

CERAMIC CHIP CAPACITORS X7R (BX) DIELECTRIC

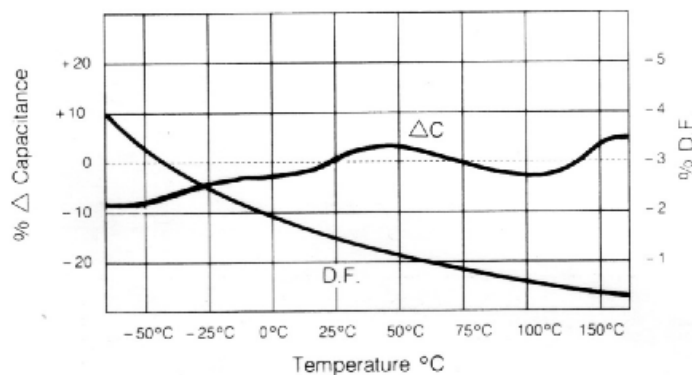
APPLICATION:

X7R dielectric properties; suited for by-pass and coupling purposes, filtering, frequency discrimination, DC blockage, and as voltage transient suppression elements.

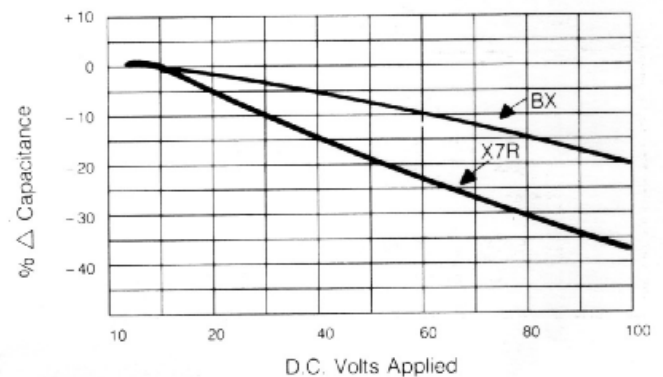
General Specification

- Operating temperature range $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Capacitance Range: 100pF ~ 1000000pF
- Capacitance Tolerance: $\pm 0.25\text{pF}$, $\pm 0.5\text{pF}$, $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- Voltage Ratings: 25VDC, 50VDC, 100VDC, 200VDC, 250VDC, 500VDC, 1KV, 2KV, 3KV
- Dissipation Factor (1 KHz, 1.0 Vrms, 25°C) 2.5% Max
- Insulation Resistance (rated voltage applied at 25°C) 100,000 M Ω or 1,000 Ω -F min
- Dielectric strength $> 2.5\text{X WV. DC.}$

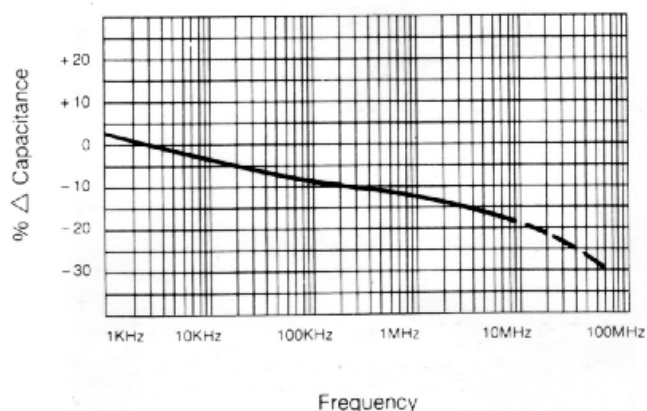
$\Delta C, D, F$, VS. Temperature Coefficient



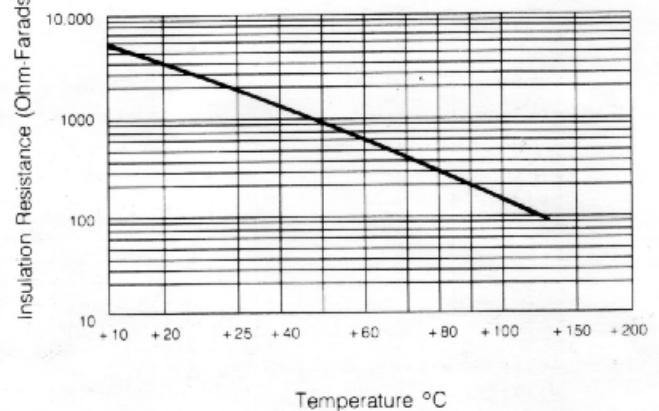
ΔC , VS. Voltage Coefficient



ΔC , VS. Frequency Coefficient



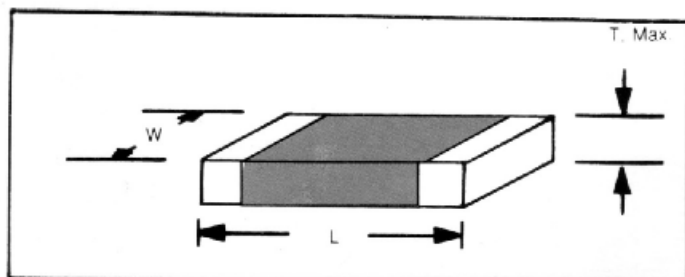
Insulation Resistance VS. Temp.



CERAMIC CHIP CAPACITORS X7R (BX) DIELECTRIC

Part Code Designation

BX	0805	472	K	1H	P	B
BX DIELECTRIC BX(X7R)	SIZE see chart	CAPACITANCE CODE 1 st two digits are signifi. third digit denotes number of zeros to follow 472=4700PF	TOLERANCE CODE C= ± 0.25 PF D= ± 0.50 PF F= $\pm 1\%$ J= $\pm 5\%$ K= $\pm 10\%$ M= $\pm 20\%$	VOLTAGE CODE 1A=6.3V 1B=10V 1C=16V 1E=25V 1H=50V 2A=100V 2D=200V 2E=250V 2H=500V 3A=1KV 3D=2KV 3F=3KV	TERMINATION CODE P=pd/Ag S=Silver R=Solder N=Nickel barrier	PACKING CODE B=Bulk R=Taped on reel



Part Code Designation

TYPE	RATED VOLT. (VDC)	CAPACITANCE		DIMENSIONS (MM)		
		RANGE (pF)	TOL	L	W	T max
0402	25	100 ~ 3300	K.M.	1.00 $\pm$ 0.05	0.50 $\pm$ 0.05	0.55
0603		180 ~ 180000		1.60 $\pm$ 0.10	0.80 $\pm$ 0.10	0.80
0805		180 ~ 100000		2.00 $\pm$ 0.15	1.25 $\pm$ 0.15	1.25
0603	50	180 ~ 68000	K.M.	1.60 $\pm$ 0.10	0.80 $\pm$ 0.10	0.80
0805	50	180 ~ 100000		2.00 $\pm$ 0.15	1.25 $\pm$ 0.15	1.25
1206		470 ~ 1000000		32.0 $\pm$ 0.20	16.0 $\pm$ 0.20	1.27
1210		180000 ~ 27000		32.0 $\pm$ 0.20	25.0 $\pm$ 0.20	1.65
1812		330000 ~ 470000		4.50 $\pm$ 0.20	3.20 $\pm$ 0.20	1.65

NOTES

- Dimensions are in millimeters.
- Other capacitance values and voltages are available upon request.