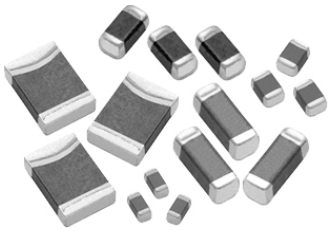
High Current Multilayer Ferrite Beads



FEATURES

- High reliability
- Surface mountable (multiple case sizes)
- Current rating up to 6 A
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE

MECHANICAL SPECIFICATIONS

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

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

Terminal Strength: 0603: 0.3 kg (0.66 lbs), 0805: 0.6 kg (1.3 lbs), 1206: 1.0 kg (2.2 lbs), 1806: 1.0 kg (2.2 lbs), 1812: 1.5 kg (3.3 lbs) for 30 s

Beam Strength: 0603: 0.3 kg (0.66 lbs), 0805: 1.0 kg (2.2 lbs), 1206: 2.0 kg (4.4 lbs), 1806: 2.5 kg (5.5 lbs), 1812: 2.5 kg (5.5 lbs)

ENVIRONMENTAL SPECIFICATIONS

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

Thermal Shock: 100 cycles, -40 °C to +125 °C

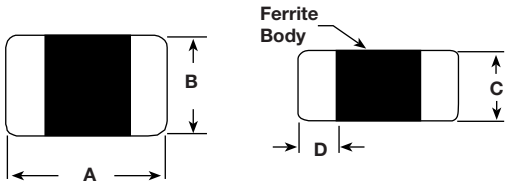
Biased Humidity: 85 % RH at 85 °C, 1000 h at full rated current

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	Z ± 25 % (Ω)	TEST FREQUENCY (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
ILHB-0603	60	100	0.10	2000
	120	100	0.10	2000
ILHB-0805	30	100	0.015	6000
	60	100	0.03	3000
	90	100	0.025	5000
	120	100	0.03	5000
	250	100	0.04	3000
	600	100	0.10	2000
ILHB-1206	50	100	0.02	6000
	75	100	0.03	3000
	120	100	0.02	6000
	500	100	0.06	2500
	600	100	0.10	2500
ILHB-1806	60	100	0.02	6000
ILHB-1812	120	100	0.02	6000
	600	50	0.04	3000
	1300	60	0.05	3000

DIMENSIONS in inches [millimeters]

Dimensional Outline



SIZE	A	B	C	D
0603	0.06 ± 0.006 [1.6 ± 0.15]	0.03 ± 0.006 [0.8 ± 0.15]	0.03 ± 0.006 [0.8 ± 0.15]	0.012 ± 0.008 [0.30 ± 0.20]
0805	0.079 ± 0.008 [2.0 ± 0.20]	0.049 ± 0.008 [1.25 ± 0.20]	0.035 ± 0.008 [0.90 ± 0.20]	0.02 ± 0.012 [0.50 ± 0.30]
1206	0.126 ± 0.008 [3.2 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.2]	0.043 ± 0.008 [1.1 ± 0.2]	0.020 ± 0.012 [0.50 ± 0.30]
1806	0.177 ± 0.010 [4.5 ± 0.25]	0.063 ± 0.008 [1.6 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.024 ± 0.016 [0.60 ± 0.40]
1812	0.177 ± 0.010 [4.5 ± 0.25]	0.126 ± 0.010 [3.2 ± 0.25]	0.060 ± 0.010 [1.5 ± 0.25]	0.024 ± 0.016 [0.60 ± 0.40]

DESCRIPTION

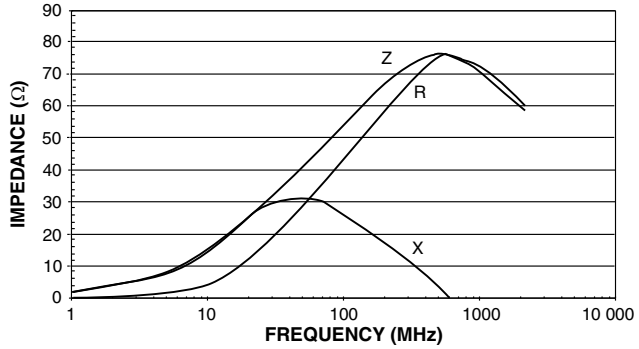
ILHB	1206	120	± 25 %	ER	e3
MODEL	SIZE	IMPEDANCE VALUE	IMPEDANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

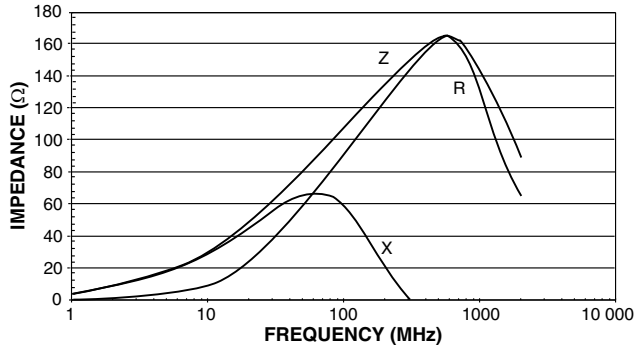
I L H B	1 2 0 6	E R	1 2 1	V
PRODUCT FAMILY	SIZE	PACKAGE CODE	IMPEDANCE VALUE	IMPEDANCE TOLERANCE

TYPICAL CURVES (Frequency Characteristics of R, X, and Z)

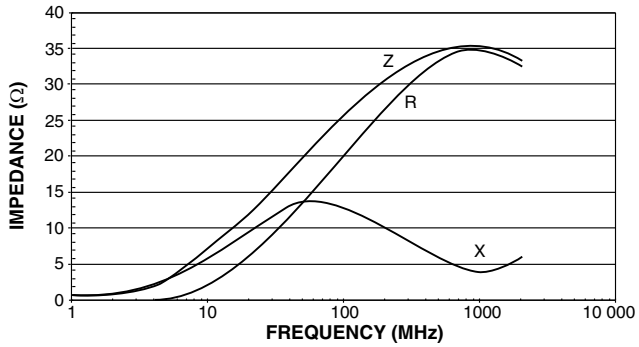
ILHB-0603 60 Ω



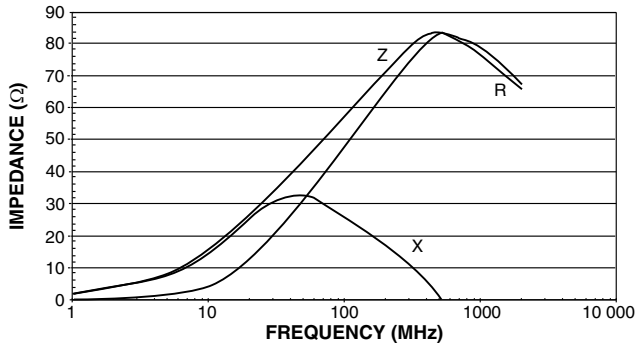
ILHB-0603 120 Ω



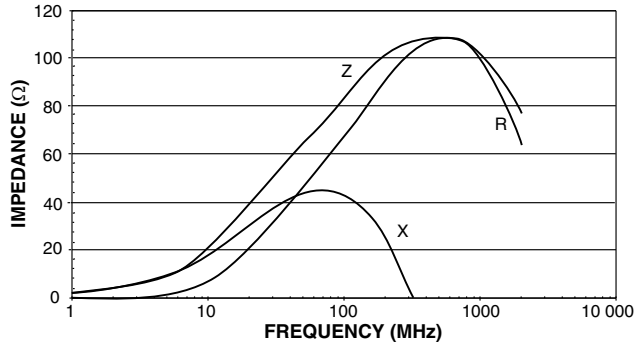
ILHB-0805 30 Ω



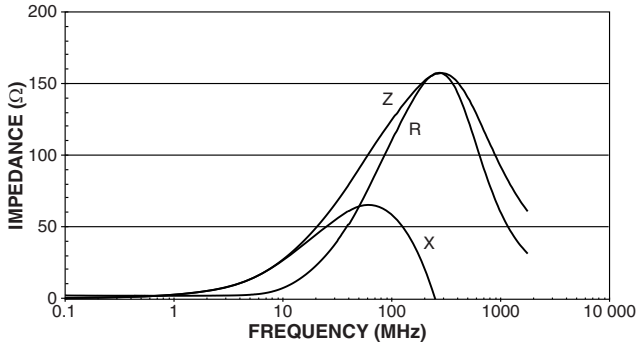
ILHB-0805 60 Ω



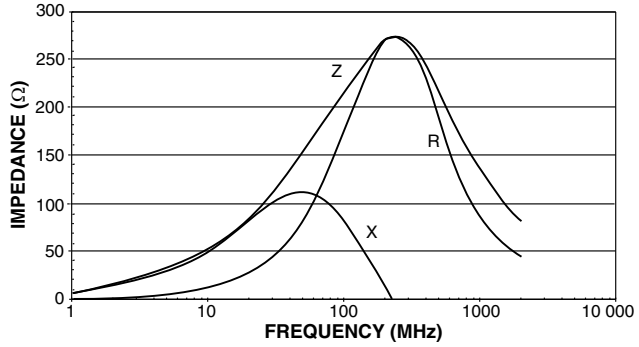
ILHB-0805 90 Ω



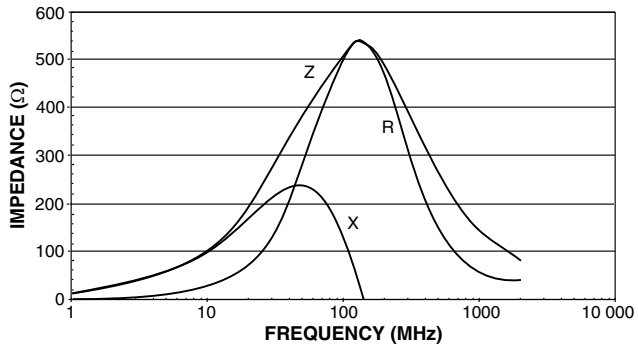
ILHB-0805 120 Ω



ILHB-0805 250 Ω

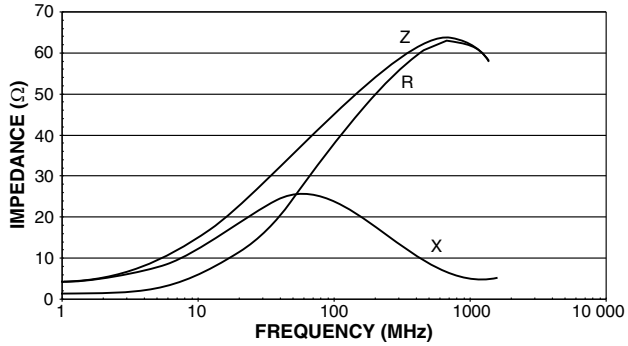


ILHB-0805 600 Ω

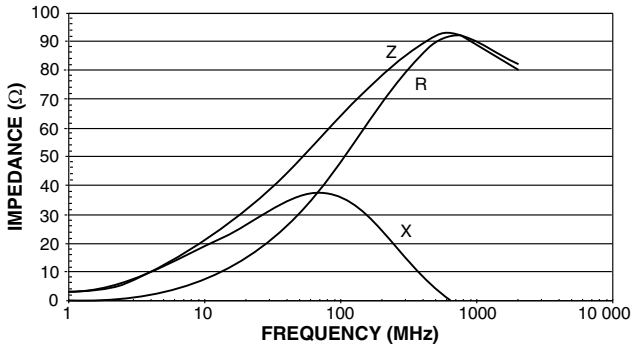


TYPICAL CURVES (Frequency Characteristics of R, X, and Z)

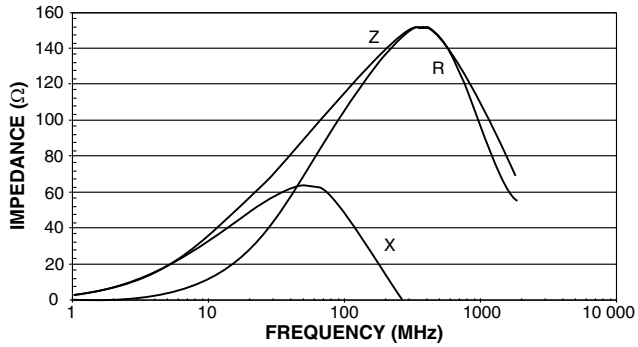
ILHB-1206 50 Ω



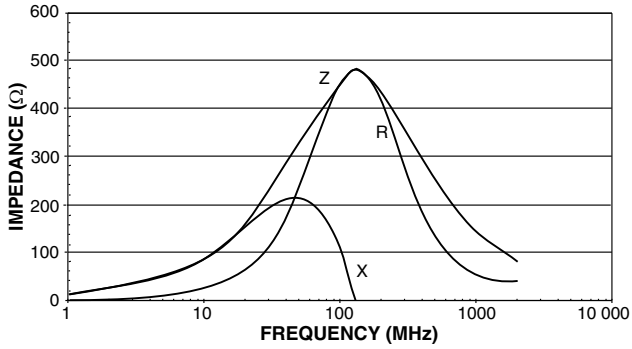
ILHB-1206 75 Ω



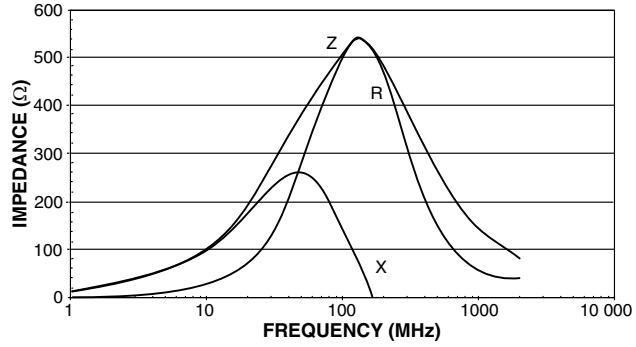
ILHB-1206 120 Ω



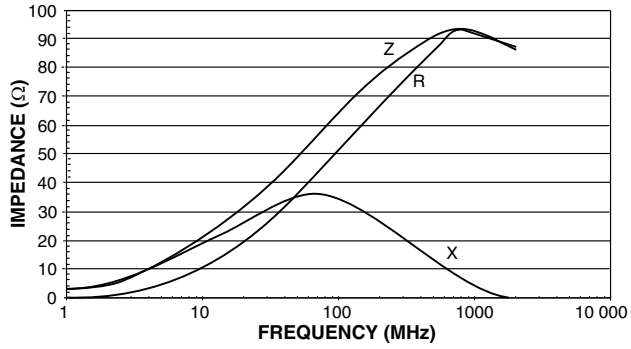
ILHB-1206 500 Ω



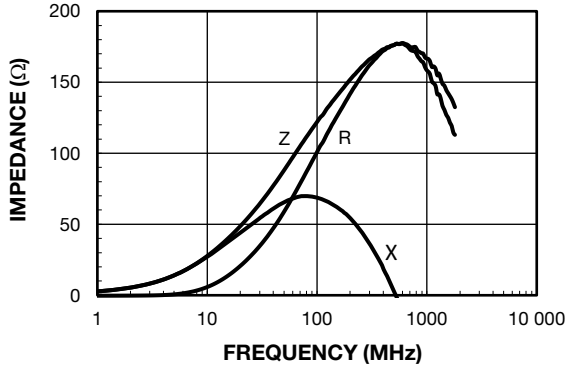
ILHB-1206 600 Ω



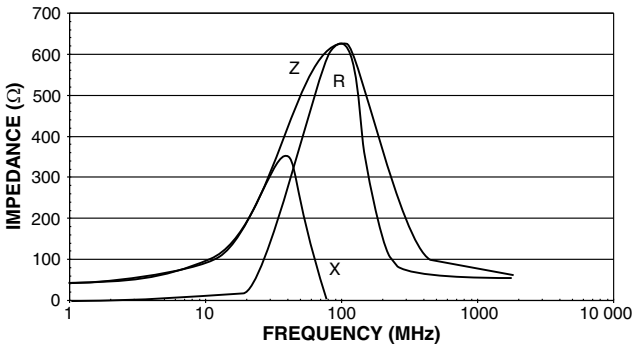
ILHB-1806 60 Ω



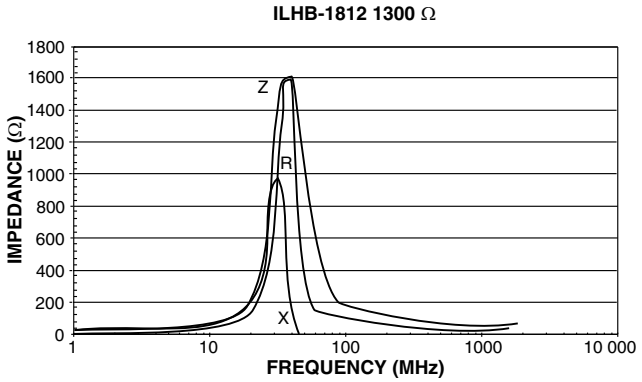
ILHB-1812 120 Ω



ILHB-1812 600 Ω



TYPICAL CURVES (Frequency Characteristics of R, X, and Z)



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