



### FEATURES

- RoHS compliant
- High current, low DCR
- Surface mount
- UL94 V-0 package materials
- Pick & place compatible
- J-STD-020D reflow
- Backward compatible with Sn/Pb soldering systems

### DESCRIPTION

The 3800 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 in 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%	Max.	Typ.	Max.
	μH	A	A	mΩ
38L361C	0.36 ±30%	18	27	1.8
38L801C	0.80	16	20	2.5
38L142C	1.40	12.0	15	3.7
38L222C	2.20	9.6	12	5
38L322C	3.20	7.8	10	6.8
38L432C	4.30	6.8	8.8	9.7
38L572C	5.70	5.8	7.3	11.9
38L722C	7.20	5.3	6.6	15.5
38L882C	8.80	4.8	5.9	19.6
38S221C	0.22 ±30%	18	35	2.2
38S451C	0.45	16	27	2.6
38S801C	0.80	12.5	20	3.7
38S132C	1.30	10.5	17	5
38S182C	1.80	9.0	14	6.8
38S252C	2.50	7.2	12	9.7
38S322C	3.20	6.5	10	11.9
38S402C	4.00	5.5	9.1	15.1
38S502C	5.00	4.9	8.1	20.3
38H151C	0.15 ±30%	18	38	1.9
38H301C	0.30 ±30%	16	32	2.2
38H501C	0.50	12.5	24	3.7
38H801C	0.80	10.5	20	5
38H122C	1.20	9	17	6.8
38H152C	1.50	7.2	14	9.5
38H202C	2.00	6.5	12	11.8
38H252C	2.50	5.5	11	15.1
38H302C	3.00	4.9	9.4	19.4

### ABSOLUTE MAXIMUM RATINGS

Operating temperature range	-40°C to +130°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	650 per reel
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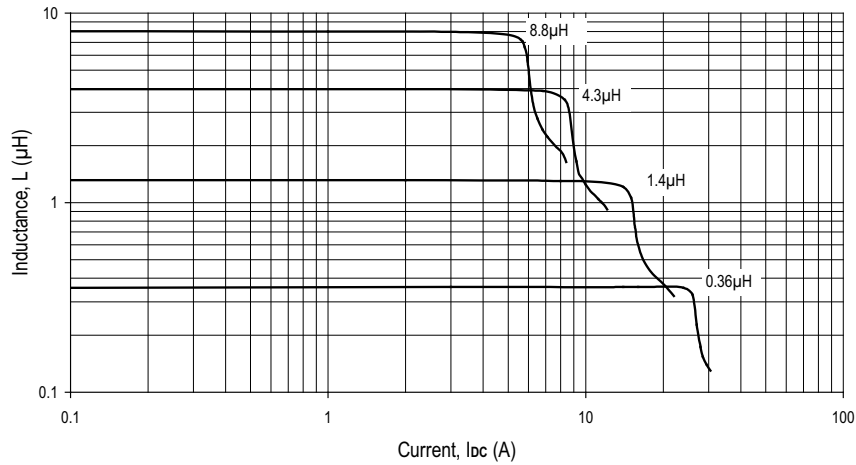
All specifications typical at T<sub>a</sub>=25°C

- 1 The maximum DC Current is the value at which the inductance falls to 65% (tolerance ±30%) or 75% (tolerance: ±20%) of its zero current 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 zero current 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.

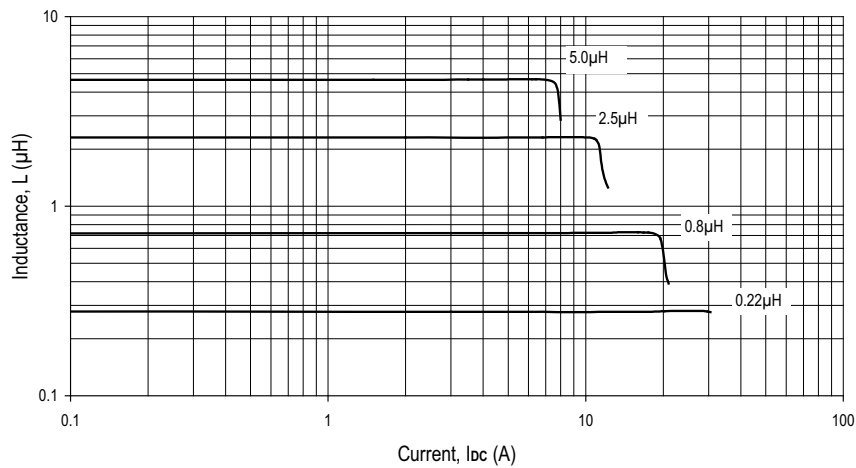


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

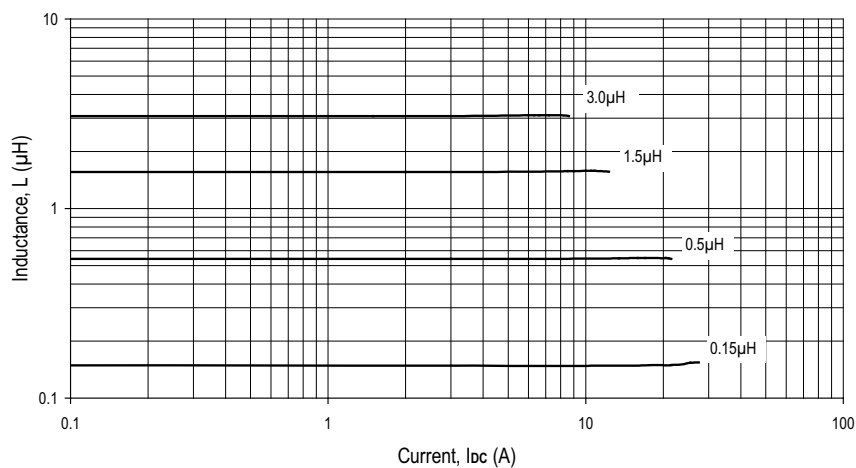
**INDUCTANCE Vs CURRENT (LOW DCR TYPES)**



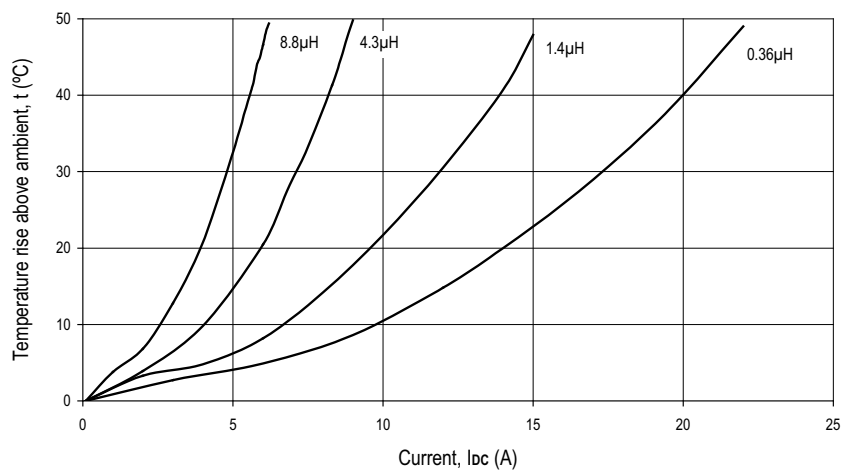
**INDUCTANCE Vs CURRENT (STANDARD TYPES)**



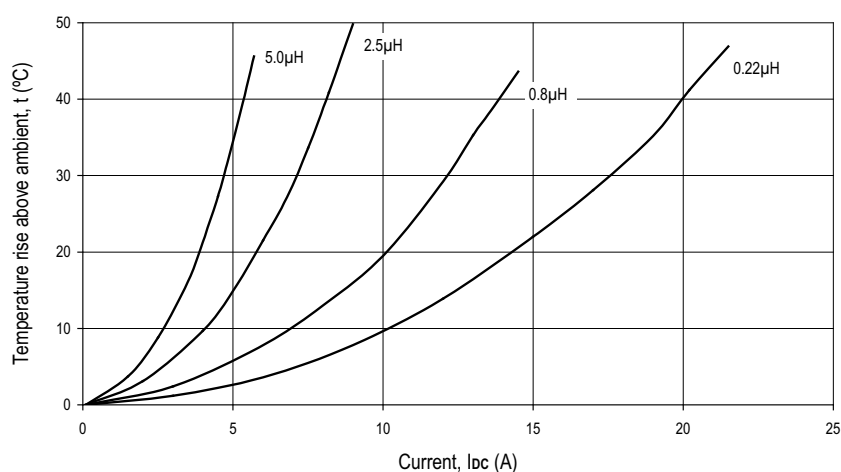
**INDUCTANCE Vs CURRENT (HIGH POWER TYPES)**



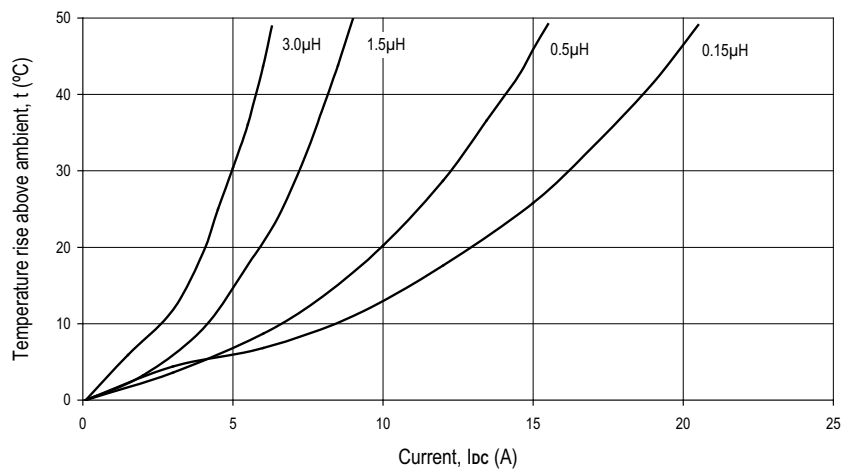
**TEMPERATURE Vs CURRENT (LOW DCR TYPES)**



**TEMPERATURE Vs CURRENT (STANDARD TYPES)**

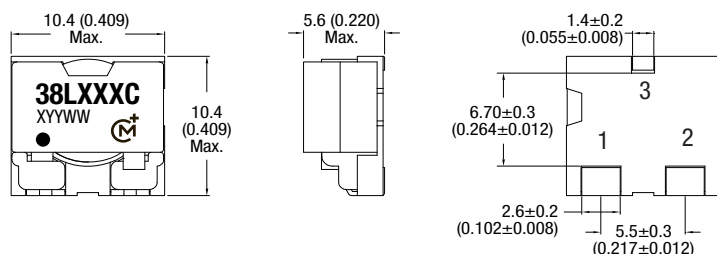


**TEMPERATURE Vs CURRENT (HIGH POWER TYPES)**



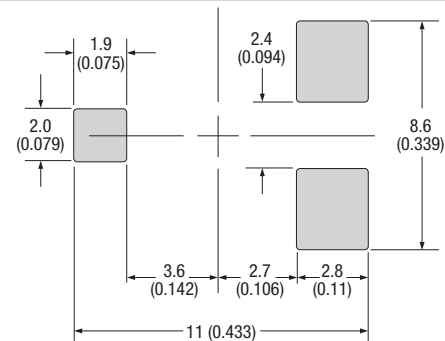
## PACKAGE SPECIFICATIONS

### MECHANICAL DIMENSIONS<sup>4</sup>



All dimensions in mm (inches).  
Package weight: 1.7g Typ.

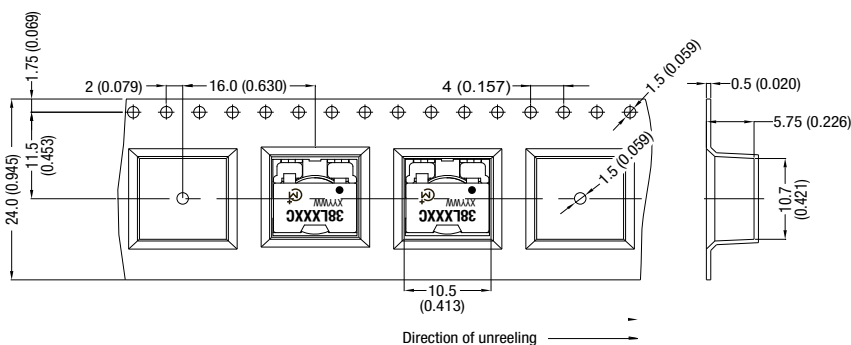
### RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches).

## TAPE & REEL SPECIFICATIONS

### TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches).

# Mouser Electronics

Authorized Distributor

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## Murata:

[38H122C](#) [38H151C](#) [38H152C](#) [38H202C](#) [38H252C](#) [38H301C](#) [38H302C](#) [38H501C](#) [38H801C](#) [38L142C](#) [38L222C](#)  
[38L322C](#) [38L361C](#) [38L432C](#) [38L572C](#) [38L722C](#) [38L801C](#) [38L882C](#) [38S132C](#) [38S182C](#) [38S221C](#) [38S252C](#)  
[38S322C](#) [38S402C](#) [38S451C](#) [38S502C](#) [38S801C](#)