

# Conformally Coated, Axial Leaded Multilayer Ceramic Capacitors

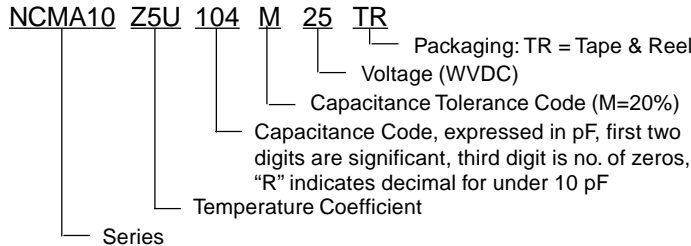
LEADED

## FEATURES

- CONFORMALLY COATED, MINIATURE SIZE
- 50, 100, AND 200 Vdc
- NPO, X7R, AND Z5U TEMPERATURE COEFFICIENTS
- TAPE AND REEL



## PART NUMBERING SYSTEM



## SPECIFICATIONS

Characteristics	NPO	X7R	Z5U
Capacitance Range	1pF ~ .01μF	220pF ~.47μF	.01μF ~ 1.0μF
Capacitance Tolerance (Code)	±1%(F), ±2%(G), ±5%(J), ±10%(K)	±5%(J), ±10%(K), ±20%(M)	±20%(M), +80 -20%(Z)
Operating Temperature Range	-55°C to +125°C	-55°C to +125°C	+10°C to +85°C
Temperature Characteristics	0±30ppm/°C	±15% (0 Vdc)	+22%, -56%
Voltage Rating	50, 100 & 200 Vdc	50, 100 & 200 Vdc	50 & 100 Vdc
Dissipation Factor	0.15% Max. (+25°C and +125°C) For Values Greater Than 30pF For Values of 30pF and Below: Q = 20 x C +400 1.0 Vrms, 1 MHz For Values ≤1000pF and 1kHz For Values > 1000pF	2.5% Max. at 1 kHz 1 Vrms Max.	4.0% Max. at 1kHz, 5Vrms Max.
Insulation Resistance 25°C (MIL-STD-202-Method 302)	100K Megohms or 1000 Megohms-μF Min., Whichever is Less	100K Megohms or 1000 Megohms-μF Min., Whichever is Less	10K Megohms or 100 Megohms-μF Min., Whichever is Less
Dielectric Strength	250% of Rated Vdc	250% of Rated Vdc	200% of Rated Vdc
Life Test (1000 hours)	200% of Rated Voltage at +125°C	200% of Rated Voltage at +125°C	150% of Rated Voltage at +85°C

## SIZE CODE AND AVAILABLE CAPACITANCE RANGE

Size Code	WVDC	NPO	X7R	Z5U
NCMA 10	50	1000pF~1200pF	8200pF~.047μF	.068μF~.22μF
	100	150pF~820pF	560pF~.015μF	.01μF~.047μF
	200	1pF~330pF*	220pF~.01μF	NA
NCMA 11	50	1800pF~3900pF	.047μF~.1μF	.22μF~.47μF
	100	1000pF~2700pF	.018μF~.039μF	.1μF
NCMA 20	50	1800pF~3900pF	.027μF~.1μF	.047μF~.1μF
	100	1000pF~1800pF	8200pF~.033μF	.033μF~.047μF
NCMA 30	50	4700pF~5600pF	.056μF~.33μF	.15μF~1.0μF
	100	1800pF~3900pF	.022μF~.1μF	.068μF~.33μF
NCMA 40	50	8200pF~.01μF	.33μF~.47μF	NA
	100	4700pF~8200pF	.12μF~.18μF	.15μF~.47μF

\*-Selected values, Please contact NIC for availability.



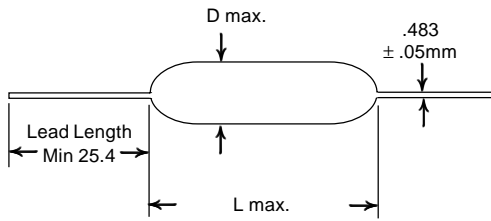
# Conformally Coated, Axial Leaded Multilayer Ceramic Capacitors

NCMA Series

LEADED

## DIMENSIONS (mm)

Type	D Diameter	L Length
NCMA 10	2.54	4.32
NCMA 11	3.5	4.32
NCMA 20	2.54	6.6
NCMA 30	3.81	7.37
NCMA 40	3.81	10.16

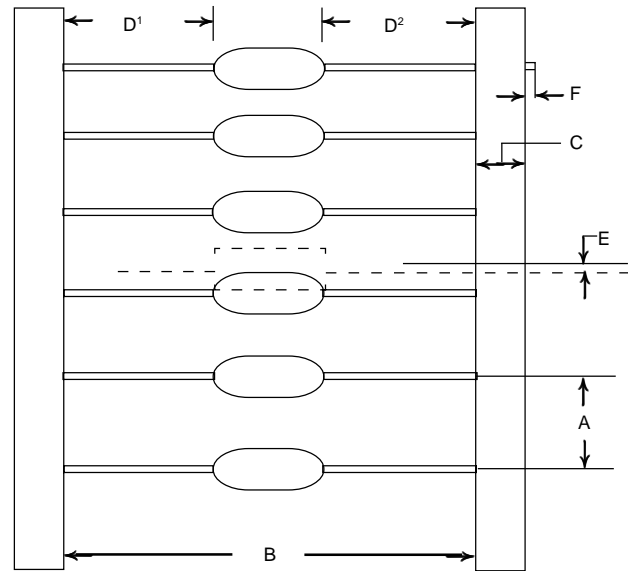


## TAPE AND REEL

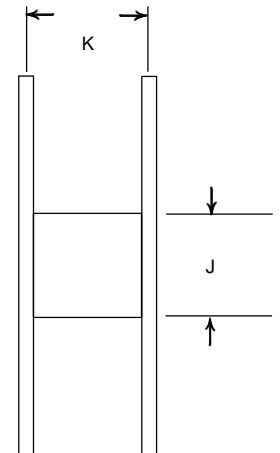
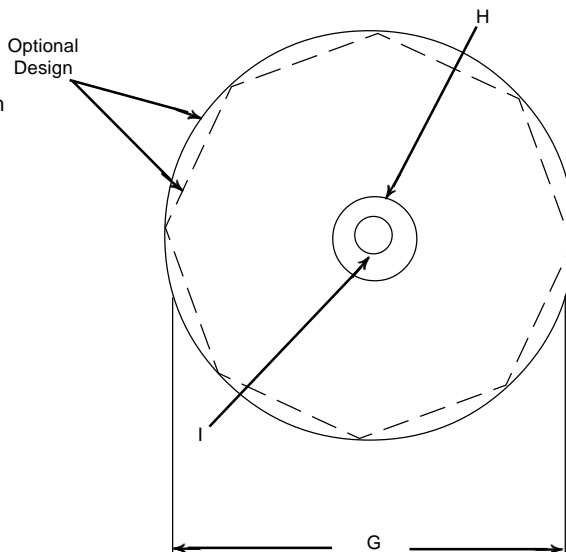
CLASS 1  
RS-296

A.	5mm ± 0.5mm
B*.	52.4mm ± 1.5mm
C.	6.35mm ± 0.4mm
E.	1.2mm
F.	1.6mm
G.	356mm
H.	76mm
I.	25.4mm
J.	84mm
K.	70mm

\*ALSO AVAILABLE IN 26.0mm  $+1.5\text{mm}$   
 $-0\text{mm}$



**LEADER TAPE:** 300mm min.  
**SPLICING TAPE:** Tape Only  
**MISSING PARTS:** 0.25% of component count max.  
No consecutive missing parts



## REEL QUANTITIES

NCMA 10	7500 pcs
NCMA 11	5000 pcs
NCMA 20	5000 pcs
NCMA 30	5000 pcs
NCMA 40	5000 pcs

