

High Temperature Standard (+200°C) Axial and Radial Ceramic Cased Capacitors (C³) ACR/ARR/ACA/ARA Series

High temperature ceramic cased capacitors, with a new, unique design concept, are ideally suited for continuous operation up to +200°C. Problems associated with epoxy cased/epoxy potted capacitors, such as material deterioration, cracks in cases and potted areas, are nonexistent, even at +200°C.

COG

COG (NPO) capacitors, which exhibit little change in capacitance with variations in temperature, are used in RF oscillators, precision timing circuits, wave filters, and other circuits requiring a predictable linear temperature coefficient.

X7R

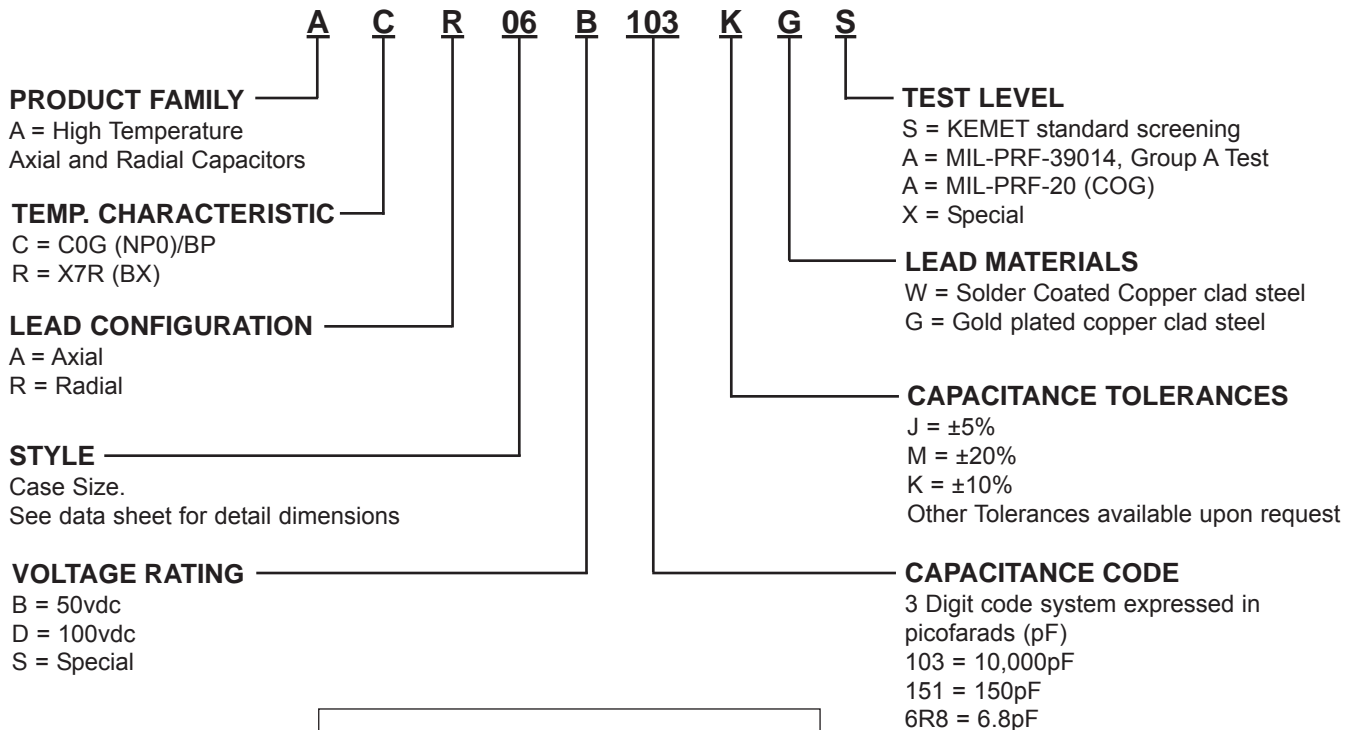
Specially formulated X7R ceramic materials result in a retention of 40% of the +25°C capacitance. Dissipation factor drops from 1.25% at +25°C to 0.1% at +200°C. At +120°C the ceramic undergoes a transformation (crystalline inversion) resulting in the material changing from ferroelectric to paraelectric - no piezoelectric behavior.

Typical applications include oil well logging (down hole), jet engine controls and geophysical pressure probes.

INSTALLATION:

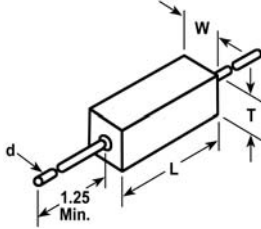
Parts should be soldered using a heat sink between the soldering point and the part using a soldering iron rated between 18-30 watts. Soldering temperature should not exceed +300°C.

PART NUMBER AND ORDERING INFORMATION

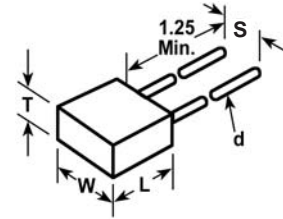


MARKING	
Manufacturer's ID	KEC
Capacitance	106J
Voltage	50V
Date Code	123

AXIAL
All Dimensions
in Inches (mm)



RADIAL
All Dimensions
in Inches (mm)



COG DIELECTRIC

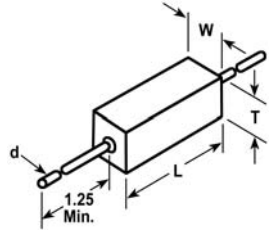
		AXIAL										RADIAL										
STYLE		16		25		39		50		69		05		06		07		08		09		
Cap	L _{MAX}	.170 (4.32)	.270 (6.86)	.400 (10.16)	.520 (13.21)	.720 (18.29)	.200 (5.08)	.300 (7.62)	.300 (7.62)	.500 (12.70)	.500 (12.70)	.200 (5.08)	.300 (7.62)	.300 (7.62)	.500 (12.70)	.500 (12.70)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.150 (3.81)	
	W _{MAX}	.080 (2.03)	.100 (2.54)	.150 (3.81)	.265 (6.73)	.370 (9.40)	.200 (5.08)	.300 (7.62)	.300 (7.62)	.500 (12.70)	.500 (12.70)	.200 (5.08)	.300 (7.62)	.300 (7.62)	.500 (12.70)	.500 (12.70)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.150 (3.81)	
	T _{MAX}	.080 (2.03)	.100 (2.54)	.150 (3.81)	.160 (4.06)	.160 (4.06)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.100 (2.54)	.200 ± .015 (5.08 ± .38)	.200 ± .015 (5.08 ± .38)	.200 ± .015 (5.08 ± .38)	.400 ± .015 (10.16 ± .38)	.400 ± .015 (10.16 ± .38)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.150 (3.81)	
	s	---	---	---	---	---	.200 ± .015 (5.08 ± .38)	.200 ± .015 (5.08 ± .38)	.200 ± .015 (5.08 ± .38)	.400 ± .015 (10.16 ± .38)	.400 ± .015 (10.16 ± .38)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.100 (2.54)	.150 (3.81)	.100 (2.54)	.150 (3.81)
	d	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.020 ± .002 (.508 ± .051)	.020 ± .002 (.508 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)	.025 ± .002 (.635 ± .051)
	Cap Code		50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
	5.6pF	569																				
6.8	689																					
8.2	829																					
10	100																					
12	120																					
15	150																					
18	180																					
22	220																					
27	270																					
33	330																					
39	390																					
47	470																					
56	560																					
68	680																					
82	820																					
100	101																					
120	121																					
150	151																					
180	181																					
220	221																					
270	271																					
330	331																					
390	391																					
470	471																					
560	561																					
680	681																					
820	821																					
1000	102																					
1200	122																					
1500	152																					
1800	182																					
2200	222																					
2700	272																					
3300	332																					
3900	392																					
4700	472																					
5600	562																					
6800	682																					
8200	822																					
0.01 μF	103																					
0.012	123																					
0.015	153																					
0.018	183																					
0.022	223																					
0.027	273																					
0.033	333																					
0.039	393																					
0.047	473																					
0.056	563																					
0.068	683																					
0.082	823																					
0.10	104																					
0.12	124																					
0.15	154																					

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ARR/ARA Series

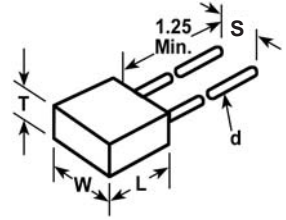
AXIAL

All Dimensions
in Inches (mm)



RADIAL

All Dimensions
in Inches (mm)



X7R DIELECTRIC

		AXIAL										RADIAL										
STYLE	Cap Code	16		25		39		50		69		05		06		07		08		09		
		50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	
L MAX																						
W MAX																						
T MAX																						
s																						
d																						
Cap Code																						
100pF	101																					
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	562																					
	682																					
	822																					
	0.01 μF	103																				
		123																				
		153																				
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