

FEATURES

- Linear temperature coefficient of capacitance
- High stability of capacitance
- Low loss across a wide frequency range



CHARACTERISTICS

Item	Characteristics
Operating Temperature Range	-25°C ~ +85°C
Capacitance Tolerance (min.)	Within the tolerance at 1MHz, 1~3Vrms, 25°C
Working Voltage (WVDC)	50WV or 500WV
Insulation Resistance	10,000MΩ min.
Test Voltage	3 x WVDC
Life Test	At 2 x WVDC @85°C for 1000 hours @ 85°C, capacitors shall meet the following: the capacitance change for ≤30pF will be ≤±5% or ≤0.3pF; for >30pF the capacitance change will be ≤±3%. For ≤30pF $Q \geq 275 = 5/3C$; for >30pF $Q \geq 350$
Humidity Test	At exposure in the ambient temperature of 40°C, and at 95% RH for 500 hours the capacitors shall meet the following after 24 hours exposure at room temperature: the capacitance change for ≤30pF will be ≤±5% or ≤0.3pF; for >30pF the capacitance change will be ≤±5%. For ≤30pF $Q \geq 275 = 5/3C$; for >30pF $Q \geq 350$

PART NUMBERING SYSTEM

Series	Voltage Actual Value	Temp. Coeff.	Lead Space	Capacitance (pF)	Tolerance	Style
C D R	5 0	N	2 -	1st digit: 1 , 2nd digit: 0 , # of 0's: 1	K	S

Temp. Coeff.	Code
NPO	N
N750	E
SL	S

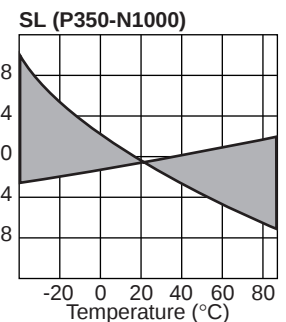
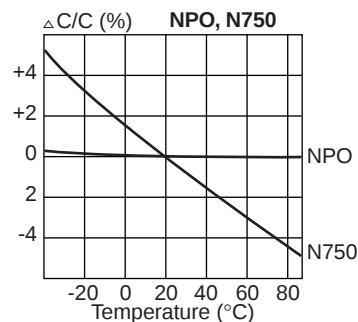
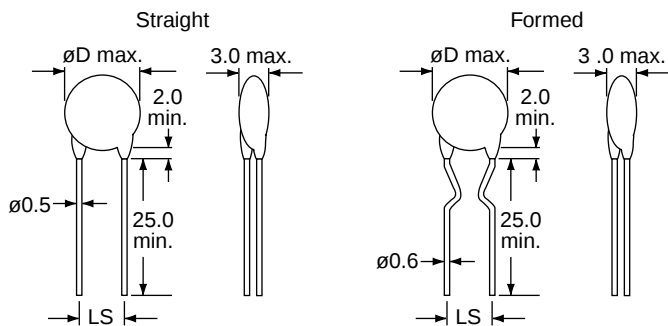
Lead Space	Code
2.5mm	2
5.0mm	5

Tolerance	Code
±0.25pF	C
±5%	J
±10%	K

Tolerance	Code
±20%	M
±0.5pF	D
+80/-20%	Z

Style	Code
Straight	S
Formed	F

DIMENSIONS (mm), CAPACITANCE RANGES (pF), TYPICAL TEMPERATURE CHARACTERISTICS



Dimensions		Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF)					
		50			500		
øD (mm)	LS (mm)	NPO	N750	SL	NPO	N750	SL
5	2.5/5.0	1 ~ 47	22 ~ 47	50 ~ 150	1-33	- - -	39 ~ 100
6	2.5/5.0	56 ~ 68	- - -	180 ~ 220	36	18 ~ 33	120 ~ 150
7.5	2.5/5.0	82 ~ 100	- - -	250 ~ 330	39 ~ 68	39 ~ 68	180 ~ 220
8.5	2.5/5.0	120 ~ 150	- - -	390 ~ 470	- - -	- - -	270 ~ 300
9.5	5.0	180 ~ 200	- - -	500 ~ 680	- - -	- - -	300 ~ 390
10.5	5.0	220 ~ 270	- - -	820	- - -	- - -	400 ~ 470
12.5	5.0	300 ~ 330	- - -	- - -	- - -	- - -	560

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Xicon:

[140-50S5-221J](#) [140-50N5-121J](#) [140-50N5-120J](#) [140-500N5-390J-TR](#) [140-500N2-8R2D](#) [140-50N2-330J](#) [140-500N2-5R6D](#) [140-50S5-131J](#) [140-50S5-750J-TR](#) [140-500S5-101K-TR](#) [140-50S5-151J-TR](#) [140-50S5-241J-TR](#) [140-100N5-470J](#) [140-50N5-470J-TR](#) [140-50N5-270J-TR](#) [140-100N5-300J](#) [140-50N5-181J](#) [140-50N5-390J-TR](#) [140-50N5-120J-TB](#) [140-50N5-220J-TB](#) [140-500N5-150J](#) [140-50N5-120J-TR](#) [140-50N5-220J-TR](#) [140-50N5-510J](#) [140-50N2-680J-TB](#) [140-50N2-180J-TB](#) [140-500S5-151K](#) [140-50N5-271J](#) [140-50N5-180J-TB](#) [140-50N5-680J-TR](#) [140-50N5-680J-TB](#) [140-50N5-180J-TR](#) [140-50N2-180J](#) [140-500N5-820J-TR](#) [140-50N5-151J-TR](#) [140-500S5-121K-TR](#) [140-500S5-221K-TR](#) [140-50N2-4R7D](#) [140-500N2-120J](#) [140-100N2-100J](#) [140-50S5-560J-TR](#) [140-50S2-101J](#) [140-50S9-102J](#) [140-50S5-391J](#) [140-50N5-820J-TB](#) [140-50N5-820J-TR](#) [140-50N2-1R0D](#) [140-50N2-101J](#) [140-100N2-1R0D](#) [140-50S5-121J-TR](#) [140-50S5-221J-TR](#) [140-50N5-330J-TR](#) [140-50N5-330J-TB](#) [140-50S2-151J-TB](#) [140-50S5-820J-TR](#) [140-500N2-100J](#) [140-50S2-121J](#) [140-100N2-2R2D](#) [140-50N5-560J-TR](#) [140-50N2-270J-TB](#) [140-50N2-270J](#) [140-50N2-470J-TR](#) [140-50N2-470J-TB](#) [140-500N5-680J](#) [140-500S5-470K-TB](#) [140-50N2-560J](#) [140-50N5-4R7D-TR](#) [140-50N5-4R7D-TB](#) [140-50N5-200J-TR](#) [140-50N5-100J-TR](#) [140-50N5-200J-TB](#) [140-50N5-300J-TB](#) [140-50N5-300J-TR](#) [140-50N5-101J](#) [140-50S5-201J](#) [140-50N2-150J-TB](#) [140-50S2-151J](#) [140-500N5-5R6J-TR](#) [140-500N5-270J](#) [140-500N5-390J](#) [140-500N5-5R6J-TB](#) [140-500N2-6R8D](#) [140-500N2-100J-TB](#) [140-100N2-200J](#) [140-50S2-470J-TB](#) [140-500S5-680K-TR](#) [140-500N5-470J](#) [140-50N5-220J](#) [140-50N5-221J](#) [140-500N5-8R2J-TB](#) [140-500N5-8R2J-TR](#) [140-50S5-431J](#) [140-500N2-4R7C](#) [140-50S5-271J](#) [140-500N5-220J](#) [140-50N2-620J](#) [140-100N2-4R7D](#) [140-500N5-2R2C-TR](#) [140-500N5-2R2C-TB](#) [140-50S5-471J](#)