

37951C Datasheet

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| | |
|------------------------------|--|
| DiGi Electronics Part Number | 37951C-DG |
| Manufacturer | Murata Power Solutions Inc. |
| Manufacturer Product Number | 37951C |
| Description | FIXED IND 950NH 18A 1.3 MOHM SMD |
| Detailed Description | 950 nH Unshielded Wirewound Inductor 18 A 1.3m Ohm Max Nonstandard |



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

37951C

Series:

3700

Type:

Wirewound

Inductance:

950 nH

Current Rating (Amps):

18 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:

±20%

Current - Saturation (Isat):

25A

DC Resistance (DCR):

1.3mOhm 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)

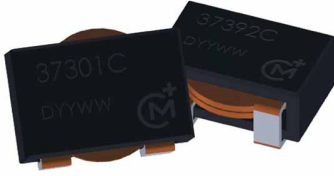
ECCN:

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% μH | Max. A | Typ. A | Max. 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 |

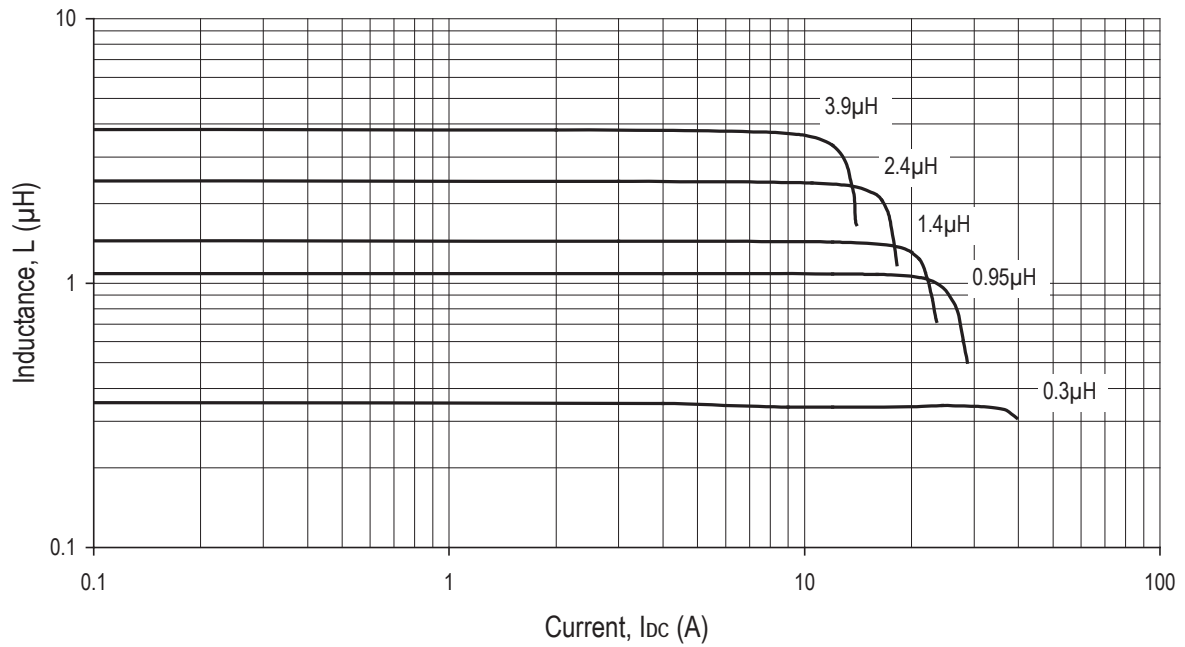
All specifications typical at T_A = 25°C

- 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

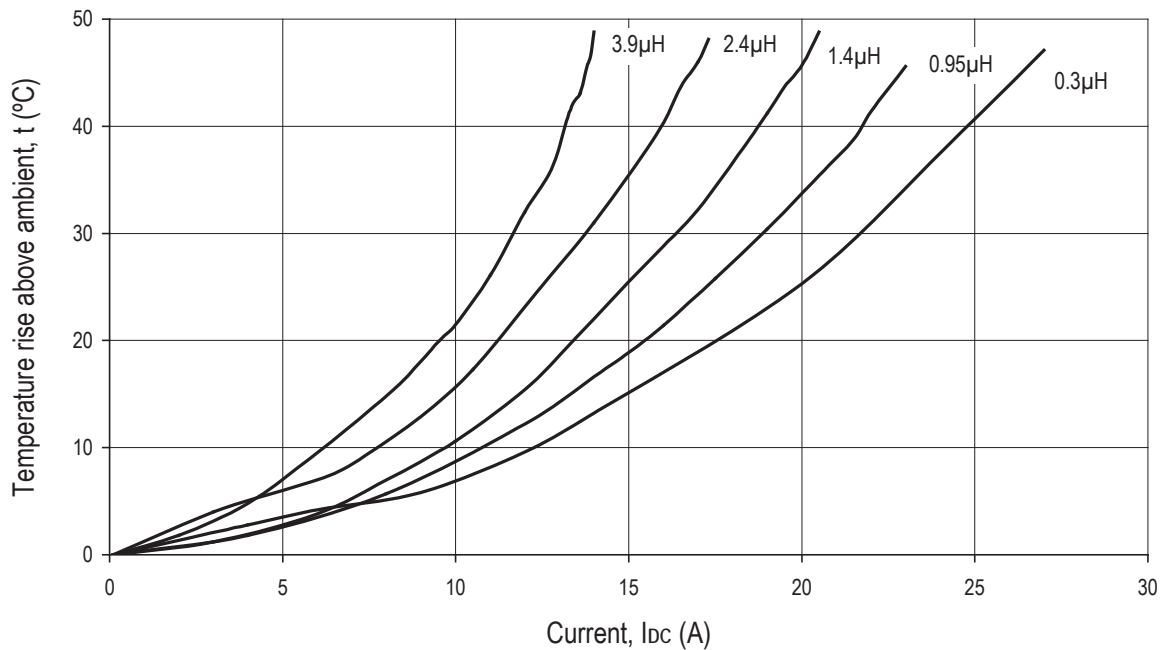


For full details go to
www.murata-ps.com/rohs

INDUCTANCE Vs CURRENT

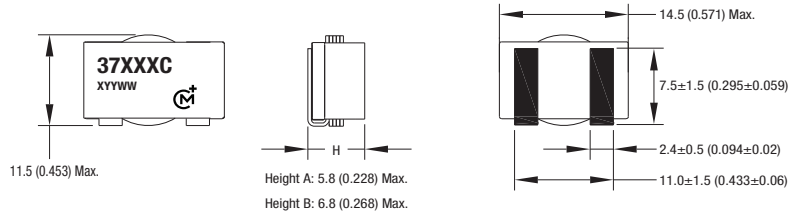


TEMPERATURE Vs CURRENT



PACKAGE SPECIFICATIONS

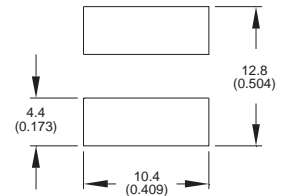
MECHANICAL DIMENSIONS



All dimensions in mm (inches).

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

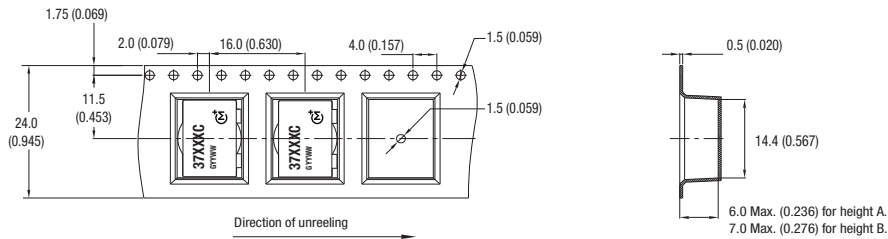
RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches).

TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches).

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

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