

## **CERTIFIED SAFETY CAPACITORS**



NOVACAP offers a line of MLC chip capacitors, sizes LS 1808, LS 1812, X<sup>2</sup>, Y<sup>3</sup> Class Compliant\* specifically designed for use in modem, facsimile, telephone and other electronic equipment where lightning or overvoltage surges can occur. These parts are rated at 250 Vac safety approved and certified to EN 60950. The product is compliant to Standards EN 132400: 1994/A2: 1998/IEC60384-14, Second Edition: 1993/A1:1995, and meet the requirements of EN61000-4-5, IEC1000-4-5, and IEC801-4-5. Capacitors are available in COG (NP0) and X7R dielectrics.

Cap (EIA)

LS 1808

COG/NPO

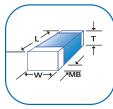
LS 1808

X7R

LS 1812

COG/NPO

SIZE	LS 1808 (Y³)	LS 1812 (Y³)			
LENGTH L	.180 (4.57)	.180 (4.57)			
WIDTH W	.080 (2.03)	.125 (3.18)			
T MAX	See Chart See Chart				
МВ	.024 (.609) Typical	.024 (.609) Typical			
CREEPAGE	.102 (2.60) Min	.102 (2.60) Min			
Dimensions are in inches, bracketed dimensions in millimeters. Tolerances for length and width are .015" (0.38 mm).					



TUV	(LS 1808N) R9972698.01,.02,.03 (LS1808B) R2272835.01,.02
	(LS1812N) R9972698.05
STANDARDS	EN 132400, EN 60950, IEC 60384-14 Second Edition, Class X <sup>2</sup> Y <sup>2</sup> .
UL	NWGQ2.E208336 and NWGQ8.E208336



Maximum Thickness of .065".

No "X065" required in the part number. ie: LS1808N151K302NT



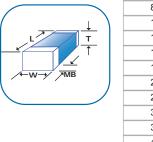
Maximum Thickness of .080".

"X080" required in the part number. ie: LS1808N102K302NX080T



Maximum Thickness of .100".

"X100" required in the part number. ie: LS1812N202K302NX100T



5R0					
6R8					
8R2					
100					
120					
150					
180					
220					
270					
330					
390					
470					
560					
680					
820					
101					
121					
151					
181					
221					
271					
331					
391					
471					
561					
681					
821	///				
102	///				
122					
152					
182					
222					

## **HOW TO ORDER**

LS1808	N	102	K	302	N	X080	Т	M
SIZE LS 1808 LS 1812	DIELECTRIC N = COG B = X7R	CAPACITANCE Value in Picofarads Two significant figures, followed by number of zeros: 102 = 1000 pF	, ., . ,	VOLTAGE-SURGE Two significant figures, followed by number of zeros: 302 = 3000 VDC	TERMINATION N = Nickel Barrier (100% Tin)	THICKNESS OPTION Not required for .065"Max Thickness, X080 or X100 required for thickness >.065" See Chart	PACKING OPTION T = Reeled	MARKING Parts Marked 'NLS'

<sup>\*</sup>Compliant with Robustness of Termination (cl 4.3) test according to IEC 60384-1 amendment 3 cl 4.34 and 4.35 Resistance to Soldering Heat (cl 4.4) tested according to IEC 60384-1 amendment 3 cl. 4.14.2, Impulse Test made with 2.5 KV or 5.0KV as required according to 6.4.2.1 in EN 60950. The creepage distance between live parts of different polarity meets the