



## FEATURES

- RoHS compliant<sup>1</sup>
- Up to 10.5A I<sub>DC</sub>
- 47μH to 680μH
- High energy storage, very low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow
- Custom inductance values available

## PRODUCT OVERVIEW

The 6000B series is a range of high-current, surface-mount power inductors. They are designed for use in power applications such as DC-DC converters, energy storage and input or output filtering. The products are supplied in tape and reel for high-volume, automated surface-mount assembly.

# 6000B Series

Surface Mount Power Inductors

## SELECTION GUIDE

| Order Code     | Inductance, L            | DC Current <sup>2</sup> | SRF         | DC Resistance |
|----------------|--------------------------|-------------------------|-------------|---------------|
|                | 0.1V@100KHz (±15%)<br>μH | Max.<br>A               | Typ.<br>MHz | Max.<br>mΩ    |
| <b>60B473C</b> | 47                       | 10.5                    | 7.45        | 13            |
| <b>60B683C</b> | 68                       | 9.0                     | 6.07        | 17            |
| <b>60B104C</b> | 100                      | 7.5                     | 4.98        | 25            |
| <b>60B154C</b> | 150                      | 6.0                     | 3.90        | 38            |
| <b>60B224C</b> | 220                      | 5.0                     | 3.21        | 50            |
| <b>60B334C</b> | 330                      | 4.0                     | 2.66        | 80            |
| <b>60B474C</b> | 470                      | 3.5                     | 2.15        | 100           |
| <b>60B684C</b> | 680                      | 3.0                     | 1.59        | 135           |

## ABSOLUTE MAXIMUM RATINGS

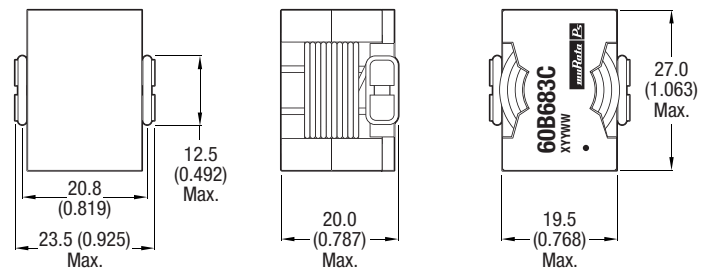
|                                      |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 85°C  |
| Storage temperature range            | -40°C to 125°C |

## SOLDERING INFORMATION<sup>1</sup>

|                                         |          |
|-----------------------------------------|----------|
| Peak reflow solder temperature          | 245°C    |
| Pin finish                              | Pure tin |
| Moisture sensitivity level <sup>3</sup> | 1        |

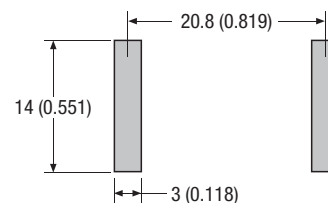
## PACKAGE SPECIFICATIONS

### Mechanical Dimensions



Package weight: 37g Typ.

### Recommended Pad Layout



All dimensions in mm (inches)

## PACKAGING INFORMATION

|      |             |
|------|-------------|
| Tray | 30 per tray |
|------|-------------|

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

<sup>1</sup> For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

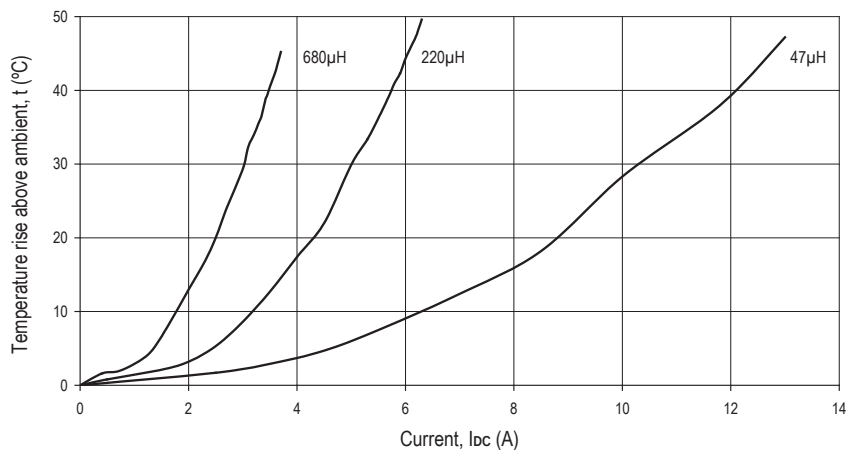
<sup>2</sup> The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

<sup>3</sup> Representative samples of the product were subjected to the conditioning described in IPC/JEDEC J-STD-020D and passed electrical testing, package coplanarity and visual inspection which revealed no external cracks or changes in package body flatness.

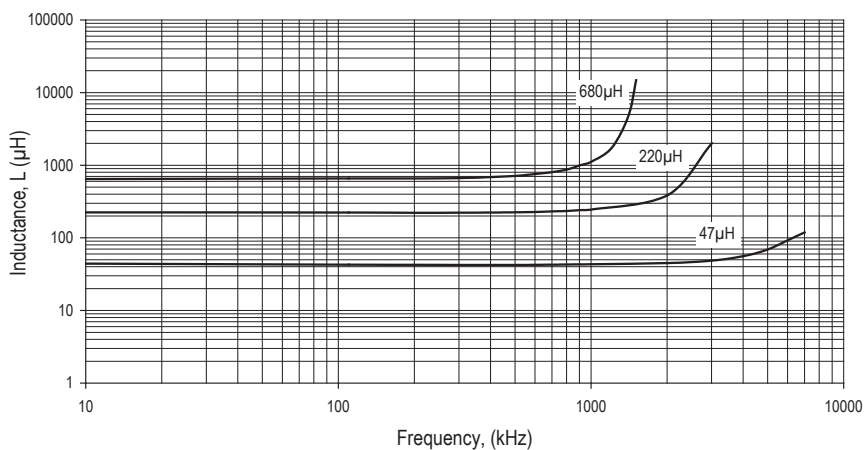


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

**TEMPERATURE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**



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