

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.

C0G

C0G (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

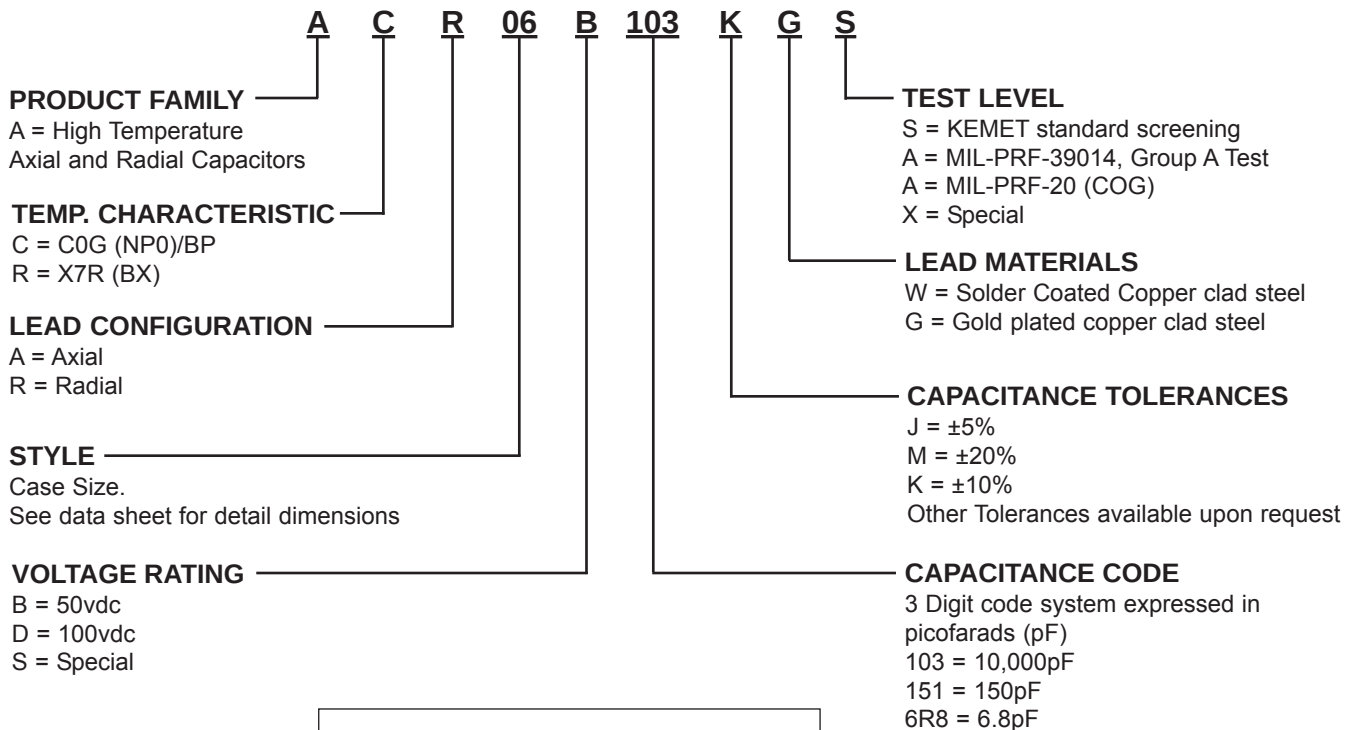
Specially formulated X7R ceramic materials result in a retention of 40% of the +25°C capacitance. Dissipation factor drops from 1.25% at +25°C to 0.1% at +200°C. At +120°C the ceramic undergoes a transformation (crystalline inversion) resulting in the material changing from ferroelectric to paraelectric - 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

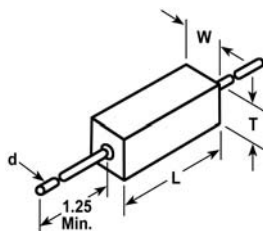


MARKING

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

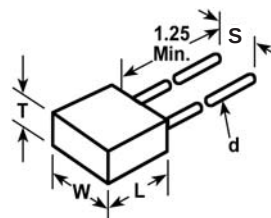
AXIAL

All Dimensions
in Inches (mm)



RADIAL

All Dimensions
in Inches (mm)



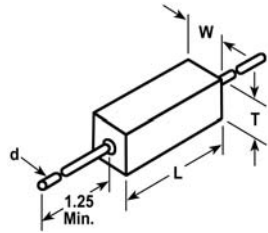
COG DIELECTRIC

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)								
	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)								
	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)	.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)								
	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)								
	Cap Code	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC	WVDC							
	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																		

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

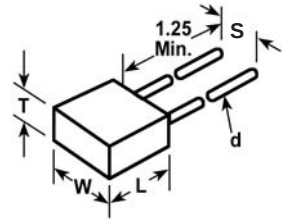
AXIAL

All Dimensions
in Inches (mm)



RADIAL

All Dimensions
in Inches (mm)



X7R 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)	
	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)	
	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)		.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)	
	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)	
	Cap Code	WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100		WVDC 50 100	
100pF	101																				
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0.68	684																				
0.82	824																				
1.0	105																				
1.2	125																				
1.5	155																				
1.8	185																				
2.2	225																				
2.7	275																				
3.3	335																				
3.9	395																				

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