Murata Power Solutions

# 3800 Series

Flat Coil SM Power Inductors

## 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, 0.1VAC) ±20% µH | DC Current[1] Max. A | Saturation Current[2] Typ. A | DC Resistance 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 INFORMATION[3]

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

## PACKAGING INFORMATION

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

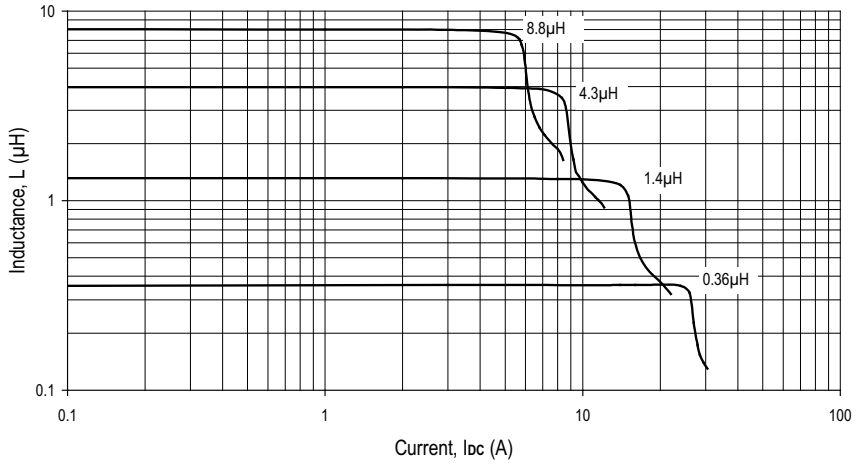
All specifications typical at $T_A$=25°C

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.

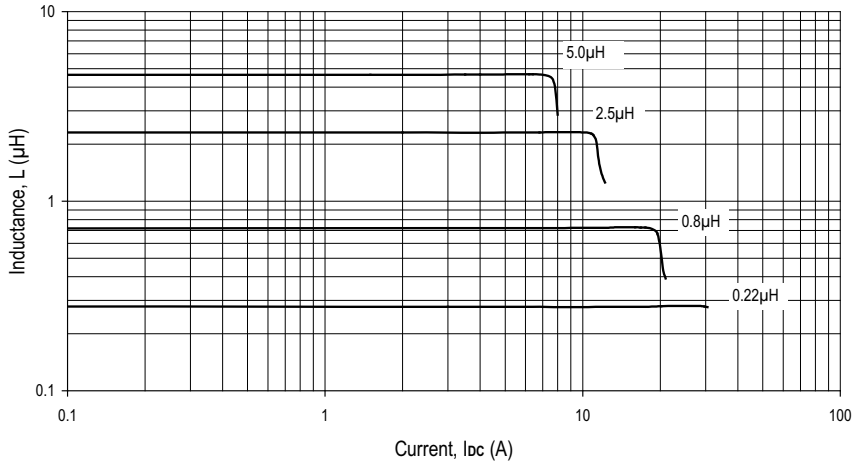
RoHS COMPLIANT

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

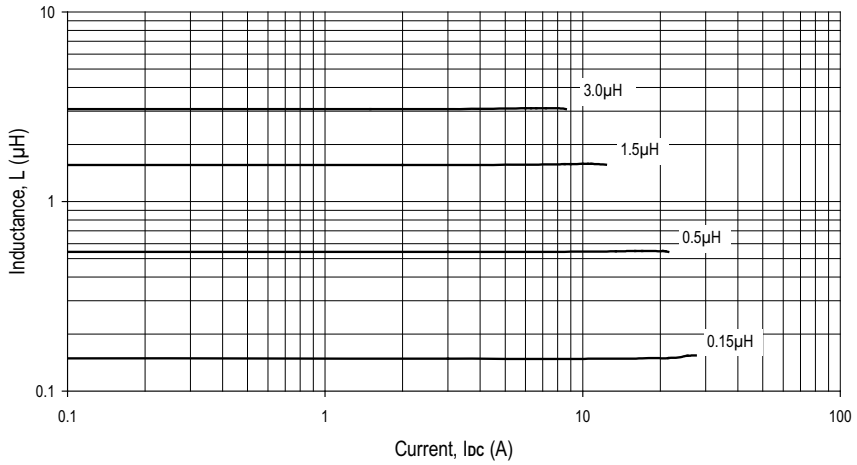
## INDUCTANCE Vs CURRENT (LOW DCR TYPES)



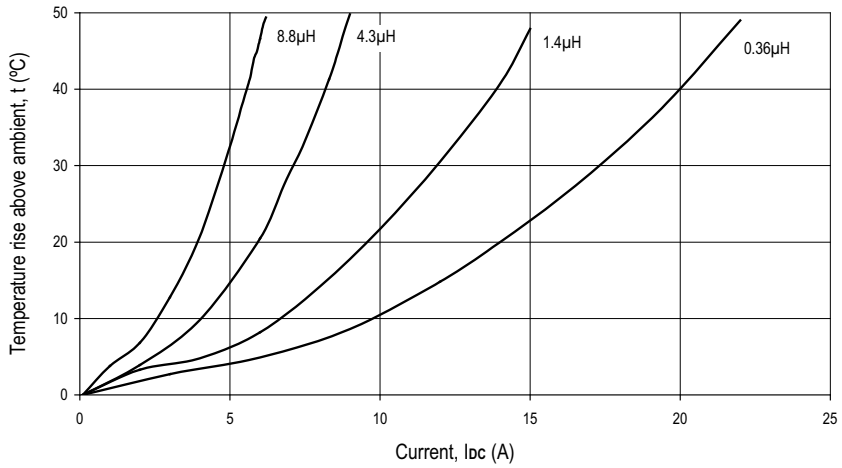

## INDUCTANCE Vs CURRENT (STANDARD TYPES)



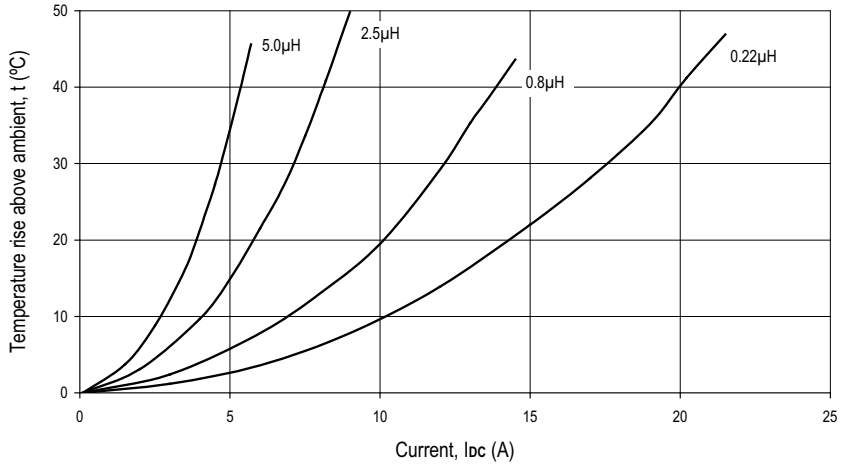

## INDUCTANCE Vs CURRENT (HIGH POWER TYPES)



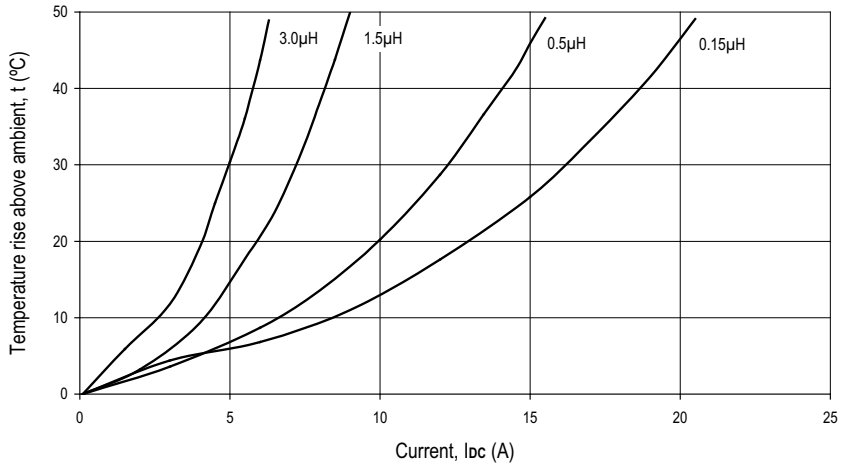
## TEMPERATURE Vs CURRENT (LOW DCR TYPES)




## TEMPERATURE Vs CURRENT (STANDARD TYPES)




## TEMPERATURE Vs CURRENT (HIGH POWER TYPES)



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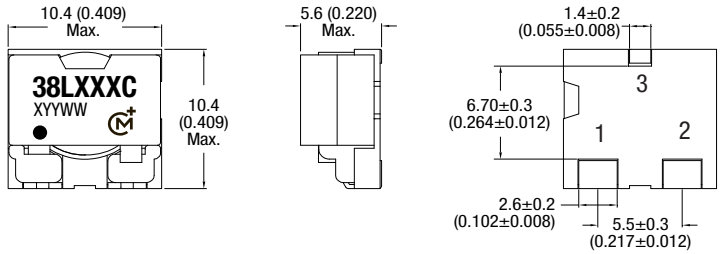
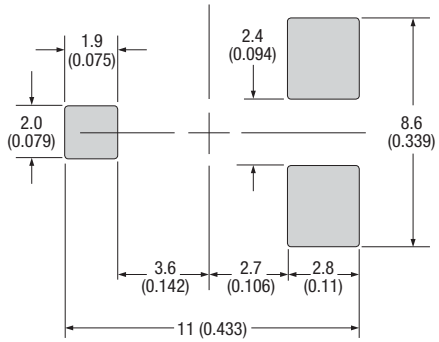
## PACKAGE SPECIFICATIONS

### MECHANICAL DIMENSIONS[4]




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

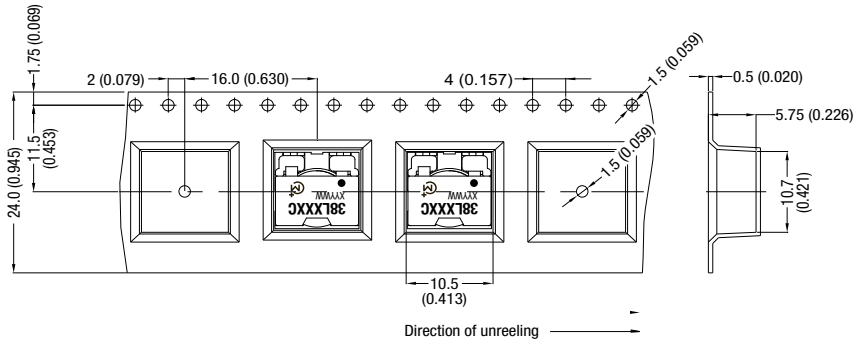
### RECOMMENDED FOOTPRINT DETAILS




All dimensions in mm (inches).

## TAPE & REEL SPECIFICATIONS

### TAPE OUTLINE DIMENSIONS




All dimensions in mm (inches).



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Наши преимущества:

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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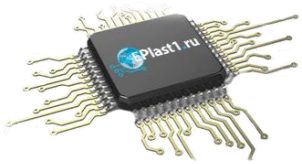
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

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