



## 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	39S681C	0.68 ±30%	19.5	20.4	1.9
	39S152C	1.50 ±30%	13.5	14.0	2.5
	39S252C	2.50	10.0	10.0	3.9
	39S402C	4.00	8.3	8.3	5.4
	39S602C	6.00	6.7	6.7	8.0
	39S822C	8.20	5.8	5.8	11.4
	39S103C	10.0	5.0	5.0	13.5
High Power Type	39H471C	0.47 ±30%	19.5	28.8	1.9
	39H102C	1.00	17.5	20.0	2.5
	39H182C	1.80	13.5	15.3	3.9
	39H282C	2.80	11.0	12.3	5.4
	39H402C	4.00	9.7	10.3	8.0
	39H562C	5.60	8.2	8.8	11.4
	39H722C	7.20	6.6	7.8	13.5
Ultra Power Type	39U351C	0.35 ±30%	19.5	35.0	1.9
	39U801C	0.80 ±30%	18.0	25.7	2.5
	39U142C	1.40	13.5	19.2	3.9
	39U222C	2.20	11.0	14.8	5.4
	39U322C	3.20	9.7	12.8	8.0
	39U432C	4.30	8.2	11	11.4
39U562C	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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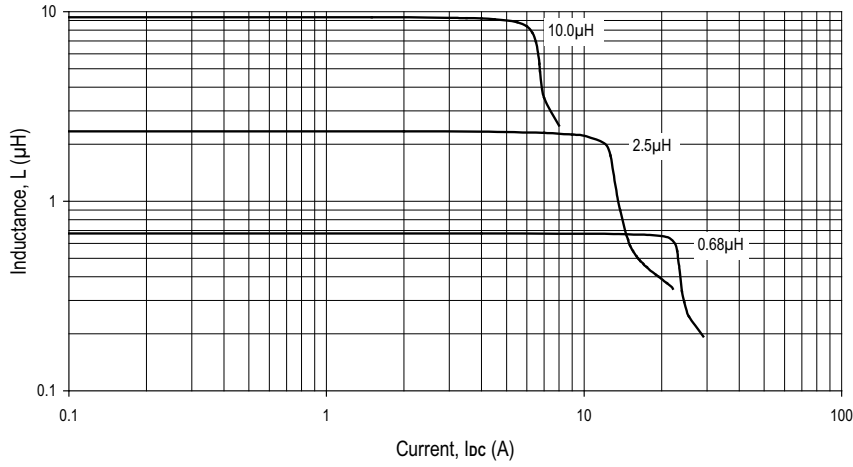
All specifications typical at T<sub>A</sub>=25°C

- 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)
- 4 Terminal 3 is open-circuit and for mounting stability only.

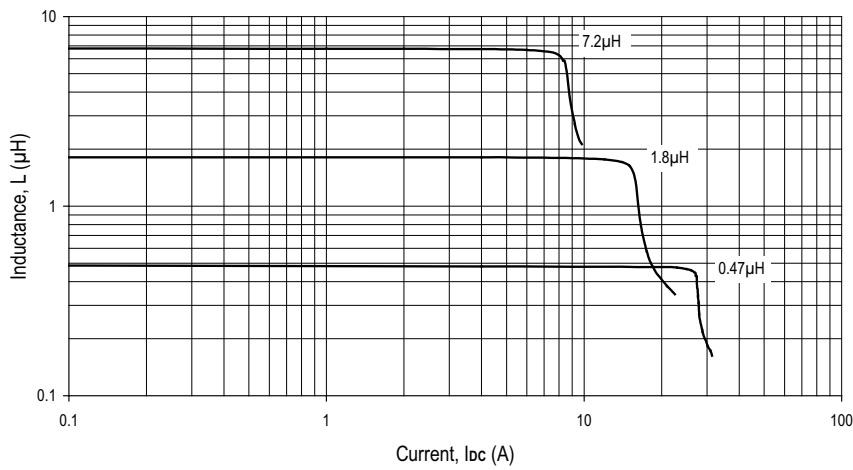


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

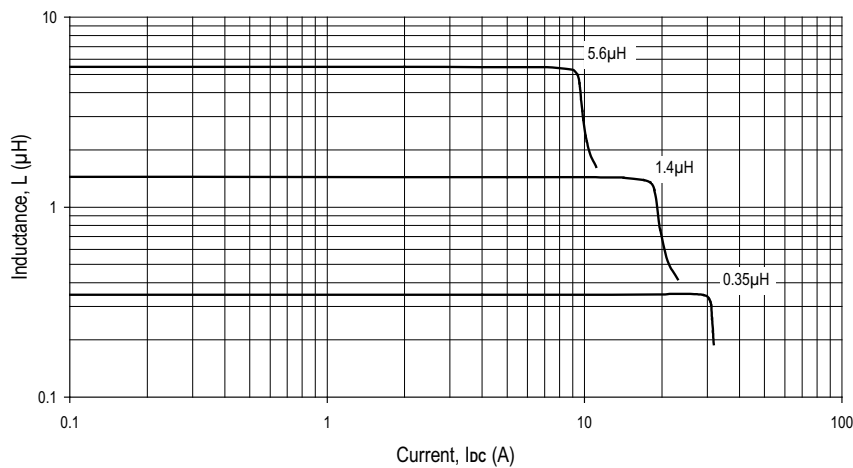
**INDUCTANCE Vs CURRENT (STANDARD TYPE)**



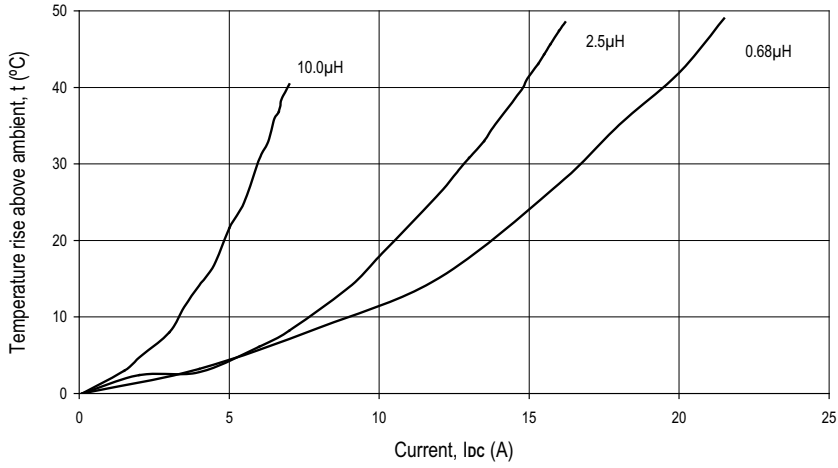
**INDUCTANCE Vs CURRENT (HIGH POWER TYPE)**



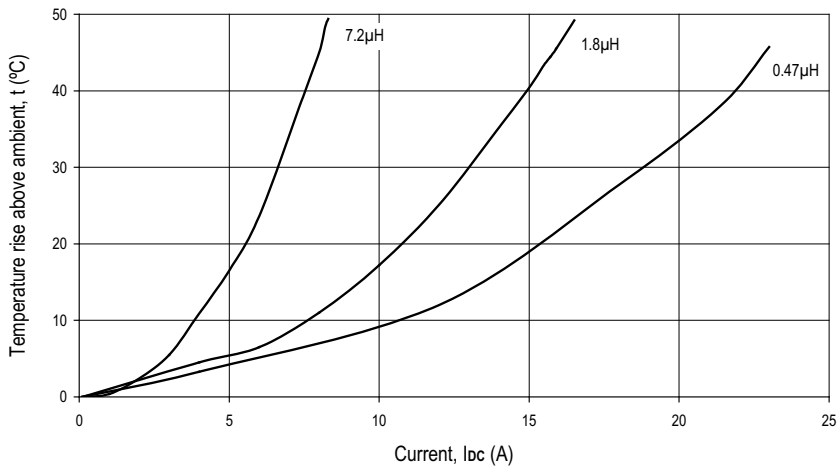
**INDUCTANCE Vs CURRENT (ULTRA HIGH POWER TYPE)**



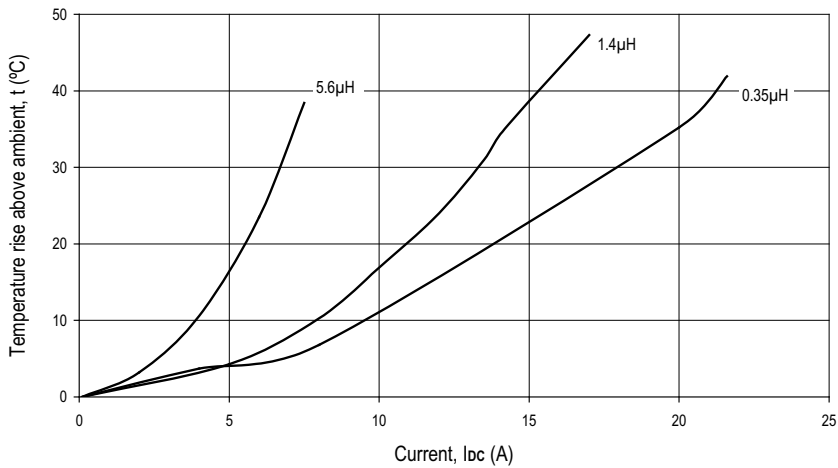
**TEMPERATURE Vs CURRENT (STANDARD TYPE)**



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

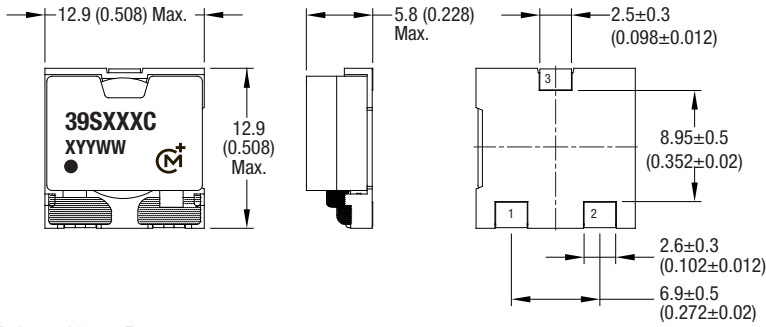


**(ULTRA HIGH POWER TYPE)**



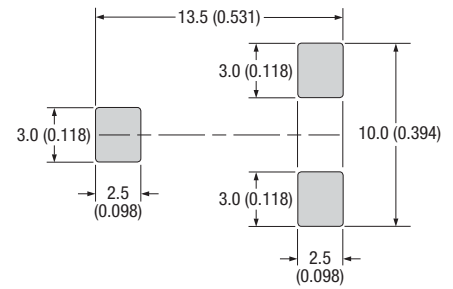
**PACKAGE SPECIFICATIONS**

**MECHANICAL DIMENSIONS<sup>4</sup>**



Package weight: 2.7g Typ.

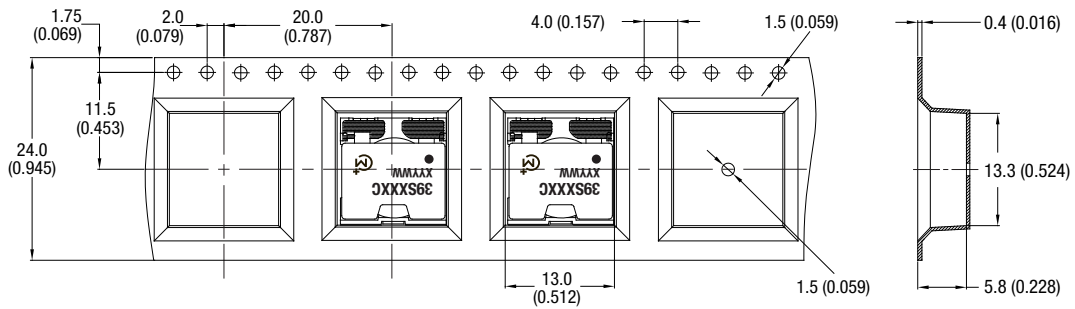
**RECOMMENDED FOOTPRINT DETAILS**



All dimensions in mm (inches).

**TAPE & REEL SPECIFICATIONS**

**TAPE OUTLINE DIMENSIONS**



Reel quantity: 550  
Unless otherwise stated, all dimensions in mm (inches).