



FEATURES

- RoHS compliant
- Radial format
- Integral EMI shield
- Compact size
- Up to 4.6A I_{DC}
- 10μH 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
	±15%	Max.	Max.
	μH	A	mΩ
12RS103C	10 ±20%	4.6	23
12RS153C	15 ±20%	4.0	36
12RS223C	22 ±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

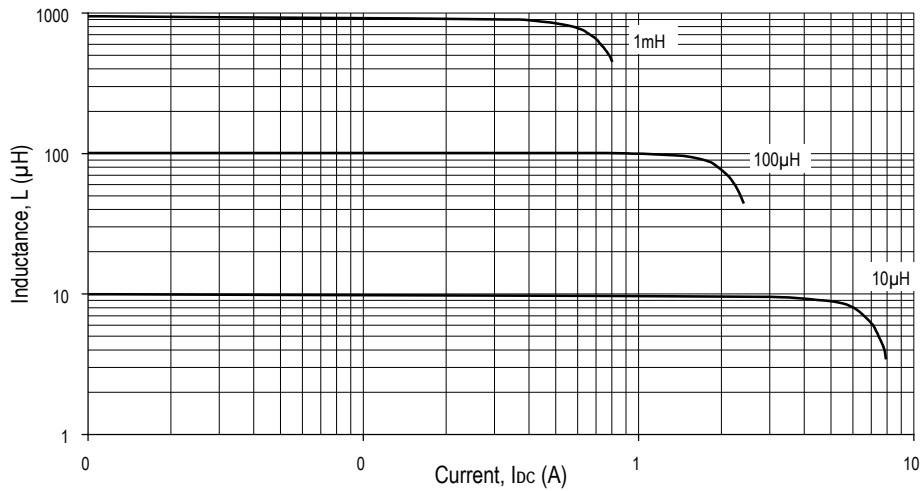
Peak wave solder temperature	260°C for 10 seconds
Pin finish	Matte tin

All specifications typical at T_a=25°C

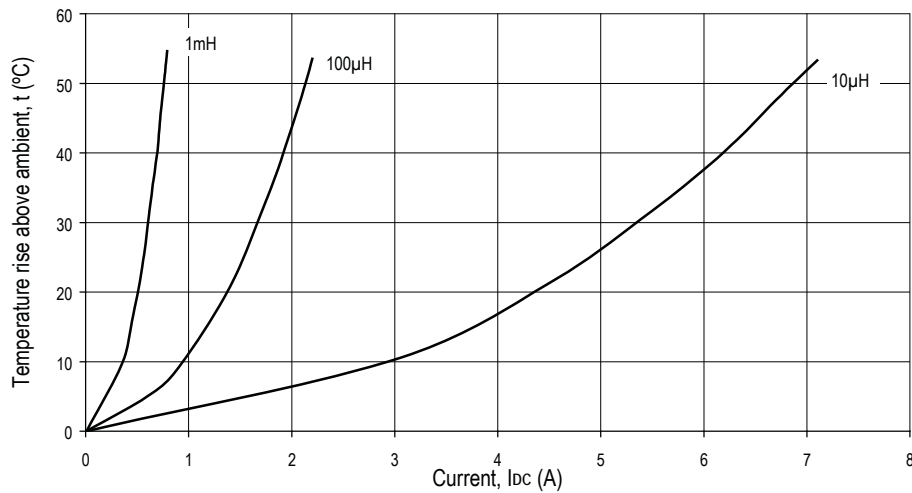
- 1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs



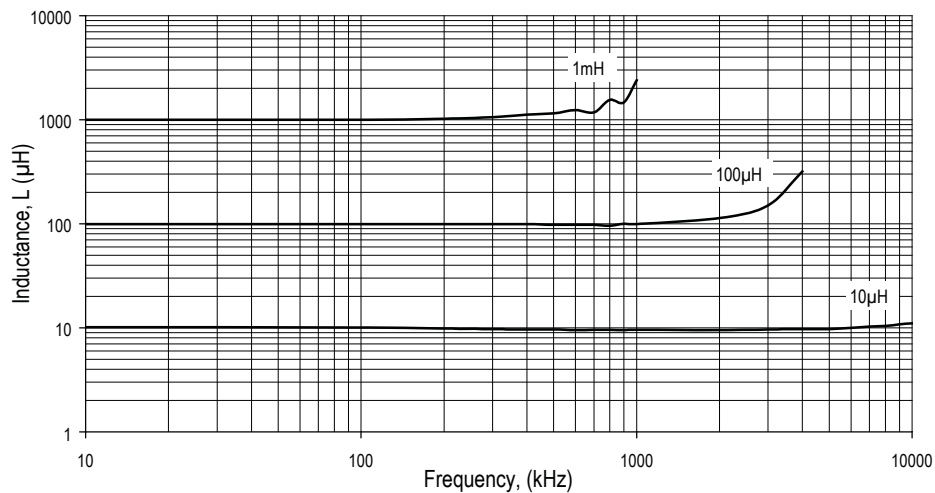
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

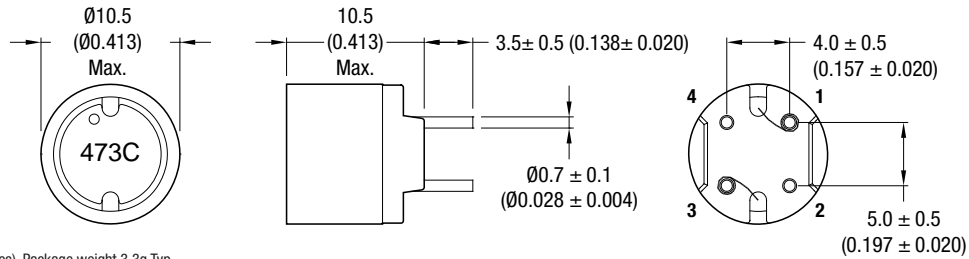


INDUCTANCE Vs FREQUENCY



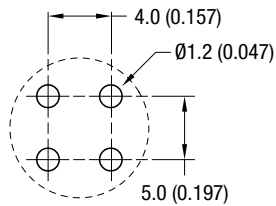
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS



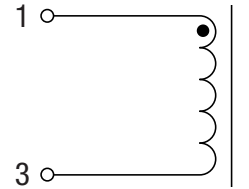
All dimensions in mm (inches). Package weight 3.3g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

SCHEMATIC



PACKAGING DETAILS

Supplied in cartons (250 pieces per carton)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Murata:

[12RS103C](#) [12RS104C](#) [12RS105C](#) [12RS153C](#) [12RS154C](#) [12RS223C](#) [12RS224C](#) [12RS333C](#) [12RS334C](#)
[12RS473C](#) [12RS474C](#) [12RS683C](#) [12RS684C](#)