

# AXIAL LEADED - COMMERCIAL

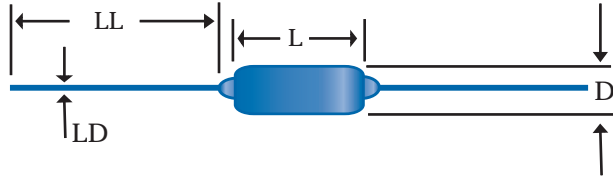


NOVACAP Axial Leaded Capacitors are available in COG, X7R and X8R characteristics. Conformal coating and lead mounting provide a rugged configuration for optimum performance, with high capacitance efficiency per KV rating. Units are designed for commercial/industrial use to 2 KV, with application in power supply and voltage multiplier circuits. High reliability versions with restricted capacitance ranges are also available. Please refer to other NOVACAP literature, or consult the factory.

## CASE SIZE OPTIONS

SIZE	0805	1206
L MAX.	.150 (3.80)	.200 (5.10)
D MAX.	.100 (2.54)	.125 (3.20)
WD +/- .002	.020 (0.50)	.020 (0.50)
LL MIN.	1.00 (25.0)	1.00 (25.0)

Dimensions in inches; bracketed dimensions in millimeters.

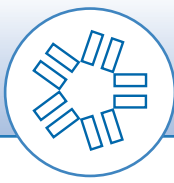


## LEAD CONFIGURATION

## CAPACITANCE & VOLTAGE

3 digit code: two significant digits, followed by number of zeros  
 eg: 183 = 18,000 pF. R denotes decimal, eg. 2R7 = 2.7 pF

MAX CAP & VOLTAGE	DIELECTRIC		NPO		X7R		X8R	
	0805	1206	0805	1206	0805	1206	0805	1206
50V	•	•	•	•	473	154		
100V	•	•	•	•	333	104		
250V	152	392	273	683	183	333		
500V	821	182	123	223	562	153		
1000V	471	102	272	682	•	•		
2000V	•	391	•	102	•	•		



## COG DIELECTRIC CHARACTERISTICS

OPERATING TEMPERATURE RANGE:	-55°C to 125°C
TEMPERATURE COEFFICIENT:	0 +/- 30 ppm/°C
DISSIPATION FACTOR:	.001 (0.1%) max @ 25°C
INSULATION RESISTANCE, 25°C	>100GΩ or >1000ΩF
125°C	>10GΩ or >100ΩF
DIELECTRIC WITHSTANDING VOLTAGE:	120% VDCW, or 750V* *WHICHEVER IS GREATER
AGING RATE:	0% per decade
TEST PARAMETERS:	1KHz, 1.0 +/- 0.2 VRMS, 25°C 1MHZ for Capacitance <100pF

## X8R DIELECTRIC CHARACTERISTICS

OPERATING TEMPERATURE RANGE:	-55°C to 150°C
TEMPERATURE COEFFICIENT UP TO 150° C:	+/-15% ΔC Max
DISSIPATION FACTOR @ 25° C:	.025 (2.5%) max
INSULATION RESISTANCE AT 25°C	>100GΩ or >1000ΩF
AT 150°C	>10GΩ or >100ΩF
DIELECTRIC WITHSTANDING VOLTAGE:	< 200V, 250% *WHICHEVER IS GREATER
	201-500V, 150% OR 500V* > 500V, 120% or 750V*
AGING RATE:	< 2.0% per decade
TEST PARAMETERS:	1KHz, 1.0 +/- 0.2 VRMS, 25°C

## X7R DIELECTRIC CHARACTERISTICS

OPERATING TEMPERATURE RANGE:	-55°C to 125°C
TEMPERATURE COEFFICIENT:	+/-15% ΔC Max
DISSIPATION FACTOR @ 25° C:	.025 (2.5%) max @ 25°C
INSULATION RESISTANCE, 25°C	>100GΩ or >1000ΩF
125°C	>10GΩ or >100ΩF
DIELECTRIC WITHSTANDING VOLTAGE:	120% VDCW, or 750V* *WHICHEVER IS GREATER
AGING RATE:	< 2.0% per decade
TEST PARAMETERS:	1KHz, 1.0 +/- 0.2 VRMS, 25°C

## HOW TO ORDER

0805	B	123	K	501	LA	T	R
<b>SIZE</b> See Chart Above	<b>DIELECTRIC</b> N = COG B = X7R S = X8R	<b>CAPACITANCE</b> Value in Picofarads Two significant figures, followed by number of zeros: 123 = 12,000pF	<b>TOLERANCE</b> J = +/- 5 % K = +/- 10 % M = +/- 20 %	<b>VOLTAGE-VDCW</b> Two significant figures, followed by number of zeros: 501 = 500V	<b>LEAD CONFIGURATIONS AVAILABLE</b> LA = 0805 & 1206	<b>PACKAGING</b> A = Ammo Pack 5K/Pack T = Tape & Reel 7.5K/Reel No suffix = Bulk	<b>RoHS</b> R = RoHS Compliant