



## FEATURES

- RoHS compliant
- Compact size
- Surface mount
- UL94 V-0 package materials
- Pick & place compatible
- J-STD-020D reflow
- Backward compatible with Sn/Pb soldering systems

## DESCRIPTION

The 3900 series is a range of surface mount, flat coil wound power inductors that is designed for use where high current and low loss is essential, such as laptop computers and plasma screens.

## SELECTION GUIDE

Order Code	Inductance (100kHz, 0.1V <sub>AC</sub> )	DC Current <sup>1</sup>	Saturation Current <sup>2</sup>	DC Resistance	
	±20% μH	Max. A	Typ. A	Max. mΩ	
Standard Type	<b>39S681C</b>	0.68 ±30%	19.5	20.4	1.9
	<b>39S152C</b>	1.50 ±30%	13.5	14.0	2.5
	<b>39S252C</b>	2.50	10.0	10.0	3.9
	<b>39S402C</b>	4.00	8.3	8.3	5.4
	<b>39S602C</b>	6.00	6.7	6.7	8.0
	<b>39S822C</b>	8.20	5.8	5.8	11.4
	<b>39S103C</b>	10.0	5.0	5.0	13.5
High Power Type	<b>39H471C</b>	0.47 ±30%	19.5	28.8	1.9
	<b>39H102C</b>	1.00	17.5	20.0	2.5
	<b>39H182C</b>	1.80	13.5	15.3	3.9
	<b>39H282C</b>	2.80	11.0	12.3	5.4
	<b>39H402C</b>	4.00	9.7	10.3	8.0
	<b>39H562C</b>	5.60	8.2	8.8	11.4
	<b>39H722C</b>	7.20	6.6	7.8	13.5
Ultra Power Type	<b>39U351C</b>	0.35 ±30%	19.5	35.0	1.9
	<b>39U801C</b>	0.80 ±30%	18.0	25.7	2.5
	<b>39U142C</b>	1.40	13.5	19.2	3.9
	<b>39U222C</b>	2.20	11.0	14.8	5.4
	<b>39U322C</b>	3.20	9.7	12.8	8.0
	<b>39U432C</b>	4.30	8.2	11	11.4
<b>39U562C</b>	5.60	6.6	9.5	13.5	

## ABSOLUTE MAXIMUM RATINGS

Operating temperature range	-40°C to +125°C
Storage temperature range	-40°C to +150°C

## SOLDERING INFORMATION<sup>3</sup>

Peak reflow temperature	245°C
Pin finish	Matte tin
Moisture sensitivity level	1

## PACKAGING INFORMATION

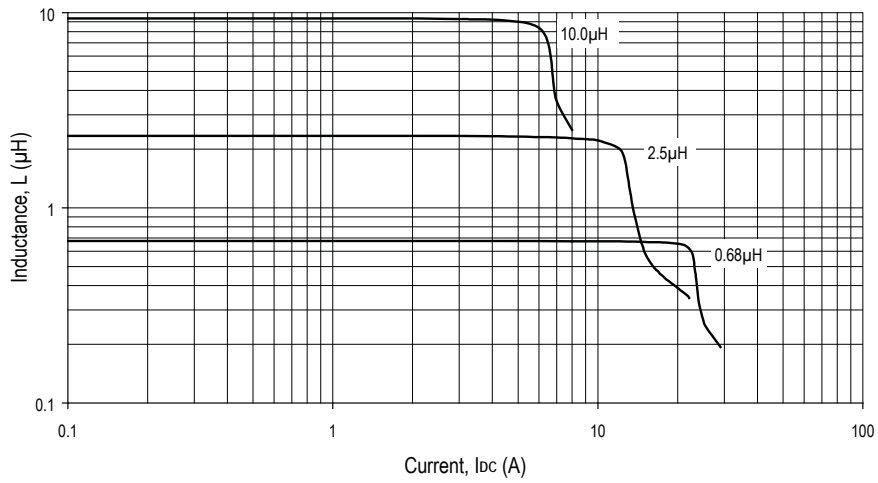
Tape & Reel	550 per reel
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All specifications typical at T<sub>A</sub>=25°C

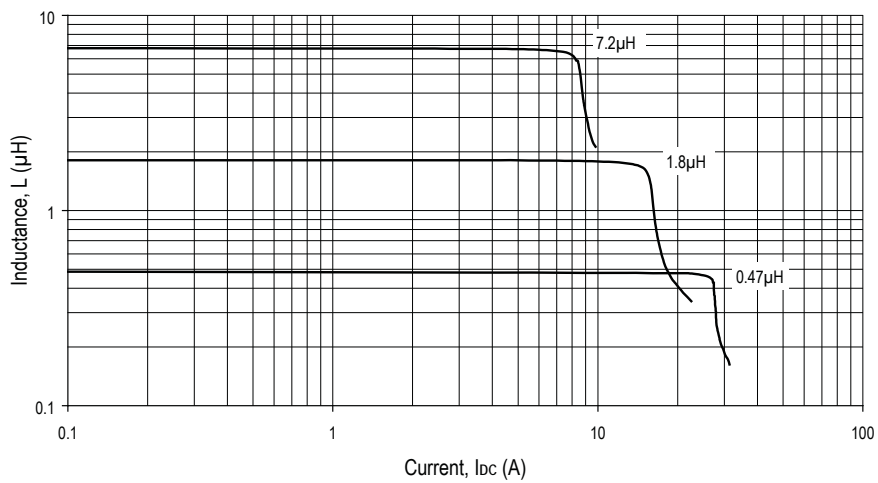
- 1 The maximum DC Current is the value at which the inductance falls to 65% (tolerance ±30%) or 75% (tolerance: ±20%) of its nominal value or until its temperature rise reaches 40°C, whichever is sooner.
- 2 The saturation current is the continuous current at 20°C ambient at which the inductance falls to 65% (tolerance: ±30%) or 75% (tolerance: ±20%) of its nominal value.
- 3 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)



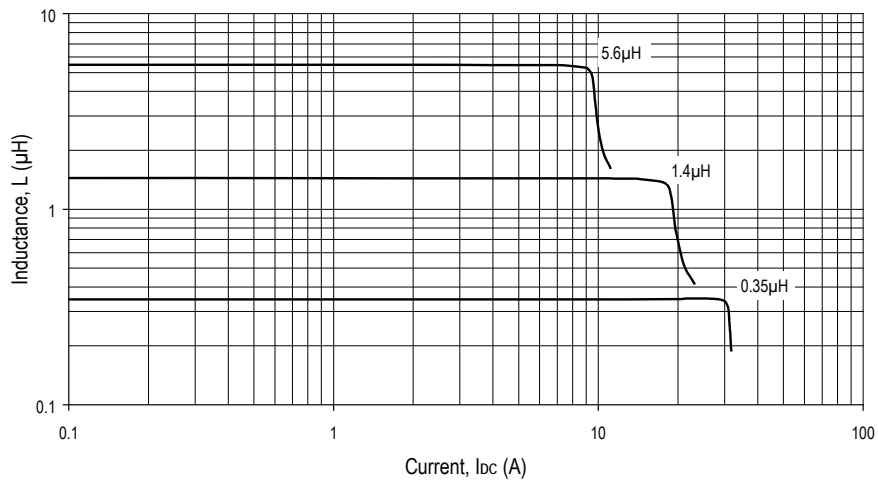
**INDUCTANCE VS CURRENT (STANDARD TYPE)**



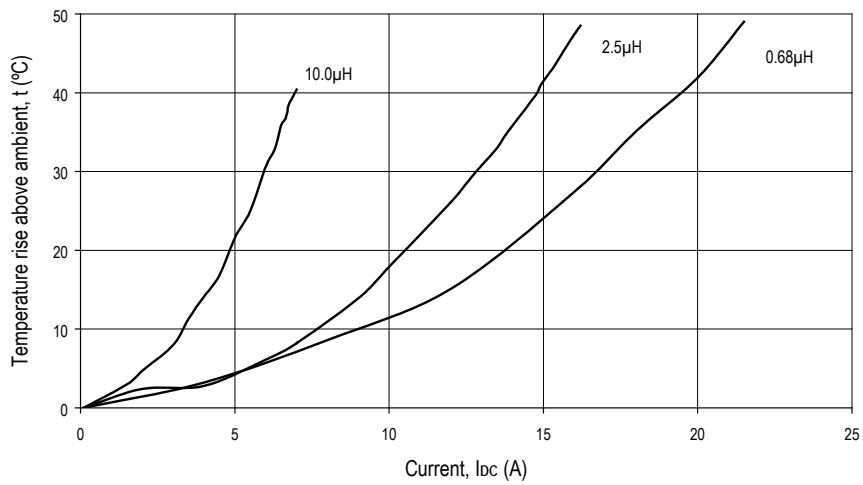
**INDUCTANCE VS CURRENT (HIGH POWER TYPE)**



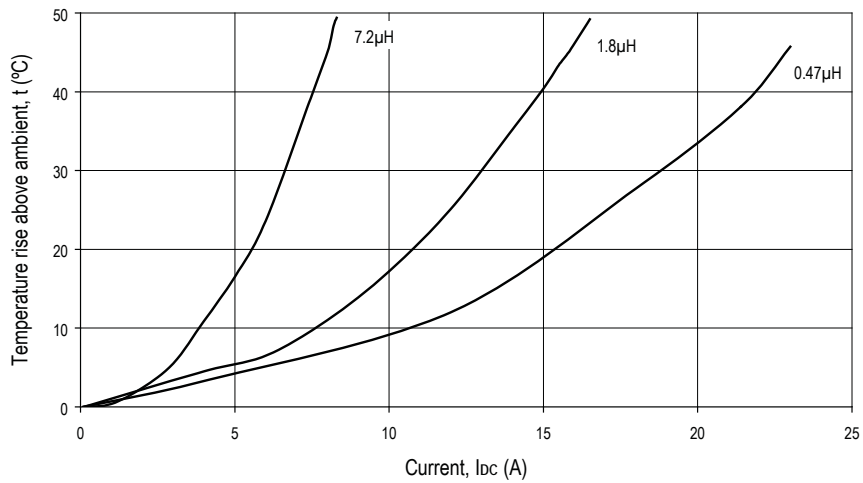
**INDUCTANCE VS CURRENT (ULTRA HIGH POWER TYPE)**



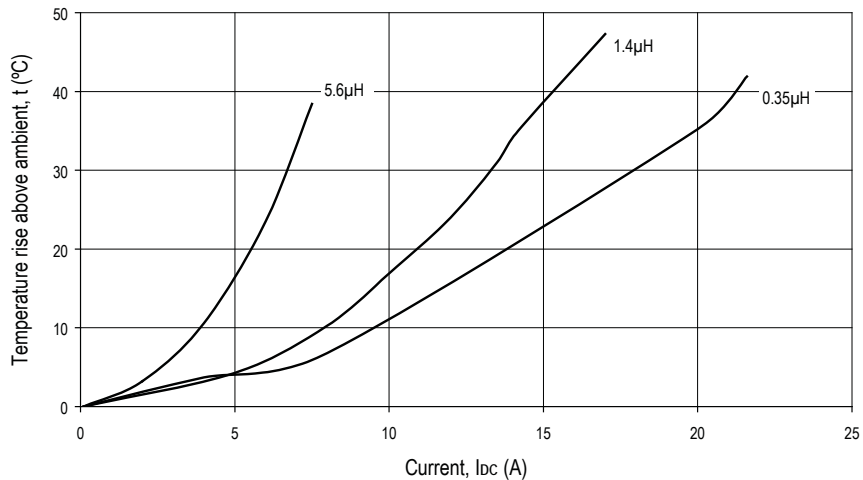
**TEMPERATURE VS CURRENT (STANDARD TYPE)**



**TEMPERATURE VS CURRENT (HIGH POWER TYPE)**

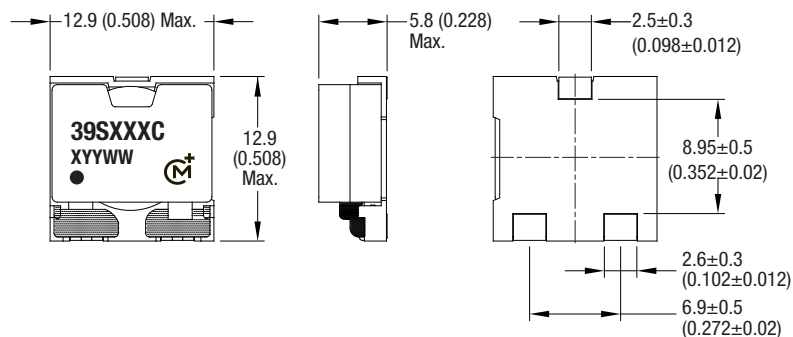


**(ULTRA HIGH POWER TYPE)**



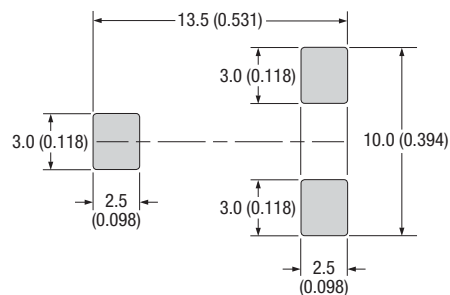
**PACKAGE SPECIFICATIONS**

**MECHANICAL DIMENSIONS**



Package weight: 2.7g Typ.

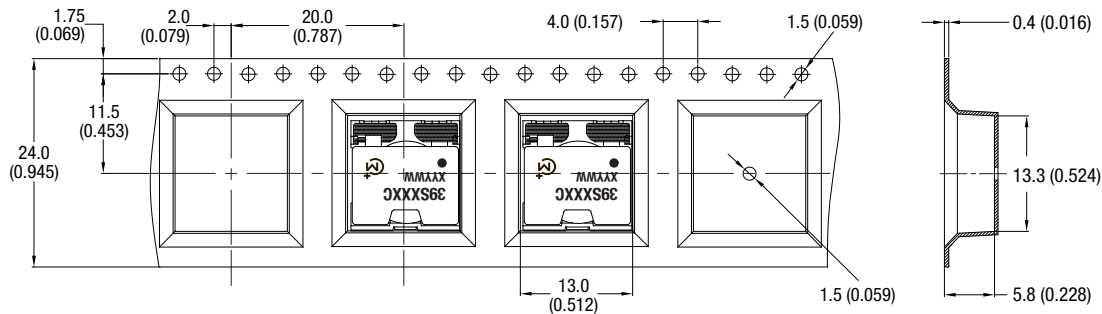
**RECOMMENDED FOOTPRINT DETAILS**



All dimensions in mm (inches).

**TAPE & REEL SPECIFICATIONS**

**TAPE OUTLINE DIMENSIONS**



Reel quantity: 550

Unless otherwise stated, all dimensions in mm (inches).