



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 _{ac}) | DC Current ¹ | Saturation Current ² | DC Resistance |
|------------|---|----------------------------|------------------------------------|------------------|
| | ±20% μH | Max. A | Typ. A | Max. 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 INFORMATION³

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

PACKAGING INFORMATION

| | |
|-------------|--------------|
| Tape & Reel | 650 per reel |
|-------------|--------------|

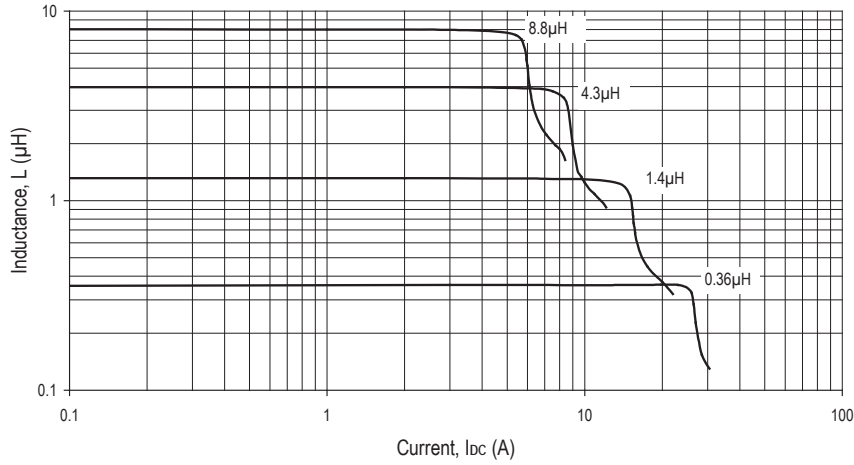
All specifications typical at T_a=25°C

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

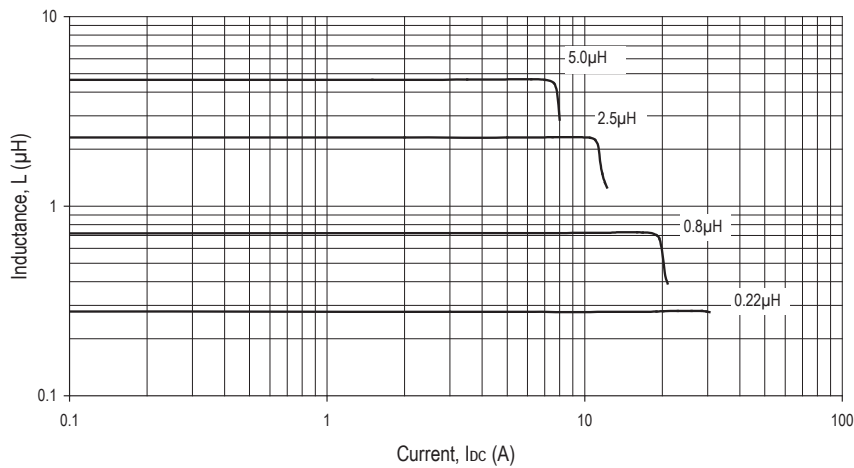


For full details go to
www.murata-ps.com/rohs

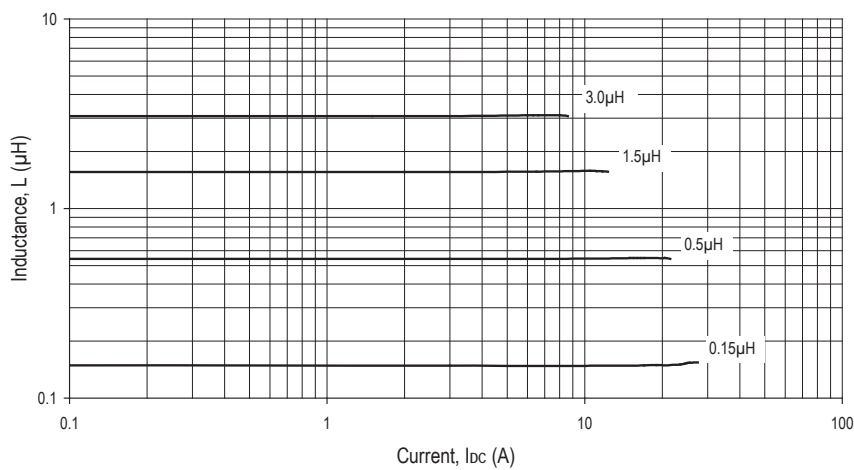
INDUCTANCE Vs CURRENT (LOW DCR TYPES)



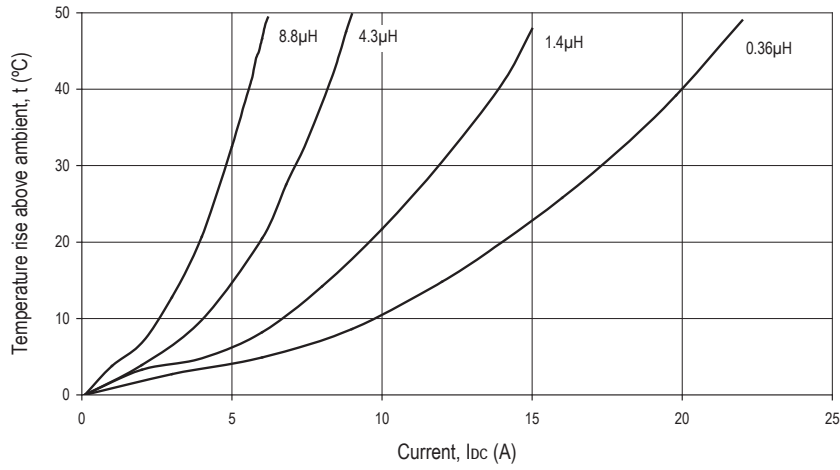
INDUCTANCE Vs CURRENT (STANDARD TYPES)



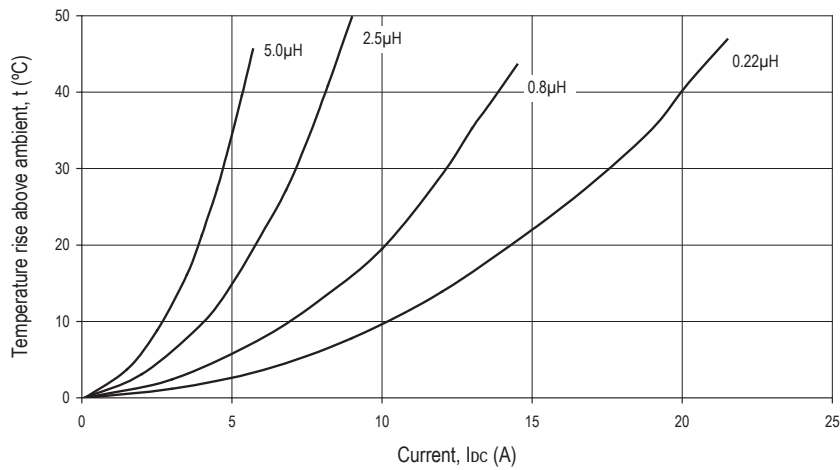
INDUCTANCE Vs CURRENT (HIGH POWER TYPES)



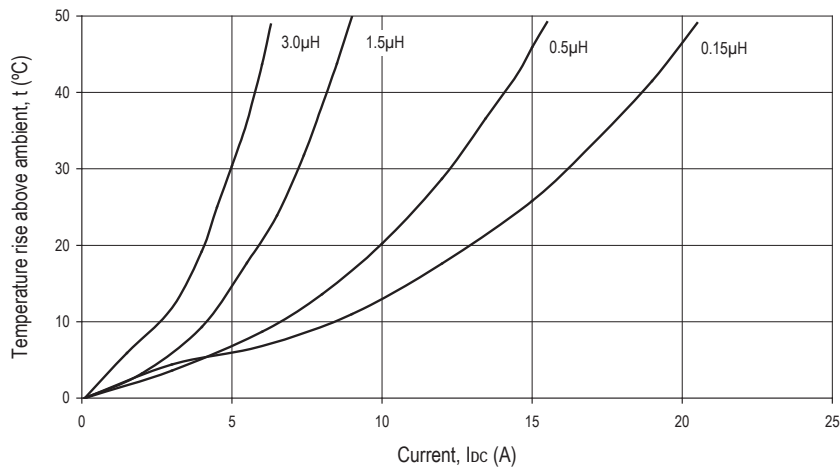
TEMPERATURE Vs CURRENT (LOW DCR TYPES)



TEMPERATURE Vs CURRENT (STANDARD TYPES)

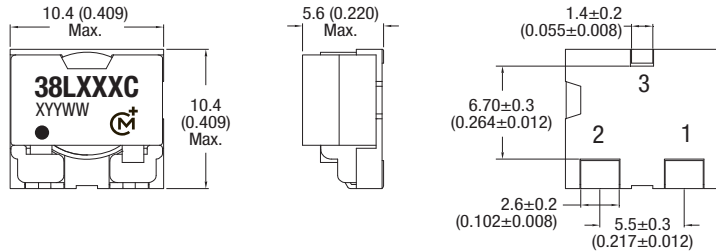


TEMPERATURE Vs CURRENT (HIGH POWER TYPES)



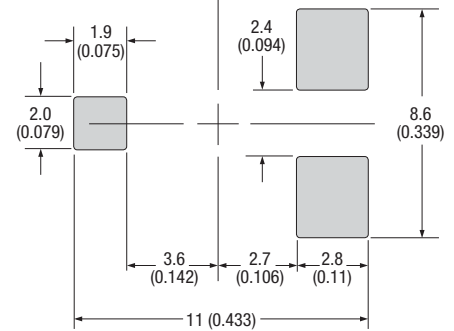
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS⁴



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

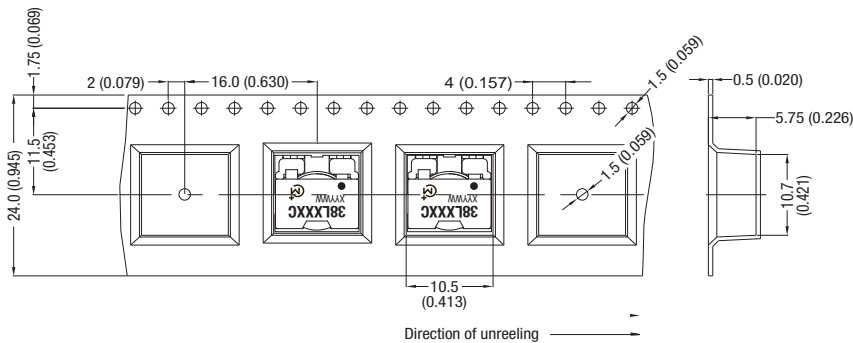
RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches).

TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches).