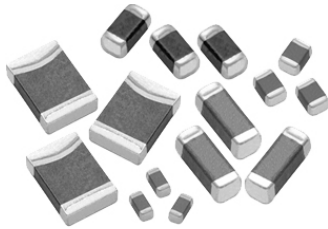


## High Current Multilayer Ferrite Beads



### 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)

### STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	Z ± 25 % (Ω)	TEST FREQUENCY (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
ILHB0603ER600V	60	100	0.04	3000
ILHB0603ER121V	120	100	0.07	2500
ILHB0805ER300V	30	100	0.015	6000
ILHB0805ER600V	60	100	0.04	3000
ILHB0805ER900V	90	100	0.02	5000
ILHB0805ER121V	120	100	0.02	5000
ILHB0805ER251V	250	100	0.04	3000
ILHB0805ER601V	600	100	0.09	2000
ILHB1206ER500V	50	100	0.015	6000
ILHB1206ER750V	75	100	0.03	4000
ILHB1206ER121V	120	100	0.015	6000
ILHB1206ER501V	500	100	0.06	2500
ILHB1206ER601V	600	100	0.07	2500
ILHB1806ER600V	60	100	0.015	6000
ILHB1812ER121V	120	100	0.015	6000
ILHB1812ER601V	600	50	0.04	3000
ILHB1812ER132V	1300	60	0.04	3000

### 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](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

### ENVIRONMENTAL SPECIFICATIONS

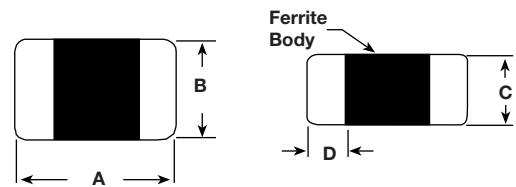
**Operating Temperature:** -55 °C to +125 °C

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

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

### 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

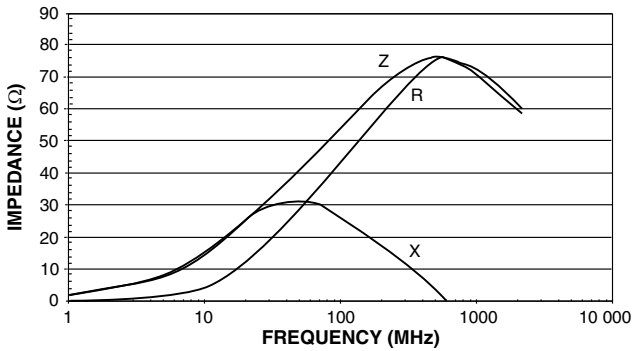
### GLOBAL PART NUMBER

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

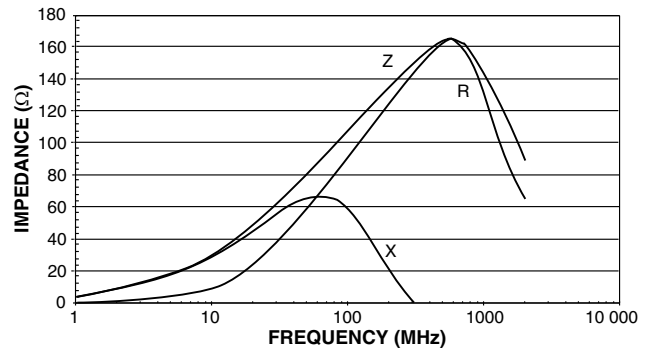


TYPICAL CURVES (Frequency Characteristics of R, X, and Z)

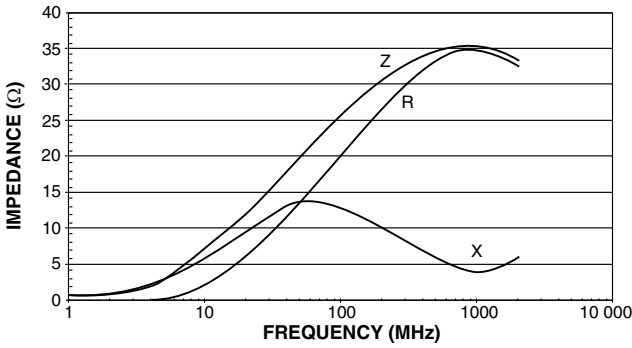
ILHB-0603 60 Ω



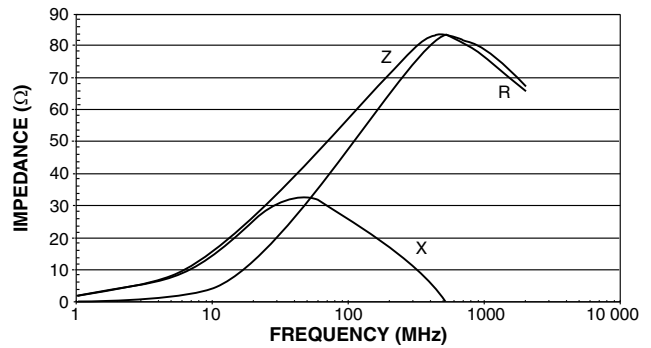
ILHB-0603 120 Ω



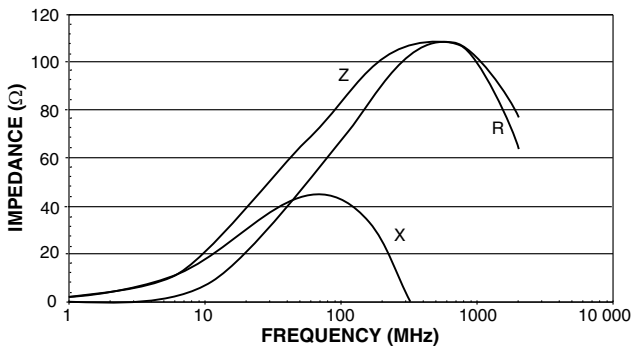
ILHB-0805 30 Ω



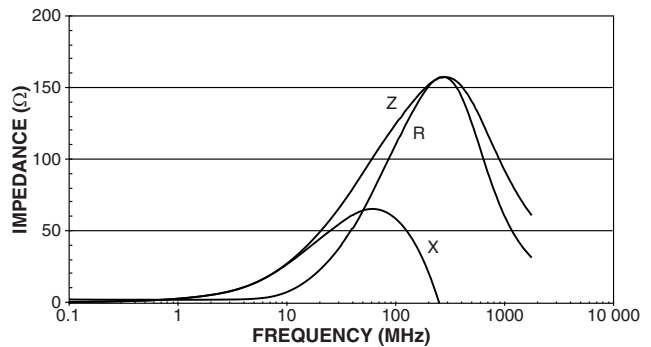
ILHB-0805 60 Ω



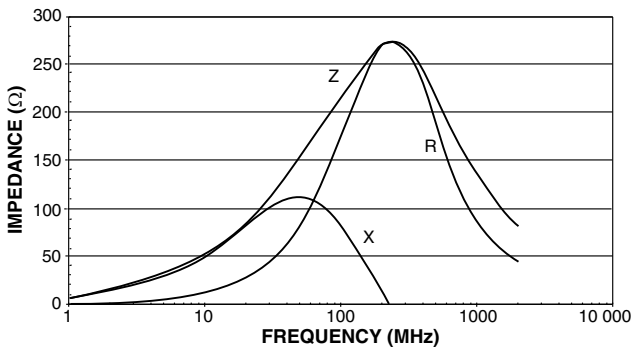
ILHB-0805 90 Ω



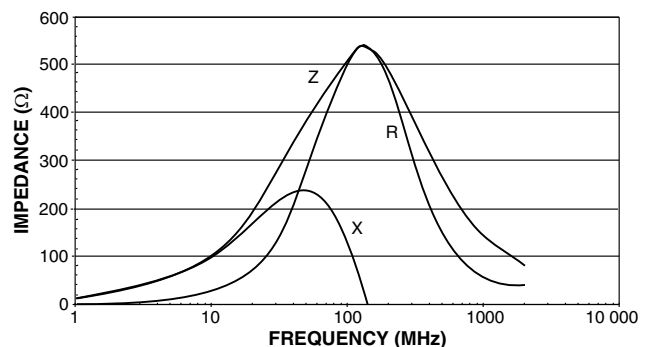
ILHB-0805 120 Ω



ILHB-0805 250 Ω

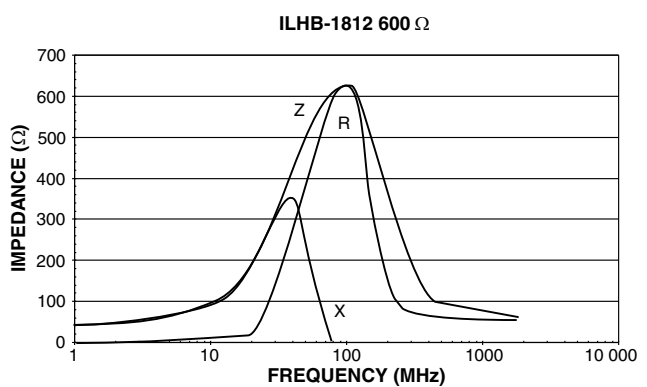
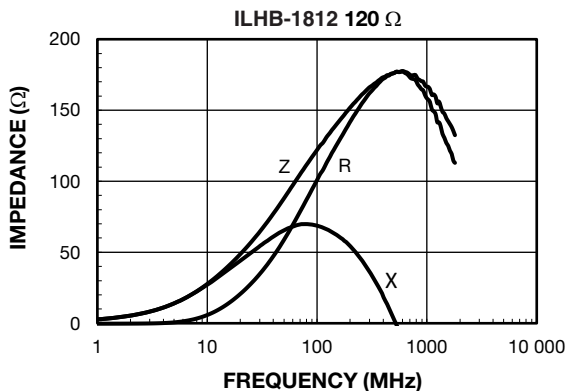
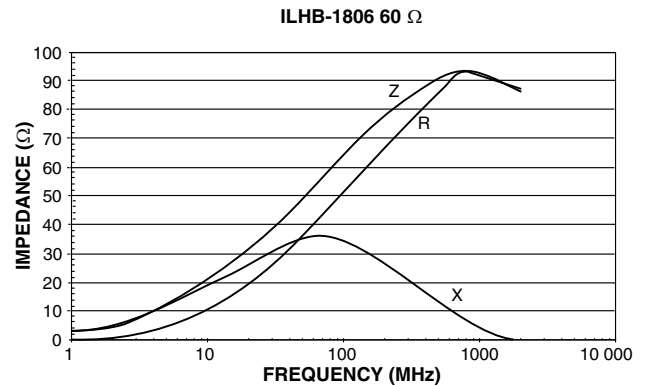
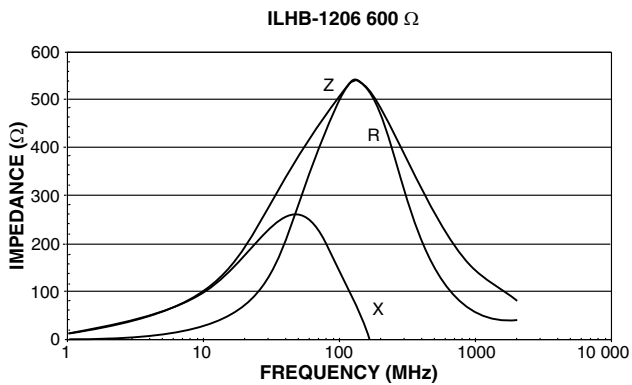
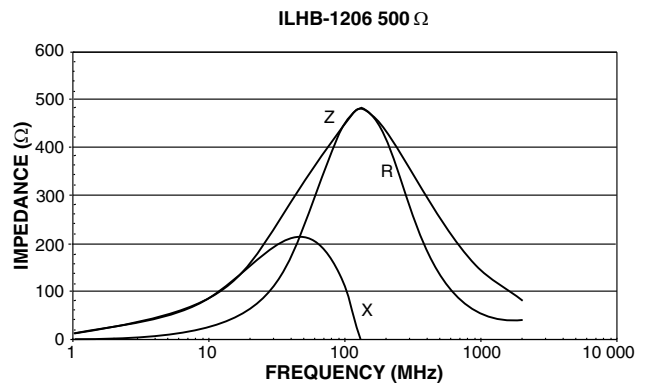
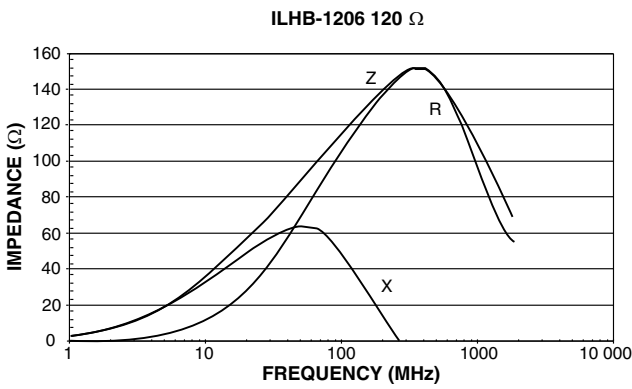
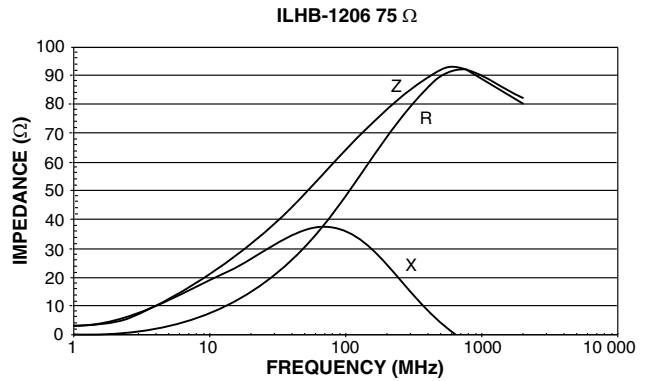
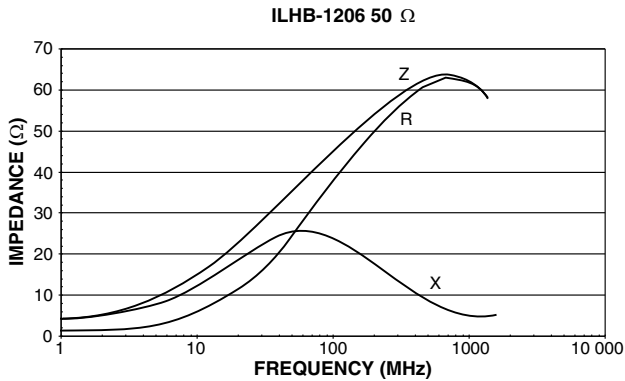


ILHB-0805 600 Ω



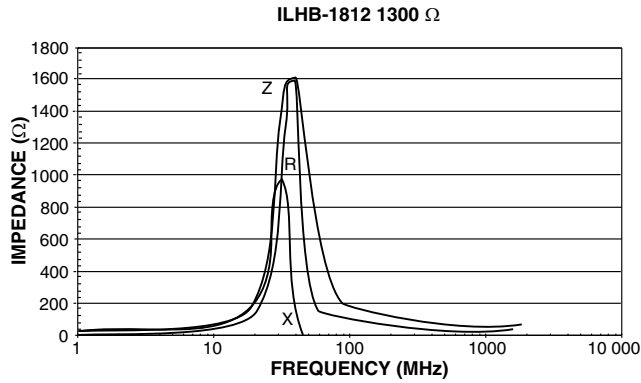


TYPICAL CURVES (Frequency Characteristics of R, X, and Z)





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





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