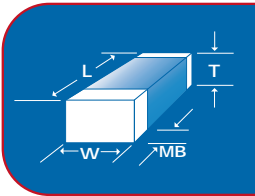
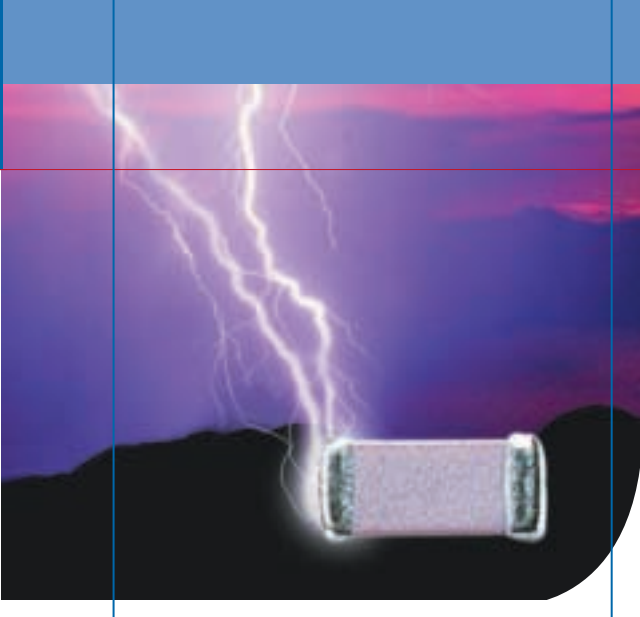


CERTIFIED SAFETY CAPACITORS



NOVACAP offers a line of MLC chip capacitors, sizes LS 1808, LS 1812, ES 2211 and ES 2215, X²,Y³/Y² 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 3,000 Vdc (Y³) or 5000 Vdc (Y²) and 250Vac 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) dielectric.



SIZE	LS 1808 (Y ³)	LS 1812 (Y ³)	ES 2211 (Y ²)	ES 2215 (Y ²)
LENGTH L	.180 (4.57)	.180 (4.57)	.220 (5.58)	.220 (5.58)
WIDTH W	.080 (2.03)	.125 (3.18)	.110 (2.79)	.150 (3.81)
T MAX	.080 (2.03)	.120 (3.05)	.110 (2.79)	.150 (3.81)
MB	.024 (.609) Typical	.024 (.609) Typical	.030 (.762) Typical	.030 (.762) Typical
CREEPAGE	.102 (2.60) Min	.102 (2.60) Min	.102 (3.00) Min	.102 (3.00) Min
CAP RANGE	5-1000pF	1000-2200pF	5-680pF	1000pF

CERTIFICATION NUMBERS

TUV	R9972698.01,.02,.03 (LS1808), R9972698.05 (LS1812) & R2072738.01 (ES2211, ES2215)
STANDARDS	EN 132400, EN 60950, IEC 60384-14 Second Edition, Class X ² Y ³

Part Identification Marking will be placed on the reel.

HOW TO ORDER

LS1808	N	301	K	302	N	X	T	M
SIZE LS 1808 LS 1812 ES 2211 ES 2215	DIELECTRIC N = COG	CAPACITANCE MAX VALUE IS 1000pF Two significant figures, followed by number of zeros: 301 = 300pF	TOLERANCE J = +/- 5 % K = +/- 10 % M = +/- 20 %	VOLTAGE-VDCW LS 302 = 3000 VDC ES 502 = 5000 VDC	TERMINATION N = Nickel Barrier 90/10 Sn/Pbr	THICKNESS OPTION X = Non standard thickness. Specify in Mils if required.	PACKING OPTION T = Reeled	MARKING OPTION Part marking available upon request

*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 requirements of IEC 60950.