T.C. CERAMIC CAPACITOR NA

SERIES TEMPERATURE COMPENSATION CAPACITOR

Temperature compensation capacitors mainly consist of Titanium. They have the characteristics of low constant, low losses(high quality factor), high stability and linear temperature relationship. All these features suited for temperature compensating are mainly used in resonant circuits or in other circuits where high Q and high temperature-base stability of circuit constant are required.

1. Specification and Test Condition

(1) Capacitance
Not exceed capacitance tolerance rated voltage
Test frequency : 1 MHz
Test voltage : 1 Vrms
Test temperature : 25 ± 2℃

(2) Quality Factor
C ≧30PF Q ≧1000
C < 30PF Q ≧ 400 + 20 x C

(3) Insulation Resistance
10000MΩ min. at the for 60 sec. Of charging.

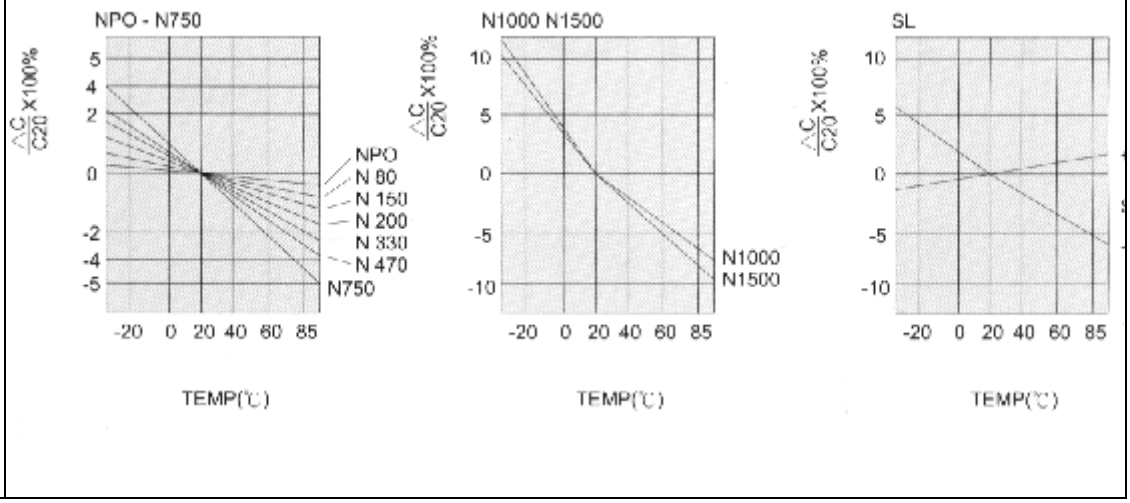
(4) Withstanding Voltage
at 2.5 times of the working voltage.

2. Capacitance tolerance

3. Temperature coefficient

Capacitance	Adapted tolerance	PPM/℃	0	-80	-150	-220	-330	-470	-750	-1000	-1500	+300 -1500
1- 9PF 10PF and above	±0.25PF & ±0.5PF(D) ±5%(J) & ±10%(K)		NPO	N80	N150	N220	N330	N470	N750	N1000	N1500	SL

Temperature coefficient Capacitance Vs temperature



4.Specifications

Maximum Diameter	Capacitance Value (PF) Temperature Coefficient								Rated Voltage
	NPO	N80	N150	N220	N330	N470	N730	SL	VDC
4.5mm	1-47	1-27	1-47	1-47	1-56	1-62	1-91	1-150	50-160-250
5.5mm	1-47	1-27	1-47	1-47	1-56	1-62	1-91	1-150	50-160-250
6.5mm	51-82	30-39	51-62	51-62	62-75	68-91	100-150	160-200	50-160-250
7.5mm	100	43-56	68-100	68-100	82-120	100-130	160-220	220-330	50-160-250
8.5mm	120-150	62-82	110-150	110-150	130-180	150-200	220-270	360-390	50-160-250
9.5mm	180-220	91-120	160-220	160-220	200-240	220-270	300-360	470-560	50-160-250
10.5mm	270-330	130-150	240-270	240-270	270-330	300-360	390-470	680-820	50-160-250
11.5mm	390								50-160-250
12.5mm		160-180	300-330	300-360	300-360	360-390	390-430	510-60	50-160-250
14.5mm	470								50-160-250