

# Ceramic Disc Capacitors

Temperature Compensating Series (Class I 50V ~ 1KV)

## • Features

- ⊙ Linear temperature coefficient of capacitance.
- ⊙ High stability of capacitance.
- ⊙ Low loss at wide range of frequency.



## • Specifications

Operating Temperature Range 操作溫度範圍	Class I : -25°C~+85°C
Rated Working Voltage (DC) 工作電壓	50V, 63V, 100V, 500V, 1KV
Capacitance 電容器	Measured at 25°C, 1MHz, 1Vms.max.
Capacitance Tolerance 電容誤差值	1p F ~ 9 p F: $\pm 0.25$ p F (C) or $\pm 0.5$ p F (D) 10 p F and above: $\pm 5\%$ (J) or $\pm 10\%$ (K)
Insulation Resistance 絕緣電阻值	10,000M $\Omega$ min. at working voltage, 60 sec.
Dissipation Factor (D.F.) 散逸因子	Measured at 25°C, 1MHz, 1V ms, max. Q=1000min, if C $\geq 30$ p F Q $\geq 400+20C$ , if C < 30p F (where C= capacitance)
Voltage Proof (Flash Test) 電壓防護	With stand 250% of rated working voltage with 50mA current, 1.5sec.
Life Test 壽命測試	200% of rated voltage at 85°C for 500 hours.
Applicable Standards 適用標準	EIA RS-198 (CLASS I ), JIS C-6422 (TYPE I )

## • How to order

T (1)	CH (2)	1H (3)	101 (4)	J (5)	L (6)	5 (7)	1 (8)	5 (9)	Y (10)
<u>CLASS I</u> T series	<u>DIELECTRIC</u> CH=NPO LH=N80 PH=N150 RH=N220 UJ=N750 SL=SL	<u>RATED VOLTAGE</u> 1H=50V 1J=63V 2A=100V 2H=500V 3A=1KV	<u>CAPACITANCE</u> 1PF = 010 1.5PF = 1R5 2.2PF = 2R2 100PF=101 120PF=121 10nF=103 100nF= 104	<u>TOLERANCE</u> C= $\pm 0.25$ PF D= $\pm 0.5$ PF F= $\pm 1\%$ J= $\pm 5\%$ K= $\pm 10\%$ M= $\pm 20\%$ Z=+80 ~ -20%	<u>LEAD SHAPE</u> K=Short kink (Bulk) S=Short Straight (Bulk) L=Long Straight (Bulk) A=Tape/Reel (Long Straight) B=Tape/Box (Long Straight) C=Tape/reel (Long kink) D=Tape/Box (Long kink)	<u>LEAD SPACING</u> 2=2.5 $\pm 0.8$ 5=5.0 $\pm 0.8$ 6=6.3 $\pm 0.8$ 7=7.5 $\pm 0.8$ 0=10 $\pm 0.8$	<u>LEAD LENGTH</u> 3=3.5 $\pm 1.0$ 5=5.0 $\pm 0.8$ 6=6.3 $\pm 0.8$ 0=10 $\pm 0.8$ 1= 25mm	<u>LEAD WIRE</u> 5=16V~500V ( $\Phi 0.48 \pm 0.05$ ) 6=1KV ( $\Phi 0.5 \pm 0.05$ ) 8=2KV ( $\Phi 0.45 \pm 0.6$ ) 9=3KV ( $\Phi 0.6 \pm 0.05$ )	<u>GRADE</u> Y=-25°C ~+85°C

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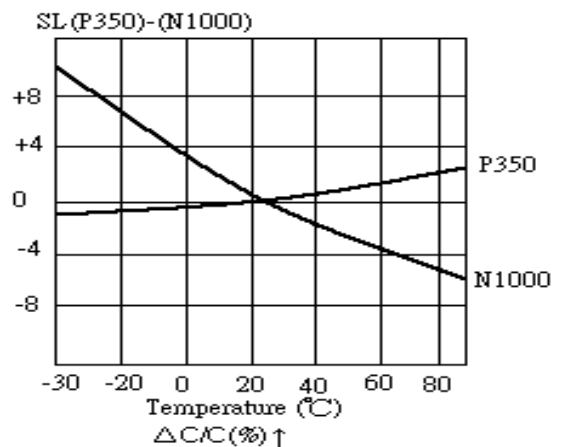
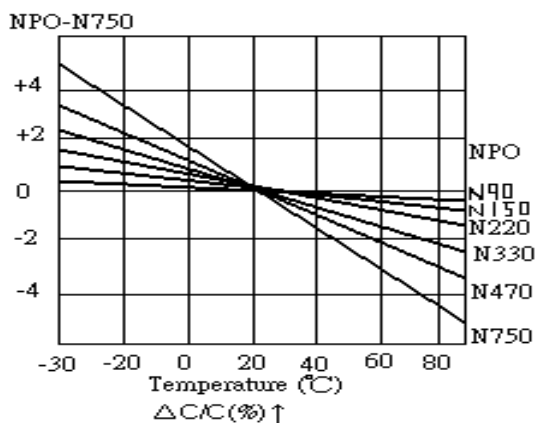


## • Dimensions & Capacitance range

Dimensions(mm) 尺寸		Capacitance range (p F) of each Temperature 各溫度係數之電容值範圍					
D	F	NPO	N80	N150	N220	N750	SL
5	2.5or5.0	1-50	1-24	1-39	1-24	22-50	1-180
6	5.0	51-82	25-39	47-56	25-39	56-82	200-220
7	5.0	100-120	47-56	82-100	47-56	100-120	270-330
8	5.0	150-180	68	120-150	68	150-180	390-470
9	5.0	220	82	180-220	82	220	560-680
10	5.0	270~330	100	-	100	270	820-1000

Dimensions(mm) 尺寸		Capacitance range (p F) of each Temperature 各溫度係數之電容值範圍		
(D)	(F) ◎	500V	500V	1 KV
Dia. Max.	Lead Spacing	NPO	SL	SL
6.0	5.0± 0.8	1 ~ 39	1 ~ 82	47 ~ 68
7.0	5.0± 0.8	47 ~ 56	90 ~ 161	82 ~ 101
8.0	5.0± 0.8	65 ~ 82		150 ~ 221
9.0	5.0± 0.8	90 ~ 101	181 ~ 301	
10.0	5.0± 0.8			271
11.0	5.0± 0.8			331
12.0	5.0± 0.8 or 7.5± 0.8			391 ~ 471
14.0	5.0± 0.8 or 7.5± 0.8			561 ~ 681

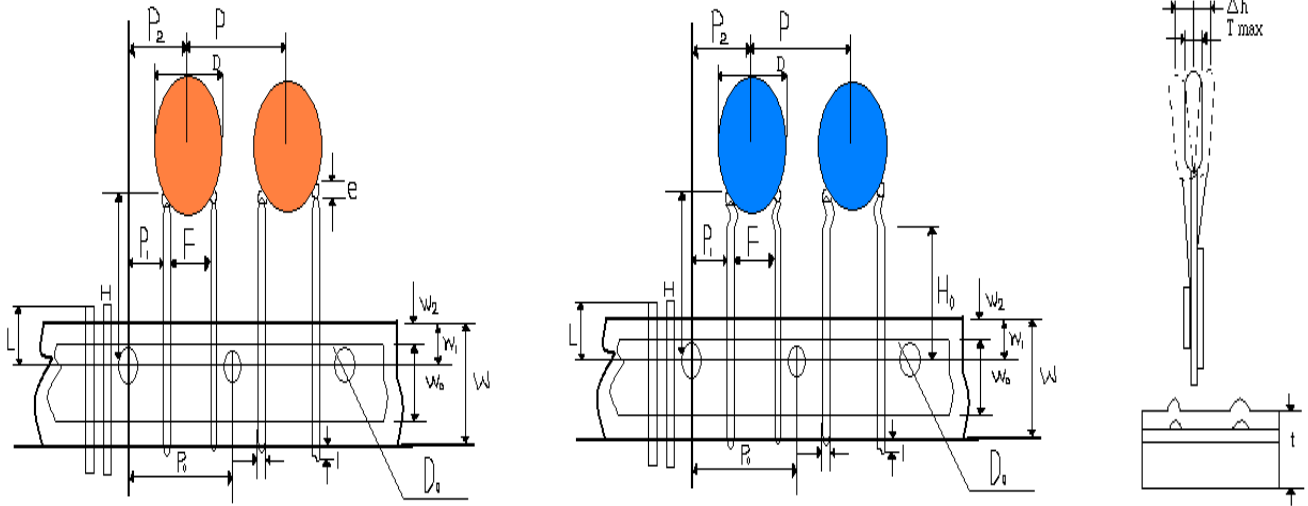
## • Temperature characteristic curves



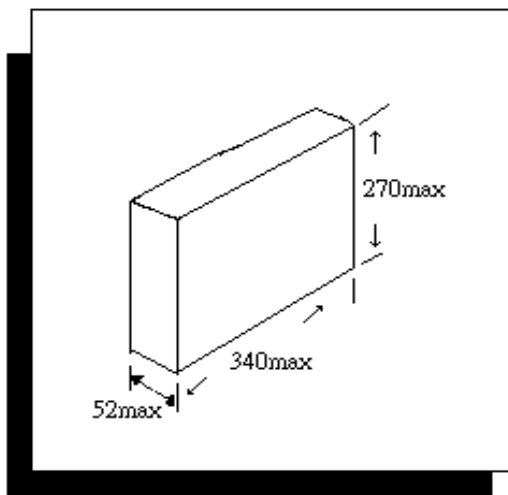
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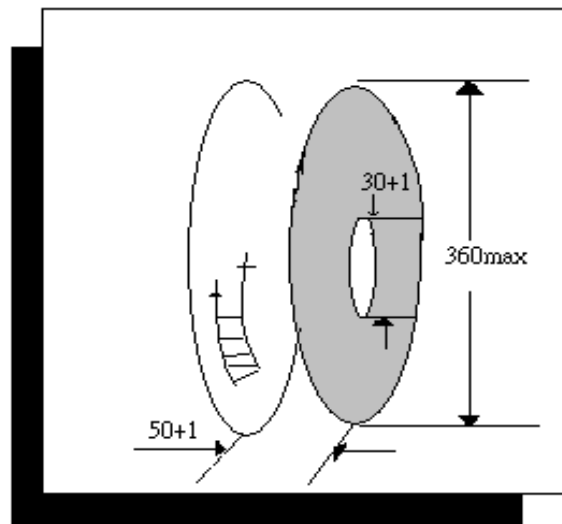
## • Taping Specifications



AMMOPACK 編帶盒裝 2000pcs per Box



REEL 編帶捲裝 2000 or 2500 pcs Reel Unit mm



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## • Taping Specifications

Item 項目	Symbol 符號	Specifications 規格		Remarks 備註
		Value 尺寸	Tolerance 誤差	
Body Width 本體直徑	D	11.0	Max.	
Body Thickness 本體厚度	T	3.5	Max.	
Lead-wire diameter 引線直徑	d	0.55	+0.06-0.05	
Pitch of component 部品間寬距	P	12.7	±1.0	
Feed hole pitch 進料孔寬距	P0	12.7	±0.3	Cumulative pitch error. 1.0 mm /20 pitch 累積誤差
Feed hole center to lead 進料孔到引線寬	P1	3.85	±0.7	To be measured at bottom 在底部量測
Hole to component center 進料孔到部品寬	P2	6.35	±1.3	
Component alignment 部品排列偏度	h	0	±0.2	
Tape width 紙帶寬度	W	18.0	+1.0-0.5	
Hold-down tape width 膠帶寬度	W0	11.0	Min.	
Hole position 進料孔位置	W1	9.0	+0.75-0.5	
Hole-down tape position 膠帶位置	W2	3.0	Max.	
Height of component from Tape center 部品與紙帶中心高度	H	20.0	+1.0-0.5	For Straight Lead Type 直引線型
	H0	16.0	±0.5	For Kinked Lead Type 彎引線型
Lead-to-lead distance 引線寬度	F	5.0	±0.8	
Lead-wire protrusion 引線凸出量	l	2.0	Max.	
Feed hole diameter 進料孔直徑	D0	4.0	±0.3	
Total tape thickness 總紙帶厚度	t	0.7	±0.2	Ground paper 底部厚度： 0.5 ±0.1mm
Length of snipped lead 裁切引線長度	L	11.0	Max.	
Coating rundown on leads 引線漆長	e	1.5	Max.	