



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## FEATURES

- RoHS compliant
- Up to 3A I<sub>DC</sub>
- 0.42μH to 100μH
- Low R<sub>DC</sub>
- Small footprint
- Ultra-low profile
- UL 94V-0 packaging materials
- J-STD-020D reflow
- Custom inductance values available

## PRODUCT OVERVIEW

The 8300 series is a range of miniature, surface-mount power inductors. They are designed for use in power applications with restricted PCB space and height, such as handheld devices, DC-DC converters and notebook computers. The products are supplied in tape and reel for high-volume, automated surface-mount assembly.

## SELECTION GUIDE

Order Code	Inductance <sup>3</sup>	DC Current <sup>2</sup>	Saturation Current	DC Resistance
	±20% μH	Max. A	Typ. A	Max. mΩ
<b>83421C</b>	0.42	3.00	5.69	24
<b>83751C</b>	0.75	2.70	4.55	30
<b>83122C</b>	1.2	1.70	3.36	65
<b>83172C</b>	1.7	1.55	2.71	73
<b>83232C</b>	2.3	1.40	2.35	86
<b>83332C</b>	3.3	1.35	1.79	98
<b>83472C</b>	4.7	1.10	1.66	130
<b>83682C</b>	6.8	0.95	1.30	150
<b>83852C</b>	8.5	0.85	1.15	167
<b>83103C</b>	10	0.75	1.04	185
<b>83153C</b>	15	0.60	0.85	300
<b>83223C</b>	22	0.50	0.74	350
<b>83333C</b>	33	0.42	0.59	600
<b>83473C</b>	47	0.35	0.48	710
<b>83683C</b>	68	0.30	0.41	850
<b>83823C</b>	82	0.27	0.37	1250
<b>83104C</b>	100	0.24	0.34	1320

## ABSOLUTE MAXIMUM RATINGS

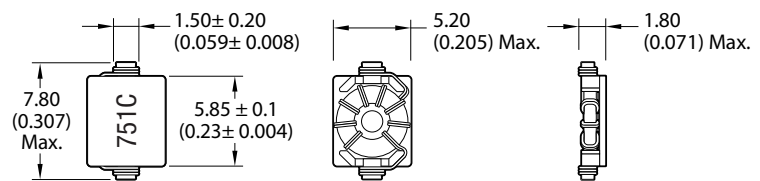
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 150°C

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

Peak reflow solder temperature	260°C
Pin finish	Tin
Moisture sensitivity level <sup>4</sup>	1

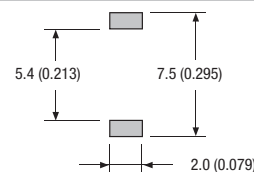
## PACKAGE SPECIFICATIONS

### Mechanical Dimensions



Package weight: 0.13g Typ.

### Recommended Pad Layout



All dimensions in mm (inches)

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 Quoted inductance values are stated with no load.

4 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.



