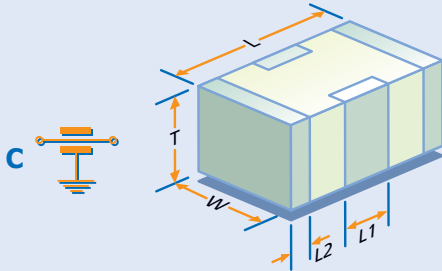


Surface Mount EMI Filters

3 Terminal EMI Chips

E01

These 3 terminal chips are ideally suited for EMI suppression in digital circuits and other signal lines, and are available in 0805, 1206 and 1806 size. While the signal or dc current passes directly through the EMI chip, unwanted noise is suppressed by the grounding of the high frequency component. COG and X7R dielectric types are available, providing capacitance values from 22pF to 200nF.



Specifications

Dimensions mm (inches)

	0805	1206
L	2.0 ± 0.3 (0.079 ± 0.012)	3.2 ± 0.3 (0.126 ± 0.012)
W	1.25 ± 0.2 (0.049 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)
T	1.0 ± 0.15 (0.039 ± 0.006)	1.1 ± 0.2 (0.043 ± 0.008)
L1	0.60 ± 0.2 (0.024 ± 0.008)	0.95 ± 0.3 (0.037 ± 0.012)
L2	0.3 ± 0.15 (0.012 ± 0.006)	0.5 ± 0.25 (0.02 ± 0.01)

	1806
L	4.5 ± 0.35 (0.177 ± 0.014)
W	1.6 ± 0.2 (0.063 ± 0.008)
T	1.1 ± 0.2 (0.043 ± 0.008)
L1	1.4 ± 0.3 (0.055 ± 0.012)
L2	0.5 ± 0.25 (0.02 ± 0.01)

Electrical Configuration

Capacitance Measurement

Current Rating

Temperature Rating

Capacitance Tolerance

Rated Voltage

Voltage Proof

C Filters

At 1000hr point

300mA dc

-55°C to 125°C

±20%

100V DC, 50V DC where shown

2.5 x Rated Volts for 5 seconds. Charging current limited to 50mA max.

Insulation Resistance

DC Resistance (max.)

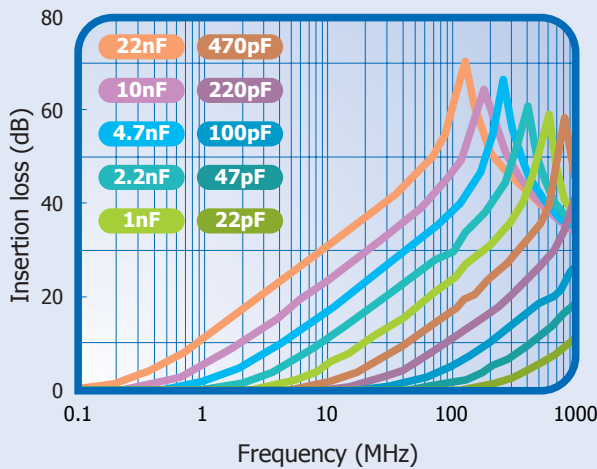
Solderability

100Gohms or 1000S, whichever is the less

0.35 ohms (1206 & 1806), 0.4 ohms (0805)

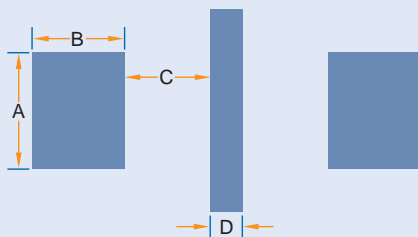
IEC 68 - 2 - 20

50 ohm system



Typical performance is shown in the graph above. The actual performance will be influenced by the amount of series inductance added by the interconnections.

Recommended Solder Lands



Dimensions mm (inches)

Chip Size	A	B	C	D
0805	0.95 (0.037)	0.9 (0.035)	0.3 (0.012)	0.4 (0.016)
1206	1.2 (0.047)	0.9 (0.035)	0.6 (0.024)	0.8 (0.03)
1806	1.2 (0.047)	1.4 (0.055)	0.8 (0.03)	1.4 (0.055)

0805		1206		1806	
COG	X7R	COG	X7R	COG	X7R
22pF	1.0nF	22pF	1.5nF	22pF	2.2nF
33pF	1.5nF	33pF	2.2nF	33pF	3.3nF
47pF	2.2nF	47pF	3.3nF	47pF	4.7nF
68pF	3.3nF	68pF	4.7nF	68pF	6.8nF
100pF	4.7nF	100pF	6.8nF	100pF	10nF
150pF	6.8nF	150pF	10nF	150pF	15nF
220pF	10nF	220pF	15nF	220pF	22nF
330pF	15nF	330pF	22nF/50V	330pF	33nF
470pF	22nF/50V	470pF	33nF/50V	470pF	47nF
560pF	33nF/50V	680pF	47nF/50V	680pF	68nF
680pF/50V	47nF/50V	1.0nF	68nF/50V	1.0nF	100nF/50V
820pF/50V			100nF/50V	1.5nF	150nF/50V
				2.2nF	200nF/50V

Reeled quantities

	0805	1206	1806
178mm (7") reel	3000	2500	2500
330mm (13") reel	12000	10000	10000

