

## 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.

# 3800 Series

## Flat Coil SM Power Inductors

### SELECTION GUIDE

Order Code	Inductance (100kHz, 0.1VAC)	DC Current <sup>1</sup>	Saturation Current <sup>2</sup>	DC Resistance	Recommended Alternative
	±20%	Max.	Typ.	Max.	
	µH	A	A	mΩ	
<b>To be discontinued</b>					
38L361C	0.36 ±30%	18	27	1.8	Contact Murata
38L801C	0.80	16	20	2.5	Contact Murata
38L142C	1.40	12.0	15	3.7	Contact Murata
38L222C	2.20	9.6	12	5	Contact Murata
38L322C	3.20	7.8	10	6.8	Contact Murata
38L432C	4.30	6.8	8.8	9.7	Contact Murata
38L572C	5.70	5.8	7.3	11.9	Contact Murata
38L722C	7.20	5.3	6.6	15.5	Contact Murata
38L882C	8.80	4.8	5.9	19.6	Contact Murata
38S221C	0.22 ±30%	18	35	2.2	Contact Murata
38S451C	0.45	16	27	2.6	Contact Murata
38S801C	0.80	12.5	20	3.7	Contact Murata
38S132C	1.30	10.5	17	5	Contact Murata
38S182C	1.80	9.0	14	6.8	Contact Murata
38S252C	2.50	7.2	12	9.7	Contact Murata
38S322C	3.20	6.5	10	11.9	Contact Murata
38S402C	4.00	5.5	9.1	15.1	Contact Murata
38S502C	5.00	4.9	8.1	20.3	Contact Murata
38H151C	0.15 ±30%	18	38	1.9	Contact Murata
38H301C	0.30 ±30%	16	32	2.2	Contact Murata
38H501C	0.50	12.5	24	3.7	Contact Murata
38H801C	0.80	10.5	20	5	Contact Murata
38H122C	1.20	9	17	6.8	Contact Murata
38H152C	1.50	7.2	14	9.5	Contact Murata
38H202C	2.00	6.5	12	11.8	Contact Murata
38H252C	2.50	5.5	11	15.1	Contact Murata
38H302C	3.00	4.9	9.4	19.4	Contact Murata

### 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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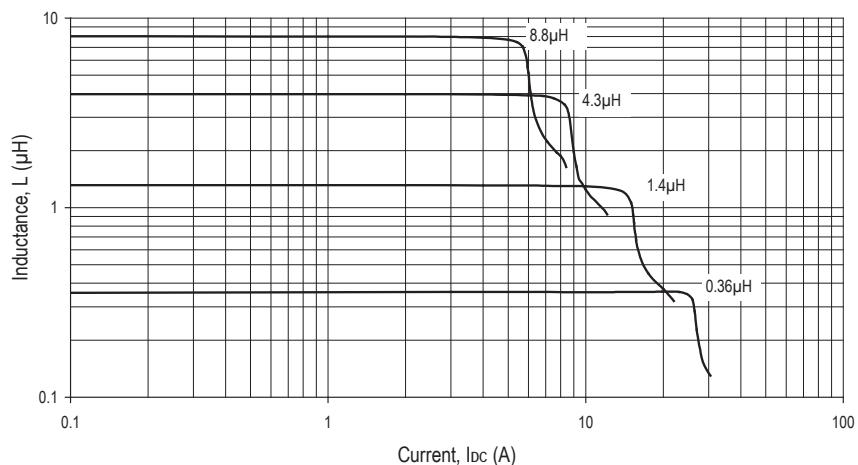
All specifications typical at  $T_A=25^\circ\text{C}$

- 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.

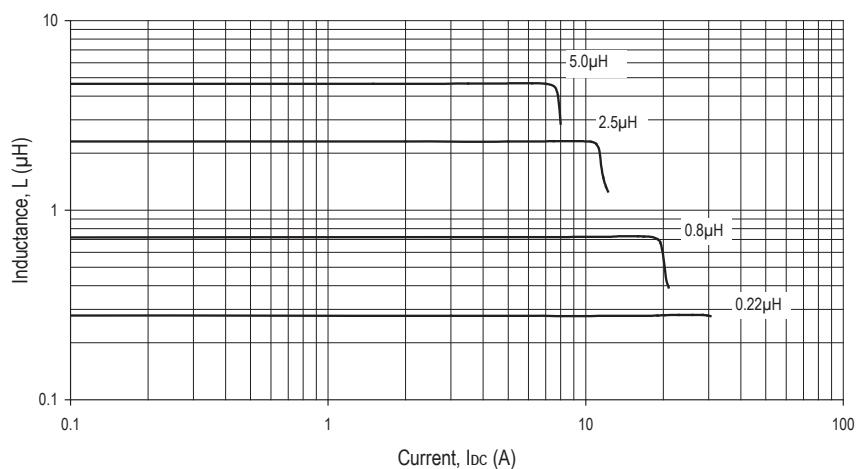


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

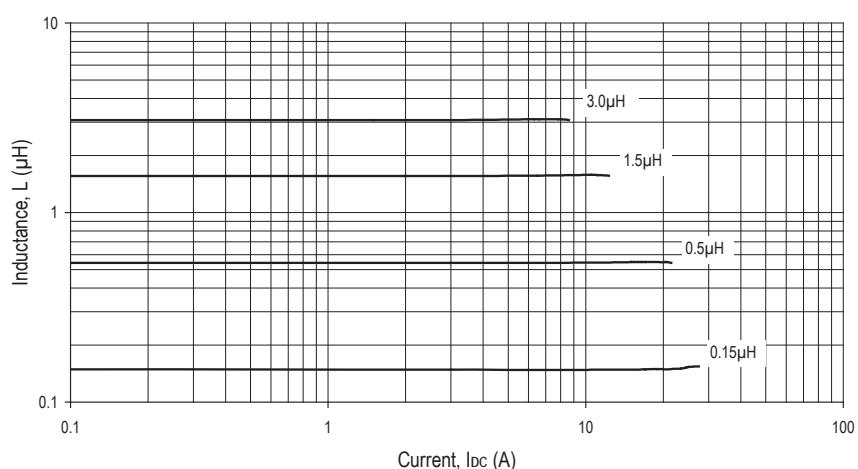
**INDUCTANCE Vs CURRENT (LOW DCR TYPES)**



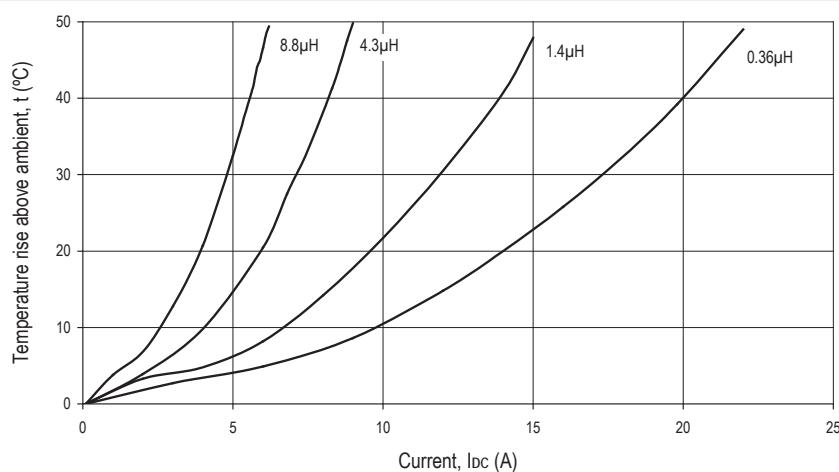
**INDUCTANCE Vs CURRENT (STANDARD TYPES)**



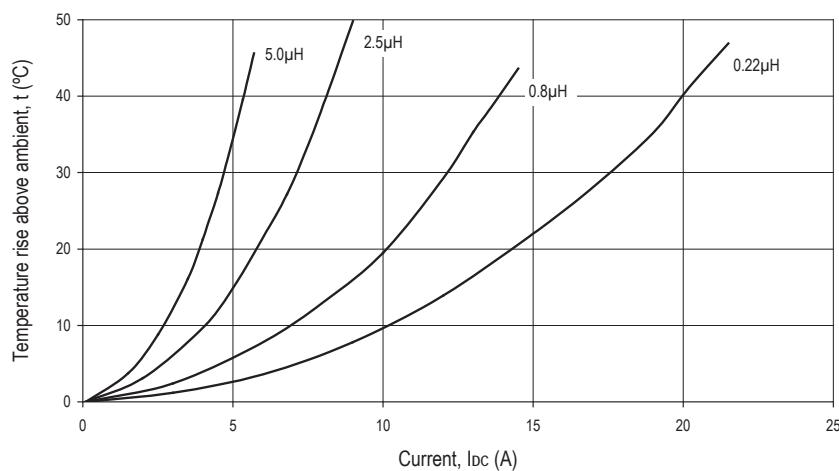
**INDUCTANCE Vs CURRENT (HIGH POWER TYPES)**



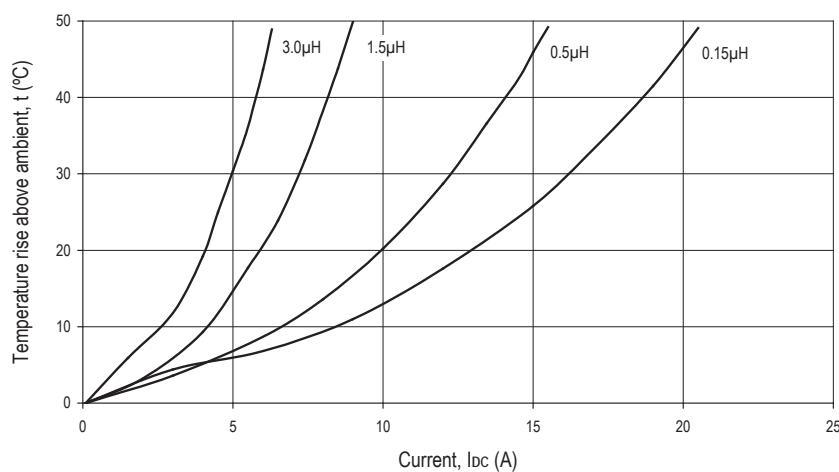
**TEMPERATURE Vs CURRENT (LOW DCR TYPES)**



**TEMPERATURE Vs CURRENT (STANDARD TYPES)**

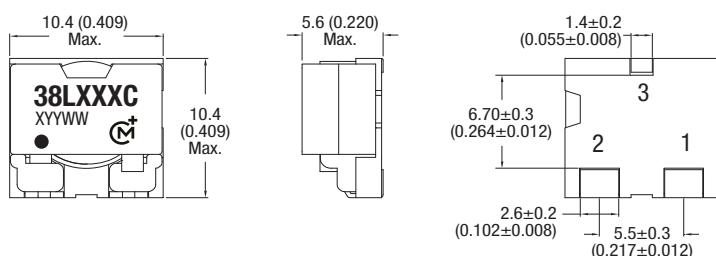


**TEMPERATURE Vs CURRENT (HIGH POWER TYPES)**



**PACKAGE SPECIFICATIONS**

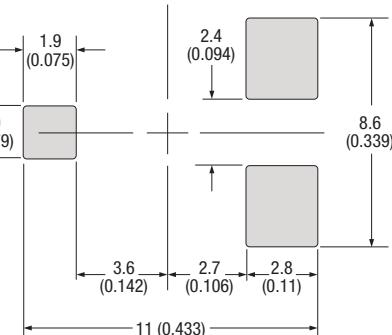
**MECHANICAL DIMENSIONS<sup>4</sup>**



All dimensions in mm (inches).

Package weight: 1.7g Typ.

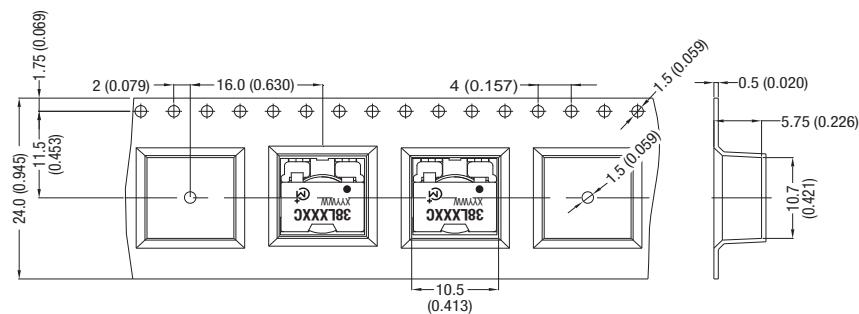
**RECOMMENDED FOOTPRINT DETAILS**



All dimensions in mm (inches).

**TAPE & REEL SPECIFICATIONS**

**TAPE OUTLINE DIMENSIONS**



All dimensions in mm (inches).

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- Medical equipment
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- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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