

Multilayer Ferrite Chip Beads (High Speed)



Features

- Monolithic structure for closed magnetic path and high reliability
- Standard EIA/EIAJ chip sizes such as 0402/1005, 0603/1608, 0805/2012, and 1206/3216
- Superior termination bonding strength
- Nickel barrier with solder overlated termination offering excellent solderability and solder leach resistance, suitable for both wave and reflow soldering processes
- RoHS compliant when -T option is specified

Applications

- High frequency noise suppression in computers and peripherals
- High frequency noise suppression in telecommunications
- High frequency noise suppression in data communications
- High frequency noise suppression in consumer electronics

Recommended PC Board Land Patterns

CHIP SIZE EIA/EIAJ	L INCH (mm)	G INCH (mm)	H INCH (mm)
0402(1005)	0.063 (1.60)	0.016 (0.40)	0.024 (0.60)
0603(1608)	0.102 (2.60)	0.022 (0.55)	0.037 (0.94)
0805(2012)	0.118 (3.00)	0.026 (0.66)	0.057 (1.45)
1206(3216)	0.173 (4.40)	0.059 (1.50)	0.071 (1.80)

Operating Temperature

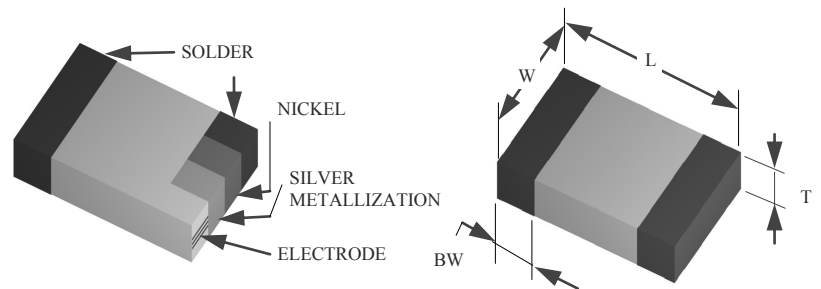
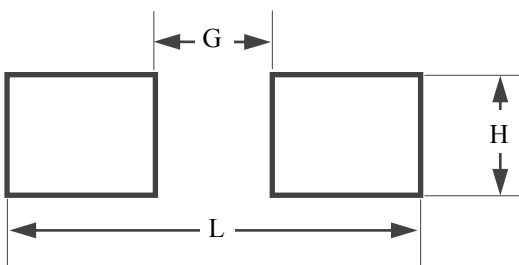
-55°C — +125°C

Product Identification

MCB 0805 S 121 P I - I
(1) (2) (3) (4) (5) (6) (7)

- (1) Series code:
MCB: Multilayer Ferrite Chip Bead
- (2) Dimensions: L x W inches
The first two digits: L (length)
The last two digits: W (width)
- (3) Characteristic code: S
- (4) Value code: Impedance (ohms at 100 MHz)
The first two digits are significant. The last digit specifies the number of zeros to follow.
- (5) Tolerance code:
P = ±25%
Other tolerances may be available upon request.
- (6) Package code:
T = Tape & Reel
B = Bulk
- (7) Termination type code:
T = 100% Sn plating

Shape and Dimensions



CHIP SIZE EIA/EIAJ	LENGTH (L) INCH (mm)	WIDTH (W) INCH (mm)	THICKNESS (T) INCH (mm)	TERMINATION (BW) INCH (mm)
0402/1005	0.039 ± 0.004 (1.00 ± 0.10)	0.020 ± 0.004 (0.50 ± 0.10)	0.020 ± 0.004 (0.50 ± 0.10)	0.010 ± 0.004 (0.25 ± 0.10)
0603/1608	0.063 ± 0.006 (1.60 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.014 ± 0.006 (0.36 ± 0.15)
0805/2012	0.079 ± 0.008 (2.00 ± 0.20)	0.049 ± 0.008 (1.25 ± 0.20)	0.035 ± 0.008 (0.90 ± 0.20)	0.020 ± 0.012 (0.51 ± 0.30)
1206/3216	0.126 ± 0.008 (3.20 ± 0.20)	0.063 ± 0.008 (1.60 ± 0.20)	0.043 ± 0.008 (1.10 ± 0.20)	0.020 ± 0.012 (0.51 ± 0.30)

Other sizes and values may be available upon customer's request.

MCB Series (High Speed)

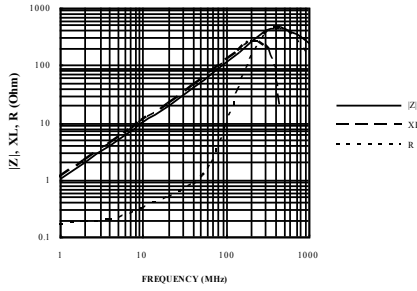
<i>AEM Part Number</i>	<i>Z@100MHz Ω</i>	<i>Tolerance</i>	<i>Max. R_{DC} Ω</i>	<i>Max. I A</i>
MCB0402S100	10	P	0.20	0.40
MCB0402S300	30	P	0.20	0.40
MCB0402S600	60	P	0.30	0.35
MCB0402S800	80	P	0.40	0.30
MCB0402S121	120	P	0.40	0.20
MCB0402S221	220	P	0.60	0.20
MCB0402S301	300	P	1.00	0.20
MCB0402S601	600	P	1.20	0.20
MCB0603S100	10	P	0.10	0.60
MCB0603S300	30	P	0.20	0.50
MCB0603S600	60	P	0.25	0.40
MCB0603S800	80	P	0.25	0.40
MCB0603S101	100	P	0.30	0.40
MCB0603S121	120	P	0.30	0.40
MCB0603S221	220	P	0.35	0.30
MCB0603S301	300	P	0.35	0.30
MCB0603S601	600	P	0.50	0.20
MCB0603S102	1000	P	0.60	0.20
MCB0805S110	11	P	0.10	0.80
MCB0805S300	30	P	0.15	0.60
MCB0805S600	60	P	0.15	0.60
MCB0805S121	120	P	0.20	0.50
MCB0805S221	220	P	0.30	0.40
MCB0805S301	300	P	0.30	0.40
MCB0805S601	600	P	0.35	0.30
MCB0805S102	1000	P	0.40	0.20
MCB1206S300	30	P	0.15	0.60
MCB1206S600	60	P	0.15	0.60
MCB1206S800	80	P	0.15	0.60
MCB1206S121	120	P	0.20	0.50
MCB1206S221	220	P	0.30	0.40
MCB1206S301	300	P	0.30	0.40
MCB1206S601	600	P	0.35	0.30
MCB1206S102	1000	P	0.40	0.30

Please add tolerance, packaging and termination type codes when ordering.

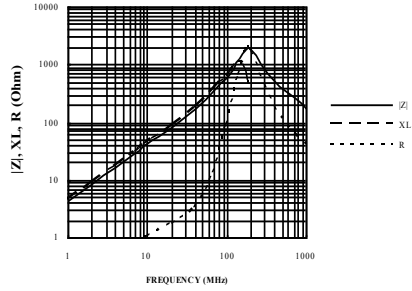
Electrical Characteristics

(Curves not listed are available upon request)

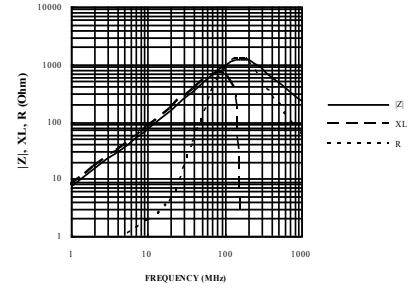
MCB0603S121



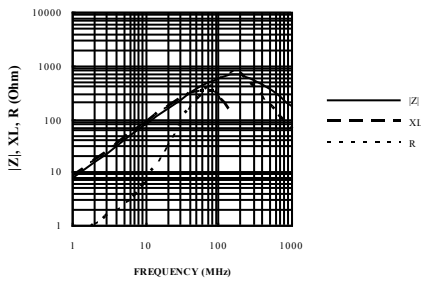
MCB0603S601



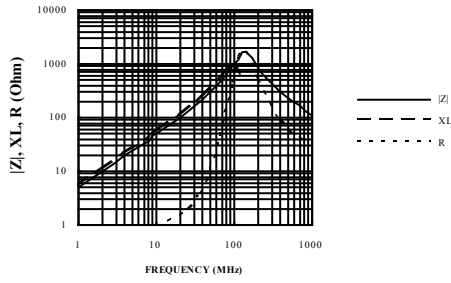
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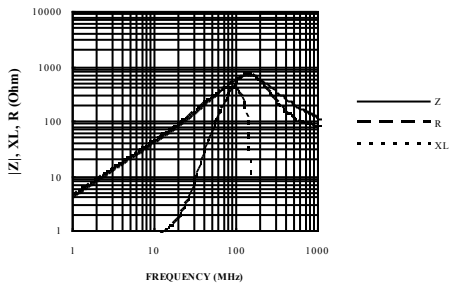
MCB0805S601



MCB0805S102



MCB1206S601



MCB1206S102

