

GENERAL PURPOSE, HI-K DIELECTRIC CONSTANT (Class II/III) TYPE

FEATURES

- WIDE SELECTION OF TEMPERATURE CHARACTERISTICS
- HIGH INSULATION RESISTANCE
- EXCELLENT HIGH FREQUENCY CHARACTERISTICS
- ECONOMICALLY PRICED
- AVAILABLE WITH FORMED LEADS AND ON TAPE FOR AUTOMATIC INSERTION

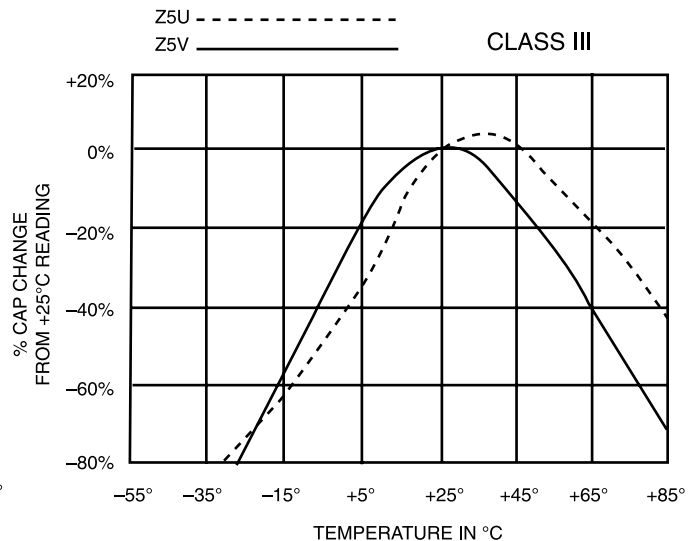
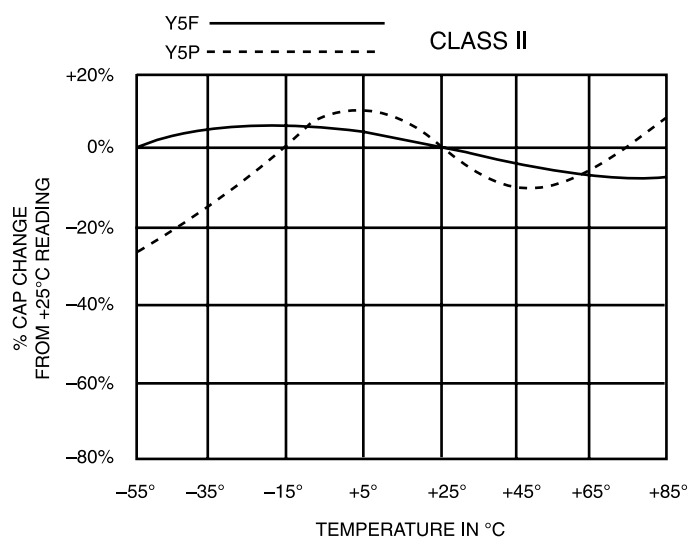
SPECIFICATIONS

Temperature Characteristics		Y5F	Y5P	Z5U	Z5V
Operating Temperature Range		-30° ~ +85°C	-30° ~ +85°C	+10° ~ +85°C	+10° ~ +85°C
Capacitance Range		100pF~.01μF	100pF~.022μF	.001μF~.1μF	.001μF~.1μF
Standard Tolerance		K= ±10%	K= ±10%	M= ±20%	Z= -20%~+80%
Capacitance Change Over Temperature Range		±7.5%	±10%	+22% -56%	+22% -82%
Dissipation Factor		2.5%*	2.5%*	5%	5%
Insulation Resistance		Minimum 10,000 Megohms			
Working Voltage Range		50 ~ 1KVdc			
Dielectric Withstanding Voltage		2.5 Times Rated Voltage For Not Less Than 1 Second, 50mA Max.			
Load Life Test 85°C 1000 Hrs	Cap. Change	±10%	±10%	±20%	±30%
	D.F. (MAX.)	4%	4%	7.5%	7.5%
	I.R. (Min)	1,000 Megohms			
Test Conditions		1Khz; 1.0V ±0.2Vrms		1Khz; 0.5V ±0.1Vrms	

* Special low dissipation factor (1.0% max.) Y5F and Y5P dielectrics are also available. Contact NIC for availability.



LEADED



PART NUMBERING SYSTEM

NCD	101	M	3KV	Z5U	J	TR	
							Optional Packaging TR = Taped and Reel TB = Tape and Box (Ammo)
							Optional Lead Style C = Cut Lead D = Inside Kink (Short Leads) E = Outward Kink (Short Leads) J = Inside Kink (Long Leads) K = Outward Kink (Long Leads)
							Temperature Coefficient
							Working Voltage DC
							Tolerance Code C = $\pm 0.25\text{pF}$ K = $\pm 10\%$ D = $\pm 0.5\text{pF}$ M = $\pm 20\%$ J = $\pm 5\%$ Z = $\pm 80\% / - 20\%$
							Capacitance code, expressed in pfd, First two digits are significant, third digit is no. of zeros. "R" indicates decimal for under 10pfd.
							Series

Lead Spacing (mm) - S				
Body Diameter	Standard Bulk	Standard T & R	Optional Bulk	Optional T & R
5 ~ 11	6.35 ± 0.8	5.0 ± 0.8	5.0 ± 0.8	2.5 ± 0.8
≥ 12	6.35 ± 0.8	5.0 ± 0.8	7.5 ± 0.8	7.5 ± 0.8
			10.0 ± 0.8	10.0 ± 0.8

LEAD DIAMETER
0.6MM IS STANDARD

BODY THICKNESS
2 ~ 4MM DEPENDENT ON CV

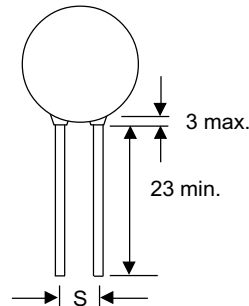
STANDARD PRODUCTS AND MAXIMUM DIAMETER (mm) BY T.C. AND VOLTAGE

Cap. (pF/ μF)	Y5F/Y5P*			Z5U			Z5V		
	50V 100V	500V	1kV	50V 100V	500V	1kV	50V 100V	500V	1kV
100 ~ 470pF	6	6	6						
560	6	6	6						
680	6	6	7						
750	6	6	7						
820	6	6	7						
.001 μF	6	7	7	6	6	6		6	6
.0015	6	8	8	6	6	7		6	6
.0022	6	9	10	6	7	7	6	6	6
.0027	7	10	12	6	7	8	6	6	7
.0033	7	10	14	6	7	9	6	7	8
.0047	8	12	14	6	8	10	6	8	8
.0056	9	14	16	6	9	10	6	8	9
.0068	9	14	16	7	9	12	6	8	10
.0082	10	16	18	7	10	12	6	9	10
.01	12	16	20	7	10	12	6	9	10
.015	14	21		9	14	16	7	10	12
.022				10	16	18	8	14	16
.033				8	18	22	7	16	18
.047				8	21	24	7	16	21
.068				8/9	24		8	16	
.1				8/9	26		8/9	17	

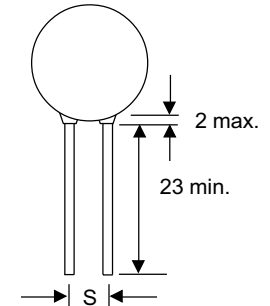
*.0047 μF AND ABOVE NOT AVAILABLE IN Y5F, PLEASE USE Y5P.

NIC RESERVES THE RIGHT TO REQUEST MINIMUM QUANTITIES ON CERTAIN VALUES.

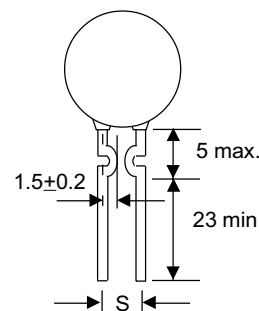
Standard
500Vdc & Up



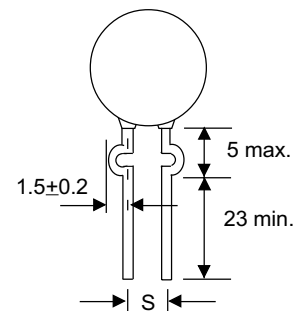
Low Voltage
100Vdc & Below



J Style

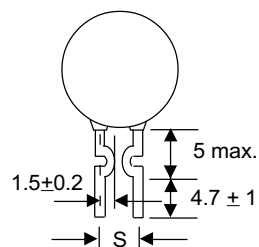


K Style

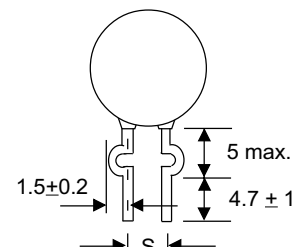


(BULK AND TAPED STYLES)

D Style



E Style



(BULK ONLY)