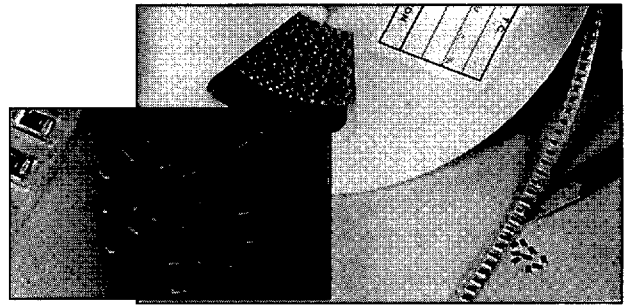


## FEATURES

- HIGH K DIELECTRIC
- HIGH CAPACITANCE DENSITY, HIGH CV VALUES AVAILABLE
- LOW ESL, LOW ESR AND EXCELLENT FREQUENCY RESPONSE
- NICKEL BARRIER TERMINATIONS AND EXCELLENT MECHANICAL STRENGTH
- EIA MARKING AVAILABLE

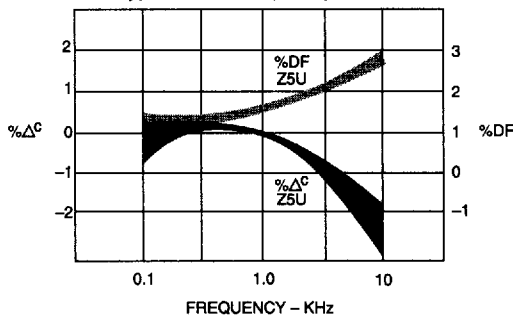


## SPECIFICATIONS Z5U

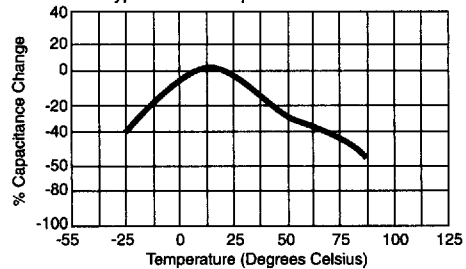
Capacitance Range	0.01 $\mu$ f to 4.7 $\mu$ f
Capacitance Tolerances	$\pm 20\%$ (M), +80% -20%(Z)
Operating Temperature Range	+10°C to +85°C
Temperature Characteristics	+22% to -56% Max. Within Operating Temperature
Rated Voltages	16Vdc, 25Vdc, 50Vdc
Dissipation Factor	4% max. @ 1kHz, 0.5Vrms, +25°C
Insulation Resistance (+25°C, Rated Voltage)	10,000 Megohm or 1000 ohms/Farads, whichever is less (min.)
Dielectric Withstanding Voltage	150% of Rated Voltage for 1 to 5 seconds, 50 Millamps Maximum
Test Conditions	1kHz, 0.5V $\pm$ 0.1Vrms

SURFACE MOUNT

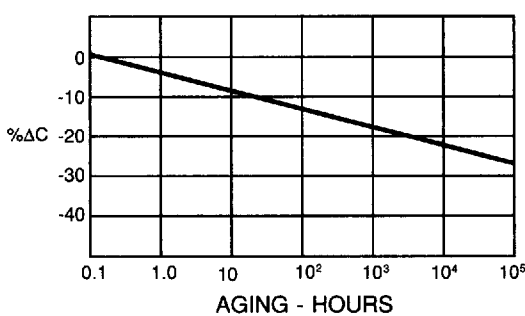
Typical Z5U Frequency Effects



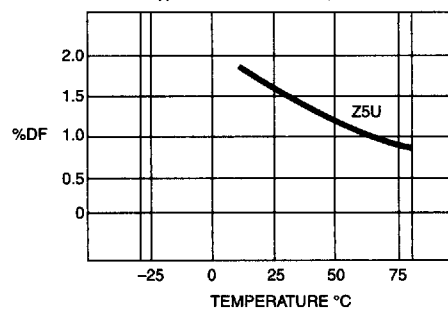
Typical Z5U Temperature Coefficient



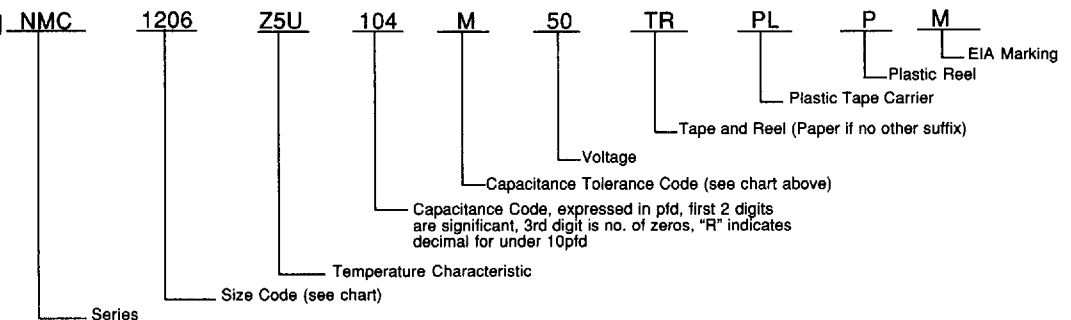
TYPICAL Z5U AGING CHARACTERISTIC



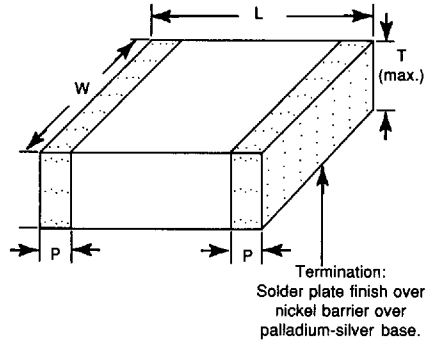
Typical Z5U DF over Temperature



## PART NUMBERING SYSTEM



SURFACE MOUNT



## Z5U CAPACITOR SIZE CHART mm

(CONSULT FACTORY FOR CAPACITANCE VALUES NOT LISTED)

EIA Case Size	0402			0603		0805			1206			1210			1812			2225								
Length L	1.0±0.05			1.6±0.2		2.0±0.2			3.2±0.2			3.2±0.2			4.5±0.3			5.7±0.4								
Width W	0.5±0.05			0.8±0.2		1.25±0.2			1.6±0.2			2.5±0.2			3.2±0.25			6.35±0.25								
Thickness (max.) T	0.6			1.0		1.30			1.50			1.70			1.70			1.78								
Termination Width P	0.2±0.1			.12-.51		.25-.71			.25-.71			.25-.71			.25-.76			.25-1.02								
Working Voltage Capacitance	16			25		50			16			25			50			16			25			50		
	.001µf				AVAILABLE		AVAILABLE			AVAILABLE																
.0015				IN		IN			IN																	
.0018				X7R		X7R			X7R																	
.0022																										
.0027																										
.0033																										
.0047																										
.0056																										
.0068																										
.0082																										
.01																										
.015																										
.018																										
.022																										
.027																										
.033																										
.047																										
.068																										
.1																										
.15																										
.22																										
.27																										
.33																										
.47																										
.68																										
1.0																										
1.5																										
2.2																										
3.3																										
4.7																										

**1210 SIZE:**  
 4.7µF / 25Vdc (T = 2.5mm)  
 6.8µF / 16Vdc (T = 1.8mm)  
 10µF / 16Vdc (T = 2.2mm)  
 Special Thickness parts are available.  
 Contact NIC for details.

