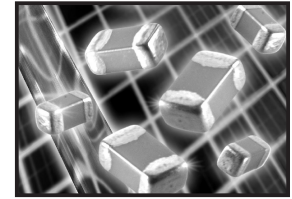


# Multilayer Ceramic Chip Capacitors

NMC-L Series

## FEATURES

- LOWER ESR - HIGH Q at HIGH FREQUENCY
- STABLE NPO CHARACTERISTICS OVER TEMPERATURE AND VOLTAGE
- EIA 0201, 0402, 0603 & 0805 CASE SIZES
- WIDE CAPACITANCE (UP TO 3,300pF) & VOLTAGE RANGE (UP TO 100VDC)



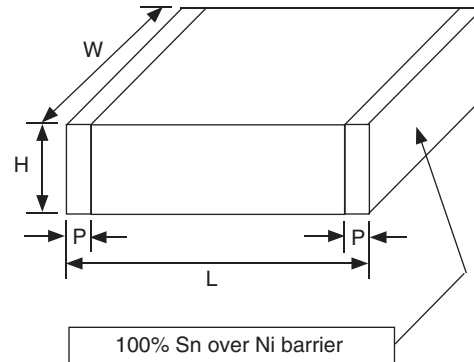
SPECIFICATIONS	NPO			
	0201	0402	0603	0805
Case Sizes	0201	0402	0603	0805
Capacitance Range	1.0pF ~ 15pF	0.5pF ~ 470pF	0.5pF ~ 3300pF	1.0pF ~ 150pF
Capacitance Tolerance	Cap. Values $\leq 5\text{pF}$ : $\pm 0.1\text{pF(B)}$ , $\pm 0.25\text{pF(C)}$ Cap. Values $5\text{pF} \sim 8.2\text{pF}$ : $\pm 0.25\text{pF(C)}$ , $\pm 0.5\text{pF(D)}$ Cap. Values $\geq 10\text{pF}$ : $\pm 1\%(F)$ , $\pm 2\%(G)$ , $\pm 5\%(J)$			
Operating Temperature Range	-55°C ~ +125°C			
Temperature Characteristics	0 $\pm$ 30PPM/°C			
Rated Voltage	16Vdc, 25Vdc, 50Vdc		16Vdc, 25Vdc, 50Vdc & 100Vdc	
Q Factor	Cap. Values $< 30\text{pF}$ : $Q \geq 400 + 20C$ Cap. Values $\geq 30\text{pF}$ : $Q \geq 1000$			
ESR	Cap. Values $< 2.2\text{pF}$ : $\leq 1000\text{m}\Omega @ 900\text{MHz} \pm 100\text{MHz}$ Cap. Values $2.2\text{pF} \sim 470\text{pF}$ : $\leq 500\text{m}\Omega @ 900\text{MHz} \pm 100\text{MHz}$ Cap. Values $> 470\text{pF}$ : $\leq 500\text{m}\Omega @ 60\text{MHz} \pm 10\text{MHz}$			
Insulation Resistance	10,000 Megohms min. @ +25°C			
Dielectric Withstanding Voltage	250% of rated voltage for 1 ~ 5 seconds			
Test Conditions	1.0 $\pm$ 0.2Vrms, 1MHz $\pm$ 10% ( $\leq 1000\text{pF}$ ) or 1KHz $\pm$ 10% ( $> 1000\text{pF}$ )			

**RoHS  
Compliant**

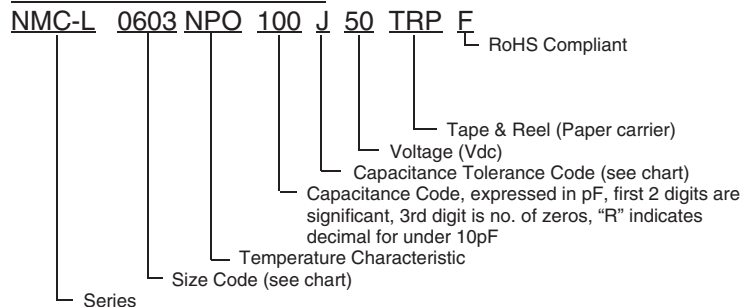
Includes all homogeneous materials

\*See Part Number System for Details

EIA Case Size	0201	0402	0603	0805
Length (L)	0.6 $\pm$ 0.05	1.0 $\pm$ 0.05	1.6 $\pm$ 0.10	2.0 $\pm$ 0.10
Width (W)	0.3 $\pm$ 0.05	0.5 $\pm$ 0.05	0.8 $\pm$ 0.10	1.25 $\pm$ 0.10
Thickness (T)	0.33 max.	0.60 max.	1.0 max.	1.3 max.
Termination Width (P)	0.10 ~ 0.20	0.15 ~ 0.30	0.12 ~ 0.55	0.25 ~ 0.71



## PART NUMBER SYSTEM



# Multilayer Ceramic Chip Capacitors

NMC-L Series

EIA Case Size	0201	0402				0603			0805		
2.0	0.6 ± 0.05	1.0 ± 0.05				1.6 ± 0.10			2.0 ± 0.1		
Width (W)	0.3 ± 0.05	0.5 ± 0.05				0.8 ± 0.10			1.25 ± 0.1		
Thickness max. (T)	0.33 max	0.55 max.				0.87 max.			1.30 max.		
Termination Width (P)	0.10 ~ 0.20	0.15 ~ 0.30				0.25 ~ 0.55			0.25 ~ 0.71		
Capacitance (pF)	Working Voltage (Vdc)										
	25V	16	25	50	100	16	25	50	100	50	100
0.5											
0.6											
0.7											
0.8											
0.9											
1.0											
1.2											
1.5											
1.8											
2.2											
2.7											
3.3											
3.9											
4.7											
5.6											
6.8											
8.2											
10											
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150											
180											
220											
270											
330											
390											
470											
560											
680											
820											
1,000											
1,200											
1,500											
1,800											
2,200											
2,700											
3,300											



