

FEATURES

- Four individual capacitors inside one 1206 monolithic structure
- Saves board and inventory space
- One placement instead of four - less costly
- Easier to handle and solder than 4 smaller chips
- Tape and reel per EIA 481-1
- RoHS Compliant

CAPACITOR OUTLINE DRAWING

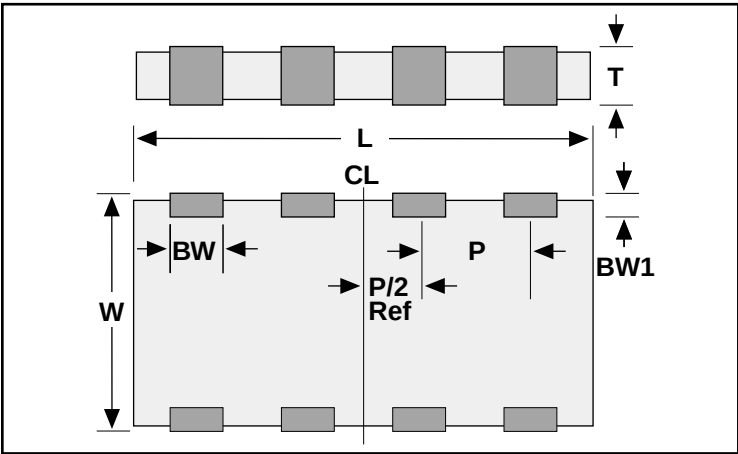


TABLE 1
EIA DIMENSIONS – MILLIMETERS (INCHES)

Size Code	Length L	Width W	Thickness T (max.)	Bandwidth BW	Bandwidth BW1	Pitch P
1632	3.2 (0.126) ± 0.2 (0.008)	1.6 (.063) ± 0.2 (.008)	0.7 - 1.35 (0.027 - 0.053)	0.40 (0.016) ± 0.2 (0.008)	0.1 - 0.5 (0.004 - 0.020)	0.8 (0.031) ± 0.1 (0.004)

- Notes:**
1. Metric is controlling - English for reference only.
 2. Pitch (P) tolerances are non-cumulative along the package.
 3. Thickness (T) depends on capacitance.

CERAMIC ARRAY ORDERING INFORMATION

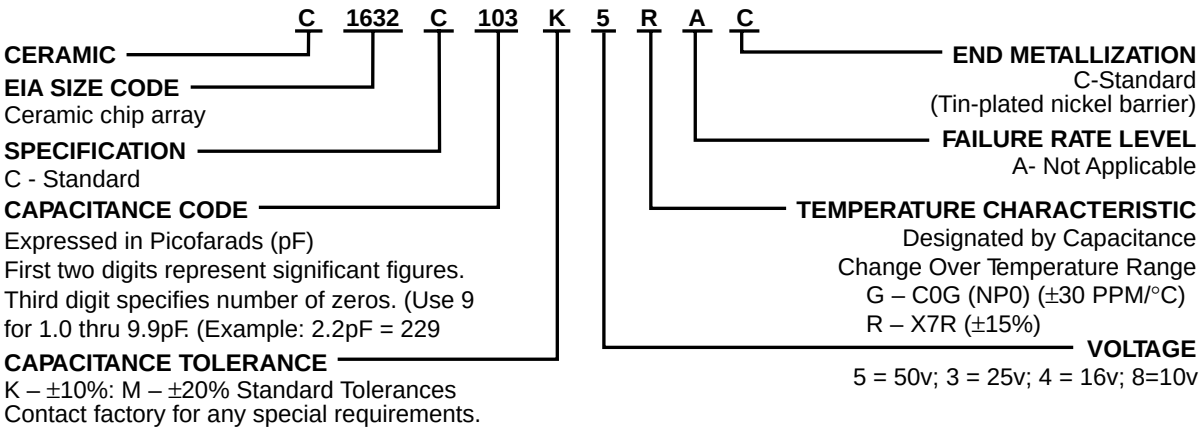


TABLE 2A
COG DIELECTRIC – CAPACITANCE RANGE

Capacitance Values (pF)	KEMET Part Number	Capacitance Tolerance	10V 16V	25V	50V	100V	200V
10	C1632C100(1)(2)GAC	K,M	100	100	100	100	100
12	C1632C120(1)(2)GAC	K,M	120	120	120	120	120
15	C1632C150(1)(2)GAC	K,M	150	150	150	150	150
18	C1632C180(1)(2)GAC	K,M	180	180	180	180	180
22	C1632C220(1)(2)GAC	K,M	220	220	220	220	220
27	C1632C270(1)(2)GAC	K,M	270	270	270	270	270
33	C1632C330(1)(2)GAC	K,M	330	330	330	330	330
39	C1632C390(1)(2)GAC	K,M	390	390	390	390	390
47	C1632C470(1)(2)GAC	K,M	470	470	470	470	470
56	C1632C560(1)(2)GAC	K,M	560	560	560	560	560
68	C1632C680(1)(2)GAC	K,M	680	680	680	680	680
82	C1632C820(1)(2)GAC	K,M	820	820	820	820	820
100	C1632C101(1)(2)GAC	K,M	101	101	101	101	101
120	C1632C121(1)(2)GAC	K,M	121	121	121	121	121
150	C1632C151(1)(2)GAC	K,M	151	151	151	151	151
180	C1632C181(1)(2)GAC	K,M	181	181	181	181	181
220	C1632C221(1)(2)GAC	K,M	221	221	221	221	221
270	C1632C271(1)(2)GAC	K,M	271	271	271	271	271
330	C1632C331(1)(2)GAC	K,M	331	331	331	331	331
390	C1632C391(1)(2)GAC	K,M	391	391	391	391	391
470	C1632C471(1)(2)GAC	K,M	471	471	471	471	471

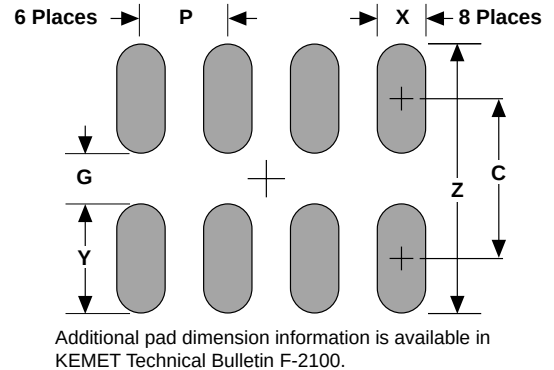
- (1) To complete the KEMET part number, insert the alpha code for the tolerance desired.
K = ±10% and M = ±20% – standard tolerance. Contact factory for any special requirements.
(2) To complete the KEMET part number, insert appropriate number for voltage desired:
"5" = 50 volts, "3" = 25 volts, "4" = 16 volts, and "8" = 10 volts.

TABLE 2B
X7R DIELECTRIC – CAPACITANCE RANGE

Capacitance Values (pF)	KEMET Part Number	Capacitance Tolerance	10V 16V	25V	50V	100V	200V
330	C1632C331(1)(2)RAC	K,M	331	331	331	331	331
390	C1632C391(1)(2)RAC	K,M	391	391	391	391	391
470	C1632C471(1)(2)RAC	K,M	471	471	471	471	471
560	C1632C561(1)(2)RAC	K,M	561	561	561	561	561
680	C1632C681(1)(2)RAC	K,M	681	681	681	681	681
820	C1632C821(1)(2)RAC	K,M	821	821	821	821	821
1000	C1632C102(1)(2)RAC	K,M	102	102	102	102	102
1200	C1632C122(1)(2)RAC	K,M	122	122	122	122	122
1500	C1632C152(1)(2)RAC	K,M	152	152	152	152	152
1800	C1632C182(1)(2)RAC	K,M	182	182	182	182	182
2200	C1632C222(1)(2)RAC	K,M	222	222	222	222	222
2700	C1632C272(1)(2)RAC	K,M	272	272	272	272	272
3300	C1632C332(1)(2)RAC	K,M	332	332	332	332	332
3900	C1632C392(1)(2)RAC	K,M	392	392	392	392	392
4700	C1632C472(1)(2)RAC	K,M	472	472	472	472	472
5600	C1632C562(1)(2)RAC	K,M	562	562	562	562	562
6800	C1632C682(1)(2)RAC	K,M	682	682	682	682	682
8200	C1632C822(1)(2)RAC	K,M	822	822	822	822	822
10,000	C1632C103(1)(2)RAC	K,M	103	103	103	103	103
12,000	C1632C123(1)(2)RAC	K,M	123	123	123	123	123
15,000	C1632C153(1)(2)RAC	K,M	153	153	153	153	153
18,000	C1632C183(1)(2)RAC	K,M	183	183	183	183	183
22,000	C1632C223(1)(2)RAC	K,M	223	223	223	223	223
27,000	C1632C273(1)(2)RAC	K,M	273	273	273	273	273
33,000	C1632C333(1)(2)RAC	K,M	333	333	333	333	333
39,000	C1632C393(1)(2)RAC	K,M	393	393	393	393	393
47,000	C1632C473(1)(2)RAC	K,M	473	473	473	473	473
56,000	C1632C563(1)(2)RAC	K,M	563	563	563	563	563
68,000	C1632C683(1)(2)RAC	K,M	683	683	683	683	683
82,000	C1632C823(1)(2)RAC	K,M	823	823	823	823	823
100,000	C1632C104(1)(2)RAC	K,M	104	104	104	104	104

- (1) To complete the KEMET part number, insert the alpha code for the tolerance desired:
K = ±10% and M = ±20% – standard tolerances. Contact factory for any special requirements.
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1632 CERAMIC ARRAY
LAND PATTERN LAYOUT



Additional pad dimension information is available in KEMET Technical Bulletin F-2100.

LAND PATTERN DIMENSIONS - CERAMIC CHIP CAPACITOR ARRAYS - MM

Dimension	Reflow Solder					
	Z	G	X	Y(ref)	C(ref)	P(ref)
3216	2.80	0.40	0.52	1.20	1.60	0.80

Calculation Formula
 $Z = L_{min} + 2J_t + T_t$
 $G = S_{max} - 2J_h - T_h$
 $X = W_{min} + 2J_s + T_s$
 $T_t, T_h, T_s = \text{Combined tolerances}$