

Multilayer Ferrite Beads



MECHANICAL SPECIFICATIONS

Solderability: 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C to 150 °C and type R flux dip

Resistance to Solder Heat: 10 s in 260 °C solder, after preheat and flux per above

Terminal Strength: 1.0 kg (2.2 lbs) minimum for 30 s

Beam Strength: 2.0 kg (4.4 lbs) minimum

STANDARD ELECTRICAL SPECIFICATIONS

Z ± 25 % AT 100 MHz (Ω)	FREQUENCY (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
19	100	0.05	500
26	100	0.05	500
31	100	0.05	500
50	100	0.10	600
60	100	0.10	600
70	100	0.10	600
80	100	0.20	400
90	100	0.20	400
100	100	0.20	400
120	100	0.20	400
150	100	0.20	300
200	100	0.20	300
300	100	0.30	300
500	100	0.30	200
600	100	0.30	200
800	100	0.30	200
1000	100	0.40	200
1200	100	0.40	100
1500	50	0.50	100
2000	30	0.50	100

FEATURES

- High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT
HALOGEN
FREE

ENVIRONMENTAL SPECIFICATIONS

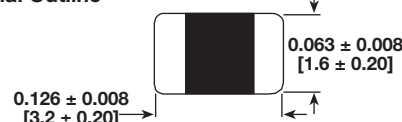
Operating Temperature: - 55 °C to + 125 °C

Thermal Shock: 300 cycles, - 40 °C to + 125 °C

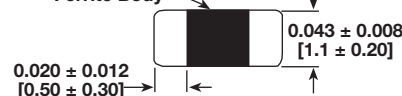
Biased Humidity: 85 % RH at 85 °C, 1000 h at full rated current

DIMENSIONS in inches [millimeters]

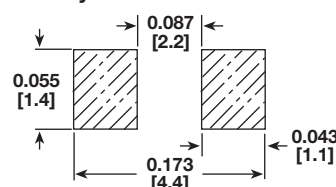
Dimensional Outline



Ferrite Body



Recommended Pad Layout



PACKAGING OPTIONS

- Bulk: 1000 pieces per plastic bag
- Tape and Reel: Paper carrier tape, 3000 pieces per reel

DESCRIPTION

ILB-1206	19 Ω	± 25 %	ER	e3
MODEL	IMPEDANCE VALUE	IMPEDANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	L	B	1	2	0	6	E	R	1	9	0	V
PRODUCT FAMILY			SIZE			PACKAGE CODE		IMPEDANCE VALUE			IMPEDANCE TOLERANCE	

TAPE AND REEL SPECIFICATIONS in inches [millimeters]

The diagram illustrates the dimensions and components of a ferrite bead tape and reel assembly. It includes three main views: a side view of the tape, a top view of the reel, and a cross-section of the tape.

Side View Dimensions:

- P_0 : Pitch between bead centers.
- P_1 : Pitch between component centers.
- P_2 : Pitch between empty trailer centers.
- B_0 : Width of the tape.
- $\varnothing D_0$: Outer diameter of the reel.
- $\varnothing D_1$: Inner diameter of the reel.
- A_0 : Width of the reel flange.
- E_1 : Thickness of the tape.
- F : Thickness of the component.
- W : Thickness of the empty trailer.
- T : Thickness of the cover tape leader.
- K_0 : Thickness of the reel flange.

Top View Dimensions:

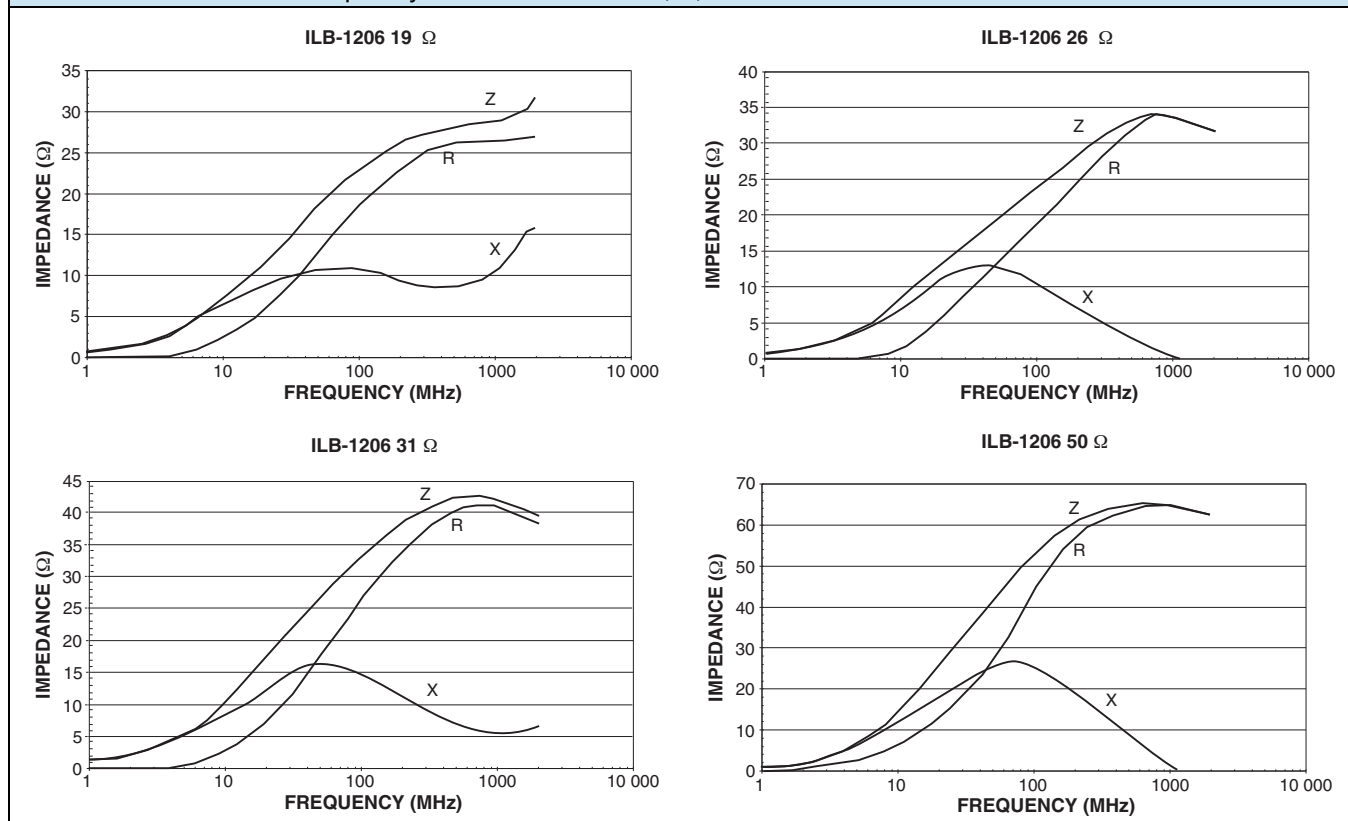
- $\varnothing C$: Outer diameter of the reel.
- $\varnothing N$: Inner diameter of the reel.
- $\varnothing A$: Diameter of the central hub.
- T_1 : Thickness of the reel flange.
- W_1 : Width of the reel flange.

Cross-Section Dimensions:

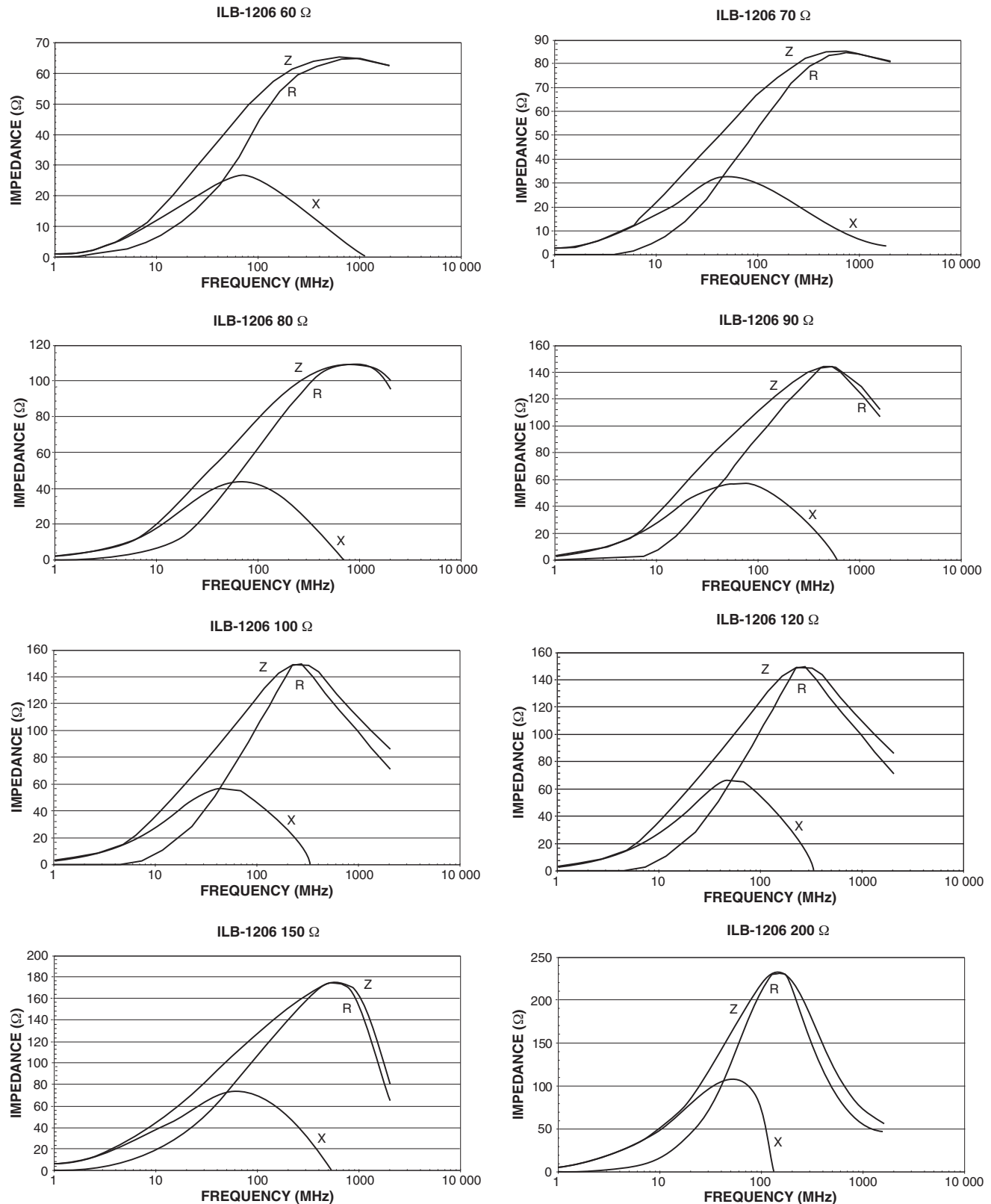
- Empty Trailer: Width of the empty trailer.
- Components: Width of the components.
- Empty Tape: Width of the empty tape.
- Cover Tape Leader: Width of the cover tape leader.
- 160 mm Minimum: Minimum width of the empty trailer.
- 390 mm Minimum: Minimum width of the empty tape.
- Unreel Direction: Indicated by an arrow.

A_0	0.071 ± 0.008 [1.80 $\pm$ 0.2]
B_0	0.140 ± 0.006 [3.45 $\pm$ 0.15]
D_0	$0.059 + 0.005/- 0.000$ [1.5 + 0.127/- 0.0]
D_1	0.039 min. [1.0 min.]
E_1	0.069 ± 0.004 [1.75 $\pm$ 0.1]
F	0.138 ± 0.002 [3.50 $\pm$ 0.05]
K_0	0.049 ± 0.002 [1.24 $\pm$ 0.05]
P_0	0.157 ± 0.004 [4.00 $\pm$ 0.1]
P_1	0.157 ± 0.004 [4.00 $\pm$ 0.1]
P_2	0.079 ± 0.002 [2.00 $\pm$ 0.05]
W	0.327 max. [8.3 max.]
T	0.009 ± 0.002 [0.2 $\pm$ 0.05]
A	7.000 ± 0.079 [178 $\pm$ 2.0]
N	2.500 [63.5]
C	0.512 ± 0.020 [13.00 $\pm$ 0.5]
W_1	$0.315 + 0.059/- 0.000$ [8.00 + 1.5/- 0.0]
T_1	0.079 ± 0.002 [2.00 $\pm$ 0.05]

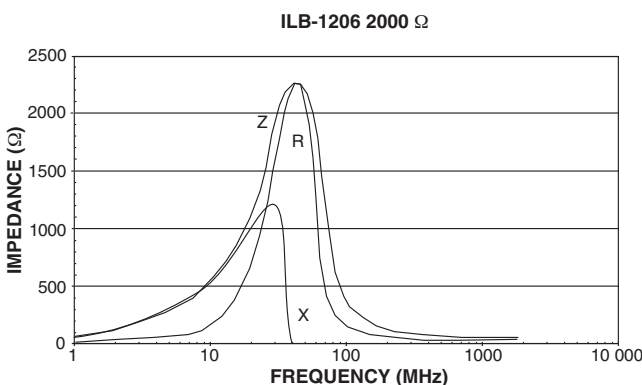
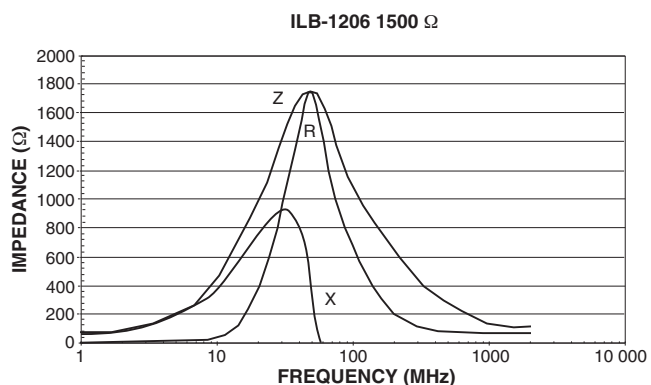
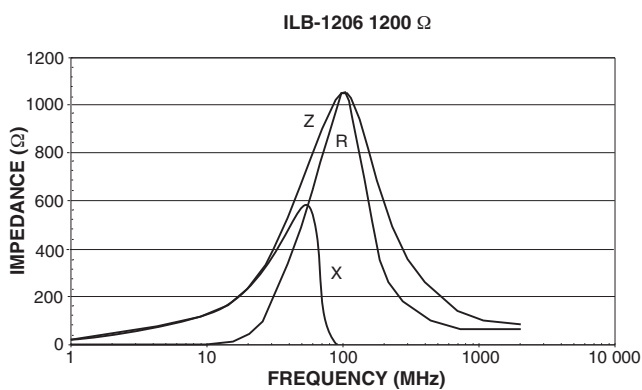
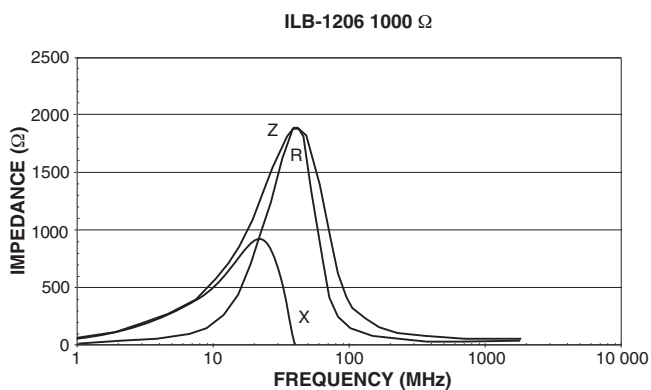
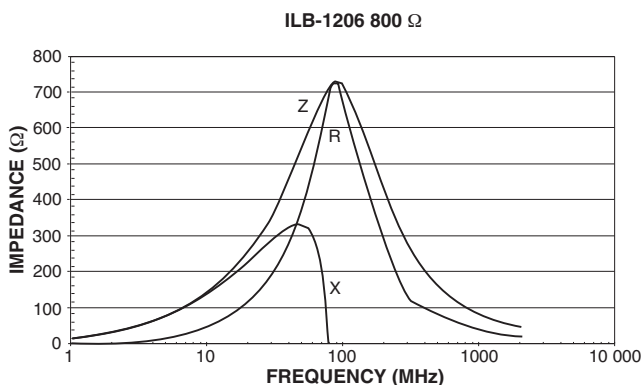
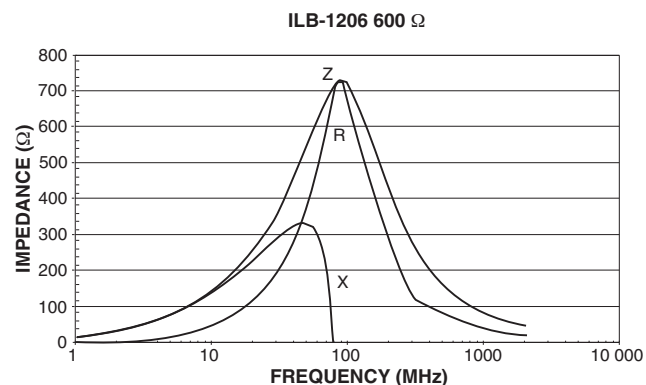
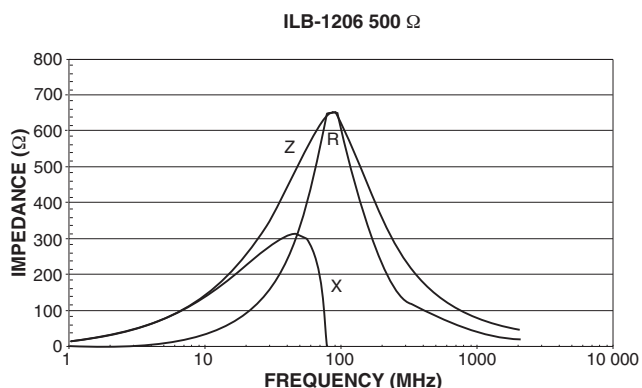
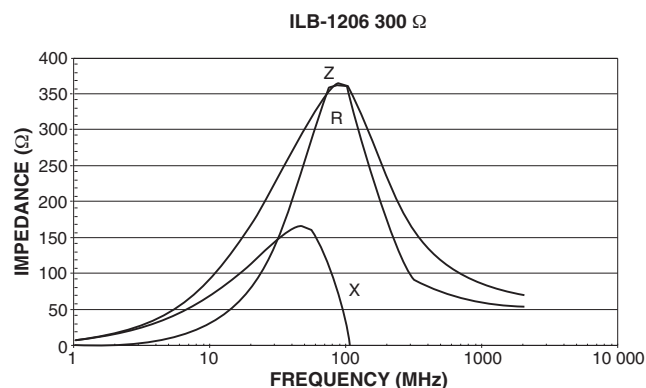
TYPICAL CURVES - Frequency Characteristics of R, X, and Z



TYPICAL CURVES - Frequency Characteristics of R, X, and Z



TYPICAL CURVES - Frequency Characteristics of R, X, and Z





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