

# Axial Multilayer Ceramic Capacitors

NCMA Series

## FEATURES

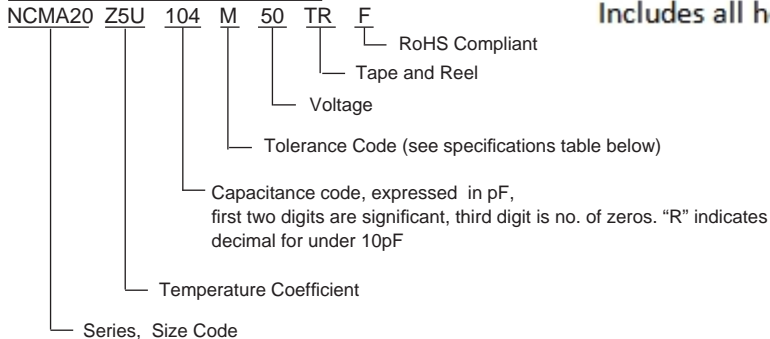
- CONFORMALLY COATED, MINIATURE SIZE
- 50, 100, AND 200 Vdc
- NPO, X7R, AND Z5U TEMPERATURE COEFFICIENTS
- SUPPLIED ON TAPE AND REEL

RoHS Compliant

Includes all homogeneous materials



## PART NUMBER SYSTEM



## SPECIFICATIONS

Characteristics	NPO	X7R	Z5U
Capacitance Range*	1pF ~ 0.01μF	220pF ~ 0.47μF	0.01μF ~ 1.0μF
Capacitance Tolerance (Code)	±1%(F), ±2%(G), ±5%(J)	±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 30 pF. For values of 30pF and below: Q = 20 x C +400 1.0Vrms 1MHz for values ≤ 1000pF 1KHz for values > 1000pF	2.5% Max. at 1KHz, 1Vrms Max.	4.0% Max. at 1KHz, 5Vrms Max.
Insulation Resistance 25°C (Mil- STD-202, Method 302)	100K Megohms or 1000 Megohm -μF Min., Whichever is Less	100K Megohms or 1000 Megohm -μF Min., Whichever is Less	10K Megohms or 100 Megohm -μF Min., Whichever is Less
Dielectric Strength	250% of Rated Voltage	250% of Rated Voltage	200% of Rated Voltage
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
NCMA10	50	1000pF~1200pF	8200pF~0.047μF	0.068μF~0.22μF
	100	150pF~820pF	560pF~0.015μF	0.01μF~0.047μF
	200	1pF~330pF*	220pF~0.01μF	-
NCMA11	50	1800pF~3900pF	0.047μF~0.1μF	0.22μF~0.047μF
	100	1000pF~2700pF	0.018μF~0.039μF	0.1μF
NCMA20	50	1800pF~3900pF	0.027μF~0.1μF	0.047μF~0.1μF
	100	1000pF~1800pF	8200pF~0.033μF	0.033μF~0.047μF
NCMA30	50	4700pF~5600pF	0.056μF~0.33μF	0.15μF~1.0μF
	100	1800pF~3900pF	0.022μF~0.1μF	0.068μF~0.33μF
NCMA40	50	8200pF~0.01μF	0.33μF~0.47μF	-
	100	4700pF~8200pF	0.12μF~0.18μF	0.15μF~0.47μF

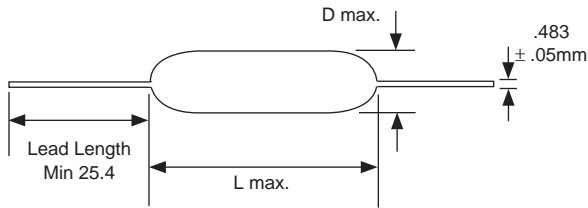
\*-Selected values, Please contact NIC for availability.



# Conformally Coated, Axial Multilayer Ceramic Capacitors

## DIMENSIONS (mm)

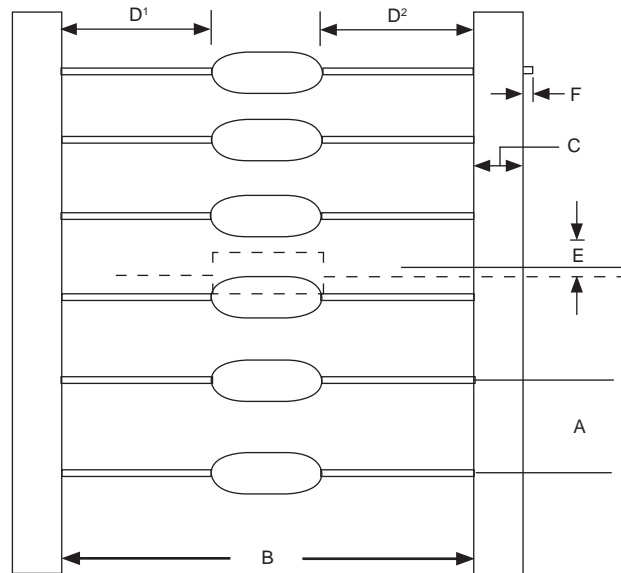
Type	D Diameter	L Length
NCMA10	2.54	4.32
NCMA11	3.50	4.32
NCMA20	2.54	6.80
NCMA30	3.81	7.37
NCMA40	3.81	10.16



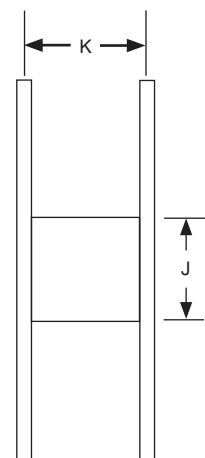
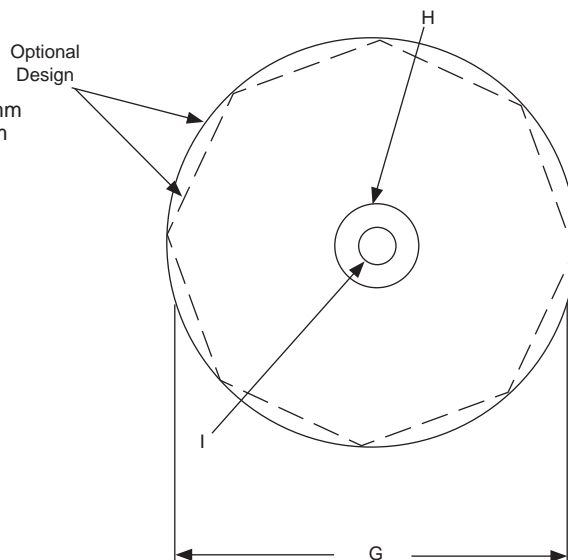
## TAPE AND REEL CLASS 1 RS-296

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  $+1.5mm$   
 $-0mm$



**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

