



## FEATURES

- RoHS compliant
- Radial format
- Integral EMI shield
- Compact size
- Up to 4.6A loc
- 10 $\mu$ 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.

# 1200RS Series

Through Hole Radial Lead Shielded Inductors

## SELECTION GUIDE

Order Code	Inductance (0.1V@10kHz)	DC Current <sup>1</sup> Max. μH	DC Resistance Max. mΩ	Recommended Alternative
	±15%			
	μH			
NRND				
<b>12RS103C</b>	10 ±20%	4.6	23	Contact Murata
<b>12RS153C</b>	15 ±20%	4.0	36	Contact Murata
<b>12RS223C</b>	22 ±20%	3.3	42	Contact Murata
<b>12RS333C</b>	33	2.7	57	Contact Murata
<b>12RS473C</b>	47	2.2	100	Contact Murata
<b>12RS683C</b>	68	1.8	150	Contact Murata
<b>12RS104C</b>	100	1.4	190	Contact Murata
<b>12RS154C</b>	150	1.25	230	Contact Murata
<b>12RS224C</b>	220	1.10	290	Contact Murata
<b>12RS334C</b>	330	0.85	510	Contact Murata
<b>12RS474C</b>	470	0.72	980	Contact Murata
<b>12RS684C</b>	680	0.55	1200	Contact Murata
<b>12RS105C</b>	1000	0.44	1500	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<sup>2</sup>

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

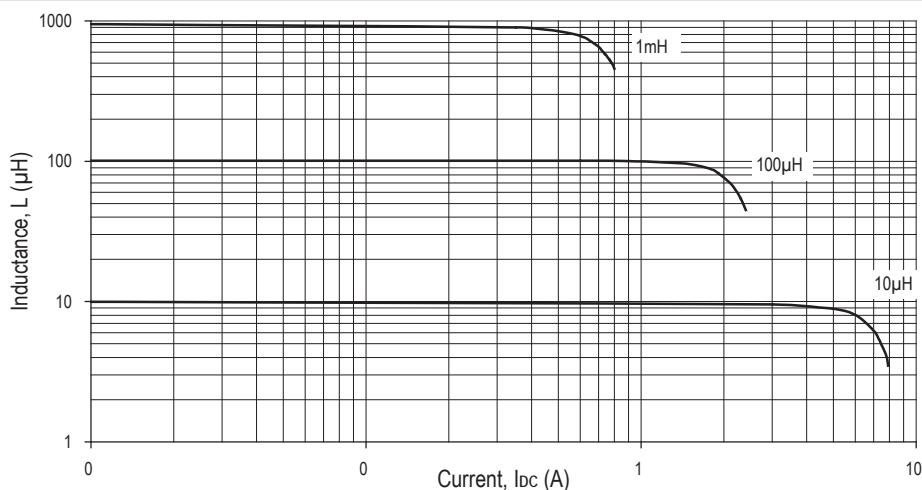


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

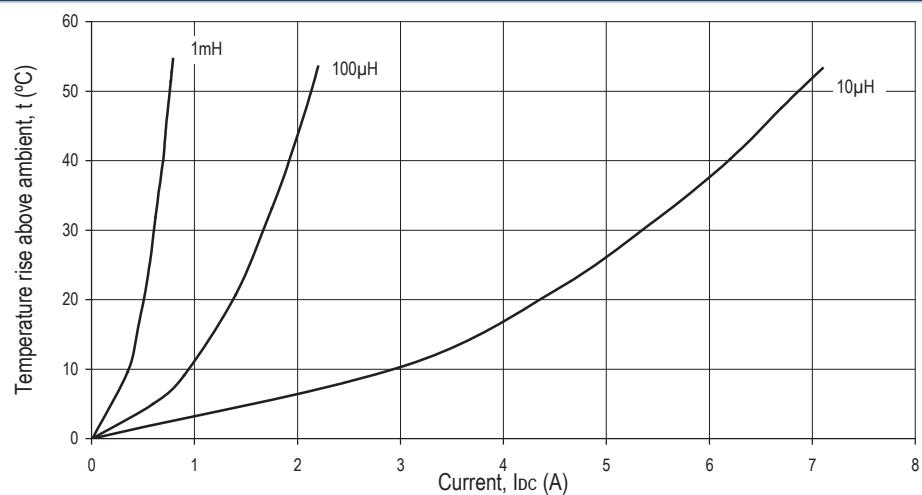
All specifications typical at T<sub>A</sub>=25°C

- 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](http://www.murata-ps.com/rohs)

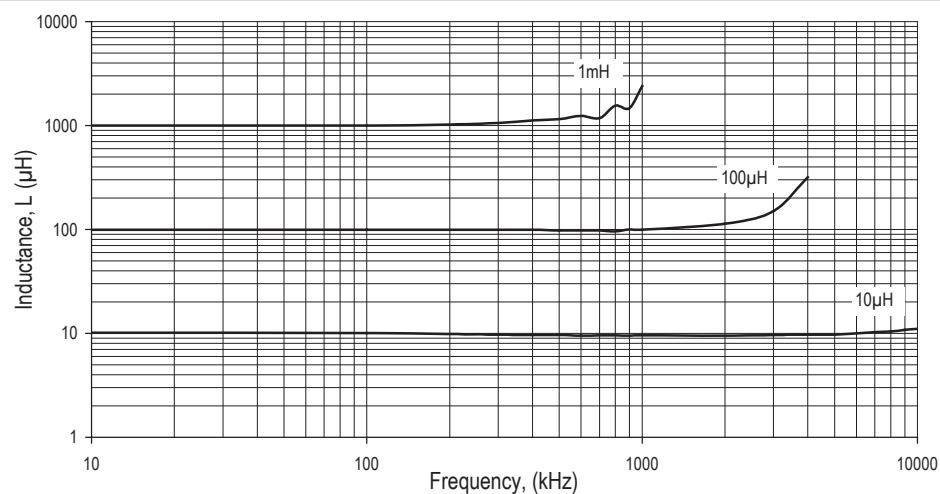
**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**

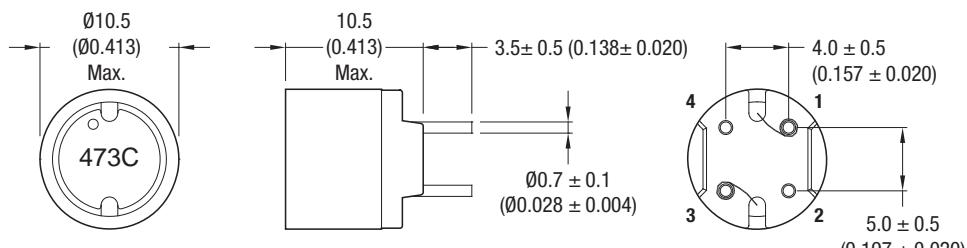


**INDUCTANCE Vs FREQUENCY**



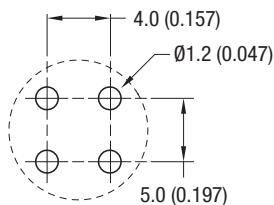
## PACKAGE SPECIFICATIONS

## MECHANICAL DIMENSIONS



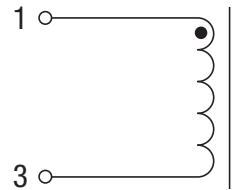
All dimensions in mm (inches). Package weight 3.3g Typ.

## RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

## SCHEMATIC



## PACKAGING DETAILS

Supplied in cartons (250 pieces per carton)

**DISCLAIMER**

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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