

8300 Series

Toroidal Surface Mount Power Inductors

FEATURES

RoHS compliant
Up to 3A loc
■ 0.42µH to 100µH
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, surfacemount 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.



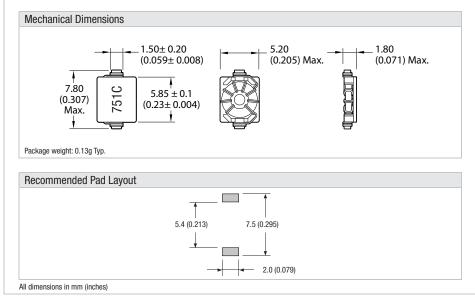


SELECTION GUIDE					
	Inductance ³	DC Current ²	Saturation Current	DC Resistance	
Order Code	±20%	Max.	Тур.	Max.	
	μH	А	А	mΩ	
83421C	0.42	3.00	5.69	24	
83751C	0.75	2.70	4.55	30	
83122C	1.2	1.70	3.36	65	
83172C	1.7	1.55	2.71	73	
83232C	2.3	1.40	2.35	86	
83332C	3.3	1.35	1.79	98	
83472C	4.7	1.10	1.66	130	
83682C	6.8	0.95	1.30	150	
83852C	8.5	0.85	1.15	167	
83103C	10	0.75	1.04	185	
83153C	15	0.60	0.85	300	
83223C	22	0.50	0.74	350	
83333C	33	0.42	0.59	600	
83473C	47	0.35	0.48	710	
83683C	68	0.30	0.41	850	
83823C	82	0.27	0.37	1250	
83104C	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 ¹	
Peak reflow solder temperature	260°C
Pin finish	Tin
Moisture sensitivity level ⁴	1

PACKAGE SPECIFICATIONS



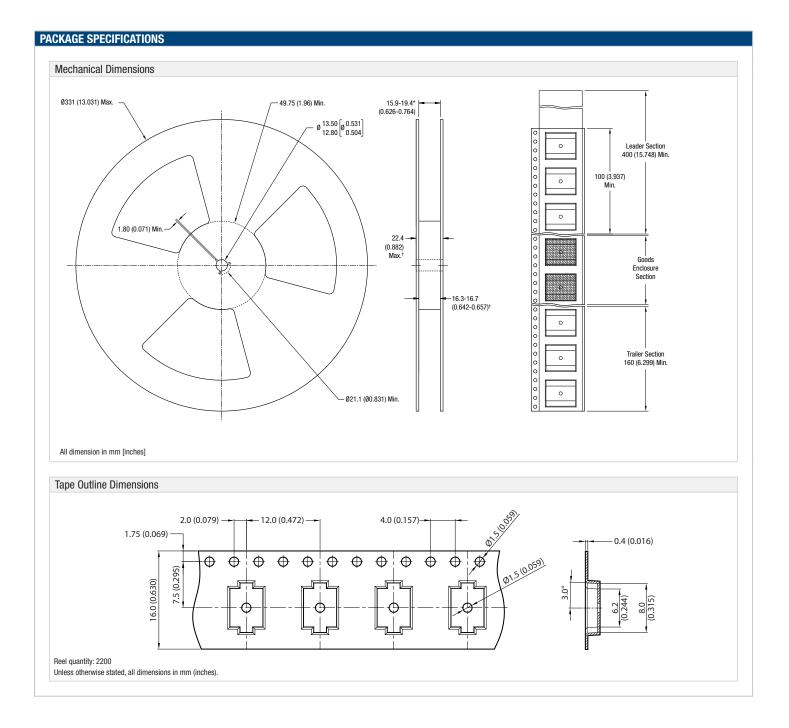
Specifications typical at $T_{A} = 25^{\circ}C$

- 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 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.



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