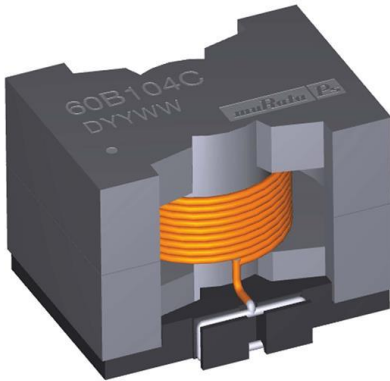


# 60B684C Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	60B684C-DG
Manufacturer	<a href="#">Murata Power Solutions Inc.</a>
Manufacturer Product Number	60B684C
Description	FIXED IND 680UH 3A 135 MOHM SMD
Detailed Description	680 $\mu$ H Unshielded Wirewound Inductor 3 A 135mOhm Max Nonstandard



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

60B684C

Series:

6000B

Type:

Wirewound

Inductance:

680  $\mu$ H

Current Rating (Amps):

3 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 kHz

Package / Case:

Nonstandard

Size / Dimension:

1.063" L x 0.768" W (27.00mm x 19.50mm)

Base Product Number:

60B

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

$\pm$ 15%

Current - Saturation (Isat):

-

DC Resistance (DCR):

135mOhm Max

Frequency - Self Resonant:

1.59MHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.787" (20.00mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

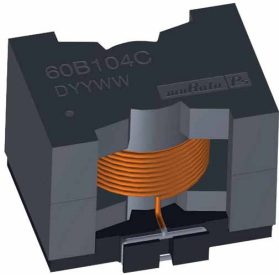
8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



## 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.

## SELECTION GUIDE

Order Code	Inductance, L	DC Current <sup>2</sup>	SRF	DC Resistance
	0.1V@100KHz (±15%) μH	Max. A	Typ. MHz	Max. 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

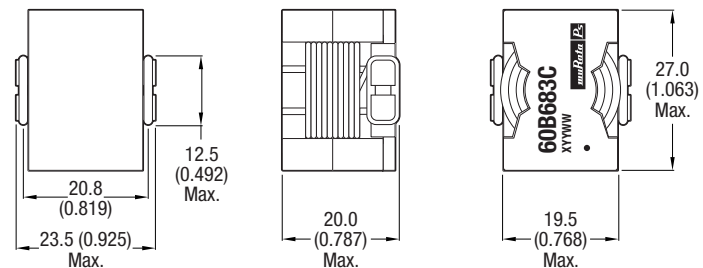
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 125°C

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

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

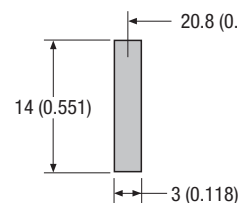
## PACKAGE SPECIFICATIONS

### Mechanical Dimensions



Package weight: 37g Typ.

### Recommended Pad Layout



All dimensions in mm (inches)

## PACKAGING INFORMATION

Carton	30 per carton
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Specifications typical at T<sub>a</sub> = 25°C

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

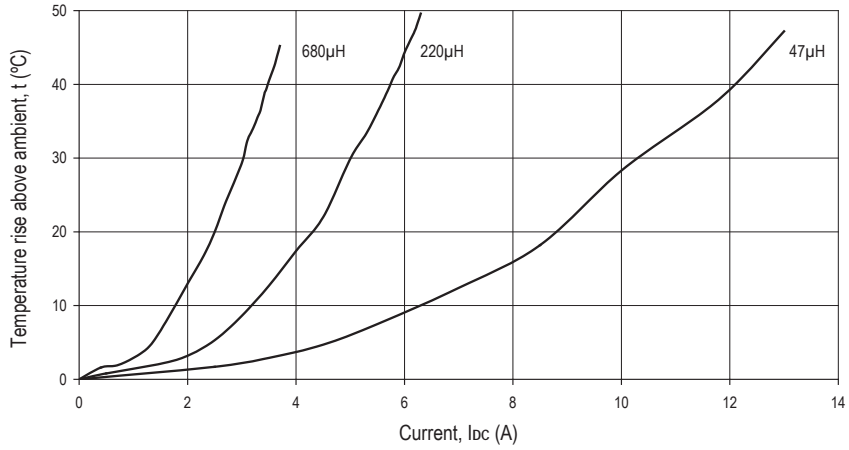
2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

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.

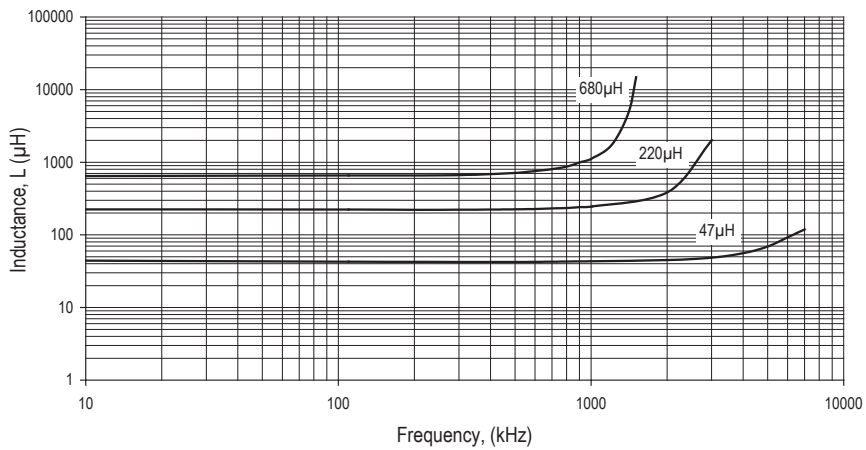


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

**TEMPERATURE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**



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- Disaster prevention / crime prevention equipment
- Data Processing equipment

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