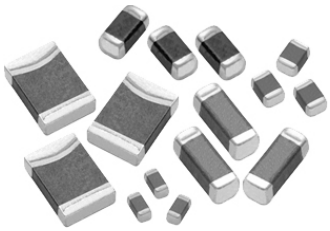
High Current Multilayer Ferrite Beads



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

Voltage Rating: 100 V

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	0.04	3000
ILHB0805ER300V	30	100	0.015	6000
ILHB0805ER600V	60	100	0.040	3000
ILHB0805ER900V	90	100	0.020	5000
ILHB0805ER121V	120	100	0.020	5000
ILHB0805ER251V	250	100	0.040	3000
ILHB0805ER601V	600	100	0.090	2000
ILHB1206ER500V	50	100	0.015	6000
ILHB1206ER750V	75	100	0.040	3000
ILHB1206ER121V	120	100	0.015	6000
ILHB1206ER501V	500	100	0.070	2500
ILHB1206ER601V	600	100	0.070	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

DESCRIPTION

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

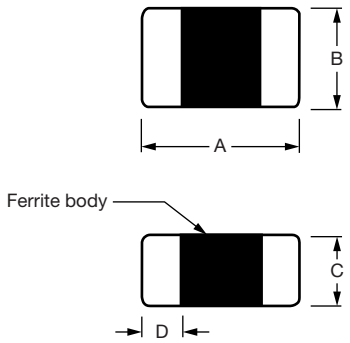
GLOBAL PART NUMBER

I L H B	1 2 0 6	E R	1 2 1	V
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE
		ER = tape and reel	**121** = 120 Ω	**V** = ± 25 %

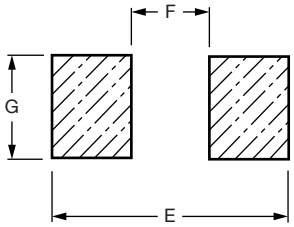
For technical questions, contact: magnetics@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

DIMENSIONS in inches [millimeters]



Dimensional outline



Suggested pad layout

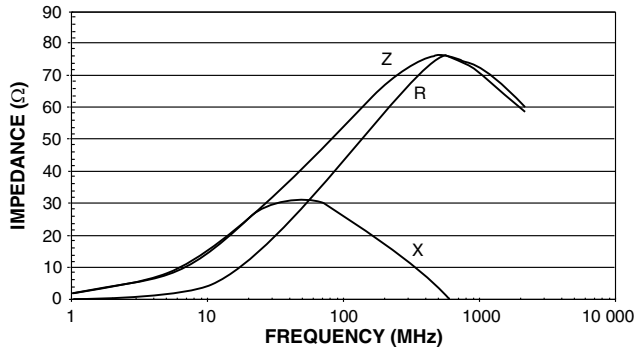
SIZE	A	B	C	D	E	F	G
0603	0.06 ± 0.006 [1.6 ± 0.15]	0.03 ± 0.006 [0.8 ± 0.15]	0.03 ± 0.006 [0.8 ± 0.15]	0.012 ± 0.008 [0.30 ± 0.20]	0.071 to 0.079 [1.8 to 2.0]	0.028 [0.7]	0.028 [0.7]
0805	0.079 ± 0.008 [2.0 ± 0.20]	0.049 ± 0.008 [1.25 ± 0.20]	0.035 ± 0.008 [0.90 ± 0.20]	0.02 ± 0.012 [0.50 ± 0.30]	0.118 to 0.157 [3.0 to 4.0]	0.047 [1.2]	0.039 [1.0]
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]	0.165 to 0.205 [4.2 to 5.2]	0.079 [2.0]	0.047 [1.2]
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]	0.217 to 0.256 [5.5 to 6.5]	0.118 [3.0]	0.047 [1.2]
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]	0.217 to 0.256 [5.5 to 6.5]	0.118 [3.0]	0.166 [4.22}

For technical questions, contact: magnetics@vishay.com

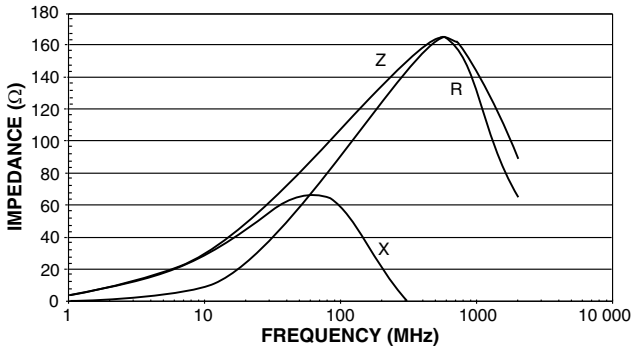
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

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

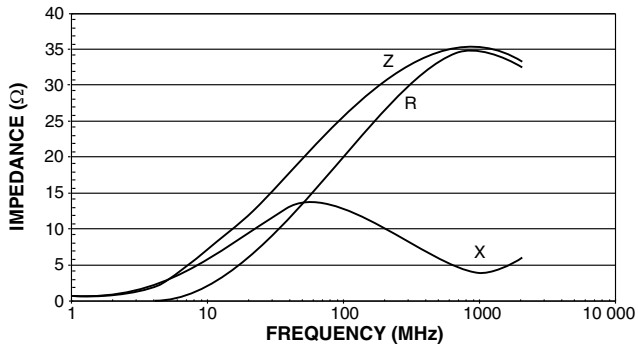
ILHB-0603 60 Ω



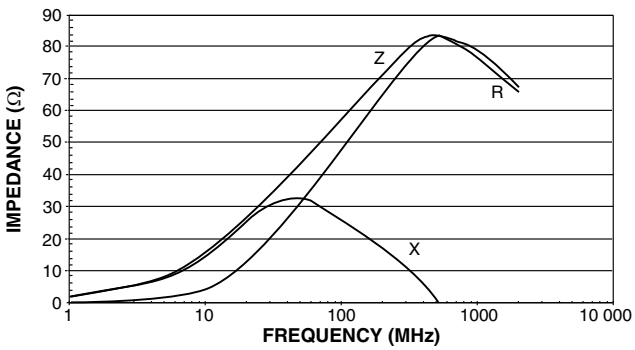
ILHB-0603 120 Ω



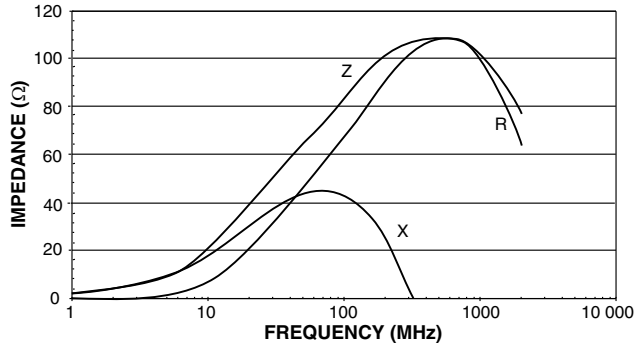
ILHB-0805 30 Ω



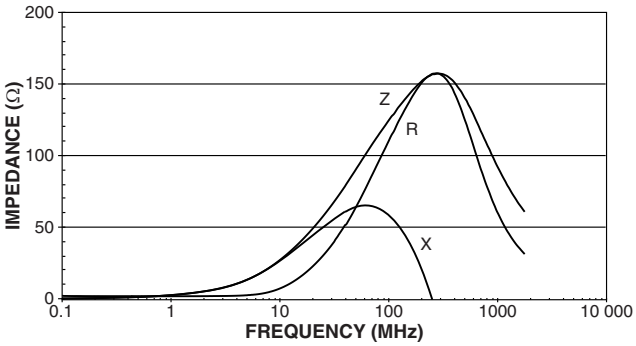
ILHB-0805 60 Ω



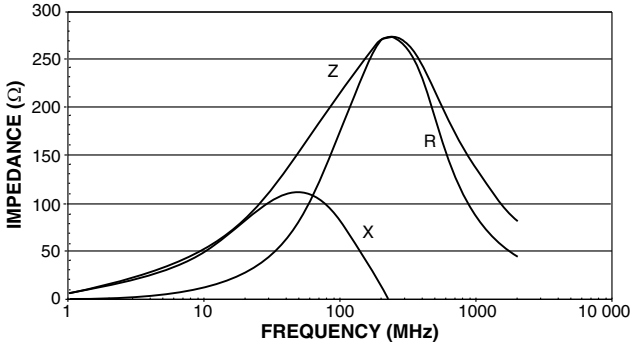
ILHB-0805 90 Ω



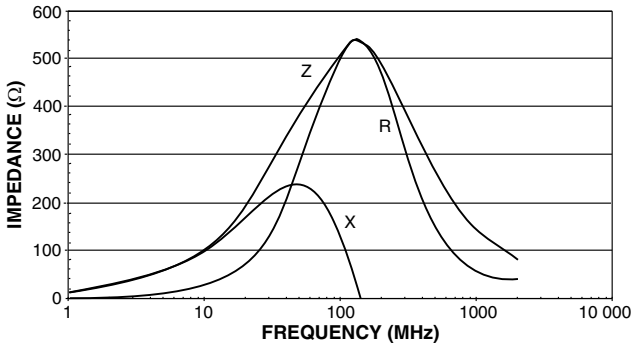
ILHB-0805 120 Ω



ILHB-0805 250 Ω



ILHB-0805 600 Ω

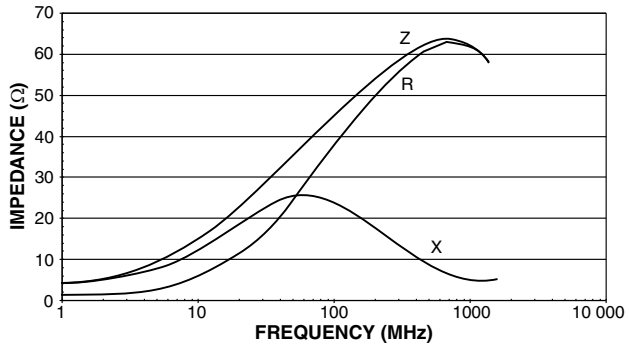


For technical questions, contact: magnetics@vishay.com

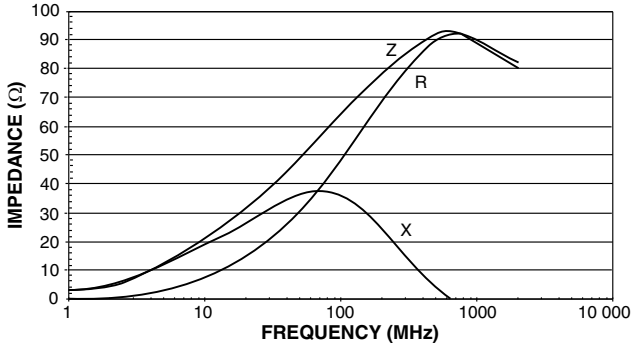
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

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

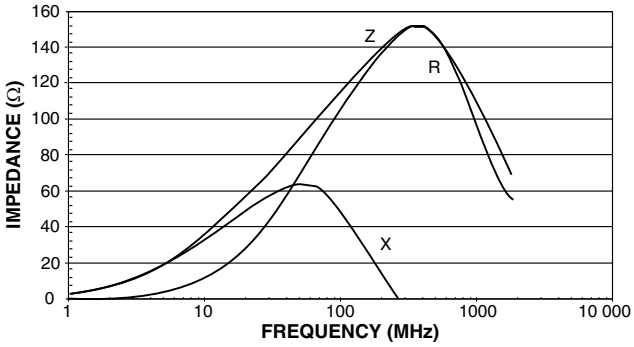
ILHB-1206 50 Ω



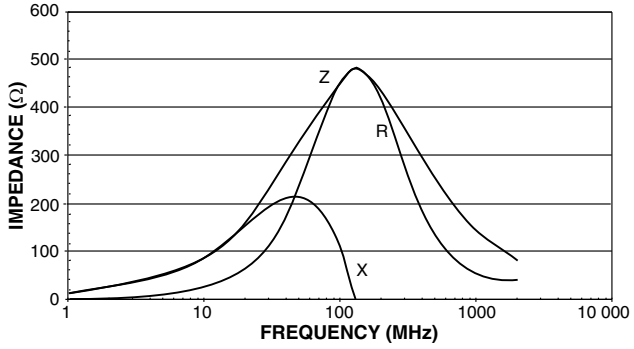
ILHB-1206 75 Ω



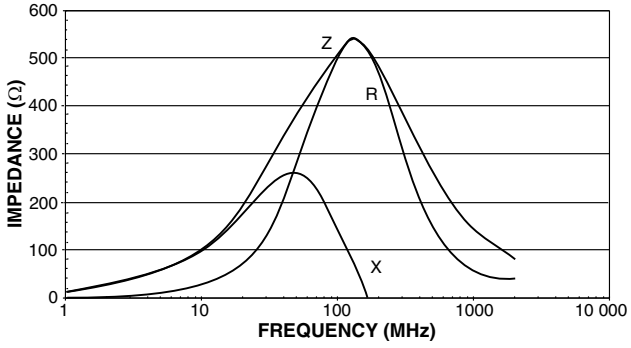
ILHB-1206 120 Ω



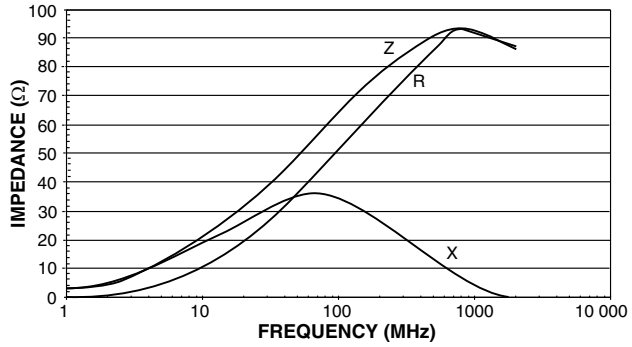
ILHB-1206 500 Ω



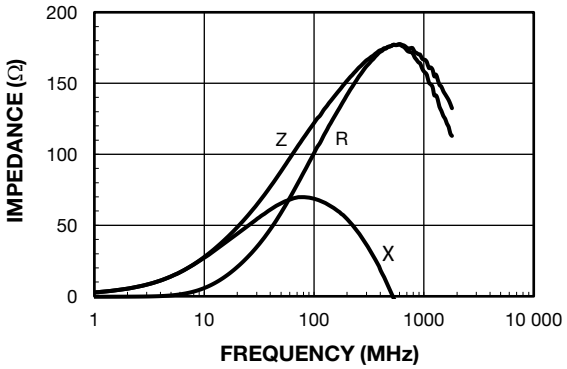
ILHB-1206 600 Ω



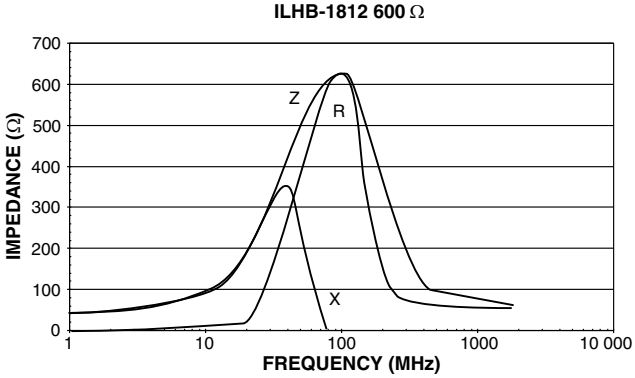
ILHB-1806 60 Ω



ILHB-1812 120 Ω



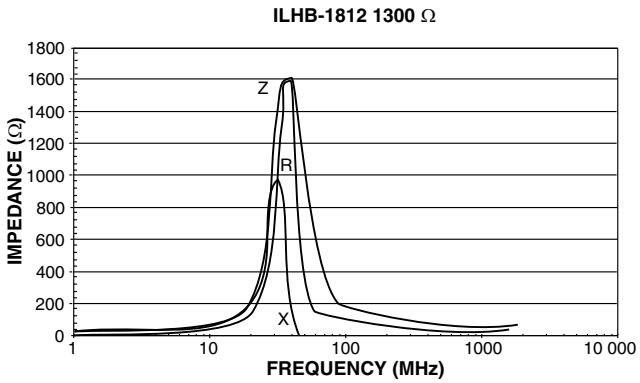
ILHB-1812 600 Ω



For technical questions, contact: magnetics@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

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



For technical questions, contact: magnetics@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2026 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000