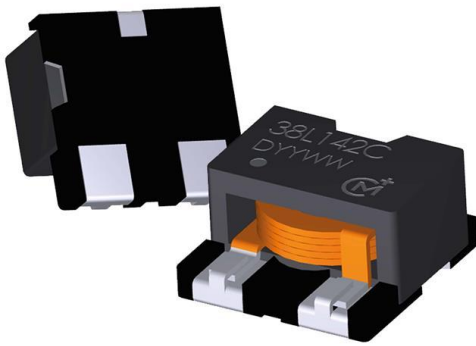


# 38S322C Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	38S322C-DG
Manufacturer	<a href="#">Murata Power Solutions Inc.</a>
Manufacturer Product Number	38S322C
Description	FIXED IND 3.2UH 6.5A 11.9MOHM SM
Detailed Description	3.2 $\mu$ H Unshielded Wirewound Inductor 6.5 A 11.9m Ohm Max Nonstandard



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

38S322C

Series:

3800

Type:

Wirewound

Inductance:

3.2  $\mu$ H

Current Rating (Amps):

6.5 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.409" L x 0.409" W (10.40mm x 10.40mm)

Base Product Number:

38S

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

$\pm$ 20%

Current - Saturation (Isat):

10A

DC Resistance (DCR):

11.9mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 130°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.220" (5.60mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

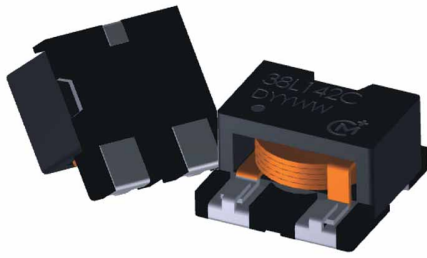
ECCN:

EAR99



# 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)	DC Current <sup>1</sup>	Saturation Current <sup>2</sup>	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 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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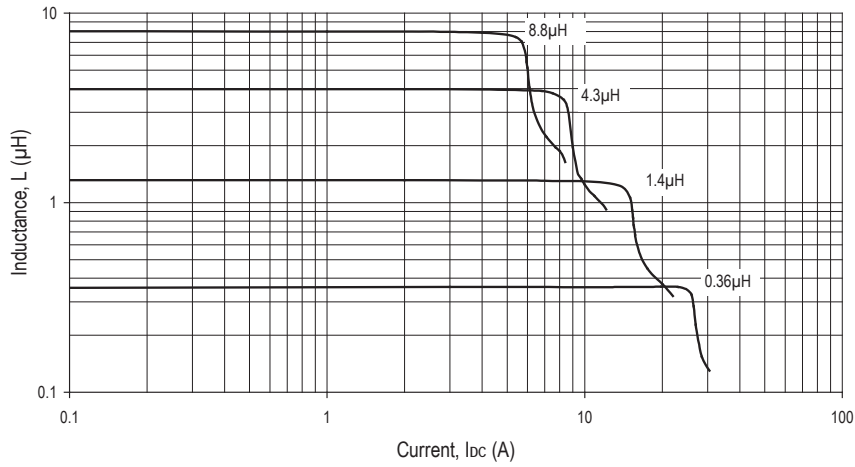
All specifications typical at T<sub>a</sub>=25°C

- 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.

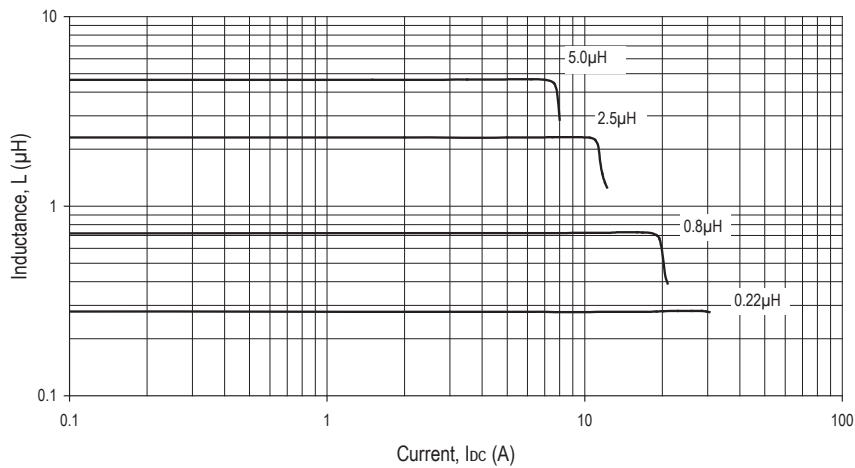


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

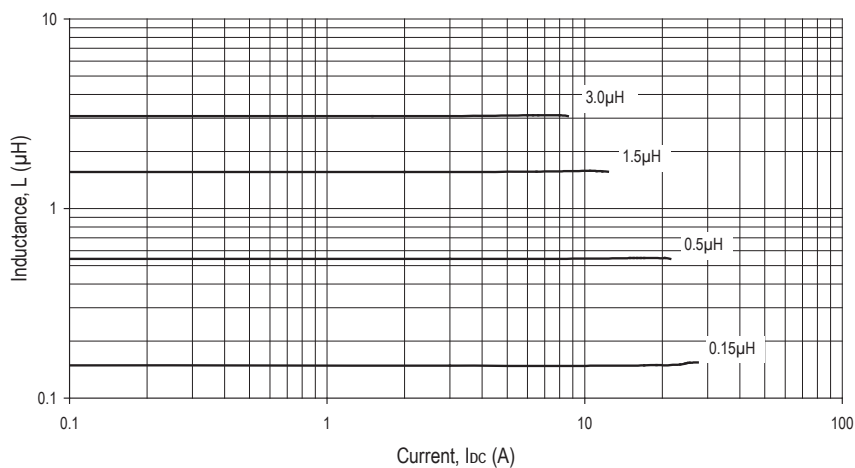
**INDUCTANCE Vs CURRENT (LOW DCR TYPES)**



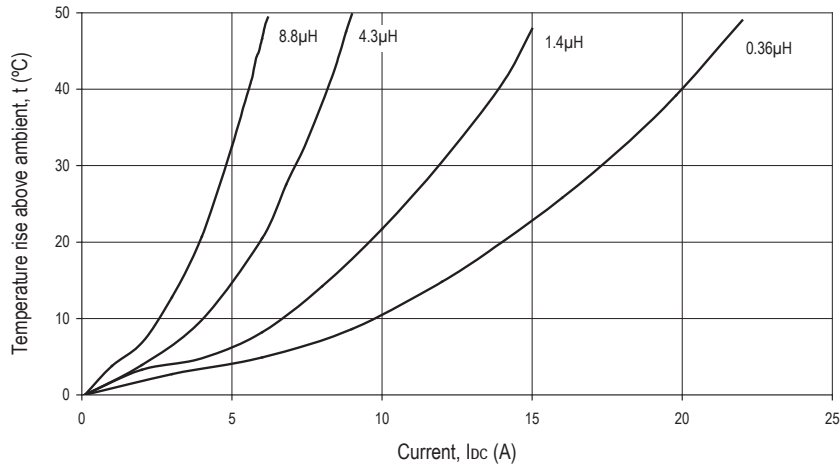
**INDUCTANCE Vs CURRENT (STANDARD TYPES)**



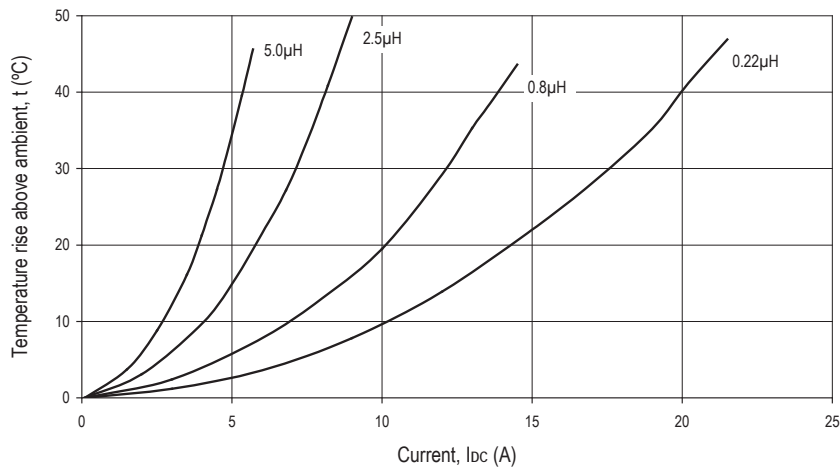
**INDUCTANCE Vs CURRENT (HIGH POWER TYPES)**



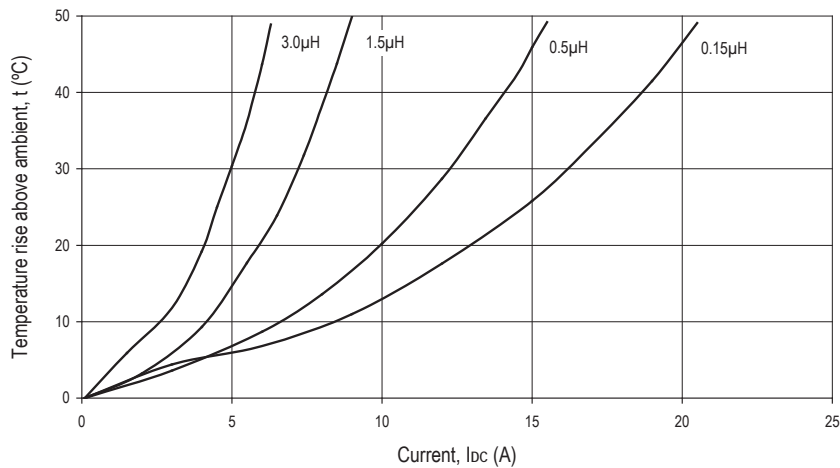
**TEMPERATURE Vs CURRENT (LOW DCR TYPES)**



**TEMPERATURE Vs CURRENT (STANDARD TYPES)**

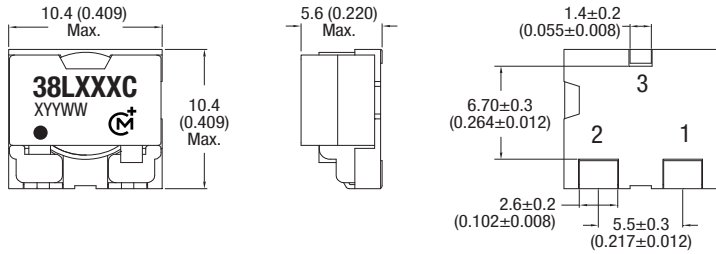


**TEMPERATURE Vs CURRENT (HIGH POWER TYPES)**



**PACKAGE SPECIFICATIONS**

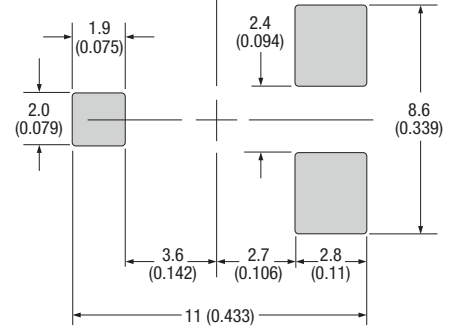
**MECHANICAL DIMENSIONS<sup>4</sup>**



All dimensions in mm (inches).

Package weight: 1.7g Typ.

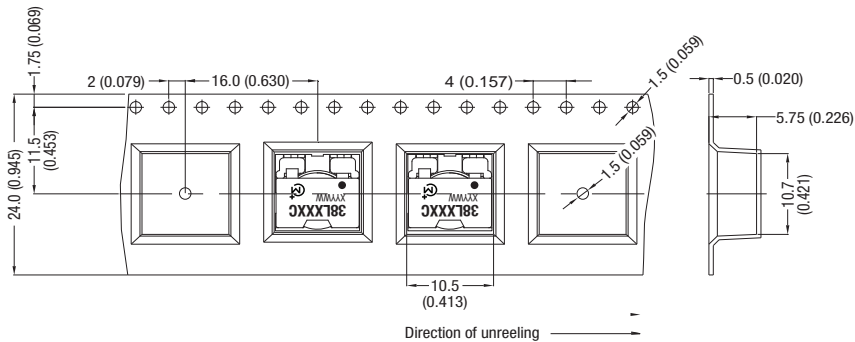
**RECOMMENDED FOOTPRINT DETAILS**



All dimensions in mm (inches).

**TAPE & REEL SPECIFICATIONS**

**TAPE OUTLINE DIMENSIONS**



All dimensions in mm (inches).

Direction of unreeling →

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