# **6000B Series**

Surface Mount Power Inductors



muRata 🚺

**Murata Power Solutions** 

#### **FEATURES**

- RoHS compliant<sup>1</sup>
- Up to 10.5A loc
- 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.

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

ABSOLUTE MAXIMUM RATINGS	
Operating temperature range <sup>3</sup>	-40°C to 85°C
Storage temperature range	-40°C to 125°C

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

### PACKAGE SPECIFICATIONS



- Specifications typical at  $T_A = 25^{\circ}C$
- 1 For further information, please visit www.murata-ps.com/rohs
- 2 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.
- 3 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.





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#### PACKAGE SPECIFICATIONS **Mechanical Dimensions** 55.9 (2.201) Min. Ø332 (13.071) Max. Ø110 (4.33) Min. 59.4 (2.339) Max. $\emptyset \, {}^{13.50}_{12.50} \! \left[ \! \emptyset \, {}^{0.531}_{0.492} \! \right]$ 0 0 Leader Section 400 (15.748) Min. 116 (4.567) 0 Nin. 0 c 1.80 (0.071) Min. 61.5 (2.42) 0 Max. Goods Enclosure Section 0 56 (2.205) Min. 56.5 (2.224) Max.<sup>+</sup> 0 Trailer Section 0 160 (6.299) Min. 0 -2.3+0.20 lc Ø20.5 (Ø0.807) Min. (0.091±0.008) Min. All dimension in mm [inches] Includes flange distortion at outer edge † Measured at hub **Tape Outline Dimensions** 1.75 (0.06 Ø1.5 (0.059) 40.0 (1.57) -2.0 (0.079) -4.0 (0.157) -0.5 (0.020) **. . . . . . . . .** 26.2 (1.03) M K 52.4 (2.06) -27.1 (1.067) 56.0 (2.20) φ 20.5 Direction of unreeling -Reel quantity: 65 Unless otherwise stated, all dimensions in mm (inches)

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