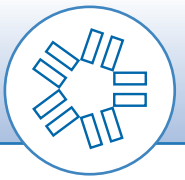


# Y2 - CERTIFIED SAFETY CAPACITORS



NOVACAP offers a line of MLC chip capacitors, sizes ES 1808, ES 2211, ES 2215 and ES2225, Y<sup>2</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 IEC60384-14, Second Edition: 1993/A1:1995. The product is compliant to Standards EN 132400: 1994/A2:1998 and meet the requirements of EN61000-4-5, IEC1000-4-5, and IEC801-4-5. Capacitors are available in COG (NP0) dielectric only.



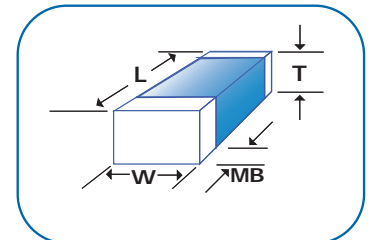
SIZE	ES 1808 (Y <sup>2</sup> )	ES 2211 (Y <sup>2</sup> )	ES 2215 (Y <sup>2</sup> )	ES2225 (Y <sup>2</sup> )
LENGTH L	.180 (4.50)	.220 (5.58)	.220 (5.58)	.220 (5.58)
WIDTH W	.080 (2.00)	.110 (2.79)	.150 (3.81)	.250 (6.35)
T MAX	.080 (2.00)	.110 (2.79)	.150 (3.81)	.080 (2.03)
MB	.020 (5.08) Typical	.030 (.762) Typical	.030 (.762) Typical	.030 (.762) Typical
CREEPAGE	.100 (2.50) Min	.157 (4.00) Min	.157 (4.00) Min	.157 (4.00) Min
CAP RANGE	COG 4.7 - 220pF X7R 150 - 1000pF	COG 5-680pF X7R N/A	COG 1000pF X7R N/A	COG 1000pF X7R N/A

Dimensions are in inches, bracketed dimensions in millimeters. Tolerances for 2211, 2215 and 2225 length and width are .015" (0.38 mm). Tolerances for 1808 length are .014" and width are .012".

## CERTIFICATION NUMBERS

TUV	(ES2211, ES2215) R2072738.01 (ES2225) R2072738.02 (ES 1808) R60012089
STANDARDS	EN 132400, IEC 60384-14 Second Edition, Class X <sup>1</sup> Y <sup>2</sup>

Part Identification Marking will be placed on the reel.



## HOW TO ORDER

ES2225	N	102	K	502	N	X	T	M
<b>SIZE</b>	<b>DIELECTRIC</b>	<b>CAPACITANCE</b>	<b>TOLERANCE</b>	<b>VOLTAGE-SURGE</b>	<b>TERMINATION</b>	<b>THICKNESS OPTION</b>	<b>PACKING OPTION</b>	<b>MARKING</b>
ES 1808 ES 2211 ES 2215 ES 2225	N = COG B = X7R	Value in Picofarads Two significant figures, followed by number of zeros: 102 = 1000 pF	J = +/- 5 % K = +/- 10 % M = +/- 20 %	Two significant figures, followed by number of zeros: 502 = 5000 VDC	N = Nickel Barrier (100% Tin)	X = Non-standard thickness. Specify in Mils. if non-standard is required. Standard items are any thickness to Maximum shown in charts.	T = Reeled	Parts Marked 'NY2'