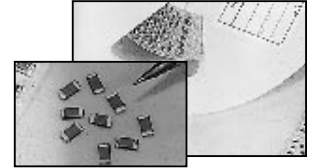


FEATURES

- CLASS II DIELECTRIC, TEMPERATURE STABLE
- EXCELLENT FREQUENCY CHARACTERISTICS, NON-LINEAR CAPACITANCE CHANGE
- NICKEL BARRIER TERMINATIONS AND EXCELLENT MECHANICAL STRENGTH
- EIA MARKING AVAILABLE

RoHS Compliant
includes all homogeneous materials

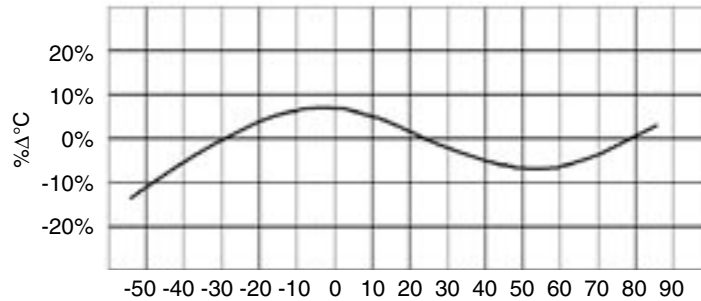


*See Part Number System for Details

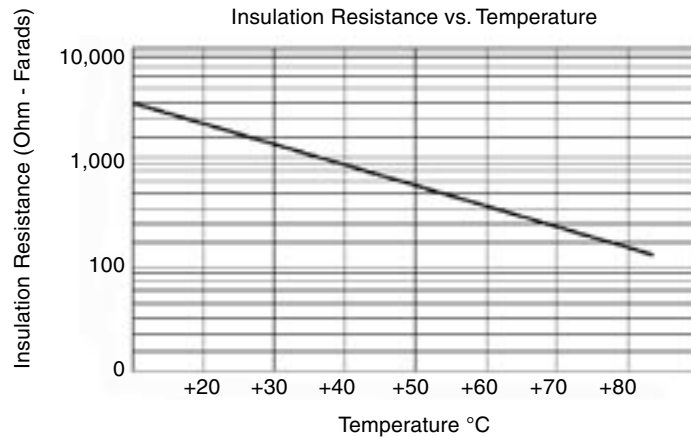
CHARACTERISTICS

Capacitance Range	0.0012 μ F ~ 0.82 μ F (see high CV datasheet for higher capacitance values)
Capacitance Tolerance	$\pm 10\%$ (K), $\pm 20\%$ (M)
Operating Temperature Range	-55 $^{\circ}$ C ~ +85 $^{\circ}$ C
Temperature Characteristics	$\pm 15\% \Delta$ max. over temperature range (with 0 Vdc applied)
Rated Voltages	6.3Vdc, 16Vdc & 25Vdc (see NMC-H Series for higher voltages)
Dissipation Factor	3.5% max. (25Vdc) 5% max. (16Vdc), 7.5% (10Vdc), 10% (6.3Vdc) @ 1.0Vrms and 1KHz, +25 $^{\circ}$ C
Insulation Resistance	10Gigohms min. or 500Megohm/ μ F min. whichever is less @ +25 $^{\circ}$ C
Dielectric Withstanding Voltage	250% of Rated Voltage for 5 \pm 1 seconds, 50mA maximum current
Test Conditions (EIA-198-2E)	1KHz, 1.0V \pm 0.2Vrms

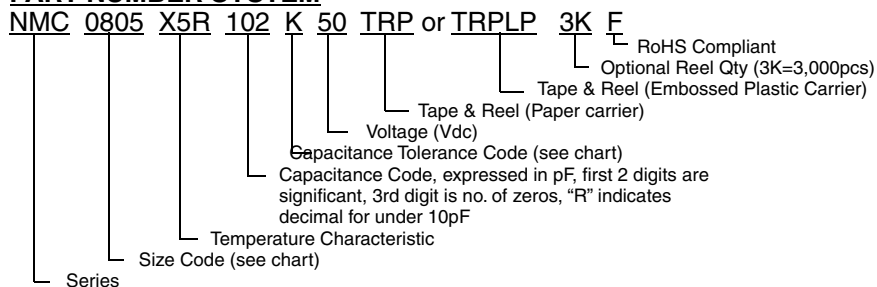
Typical X5R Temperature Coefficient



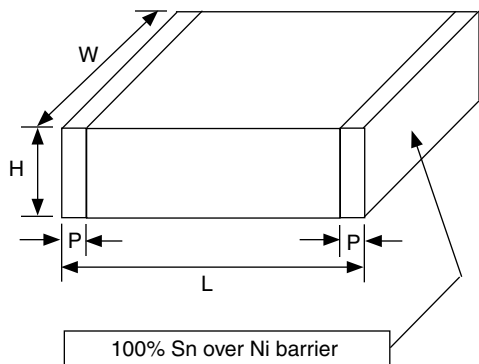
Insulation Resistance vs. Temperature



PART NUMBER SYSTEM



(CONSULT FACTORY
FOR CAPACITANCE
VALUES NOT LISTED)



X5R CAPACITOR SIZE CHART (mm)

EIA Case Size	0201		0402			0603			
Length (L)	0.6 ± 0.05		1.0 ± 0.05			1.6 ± 0.15			
Width (W)	0.3 ± 0.05		0.5 ± 0.05			0.8 ± 0.15			
Thickness max. (T)	0.33		0.6			1.0			
Termination Width (P)	0.10 ~ 0.20		0.2 ± 0.1			0.12 ~ 0.51			
Capacitance	Working Voltage (Vdc)								
	6.3	10	6.3	10	16	6.3	10	16	25
0.0012µF									
0.0015µF									
0.0018µF									
0.0022µF									
0.0027µF									
0.0033µF									
0.0039µF									
0.0047µF									
0.0056µF									
0.0068µF									
0.0075µF									
0.0082µF									
0.01µF									
0.015µF									
0.018µF									
0.022µF									
0.027µF									
0.033µF									
0.036µF									
0.039µF									
0.047µF									
0.056µF									
0.068µF									
0.075µF									
0.082µF									
0.1µF									
0.15µF									
0.18µF									
0.22µF									
0.27µF									
0.33µF									
0.36µF									
0.39µF									
0.47µF									
0.56µF									
0.68µF									
0.82µF									

See NMC high CV series for values above 0.82µF