



FEATURES

- RoHS compliant
- Radial format
- Up to 6.3A Ioc
- 1.5μH to 68mH
- Low DC resistance
- UL VW-1 rated sleeving
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

DESCRIPTION

The 1300R Series is a general purpose range of inductors suitable for low to medium current applications such as power supply and other general purpose filtering designs.

SELECTION GUIDE

Order Code	Inductance (1kHz, 0.1V _{AC})	DC Current ¹	DC Resistance
	±10%	Max.	Max.
	μH	A	Ω
13R152C	1.5 ±20%	6.3	0.008
13R222C	2.2 ±20%	5.3	0.010
13R332C	3.3 ±20%	4.8	0.013
13R472C	4.7 ±20%	4.3	0.017
13R682C	6.8 ±20%	3.5	0.023
13R103C	10	3.0	0.031
13R153C	15	2.5	0.042
13R223C	22	2.0	0.070
13R333C	33	1.8	0.092
13R473C	47	1.5	0.110
13R683C	68	1.3	0.150
13R104C	100	1.0	0.240
13R154C	150	0.82	0.330
13R224C	220	0.70	0.470
13R334C	330	0.58	0.640
13R474C	470	0.45	1.05
13R684C	680	0.42	1.50
13R105C	1.0mH	0.33	2.10
13R155C	1.5mH	0.28	3.10
13R225C	2.2mH	0.24	4.50
13R335C	3.3mH	0.19	7.0
13R475C	4.7mH	0.16	9.3
13R685C	6.8mH	0.13	13.5
13R106C	10mH	0.085	23.8
13R156C	15mH	0.080	31.0
13R226C	22mH	0.070	48.0
13R336C	33mH	0.060	68.0
13R476C	47mH	0.045	120.0
13R686C	68mH	0.040	152.0

ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to +85°C
Storage temperature range	-40°C to 125°C

SOLDERING INFORMATION²

Peak wave solder temperature	260°C for 10 seconds
Pin finish	Bright tin

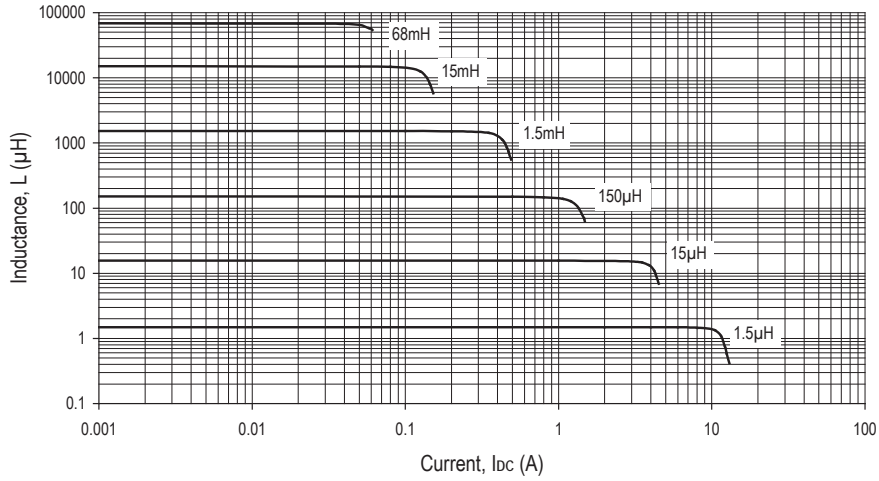


For full details go to
www.murata-ps.com/rohs

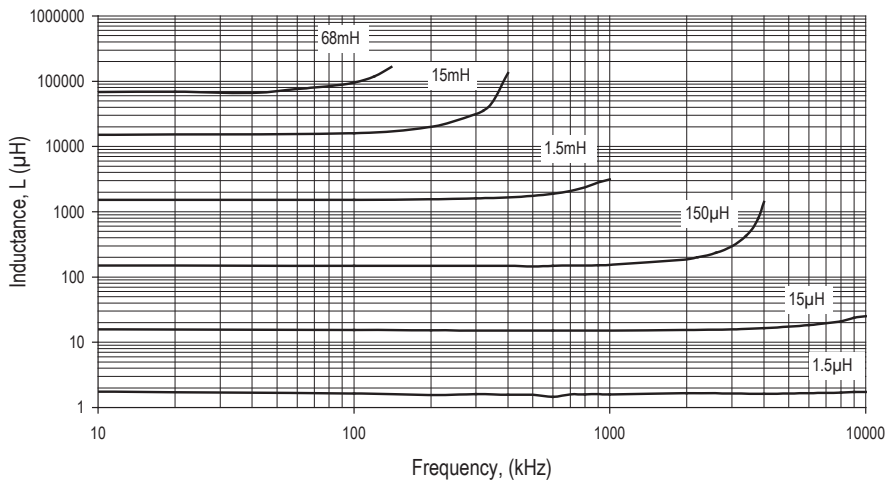
All specifications typical at T_A=25°C

- 1 Maximum DC current occurs when either the inductance falls to 90% of its nominal value or when its temperature rise reaches 30°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs

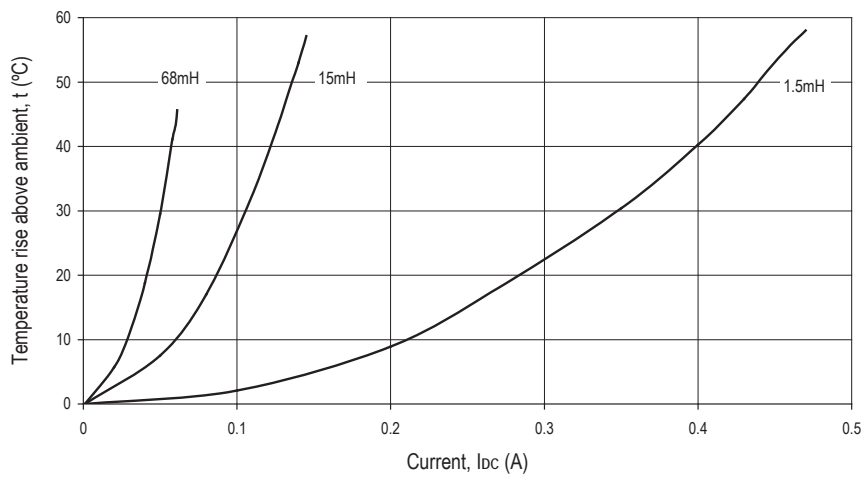
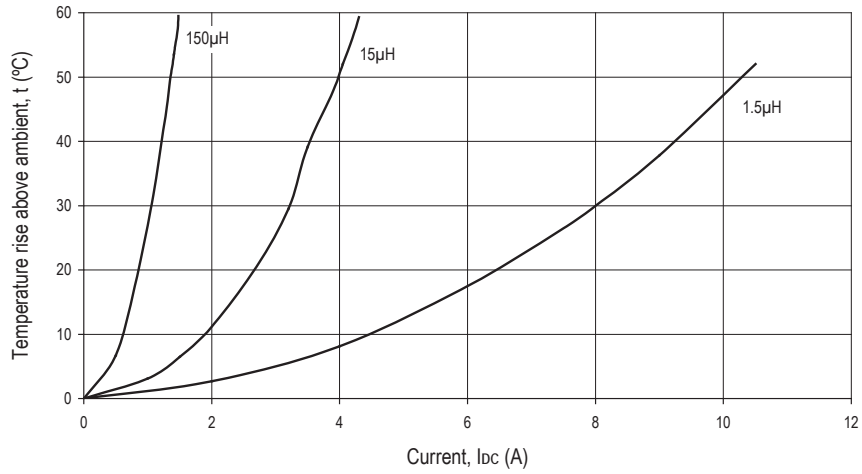
INDUCTANCE Vs CURRENT



INDUCTANCE Vs FREQUENCY

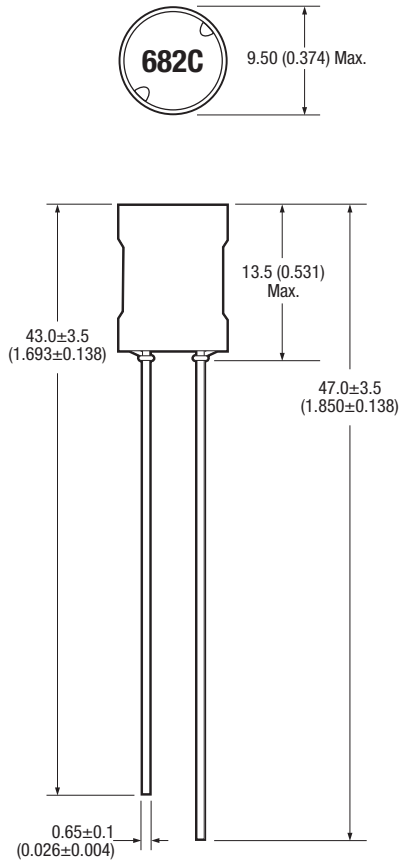


TEMPERATURE vs CURRENT



PACKAGE SPECIFICATIONS

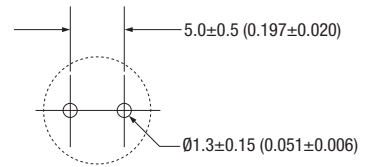
MECHANICAL DIMENSIONS



All dimensions in mm (inches).

Package weight 2.4g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

PACKAGING DETAILS

Supplied in cartons (200 pieces per carton)

DISCLAIMER

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

Particularly for safety-critical and/or life-critical applications, i.e. applications that may directly endanger or cause the loss of life, inflict bodily harm and/or loss or severe damage to equipment/property, and severely harm the environment, a prior explicit written approval from Murata is strictly required. Any use of Murata standard products for any safety-critical, life-critical or any related applications without any prior explicit written approval from Murata shall be deemed unauthorised use.

These applications include but are not limited to:

- Aircraft equipment
- Aerospace equipment
- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

Murata makes no express or implied warranty, representation, or guarantee of suitability, fitness for any particular use/purpose and/or compatibility with any application or device of the buyer, nor does Murata assume any liability whatsoever arising out of unauthorised use of any Murata product for the application of the buyer. The suitability, fitness for any particular use/purpose and/or compatibility of Murata product with any application or device of the buyer remain to be the responsibility and liability of the buyer.

Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm, and take appropriate remedial actions. Buyer will fully indemnify and hold Murata, its affiliated companies, and its representatives harmless against any damages arising out of unauthorised use of any Murata products in any safety-critical and/or life-critical applications.

Remark: Murata in this section refers to Murata Manufacturing Company and its affiliated companies worldwide including, but not limited to, Murata Power Solutions.



This product is subject to the following [operating requirements](#) and the [Life and Safety Critical Application Sales Policy](#):

Refer to: <https://www.murata.com/en-eu/products/power/requirements>

Murata Power Solutions (Milton Keynes) Ltd. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

© 2021 Murata Power Solutions (Milton Keynes) Ltd