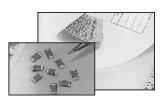
Multilayer Ceramic Chip Capacitors

FEATURES

- HIGH K DIELECTRIC
- HIGH CAPACITANCE DENSITY
- EXCELLENT MECHANICAL STRENGTH
- NICKEL BARRIER TERMINATIONS

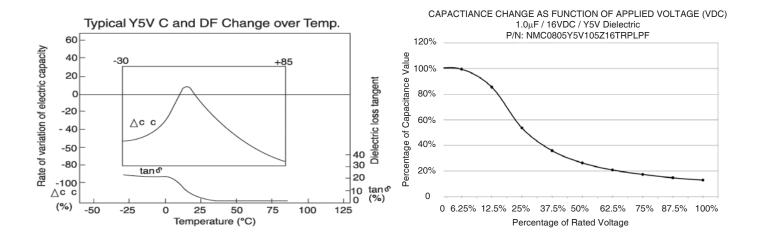
RoHS Compliant

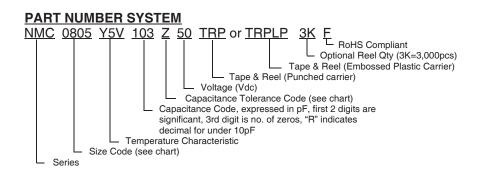
Includes all homogeneous materials



*See Part Number System for Details

Capacitance Range	$0.01\mu F \sim 0.82\mu F$ (see high CV datasheet for higher capacitance values)
Capacitance Tolerance	+80%/-20% (Z)
Operating Temperature Range	-30°C ~ +85°C
Temperature Characteristics	+22%, -82% max. capacitance Δ over temperature range
Rated Voltages	4Vdc, 6.3Vdc, 16Vdc, 25Vdc, 50Vdc & 100Vdc (see NMC-H Series for higher voltages)
Dissinction Faster	
Dissipation Factor	(See Values Table)
insulation Resistance	10,000Megohms min. or 500Megohm/µF min. whichever is less @ +25°C
Dielectric Withstanding Voltage	150% of Rated Voltage for 5 ±1 seconds, 50mA maximum current
Test Conditions (EIA-198-2E)	1KHz, 1.0V ±0.2Vrms







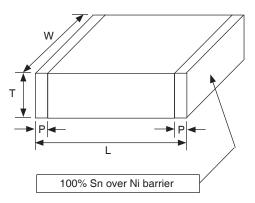
Y5V CAPACITOR SIZE AND DISSIPATION FACTOR CHART (mm)

13V CAPACITON				2011 /	~			1010															
EIA Case Size	02	201	01 0402						0603		0805							1206					
Length (L)	0.6 ±	£ 0.05	1.0 ± 0.05					1.6 ± 0.15				2.0 ± 0.2						3.2 ± 0.2					
Width (W)	0.3 ±	£ 0.05	0.5 ± 0.05					0.8 ± 0.15				1.25 ± 0.2						1.6 ± 0.2					
Thickness max. (T)	0.	.33	0.6					1.0				1.30						1.80					
Termination Width (P)	0.10	~ 0.20	0.2±0.1					0.12 ~ 0.51				0.25 ~ 0.71						0.25 ~ 0.71					
Capacitance	Working Voltage (Vdc)																						
	4	10	6.3	10	16	25	50	10	16	25	50	6.3	10	16	25	50	100	6.3	10	16	25	50	100
0.01µF				12.5%	9%	7%	7%	12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.015µF				12.5%	9%	7%	7%	12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.022µF	16%	12.5%	16%	12.5%	9%	7%	7%	12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.027µF	16%	12.5%	16%	12.5%	9%	7%	7%	12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.033µF	16%	12.5%	16%	12.5%	9%	7%	7%	12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.036µF	16%	12.5%	16%	12.5%	9%	7%		12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.039µF	16%	12.5%	16%	12.5%	9%	7%		12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.047µF	16%	12.5%	16%	12.5%	9%	7%		12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.056µF	16%		16%	12.5%	9%			12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.068µF	16%		16%	12.5%	9%			12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.075μF	16%		16%	12.5%	9%			12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.082µF	16%		16%	12.5%	9%			12.5%	7%	5%	5%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.1µF			16%	12.5%	9%			12.5%	7%	7%	7%	16%	12.5%	9%	5%	5%	5%	16%	12.5%	9%	5%	5%	5%
0.15µF			16%	12.5%				12.5%	9%	9%	9%	16%	12.5%	9%	5%	5%		16%	12.5%	9%	5%	5%	5%
0.18µF			16%	12.5%				12.5%	9%	9%	9%	16%	12.5%	9%	5%	5%		16%	12.5%	9%	5%	5%	5%
0.22µF			16%	12.5%				12.5%	9%	9%	9%	16%	12.5%	9%	5%	5%		16%	12.5%	9%	5%	5%	5%
0.27µF			16%	12.5%				12.5%	12.5%	9%		16%	12.5%	9%	5%	5%		16%	12.5%	9%	5%	5%	
0.33µF			16%	12.5%				12.5%	12.5%	9%		16%	12.5%	9%	7%	7%		16%	12.5%	9%	5%	5%	
0.36µF			16%	12.5%				12.5%	12.5%	9%		16%	12.5%	9%	9%			16%	12.5%	9%	5%	5%	
0.39µF			16%	12.5%				12.5%	12.5%	9%		16%	12.5%	9%	9%			16%	12.5%	9%	5%	5%	
0.47µF			16%	12.5%				12.5%	12.5%	9%		16%	12.5%	9%	9%			16%	12.5%	9%	5%	5%	
0.56µF			16%					12.5%	12.5%	9%		16%	12.5%	9%	9%			16%	12.5%	9%	5%	5%	
0.68µF			16%					12.5%	12.5%	9%		16%	12.5%	9%	9%*			16%	12.5%	9%	5%	5%	
0.82µF			16%					12.5%	12.5%	9%		16%	12.5%	9%	9%*			16%	12.5%	9%	5%	5%	

*1.35mm maximum thickness

Percentages in the table represent the dissipation factor for that value.

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)



See NMC High CV series for values above $0.82 \mu F$