

37142C Datasheet

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DiGi Electronics Part Number	37142C-DG
Manufacturer	Murata Power Solutions Inc.
Manufacturer Product Number	37142C
Description	FIXED IND 1.4UH 16A 1.9 MOHM SMD
Detailed Description	1.4 μ H Unshielded Wirewound Inductor 16 A 1.9mOhm Max Nonstandard



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

37142C

Series:

3700

Type:

Wirewound

Inductance:

1.4 μ H

Current Rating (Amps):

16 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.571" L x 0.453" W (14.50mm x 11.50mm)

Base Product Number:

37

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

\pm 10%

Current - Saturation (Isat):

22A

DC Resistance (DCR):

1.9mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 130°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.268" (6.80mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

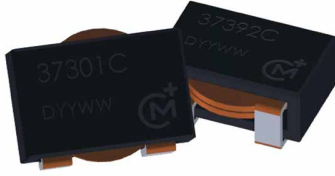
ECCN:

EAR99



3700 Series

Flat Coil SM Power Inductors



FEATURES

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

DESCRIPTION

The 3700 series is a range of surface mount, flat-coil wound power inductors. They are ideally suited 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 ¹	Saturation Current ²	DC Resistance	Height
	±10%	Max.	Typ.	Max.	
	μH	A	A	mΩ	
37301C	0.30 ±20%	19.5	39	0.9	A
37501C	0.50 ±20%	19.5	30	1.0	A
37951C	0.95 ±20%	18.0	25	1.3	B
37112C	1.1	14.5	20	2.2	A
37142C	1.4	16.0	22	1.9	B
37222C	2.2	11.5	15	4.0	A
37242C	2.4	12.0	16.5	3.0	B
37302C	3.0	9.0	13	4.8	A
37392C	3.9	10.0	12	4.2	B

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	Pure tin dip
Moisture sensitivity level	1

PACKAGING INFORMATION

Tape & Reel	Height A	Height B
	700 per reel	550 per reel

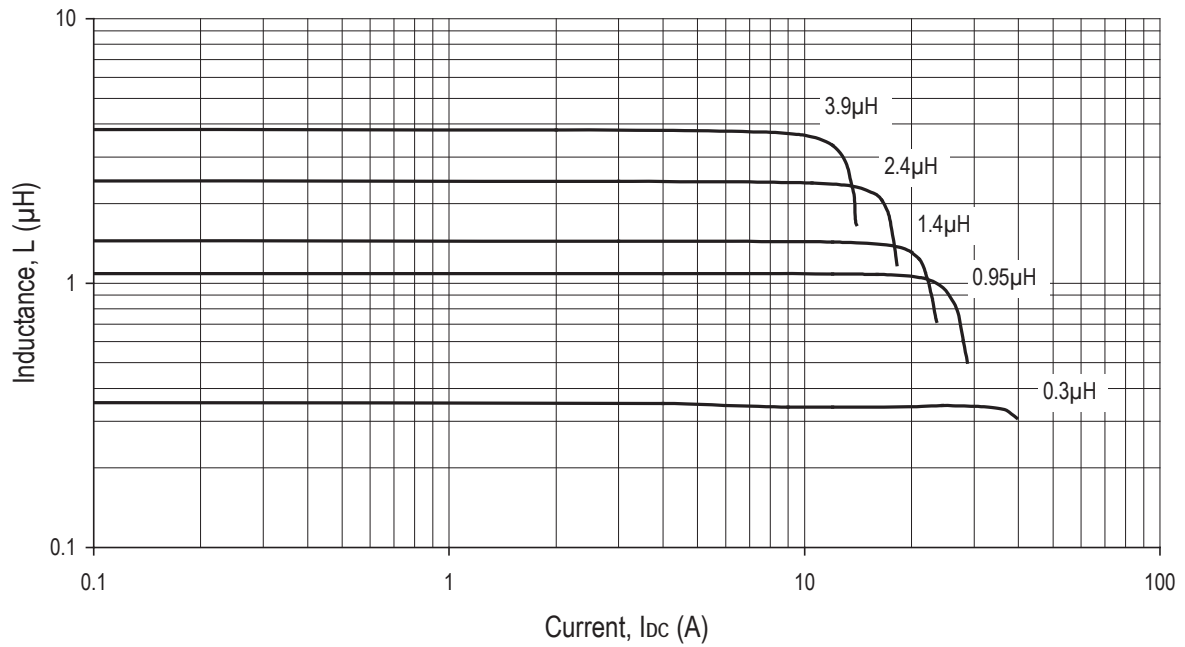
All specifications typical at T_A = 25°C

- 1 The maximum DC Current is the value at which the inductance falls to 80% of its zero current value, or when its temperature rise reaches 40°C, whichever is sooner.
- 2 Saturation current is the continuous current at 20°C ambient at which the inductance falls to 80% of its zero current value.
- 3 For further information, please visit www.murata-ps.com/rohs

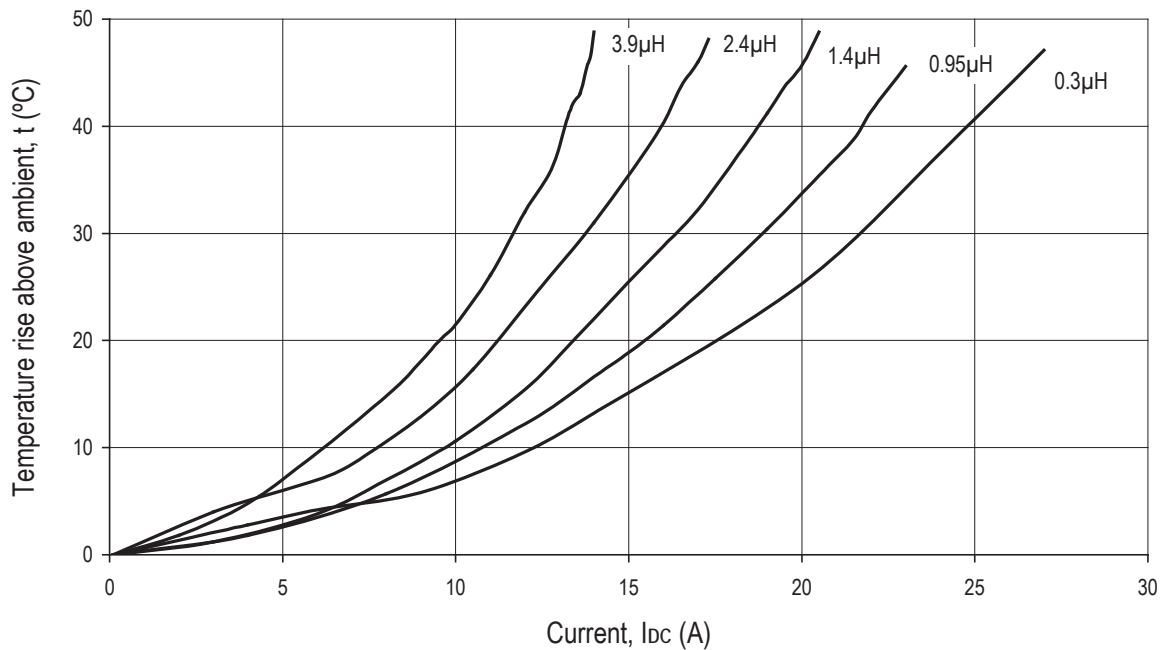


For full details go to
www.murata-ps.com/rohs

INDUCTANCE Vs CURRENT

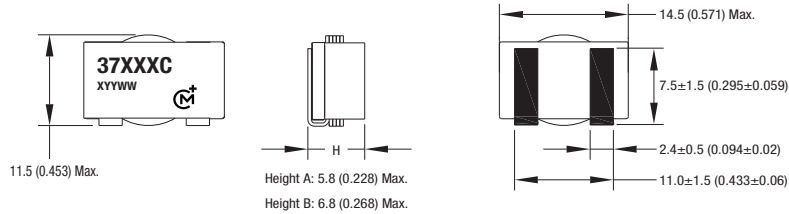


TEMPERATURE Vs CURRENT



PACKAGE SPECIFICATIONS

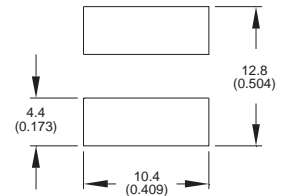
MECHANICAL DIMENSIONS



All dimensions in mm (inches).

Package weight: 2.6g Typ. (Height A), 3.4g Typ. (Height B)

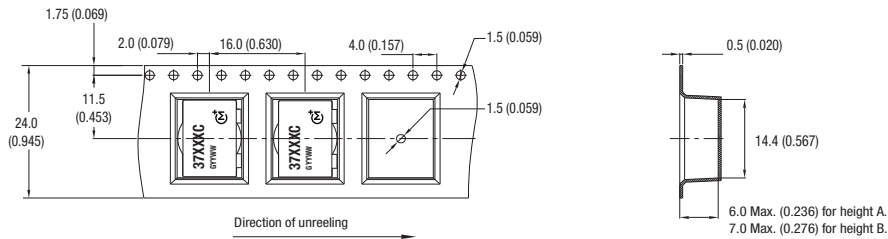
RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches).

TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches).

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- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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