Murata Power Solutions

4600 Series

Shielded Surface Mount Power Inductors



FEATURES

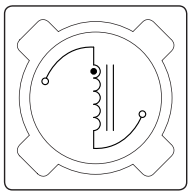
- RoHS compliant
- 0.28µH to 1.0mH
- Up to 8.7A I_{DC}
- Bobbin format
- Surface mount
- Integral EMI shield
- Compact size
- Tape and reel packaging
- UL 94V-0 materials
- J-STD-020-C reflow

DESCRIPTION

The 4600 series is a range of bobbin-wound, shielded inductors suitable for power-line filtering found in consumer electronics such as desktop computers, LED applications and GPS systems, as well as in a vast range of industrial and telecom applications including network hubs, bridges & routers, and high frequency wireless communication devices.

These surface mount inductors are extremely compact and have an integral shield, making them useful in EMI sensitive applications.

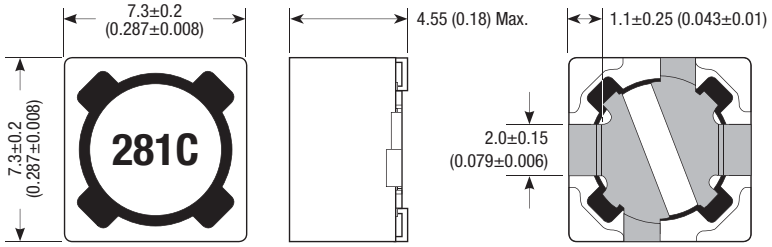
PIN CONNECTIONS (TOP VIEW)



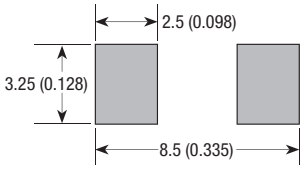
SELECTION GUIDE

Order Code	Inductance (10kHz, 0.1VAC) ±20%	DC Current[1]	DC Resistance
	Nom.	Max.	Max.
	µH	A	mΩ
46281C	0.28 (±30%)	8.7	8
46541C	0.54 (±30%)	7.7	10
46102C	1.0 (±30%)	6.8	13
46152C	1.5 (±30%)	6.3	15
46222C	2.2 (±30%)	5.0	21
46332C	3.3 (±30%)	4.3	29
46472C	4.7 (±30%)	3.7	37
46682C	6.8 (±30%)	3.1	52
46103C	10	2.4	66
46153C	15	2.2	94
46223C	22	1.8	120
46333C	33	1.45	190
46473C	47	1.25	260
46683C	68	1.05	360
46104C	100	0.86	500
46154C	150	0.72	720
46224C	220	0.57	1050
46334C	330	0.46	1850
46474C	470	0.39	2800
46684C	680	0.32	3900
46105C	1000	0.27	4900

MECHANICAL DIMENSIONS



Recommended Footprint Details*



*Distance between the outside ends of the terminations is 7.1±0.1 (0.28±0.004)
Unless otherwise stated, all dimensions in mm (inches) ± 0.25 (0.010).
Package weight: 0.8g Typ.

ABSOLUTE MAXIMUM RATINGS

Operating temperature range	-40ºC to 125ºC
Storage temperature range	-40ºC to 150ºC

SOLDERING INFORMATION[2]

Peak reflow solder temperature	250˚C
Pin finish	Tin

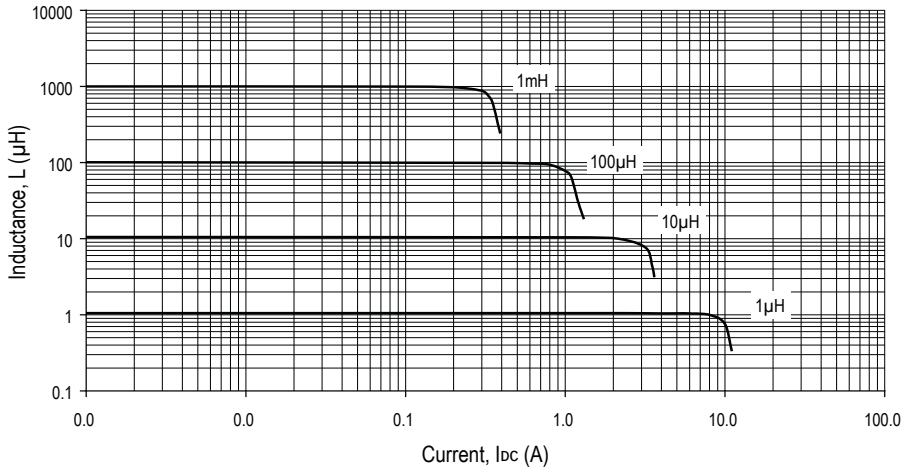
RoHS COMPLIANT 2002/95/EC

For full details go to www.murata-ps.com/rohs

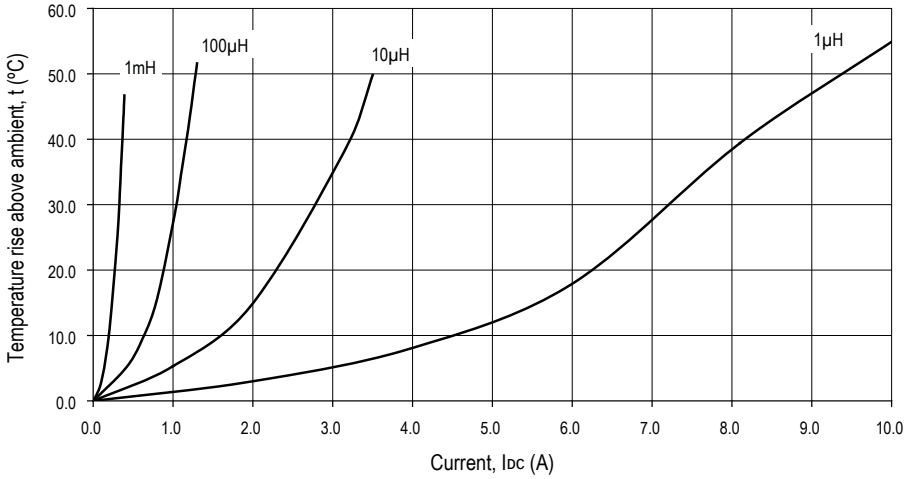
Specifications typical at T_A = 25°C

1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
2 For further information, please visit www.murata-ps.com/rohs

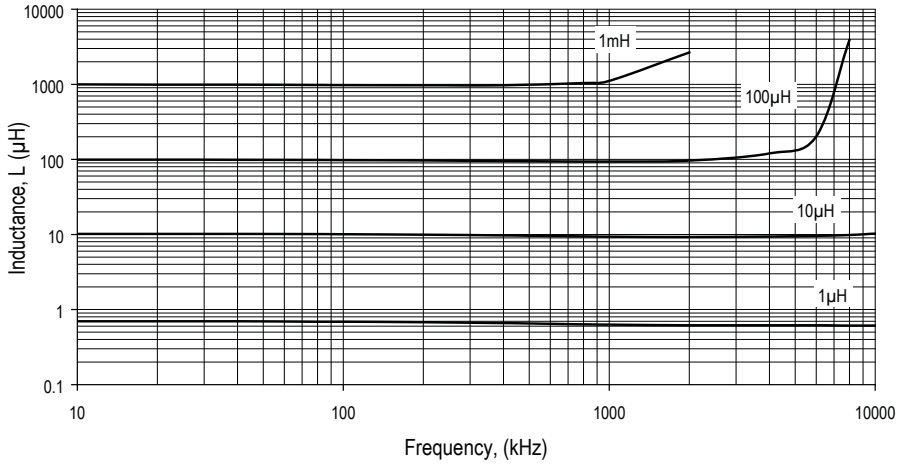
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

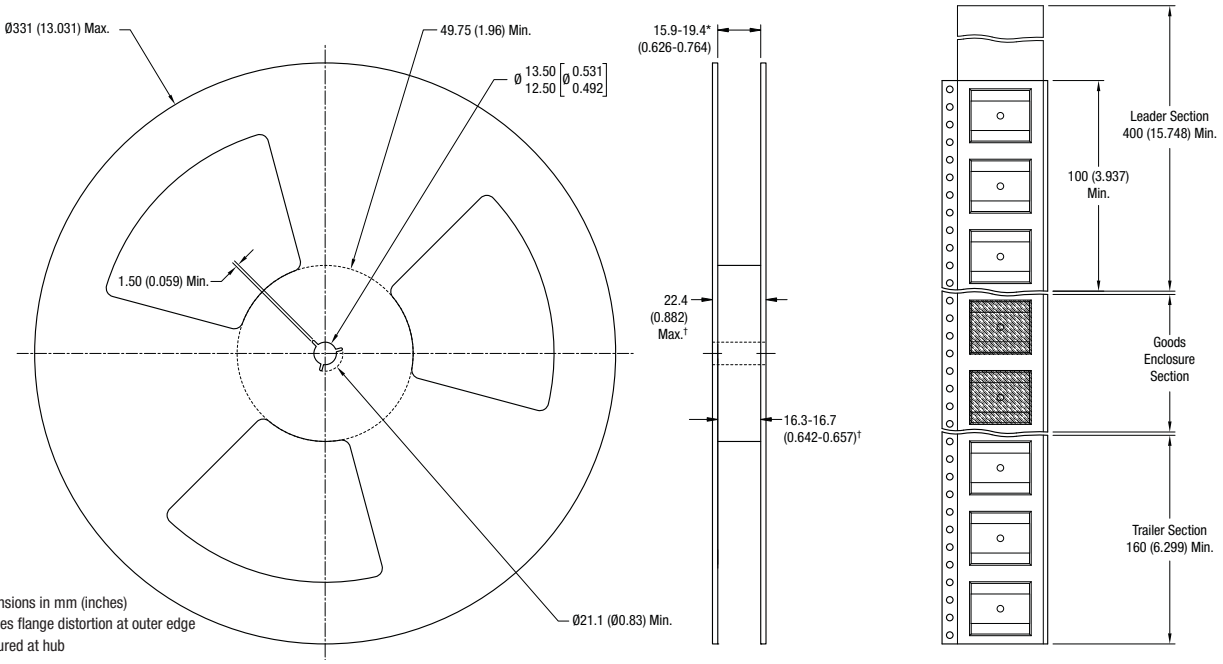


INDUCTANCE Vs FREQUENCY



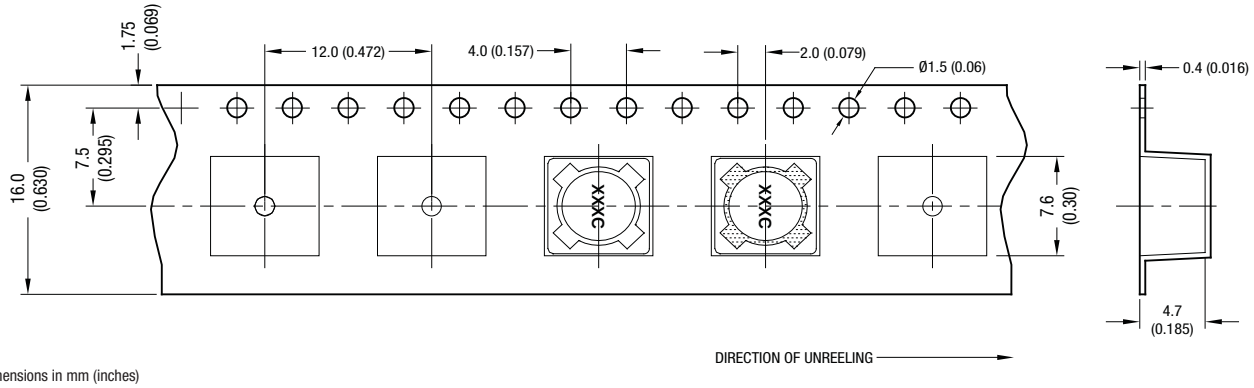
TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



All dimensions in mm (inches)
* Includes flange distortion at outer edge
† Measured at hub

TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches)
Reel quantity: 1000

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ISO 9001 and 14001 REGISTERED

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