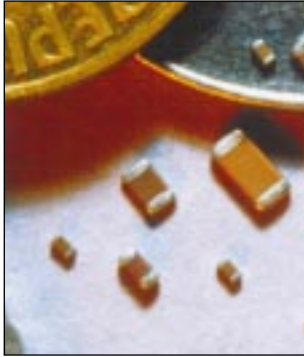


CLASS II X7R MULTILAYER CERAMIC CAPACITORS



The latest comprehensive data to fully support these parts is readily available.

CC SERIES

- IECQ APPROVED
- FUJI BULK CASSETTES AVAILABLE

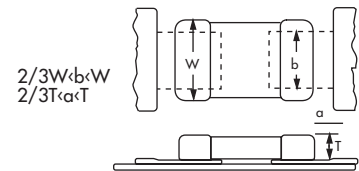
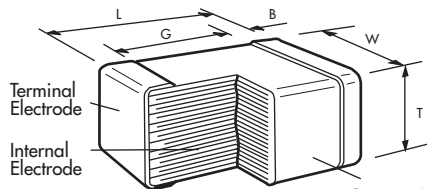
CLASS I, Temperature Compensated: COG
 CLASS II, High Dielectric Constant: X7R & Y5V.

SPECIFICATIONS

PARAMETER	X7R	TEST CONDITIONS
Temperature range	-55 +125°C	
Temp. coefficients	±15% (±22%)	
Q or dielectric diss'n factor (tan δ)	≤ 3%	
Withstanding voltage	2.5x r.v.	1 to 5 sec.
High temperature resistance		85±3°C; 2x r.v.; ≤ 50mA
Cap'n change	±10%	1000±12 hours
Q or dielectric diss'n factor (tan δ)	≤ 4%	
Humidity resistance		40±2°C; 90 to 95%RH
Cap'n change	±12.5%	Rated voltage; ≤ 50mA
Q or dielectric diss'n factor (tan δ)	≤ 5%	500±12 hours
Solder heat resistance		270±5°C
Cap'n change	±5%	after 3 ±.5 secs
Insulation resistance	≥ 10GΩ or 500MΩ•μF*	

r.v.: rated voltage. *: whichever is smaller. †: whichever is larger.

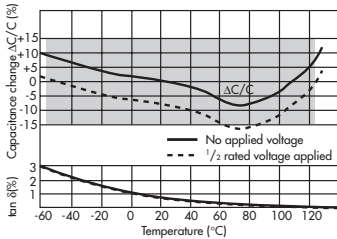
DIMENSIONS AND TYPICAL FOOTPRINT



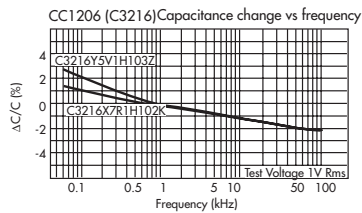
Size	L	W	T max	B min	G min
CC0603	1.6 ± 0.1	0.8 ± 0.1	0.9	0.2	0.3
CC0805	2.0 ± 0.2	1.25 ± 0.2	1.45	0.2	0.5
CC1206	3.2 ± 0.2	1.6 ± 0.2	1.30	0.2	1.0

All dimensions in mm

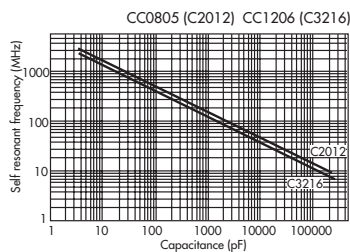
TEMPERATURE CHARACTERISTICS



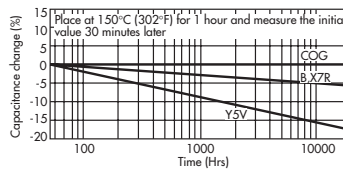
FREQUENCY CHARACTERISTICS



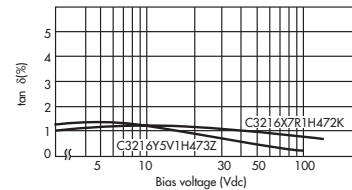
SELF-RESONANT FREQUENCY CHARACTERISTICS



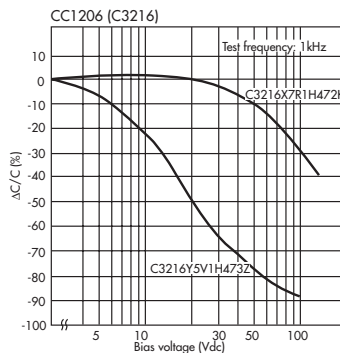
AGEING CHARACTERISTICS



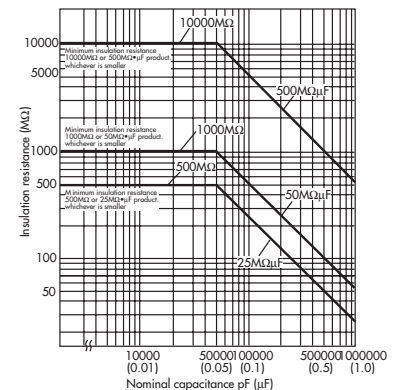
DC BIAS CHARACTERISTICS



DC BIAS CHARACTERISTICS



STANDARD INSULATION RESISTANCE VALUES



CLASS II X7R MULTILAYER CERAMIC CAPACITORS

X7R DIELECTRIC, 50V, 10%

0603 (Metric Equiv' C1608)

Part Number	Value	£/100
100pF		
CC0603HX7R221KTR	220pF	0.70
CC0603HX7R271KTR	270pF	0.70
CC0603HX7R331KTR	330pF	0.70
CC0603HX7R391KTR	390pF	0.70
CC0603HX7R471KTR	470pF	0.70
CC0603HX7R561KTR	560pF	0.70
CC0603HX7R681KTR	680pF	0.70
CC0603HX7R821KTR	820pF	0.70
1nF		
CC0603HX7R102KTR	1.0nF	0.70
CC0603HX7R122KTR	1.2nF	0.70
CC0603HX7R152KTR	1.5nF	0.70
CC0603HX7R182KTR	1.8nF	0.70
CC0603HX7R222KTR	2.2nF	0.70
CC0603HX7R272KTR	2.7nF	0.70
CC0603HX7R332KTR	3.3nF	0.70
CC0603HX7R392KTR	3.9nF	0.70
CC0603HX7R472KTR	4.7nF	0.70
CC0603HX7R562KTR	5.6nF	0.70
CC0603HX7R682KTR	6.8nF	0.70
CC0603HX7R822KTR	8.2nF	0.70
10nF		
CC0603HX7R103KTR	10nF	0.70
CC0603HX7R123KTR	12nF	1.20
CC0603HX7R153KTR	15nF	1.20

0805 (Metric Equiv' C2012)

Part Number	Value	£/100
100pF		
CC0805HX7R471KTR	470pF	0.70
CC0805HX7R561KTR	560pF	0.70
CC0805HX7R681KTR	680pF	0.70
CC0805HX7R821KTR	820pF	0.70
1nF		
CC0805HX7R102KTR	1.0nF	0.70
CC0805HX7R122KTR	1.2nF	0.70
CC0805HX7R152KTR	1.5nF	0.70
CC0805HX7R182KTR	1.8nF	0.70
CC0805HX7R222KTR	2.2nF	0.70
CC0805HX7R272KTR	2.7nF	0.70
1nF		
CC0805HX7R332KTR	3.3nF	0.70
CC0805HX7R392KTR	3.9nF	0.70
CC0805HX7R472KTR	4.7nF	0.70
CC0805HX7R562KTR	5.6nF	0.70
CC0805HX7R682KTR	6.8nF	0.70
CC0805HX7R822KTR	8.2nF	0.70
10nF		
CC0805HX7R103KTR	10nF	0.70
CC0805HX7R123KTR	12nF	0.90
CC0805HX7R153KTR	15nF	0.90
CC0805HX7R183KTR	18nF	0.90
CC0805HX7R223KTR	22nF	0.90
CC0805HX7R273KTR	27nF	0.90
CC0805HX7R333KTR	33nF	0.90
CC0805HX7R393KTR	39nF	0.90
CC0805HX7R473KTR	47nF	0.90
CC0805HX7R563KTR	56nF	1.60
CC0805HX7R683KTR	68nF	1.60
CC0805HX7R823KTR	82nF	1.60
100nF		
CC0805HX7R104KTR	100nF	1.60

1206 (Metric Equiv' C3216)

Part Number	Value	£/100
100pF		
CC1206HX7R471KTR	470pF	1.10
CC1206HX7R561KTR	560pF	1.10
CC1206HX7R681KTR	680pF	1.10
CC1206HX7R821KTR	820pF	1.10
1nF		
CC1206HX7R102KTR	1.0nF	1.10
CC1206HX7R122KTR	1.2nF	1.10
CC1206HX7R152KTR	1.5nF	1.10
CC1206HX7R182KTR	1.8nF	1.10
CC1206HX7R222KTR	2.2nF	1.10
CC1206HX7R272KTR	2.7nF	1.10
CC1206HX7R332KTR	3.3nF	1.10
CC1206HX7R392KTR	3.9nF	1.10
CC1206HX7R472KTR	4.7nF	1.10
CC1206HX7R562KTR	5.6nF	1.10
CC1206HX7R682KTR	6.8nF	1.10
CC1206HX7R822KTR	8.2nF	1.10
10nF		
CC1206HX7R103KTR	10nF	1.10
CC1206HX7R123KTR	12nF	1.10
CC1206HX7R153KTR	15nF	1.10
CC1206HX7R183KTR	18nF	1.10
CC1206HX7R223KTR	22nF	1.10
CC1206HX7R273KTR	27nF	1.10
CC1206HX7R333KTR	33nF	1.10
CC1206HX7R393KTR	39nF	1.10
CC1206HX7R473KTR	47nF	1.10
CC1206HX7R563KTR	56nF	1.10
CC1206HX7R683KTR	68nF	1.50
CC1206HX7R823KTR	82nF	1.50
100nF		
CC1206HX7R104KTR	100nF	1.50
CC1206HX7R124KTR	120nF	5.30
CC1206HX7R154KTR	150nF	5.30
CC1206HX7R184KTR	180nF	5.30
CC1206HX7R224KTR	220nF	5.20



The latest comprehensive data to fully support these parts is readily available.

X7R DIELECTRIC, 16V, 10%

0603 (Metric Equiv' C1608)

Part Number	Value	£/100
10nF		
CC0603CX7R123KTR	12nF	1.10
CC0603CX7R153KTR	15nF	1.10
CC0603CX7R183KTR	18nF	1.10
CC0603CX7R223KTR	22nF	1.10
CC0603CX7R273KTR	27nF	1.10
CC0603CX7R333KTR	33nF	1.10
CC0603CX7R393KTR	39nF	1.40
CC0603CX7R473KTR	47nF	1.40
CC0603CX7R563KTR	56nF	1.40
CC0603CX7R683KTR	68nF	1.40
CC0603CX7R823KTR	82nF	1.40
100nF		
CC0603CX7R104KTR	100nF	1.80

0805 (Metric Equiv' C2012)

Part Number	Value	£/100
10nF		
CC0805CX7R273KTR	27nF	0.90
CC0805CX7R333KTR	33nF	0.90
CC0805CX7R393KTR	39nF	0.90
CC0805CX7R473KTR	47nF	0.90
CC0805CX7R563KTR	56nF	1.60
CC0805CX7R683KTR	68nF	2.70
CC0805CX7R823KTR	82nF	2.70
100nF		
CC0805CX7R104KTR	100nF	2.70
CC0805CX7R124KTR	120nF	2.70
CC0805CX7R154KTR	150nF	2.70
CC0805CX7R184KTR	180nF	2.70
CC0805CX7R224KTR	220nF	2.70
CC0805CX7R274KTR	270nF	2.70
CC0805CX7R334KTR	330nF	2.70
CC0805CX7R394KTR	390nF	2.70
CC0805CX7R474KTR	470nF	10.50

1206 (Metric Equiv' C3216)

Part Number	Value	£/100
10nF		
CC1206CX7R683KTR	68nF	1.50
CC1206CX7R823KTR	82nF	1.50
100nF		
CC1206CX7R104KTR	100nF	1.50
CC1206CX7R124KTR	120nF	3.60
CC1206CX7R154KTR	150nF	3.60
CC1206CX7R184KTR	180nF	4.60
CC1206CX7R224KTR	220nF	4.90
CC1206CX7R274KTR	270nF	6.20
CC1206CX7R334KTR	330nF	8.20
CC1206CX7R394KTR	390nF	9.20
CC1206CX7R474KTR	470nF	6.90
CC1206CX7R564KTR	560nF	7.20
CC1206CX7R684KTR	680nF	6.80
CC1206CX7R824KTR	820nF	6.90
1µF		
CC1206CX7R105KTR	1.0µF	6.00

TAPE & REEL SPECIFICATIONS

0603	
Tape Width	8mm
Reel Diameter	178mm
Quantity	4,000

0805, 1206	
Tape Width	8mm
Reel Diameter	178mm
Quantity, Th < 1.25mm	4,000
Quantity, Th > 1.25mm	2,000