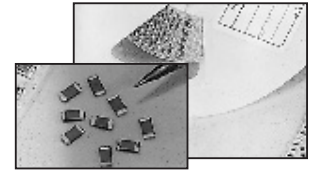


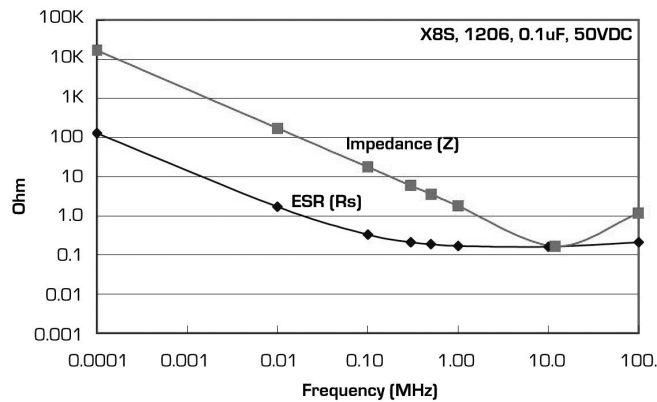
### FEATURES

- CLASS II DIELECTRIC, TEMPERATURE STABLE
- EXCELLENT FREQUENCY CHARACTERISTICS, NON-LINEAR CAPACITANCE CHANGE
- **HIGH TEMPERATURE DIELECTRIC +150°C**
- NICKEL BARRIER TERMINATIONS AND EXCELLENT MECHANICAL STRENGTH

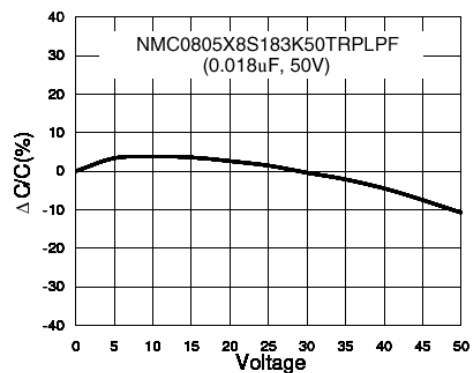
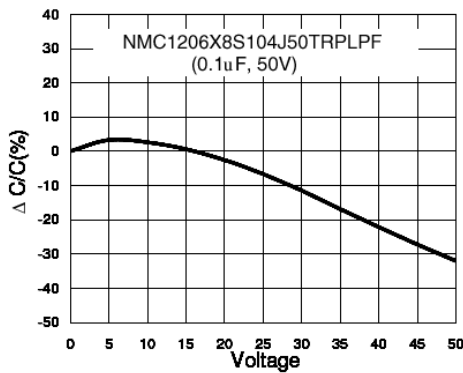


Capacitance Range	1,000pF ~ 0.27μF
Capacitance Tolerance	±10% (K), ±20% (M)
Operating Temperature Range	-55°C ~ +150°C
Temperature Characteristics	±22%Δ max. over temperature range (with 0 Vdc applied)
Rated Voltages	25Vdc & 50Vdc
Dissipation Factor	2.0% max. @ 1.0Vrms and 1KHz, +25°C
Insulation Resistance	10Gigohms min. or 500Megohm/μF min. whichever is less @ +25°C
Dielectric Withstanding Voltage	250% of Rated Voltage for 5 ±1 seconds, 50mA maximum current
Test Conditions (EIA-198-2E)	1KHz, 1.0V ±0.2Vrms

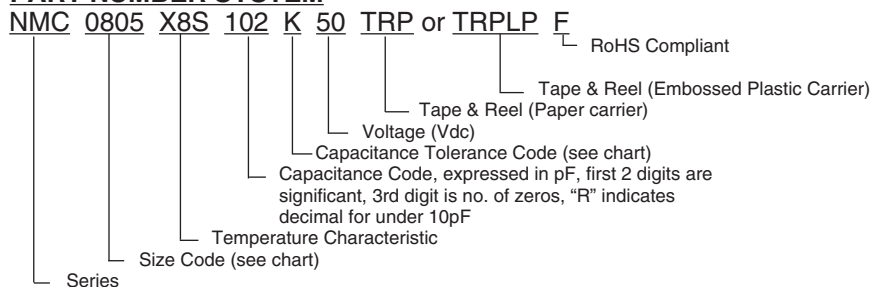
### Typical Impedance and ESR versus Frequency



### Typical Voltage Coefficient



### PART NUMBER SYSTEM



### X8S CAPACITOR SIZE CHART (mm)

EIA Case Size	0603	0805	1206		1210	1812	2220
Length (L)	1.60 ± 0.10	2.00 ± 0.20	3.20 ± 0.30		3.20 ± 0.30	4.60 ± 0.30	5.70 ± 0.40
Width (W)	0.80 ± 0.10	1.35 ± 0.25	1.60 ± 0.20		2.50 ± 0.20	3.20 ± 0.30	5.00 ± 0.40
Thickness (T)	0.90 max.	1.45 max.	1.80 max.		2.60 max.	3.00 max.	3.00 max.
Termination Width (P)	0.15 min.	0.20 min.	0.30 min.		0.30 min.	0.30 min.	0.30 min.
Capacitance	Working Voltage (Vdc)						
	50	50	25	50	50	50	50
0.001							
0.0012µF							
0.0015µF							
0.0018µF							
0.0022µF							
0.0027µF							
0.0033µF							
0.0039µF							
0.0047µF							
0.0056µF							
0.0068µF							
0.0082µF							
0.01µF							
0.012µF							
0.015µF							
0.018µF							
0.022µF							
0.027µF							
0.033µF							
0.039µF							
0.047µF							
0.056µF							
0.068µF							
0.082µF							
0.1µF							
0.15µF							
0.22µF							
0.27µF							

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)

