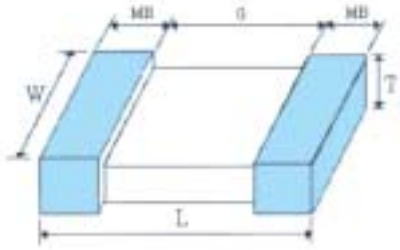
Y5V DIELECTRIC – GENERAL SPECIFICATION

INTRODUCTION：

The Y5V has high K value. Its electrical properties vary considerably under changing voltage, temperature, and time. It's suitable for general purposes applications where high capacitance values are required, and are ideal for room temperature applications with low DC bias.



FEATURES：

- Small size with high capacitance values
- Consistent dimensions and finish surface
- Engineered for automatic handling and insertion

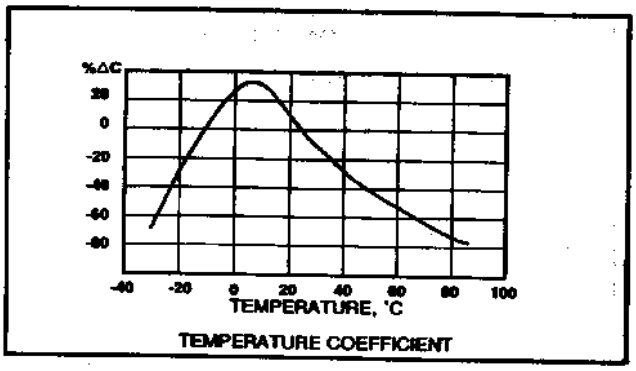
GENERAL SPECIFICATIONS：

Capacitance Range	1000pF to 10μF
Capacitance Tolerance	±20%, +80 - 20%
Operating Temperature Range	-30℃~ 85℃
Temperature Coefficient (△C Max.)	+22% ~ - 82%
Voltage Rating	6.3, 10,16, 25, 50 VDC
Dissipation Factor (tan δ)	7% Max. (12.5% max for 10V)
Insulation Resistance (IR) @25℃	Lesser of 10GΩ or 1000MΩμF
Aging Rate	-7% per Decade hour
Dielectric Strength	2.5 times the rated WVDC
Testing Parameters	1KHz ± 50Hz, 1.0Vrms ± 0.2Vrms @ 25℃, 0 Volts Bias

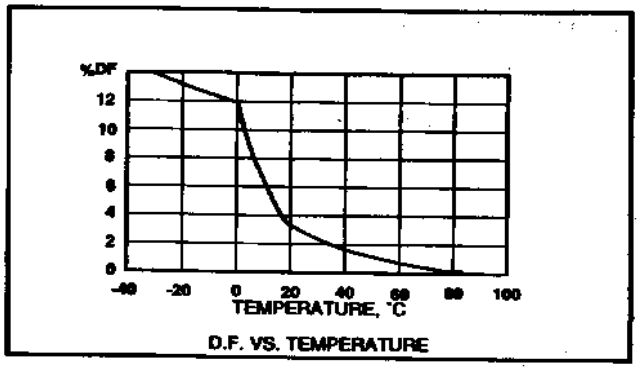
Y5V DIELECTRIC

Typical Characteristic Curves and Capacitance Chart

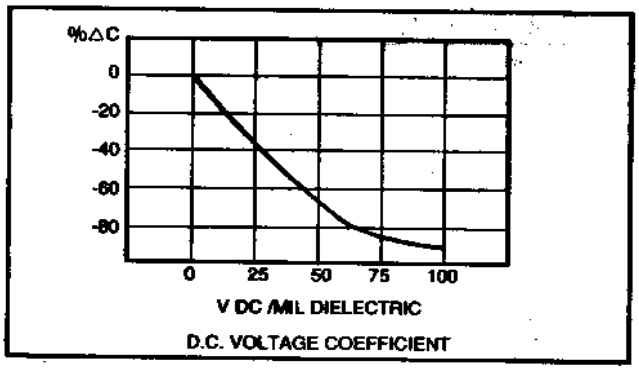
Typical Characteristic Curves：



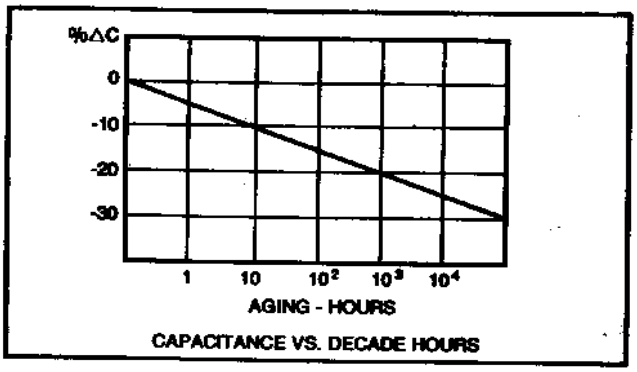
TEMPERATURE COEFFICIENT



D.F. VS. TEMPERATURE



D.C. VOLTAGE COEFFICIENT



CAPACITANCE VS. DECADE HOURS

Capacitance Chart(Y5V)：

Case Size	Rated Voltage	Temp. Chart.	Capacitance		Dimension (mm)				
			Range (pF)	Tolerance	L	W	T (max)	MB (min)	G (min)
0402	B=16V	+22% -82%	33000 ~ 100000	M, Z	1.0±0.05	0.5±0.05	0.5±0.05	0.10	0.30
	T=25V		22000						
	U=50V		1000 ~ 15000						
0603	N=10V		47000 ~ 1000000		1.6±0.10	0.8±0.10	0.8±0.10	0.20	0.40
	B=16V		47000 ~ 330000						
	T=25V		33000 ~ 100000						
	U=50V		1000 ~ 100000						
0805	N=10V		220000 ~ 2200000		2.0±0.20	1.25±0.1	1.40	0.25	0.70
	B=16V		220000 ~ 100000						
	T=25V		1000 ~ 330000						
	U=50V		1000 ~ 220000						
1206	N=10V		220000 ~ 10000000		3.2±0.20	1.6±0.20	1.52	0.25	1.40
	B=16V		220000 ~ 4700000						
	T=25V		68000 ~ 1000000						
	U=50V		1000 ~ 470000						

- **When Ordering, please use the Pan Overseas Part number as indicated on page no. 1.**