU	3300	50	.45	.38	.29	.22	.19	.14
80-C1206Y472K5R	C1206Y472K5RACTU	4700	50	.45	.38	.29	.22	.19	.14
80-C1206Y103K5R	C								