

# CERAMIC DISC CAPACITORS-(T.C.) EIA RS198 CLASS 1 JIS C 6423 TYPE I

## FEATURES

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

## Part Code Designation

Example	T (1)	CH (2)	1H (3)	101 (4)	K (5)	-	K (6)	5 (7)	5 (8)	5 (9)	B (10)
							M	±20%			

### 1. Class I—type ‘T’

### 2. Temperature coefficient(Ref. Fig 1)

Code	PPM/°C	T.C.	EIA Code
CH	0±60	NP0	C0H
UJ	-750±120	N750	U2J
SL	+350~-1,000	P350~N1000	S2L

### 3. Rated Voltage(D.C.)

Code	Voltage	Code	Voltage
1C	16V	2A	100V
1E	25V	2H	500V
1H	50V	3A	1KV
1J	63V		

### 4. Rated capacitance

Code	Cap.(PF)	Code	Cap.(PF)
010	1PF	390	39PF
1P5	1.5PF	470	47PF
2P2	2.2PF	560	56PF
3P3	3.3PF	680	68PF
3P9	3.9PF	820	82PF
4P7	4.7PF	101	100PF
5P6	5.6PF	121	120PF
6P8	6.8PF	151	150PF
8P2	8.2PF	181	180PF
100	10PF	221	220PF
120	12PF	271	270PF
150	15PF	331	330PF
180	18PF	391	390PF
220	22PF	471	470PF
270	27PF	561	560PF
330	33PF	681	680PF

### 5. Tolerance on rated capacitance

Code	Tolerance	Rated Cap.(PF)
C	±0.25PF	Under 10PF
D	±0.5PF	
J	±5%	From 10PF to 680PF
K	±10%	

### 6. Lead Shape.(Ref. Fig. 3.)

Code	Type	
K	Bulk	Short Kink
S		Short Straight
L		Long Straight
A	Taping	Inside Kink
B		Straight

### 7. Lead Spacing.(F)

Code	Dimension. (mm)		
	K	S	L
2	---	2.5±8.0	2.5±0.8
5	5.0±0.8	5.0±0.8	5.0±0.8
6	---	6.3±0.8	6.3±0.8
7	---	7.5±0.8	7.5±0.8
0	10.0±0.8	---	10.0±0.8

### 8. Lead Length.(L)

Code	Dimension(mm)		
	K	S	L
5	5.0±0.8	5.0±0.8	
6	6.3±0.8	6.3±0.8	
0	10.0±0.8	10.0±0.8	
1	---	---	25min

### 9. Lead Wire.(d)

Code	Dia (Φmm)	Rated Voltage (D.C.)
5	0.5±0.05	16V-500V
6	0.6±0.05	16V-1KV

### 10. Package

Code	Package	Q'ty

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<b>B</b>	Bulk	1000pcs
<b>A</b>	Ammo Pack	2000pcs
<b>R</b>	Tape & Reel	2500pcs

Fig. 1B SL(P350-N1000)

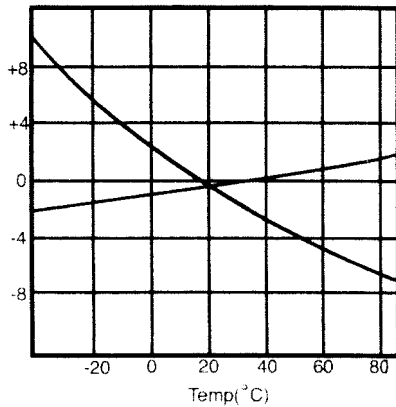
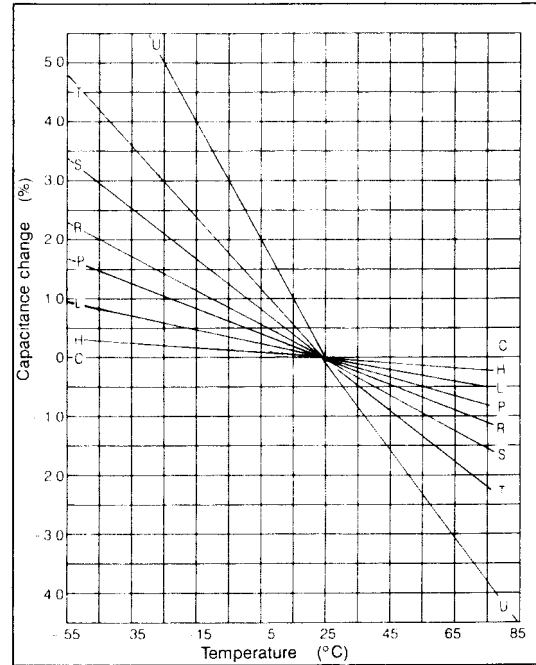


Fig. 1A(T. C. PPM/°C)



**Dimension & Capacitance Range**

Dimension (mm)				Capacitance Range (PF)						
Dia.(D) max	Lead Spacing (F)			50V		500V		1KV		
	K	S	L	CH	UJ	SL	CH	SL	CH	SL
5.0	5.0±0.8 to 10.0±0.8	2.5±0.8 to 10.0±0.8	2.5±0.8 to 10.0±0.8	1-47	5-50	1-151	1-20	20-101	1-10	20-30
6.0				56-82	56-68	161-221	22-33	121-151	12-27	33-68
7.0				101-121	82-101	241-331	47-68	181-201	30-47	70-101
8.0				131-151	121-151	361-471	82	221-271	56-68	---
9.0				161-201	161-181	501-681	101	301-331	82-101	---
10.0				221-271	201-221	821	121	391-471	---	---
12.0				301-331	---	---	151	---	---	---
14.0	---	---	---	---	---	---	---	---	---	

**SPECIFICATION & TEST**

No.	Item	Performance	Test Method
1.	Visual & Mechanical	To meet the specification	The product shall be inspected for visible evidence of defect
2.	Marking	To be clear and legible	Marking shall be tested with <b>ace ton</b>
3.	Voltage Proof (Between terminal)	No failure	2.5 times the rated voltage shall be applied for 1 to 5 sec. Charging and discharging current shall be limited to 50mA max
4.	Insulation resistance	10,000MΩ min	Shall be measured 1 minute after with rated voltage
5.	Capacitance	To be within the specified tolerance	Test frequency:1MHz ±100Hz Test voltage shall not exceed 5Vrms at 25±2°C
6.	Q Value	C≤30PF Q=400+20C. C>30PF Q>1000.	Same condition as above (Item 5)
7.	Temperature Coefficient	To be within the specification	T.C. shall be calculated by the following formula: PPM/°C=[C(t1)-C(t2)/Ct1(t2-t1)]x10 <sup>6</sup> Ct2 = capacitance at t2 Ct1 = capacitance at t1 T2 = 85 ± 3°C T1 = 25± 2°C