Murata Power Solutions

1200LRS Series

Through Hole Radial Lead Shielded Inductors

FEATURES

- RoHS compliant
- Radial format
- Integral EMI shield
- Compact size
- Up to 4.7A I_{DC}
- 6.8µH to 22mH
- Low DC resistance
- UL 94V-0 materials
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

The 1200LRS Series of inductors is suitable for power line filtering in low to medium current applications such as switching power supply circuits. The integral ferrite shield makes these devices ideal for protecting circuits susceptible to EMI.

For higher current versions with the same footprint see our 1200RS Series.

SELECTION GUIDE

Order Code	Inductance (0.1V@10kHz) ±15% µH	DC Current[1] Max. A	DC Resistance Max. mΩ	Recommended Alternative
		To be discontinued		
12LRS682C	6.8 ±20%	4.7	20	Contact Murata
12LRS103C	10 ±20%	3.4	50	Contact Murata
12LRS153C	15 ±20%	3.0	70	Contact Murata
12LRS223C	22 ±20%	2.6	90	Contact Murata
12LRS333C	33 ±20%	2.1	110	Contact Murata
12LRS473C	47 ±20%	1.7	140	Contact Murata
12LRS683C	68	1.6	160	Contact Murata
12LRS104C	100	1.4	200	Contact Murata
12LRS154C	150	1.0	350	Contact Murata
12LRS224C	220	0.78	540	Contact Murata
12LRS334C	330	0.63	860	Contact Murata
12LRS474C	470	0.53	1230	Contact Murata
12LRS684C	680	0.50	1650	Contact Murata
12LRS105C	1000	0.40	2300	Contact Murata
12LRS155C	1500	0.31	3400	Contact Murata
12LRS225C	2200	0.28	4600	Contact Murata
12LRS335C	3300	0.20	8700	Contact Murata
12LRS475C	4700	0.18	10500	Contact Murata
12LRS685C	6800	0.15	15000	Contact Murata
12LRS106C	10000	0.12	24000	Contact Murata
12LRS156C	15000	0.095	37000	Contact Murata
12LRS226C	22000	0.073	70000	Contact Murata

ABSOLUTE MAXIMUM RATINGS

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

SOLDERING INFORMATION[2]

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

RoHS COMPLIANT

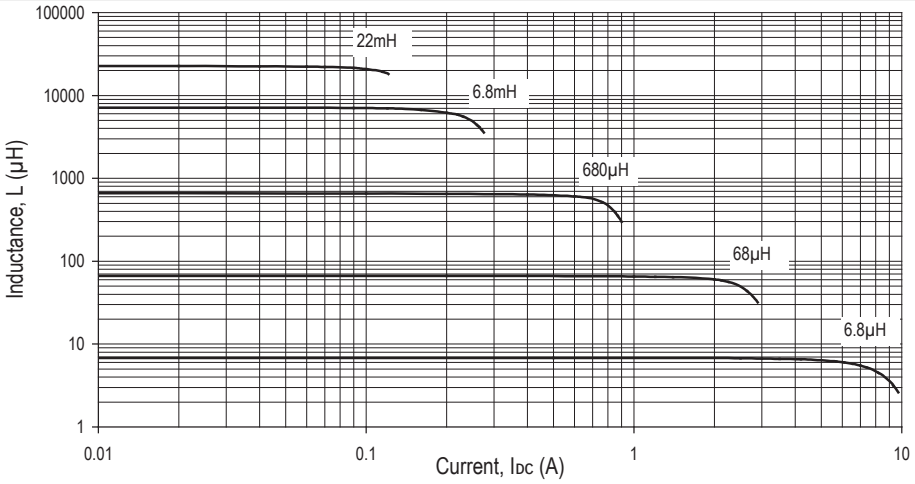
For full details go to www.murata-ps.com/rohs

All specifications typical at T_A=25°C

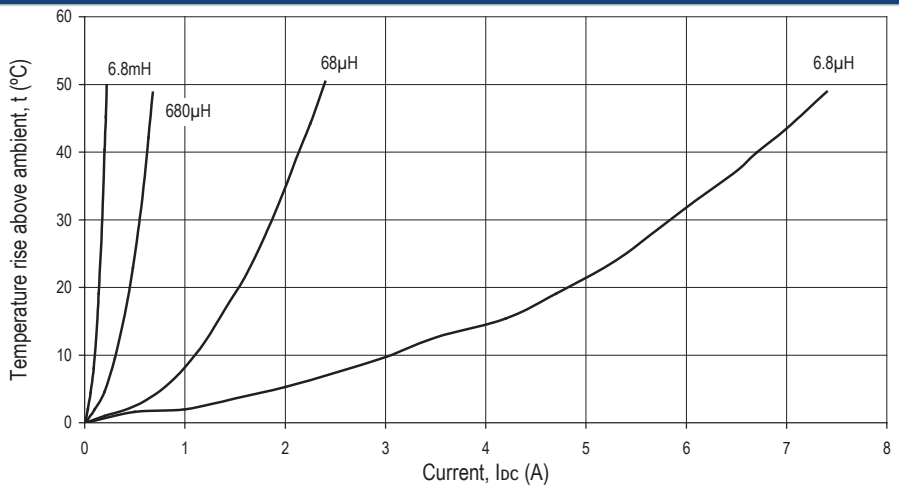
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

2 For further information, please visit www.murata-ps.com/rohs

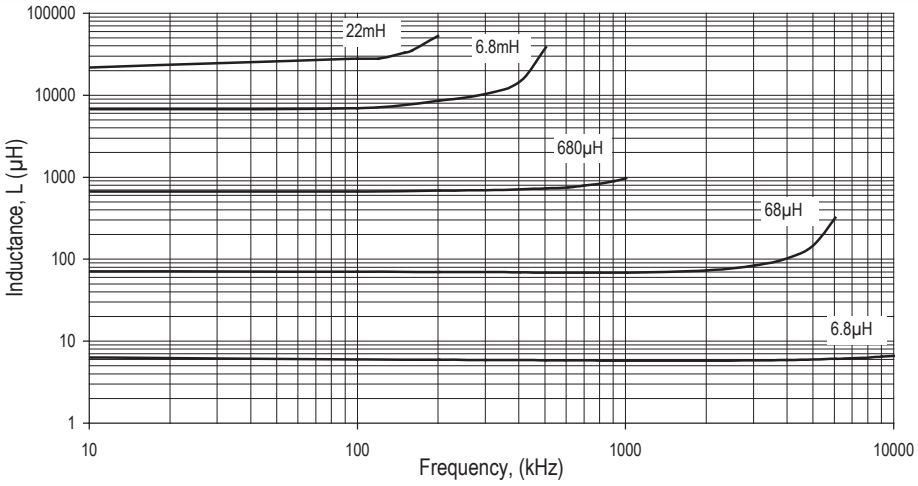
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

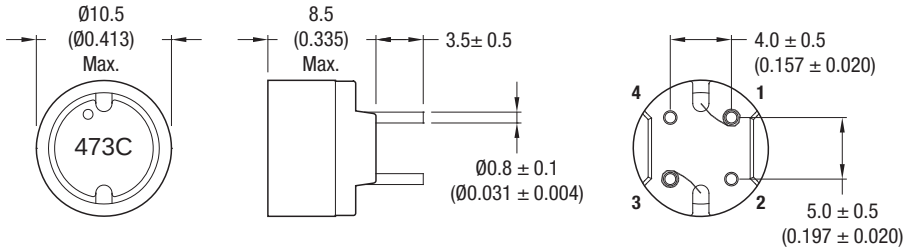


INDUCTANCE Vs FREQUENCY



PACKAGE SPECIFICATIONS

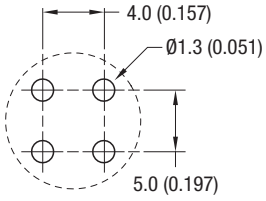
MECHANICAL DIMENSIONS



All dimensions in mm (inches).

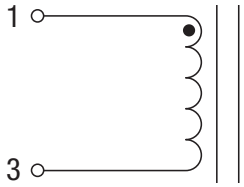
Package weight 2.6g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

SCHEMATIC



PACKAGING DETAILS

Supplied in cartons (250 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

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