

INTRODUCTION

Single layer metalized ceramic disc with resin coating (wax impregnated) below 1KV or epoxy coated 1KV up.

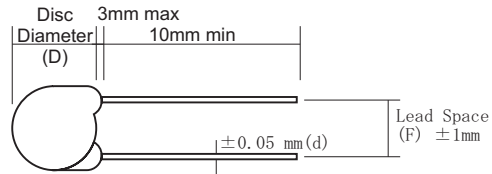
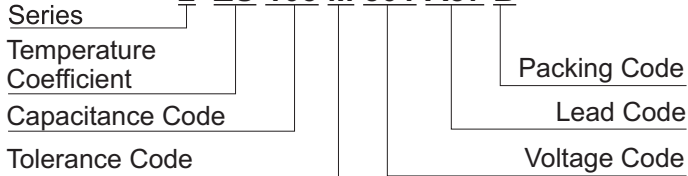
Range of values extends to much higher values than Class 1

APPLICATION

- By-Pass & Coupling
- Frequency Discriminating Circuits where Q and capacitance stability is not of major importance.
- Filtering, Blocking & Timing

PART NUMBER EXAMPLE

2 ZU 103 M 501 A57 B



DIMENSIONS (mm) & CAPACITANCE RANGE

(F: Standard Lead Spacing. Other lead spacing may be available upon request.)

Thickness Voltage	4.0 mm max.														5.0	6.5	8.0	14.0
	50V/100V			500V/630V			1KV			2KV		3KV		5KV/6KV		10KV		
	Cap (pf)	Code		Y5E Y5F Y5P Z5F	ZU YU	ZV	Y5E Y5F Y5P Z5F	ZU YU	ZV	Y5E Y5F Y5P Z5F	ZU	Y5E Y5F Y5P Z5F	ZU	YP ZU	ZU	YP		
82	820																	
100	101	D=5.5				D=6			D=6		D=6							
120	121	F=2.5				F=5.0			F=6.35		F=6.35							
180	181																	
200	201																	
220	221															D=13		
240	241															F=12.7		
300	301																	
330	331																	
390	391																	
470	471															D=15		
500	501															F=12.7		
560	561																	
680	681					D=7.5			D=8									
750	751					F=6.35			F=6.35									
820	821		D=5			D=6			D=7									
1000	102		F=2.5			F=5.0			F=6.35									
1200	122																	
1500	152	D=6.5				D=8.5			D=10		D=10							
1800	182	F=5.0				F=6.35			F=6.35		F=9.5							
2000	202						D=8.5			D=9								
2200	222						F=6.35			F=6.35								
2500	252	D=7.5																
2700	272	F=5.0	D=6															
3000	302		F=5.0															
3300	332					D=10			D=11									
3900	392					F=6.35			F=9.5									
5000	502	D=10																
5600	562	F=5.0				D=14			D=10		D=15							
6800	682		D=8			F=9.5			F=9.5		F=6.35							
7500	752					D=15			D=18									
8200	822	D=11.5	F=5.0			F=9.5			F=9.5									
10000	103	F=5.0																
15000	153	D=15																
20000	203	F=5.0	D=10															
22000	223		F=5.0															
33000	333																	
47000	473	D=17	D=12.5															
56000	563	F=9.5				D=23			D=15									
100000	104		D=16			F=9.5			F=9.5									
			D=11															
			D=13															
			D=20						D=23									
			D=17															

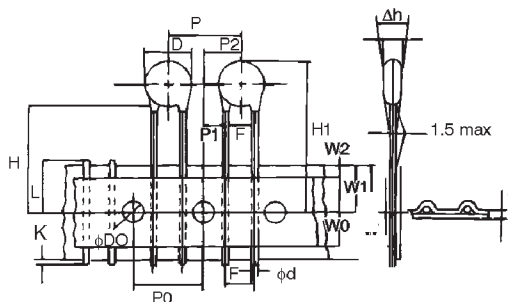
ELECTRICAL CHARACTERISTICS

Technical Data	Condition	Specification
Capacitance	Measured at 1KHz 1.0 ~ 5.0 VRMS, 25°C	80pF ~ 0.1μF
Operating Temperature	X7R	-55°C ~ +125°C
	Y5E, Y5P	-30°C ~ +85°C
	Z5U, Z5V	-10°C ~ +85°C
Dissipation Factor (tan δ)	X7R, Y5E, Y5P, Z5U	≤ 0.025
	Z5V	≤ 0.05
Insulation Resistance	Rated Voltage at 25°C ± >°C and 70% R.H. max	>10GΩ or 200MΩ Farad, whichever is less
Encapsulation	Standard 1KV and higher	Phenolic Wax Epoxy Coating
Solderability of Leads	at least 75% is covered	Solder Temperature 250°C ± 5°C Dipping: 3±0.5 sec (Flur shall be used)

TEMPERATURE COEFFICIENT CODE

Temperature Characteristics		
Code	EIA Code	Characteristics
ZU	Z5U	+22 to -56% +10 °C to +85°C
ZV	Z5V	+22 to -82% +10 °C to +85°C
YE	Y5E	'±4.7% -30 °C to +85°C
YP	Y5P	'±10% -30 °C to +85°C
YU	Y5U	'±22 to -56% -30 °C to +85°C

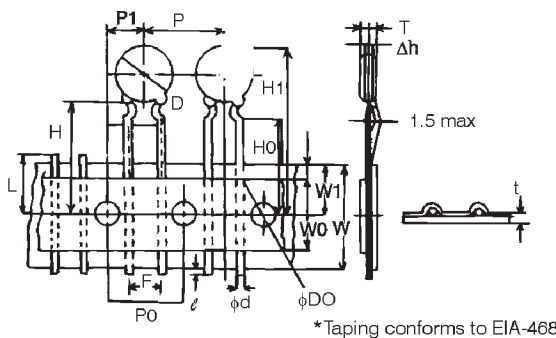
RADIAL STRAIGHT-LEAD ON TAPE (S56 LEAD CODE)



Code	Dimensions
D	11.0 max
d	0.6 ±0.05
P	12.7 ±1.0
P0	12.7 ±0.3
P1	3.85 ±0.7
P2	6.35 ±1.3
F	5.0 +0.8 -0.2
Δh	0 ±2.0
W	18.0 +1.0 -0.5
W1	9.0 +0.75 -0.5
W2	3.0 max
H	18.0 +3.0 -0
H0	16.0 ±0.5
H1	32.25 max
K	1.0 max
D0	4.0 ±0.2
t	0.7 ±0.2
L	11.0 max

RADIAL KINK-IN ON TAPE (K56 LEAD CODE)

*Most Popular



*Taping conforms to EIA-468

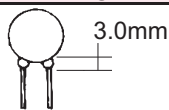
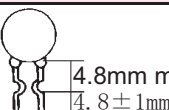

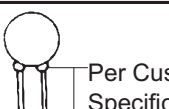
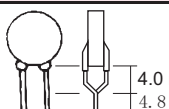
■ **TOLERANCE CODE**

Code	Tolerance
C	±0.25pF
D	±0.5pF
F	±1%
G	±2%
J	±5%
K	±10%
M	±20%

■ **VOLTAGE CODE EXAMPLE**

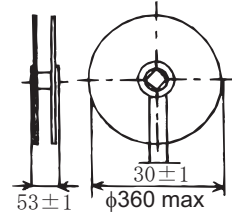
Code	500	501	502	103
WVDC	50V	500V	5KV	10KV

■ **LEAD CODES FOR BULK PACK (CERAMIC DISC ONLY)**

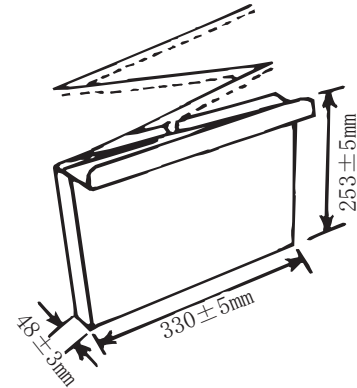
Lead Type		
A-Straight  3.0mm	C-Kink In  4.8mm max 4.8 ± 1mm	D-Kink Out  4.8mm max 4.8 ± 1mm
F-Special Length  Per Customer Specification	Y-Y Formed  4.0 mm max 4.8 ± 1.0 mm	S & K-Taped See taping specifications above.

Lead Spacing (±1.00) in mm		Wire dia. (±0.05) in mm	
Code	P	Code	dφ
2	2.5	4	0.48
5	5	6	0.6
6	6.35	7	0.65
7	7.5	8	0.8
9	10.0	9	1.0
0	12.7		
A	15.0		

■ **REEL PACK (R SUFFIX)**



■ **AMMO PACK (A SUFFIX)**



■ **HOW TO MAKE THE LEAD CODE FOR CERAMIC DISC (FOR BULK PACK ONLY)**

