



FEATURES

- RoHS compliant
- Radial format
- Integral EMI shield
- Compact size
- Up to 4.6A loc
- 10 μ H to 1mH
- Low DC resistance
- UL 94V-0 materials
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

The 1200RS 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 lower current versions with the same footprint see our 1200LRS Series.

SELECTION GUIDE

Order Code	Inductance (0.1V@10kHz)	DC Current ¹	DC Resistance
	$\pm 15\%$ μ H	Max. A	Max. m Ω
12RS103C	10 $\pm 20\%$	4.6	23
12RS153C	15 $\pm 20\%$	4.0	36
12RS223C	22 $\pm 20\%$	3.3	42
12RS333C	33	2.7	57
12RS473C	47	2.2	100
12RS683C	68	1.8	150
12RS104C	100	1.4	190
12RS154C	150	1.25	230
12RS224C	220	1.10	290
12RS334C	330	0.85	510
12RS474C	470	0.72	980
12RS684C	680	0.55	1200
12RS105C	1000	0.44	1500

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	Matte tin

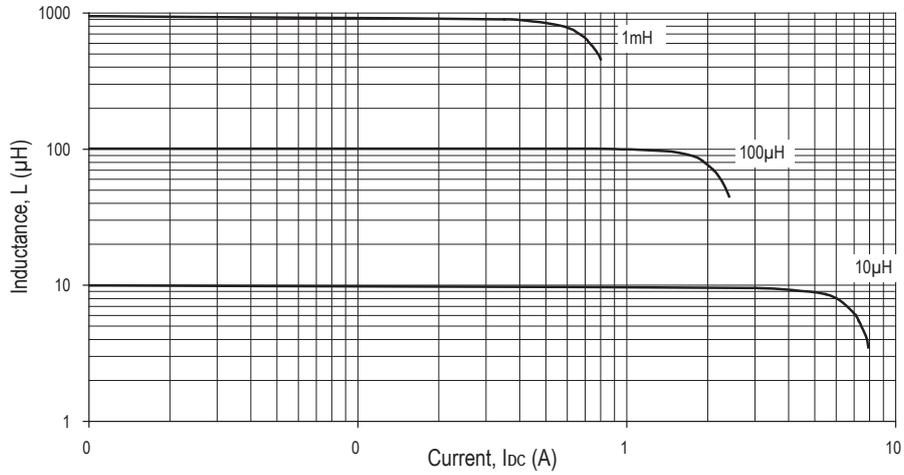


For full details go to
www.murata-ps.com/rohs

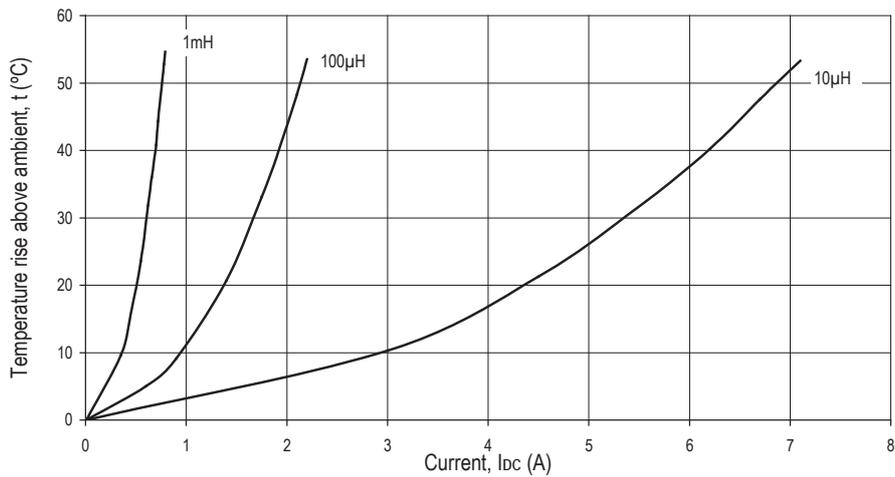
All specifications typical at $T_A = 25^\circ\text{C}$

- 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

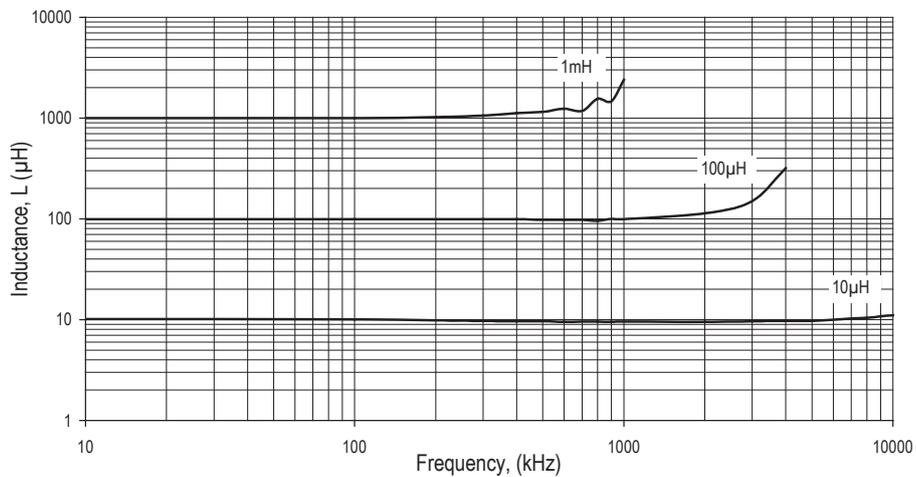
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

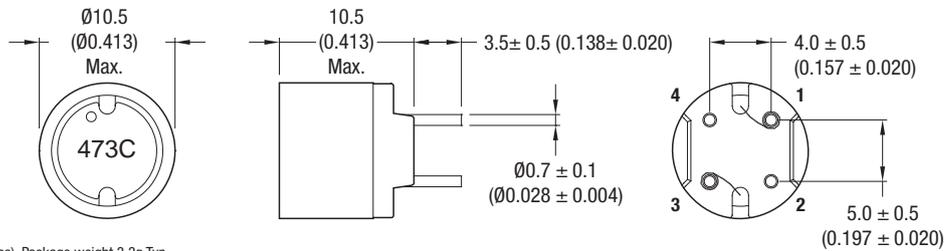


INDUCTANCE Vs FREQUENCY



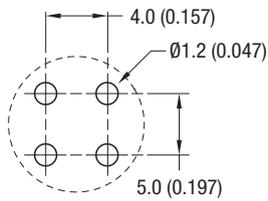
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS



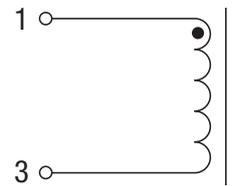
All dimensions in mm (inches). Package weight 3.3g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

SCHEMATIC



PACKAGING DETAILS

Supplied in cartons (250 pieces per carton)

DISCLAIMER

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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.

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- Aircraft equipment
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- 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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