

CERAMIC CHIP CAPACITORS X7R (BX) & X5R DIELECTRIC

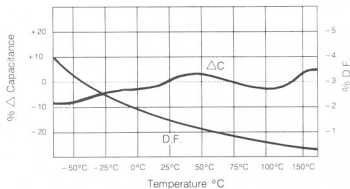
APPLICATION:

X7R, X5R dielectric properties ; suited for by-pass and coupling purposes, filtering, frequency discrimination, DC blockage, and as voltage transient suppression elements.

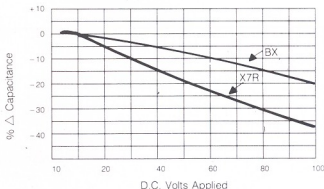
General Specification

- Operating temperature range X7R $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$, X5R $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Capacitance Range: 100pF \sim 1000000pF
- Capacitance Tolerance: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- 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) 100,000M Ω or 1,000 Ω -F min
- Dielectric strength $> 2.5\text{X WV. DC}$.

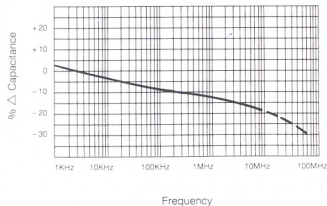
Δ C, D, F, VS. Temperature Coefficient



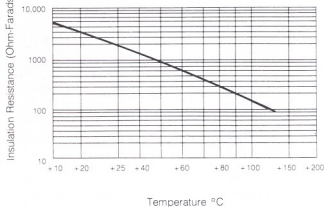
Δ C, VS. Voltage Coefficient



Δ C. VS. Frequency Coefficient

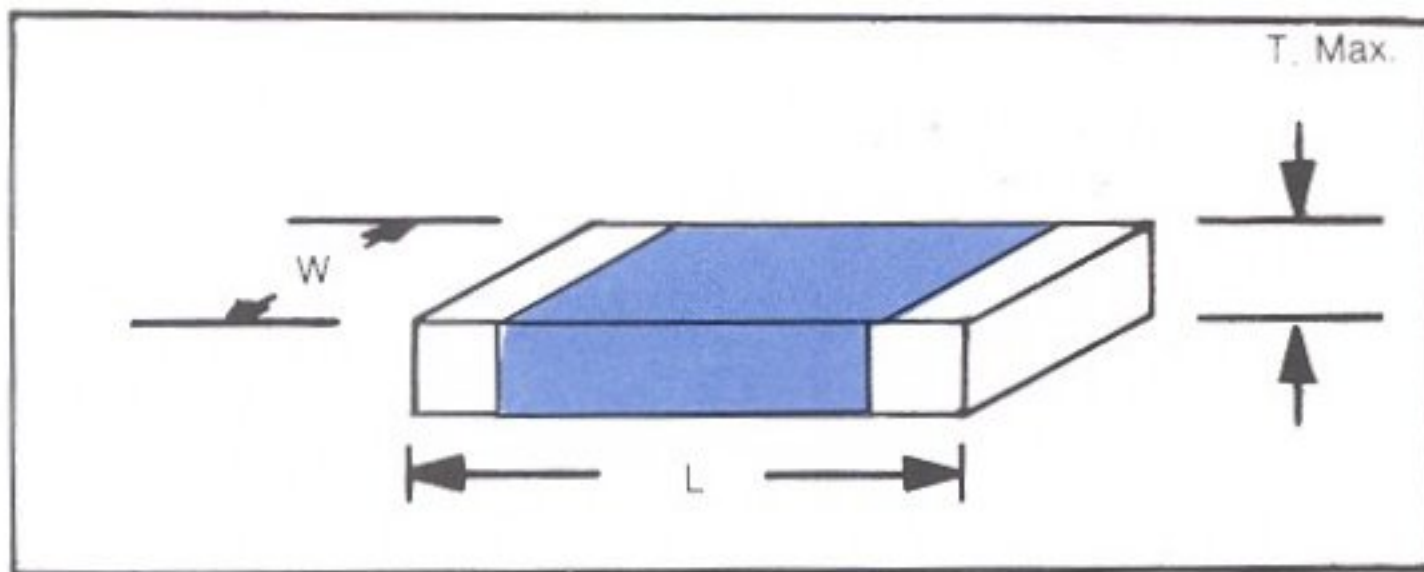
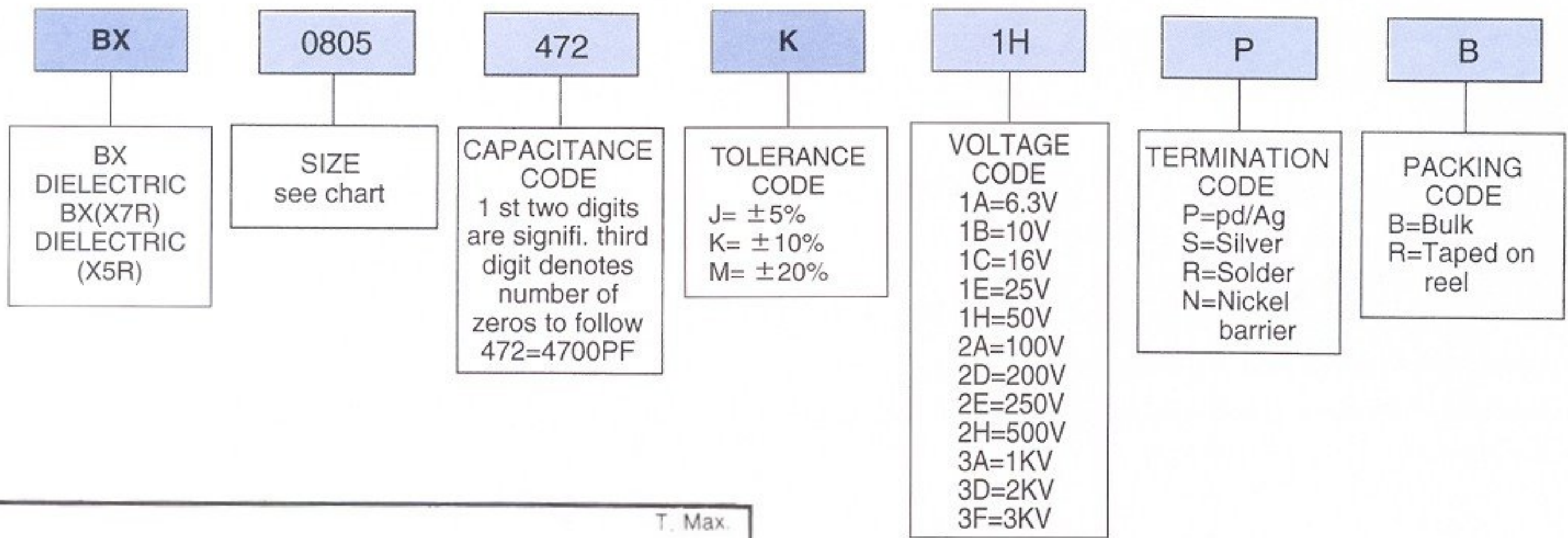


Insulation Resistance VS. Temp.



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Part Code Designation



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TYPE	RATED VOLT. (VDC)	CAPACITANCE		DIMENSIONS (MM)		
		RANGE (pF)	TOL	L	W	T max
0402	6.3 ~ 50	100 ~ 1000000	K.M.	1.00 ± 0.05	0.50 ± 0.05	0.55
0603		100 ~ 10000000		1.60 ± 0.15	0.80 ± 0.15	0.95
0805	100 ~ 2200000	K.M.		2.00 ± 0.20	1.25 ± 0.25	1.45
1206	150 ~ 47000000		3.20 ± 0.20	16.0 ± 0.25	1.90	
1210	1000 ~ 10000000		3.20 ± 0.40	2.50 ± 0.30	2.80	
1812	1000 ~ 100000000		4.50 ± 0.40	3.20 ± 0.30	2.75	

NOTES

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