



## 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.

# 3700 Series

Flat Coil SM Power Inductors

## SELECTION GUIDE

| Order Code    | Inductance<br>(100kHz, 0.1VAc) | DC<br>Current <sup>1</sup> | Saturation<br>Current <sup>2</sup> | DC<br>Resistance | Height |
|---------------|--------------------------------|----------------------------|------------------------------------|------------------|--------|
|               | ±10%                           | Max.                       | Typ.                               | Max.             |        |
|               | μH                             | A                          | A                                  | mΩ               |        |
| <b>37301C</b> | 0.30 ±20%                      | 19.5                       | 39                                 | 0.9              | A      |
| <b>37501C</b> | 0.50 ±20%                      | 19.5                       | 30                                 | 1.0              | A      |
| <b>37951C</b> | 0.95 ±20%                      | 18.0                       | 25                                 | 1.3              | B      |
| <b>37112C</b> | 1.1                            | 14.5                       | 20                                 | 2.2              | A      |
| <b>37142C</b> | 1.4                            | 16.0                       | 22                                 | 1.9              | B      |
| <b>37222C</b> | 2.2                            | 11.5                       | 15                                 | 4.0              | A      |
| <b>37242C</b> | 2.4                            | 12.0                       | 16.5                               | 3.0              | B      |
| <b>37302C</b> | 3.0                            | 9.0                        | 13                                 | 4.8              | A      |
| <b>37392C</b> | 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 INFORMATION<sup>3</sup>

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

## PACKAGING INFORMATION

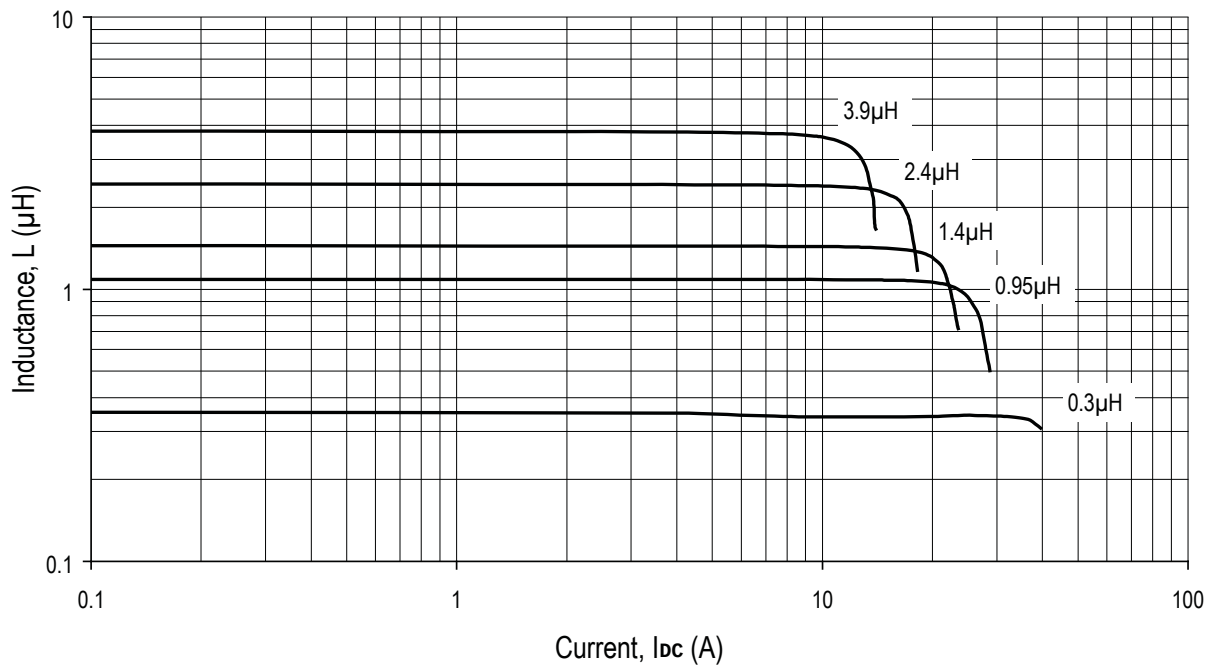
| Tape & Reel | Height A     | Height B     |
|-------------|--------------|--------------|
|             | 700 per reel | 550 per reel |

All specifications typical at T<sub>a</sub>=25°C

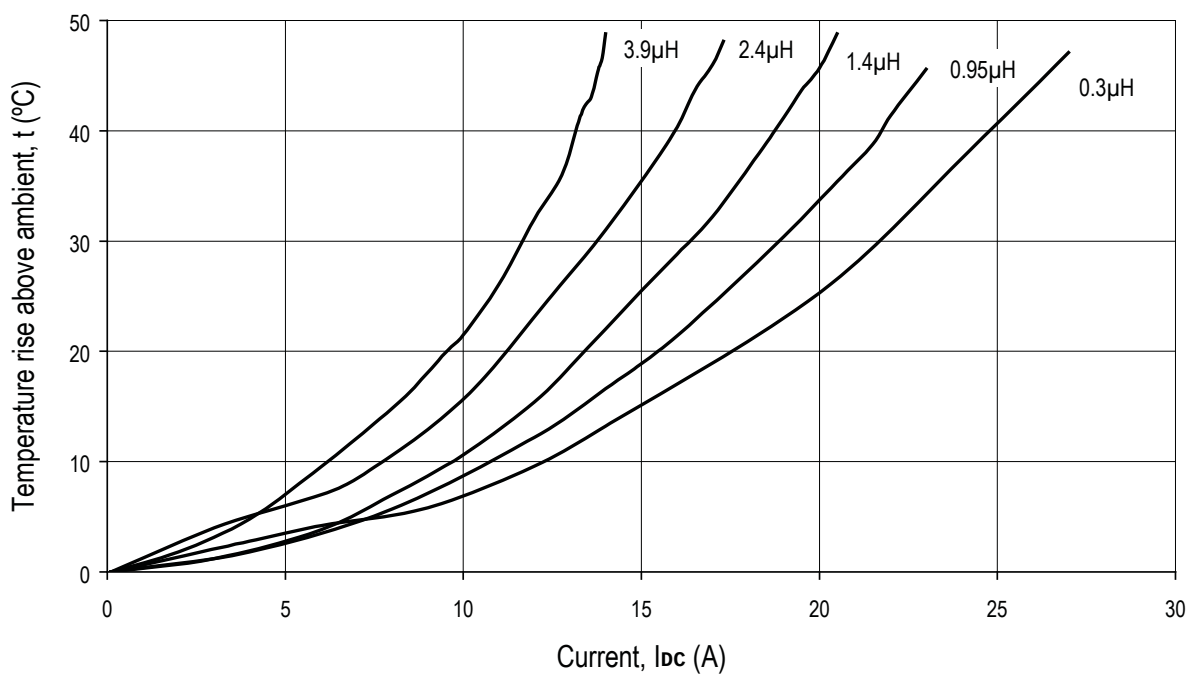
- 1 The maximum DC Current is the value at which the inductance falls to 80% of its zero current value, or when its temperature rise reaches 40°C, whichever is sooner.
- 2 Saturation current is the continuous current at 20°C ambient at which the inductance falls to 80% of its zero current value.
- 3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



**INDUCTANCE Vs CURRENT**

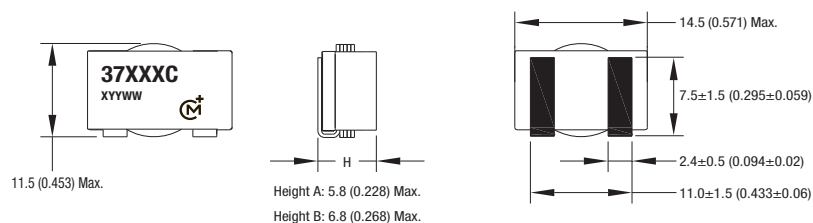


**TEMPERATURE Vs CURRENT**



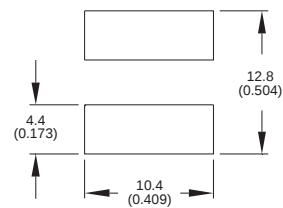
## PACKAGE SPECIFICATIONS

### MECHANICAL DIMENSIONS



All dimensions in mm (inches).  
Package weight: 2.6g Typ. (Height A), 3.4g Typ. (Height B)

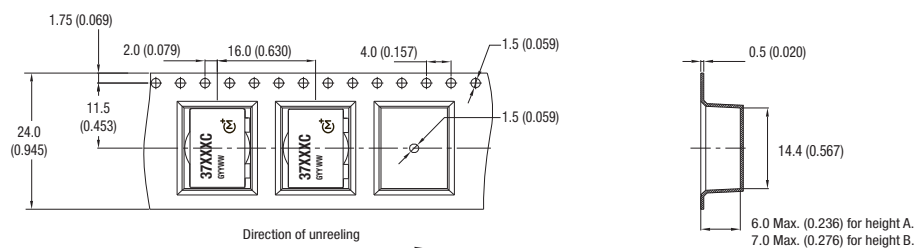
### RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches).

## TAPE & REEL SPECIFICATIONS

### TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches).

Murata Power Solutions, Inc.  
11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.  
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