



FEATURES

- RoHS compliant
- 0.28μH to 1.0mH
- Up to 8A I_{DC}
- Bobbin format
- Surface mount
- Integral EMI shield
- J-STD-020 reflow

DESCRIPTION

The 4500 series is a lower profile version of our 4600 series range of bobbin-wound, shielded inductors. They are 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 compact and have an integral shield, making them useful in EMI sensitive applications.

SELECTION GUIDE

Order Code	Inductance (10kHz, 0.1V _{AC})	DC Current ¹	DC Resistance
	±20%	Max.	Max.
	Nom. μH	A	mΩ
45281C	0.28 (±30%)	8.0	9
45541C	0.54 (±30%)	7.0	11
45102C	1.0 (±30%)	6.0	14
45152C	1.5 (±30%)	5.5	17
45222C	2.2 (±30%)	4.5	26
45332C	3.3 (±30%)	3.7	34
45472C	4.7 (±30%)	3.2	47
45682C	6.8 (±30%)	2.6	66
45103C	10	2.2	82
45153C	15	1.8	120
45223C	22	1.35	180
45333C	33	1.25	250
45473C	47	1.05	360
45683C	68	0.82	510
45104C	100	0.70	710
45154C	150	0.58	1000
45224C	220	0.50	1550
45334C	330	0.35	2540
45474C	470	0.32	3250
45684C	680	0.26	5000
45105C	1000	0.23	6500

TEMPERATURE CHARACTERISTICS

Operating temperature range	-40°C to 125°C
Storage temperature range	-40°C to 150°C

RoHS COMPLIANCE, MSL, PSL AND REFLOW SOLDERING INFORMATION



This series is compatible with Pb-Free soldering systems and is also backward compatible with Sn/Pb soldering systems. The 4500 series can be soldered in accordance with J-STD-020 and have a classification temperature of 250°C with a time above liquidus (217°C) which for this series is 130 seconds (max) and moisture sensitivity level 1. The termination finish on this product is Tin.

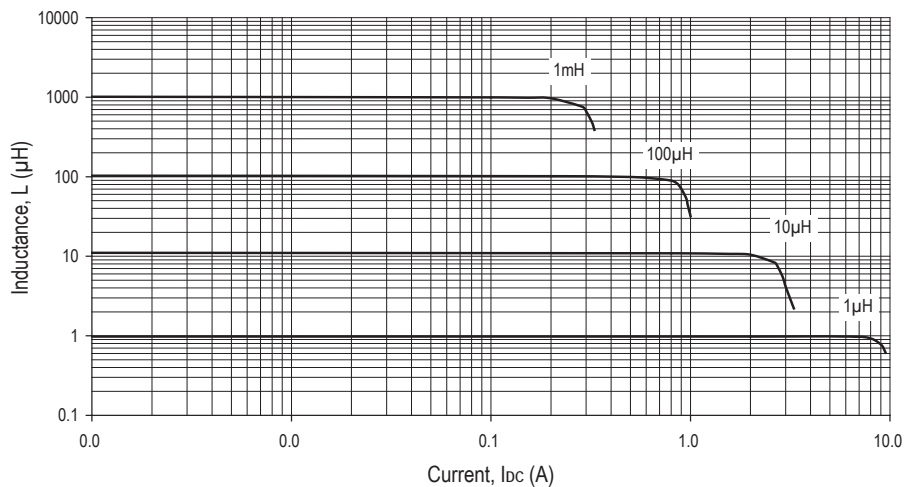


For full details go to
[www.murata.com/en-global/
products/power/rohs](http://www.murata.com/en-global/products/power/rohs)

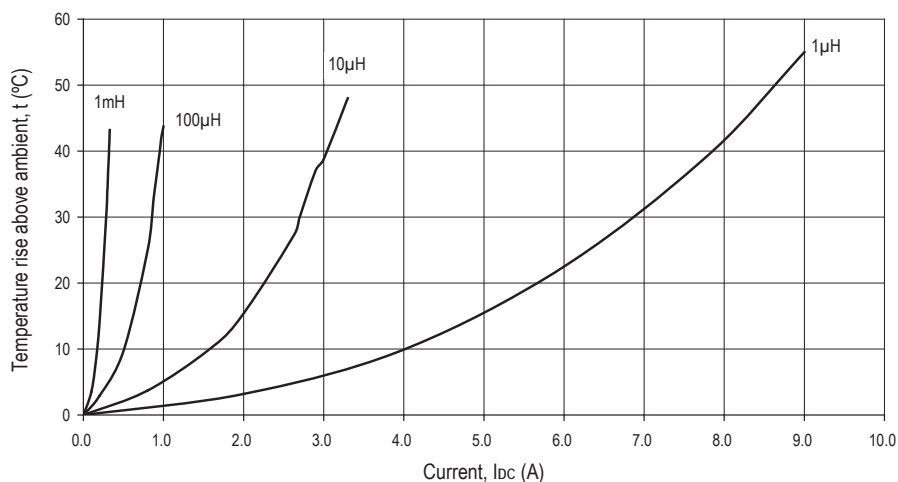
All specifications typical at T_a=25°C unless otherwise specified.

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.

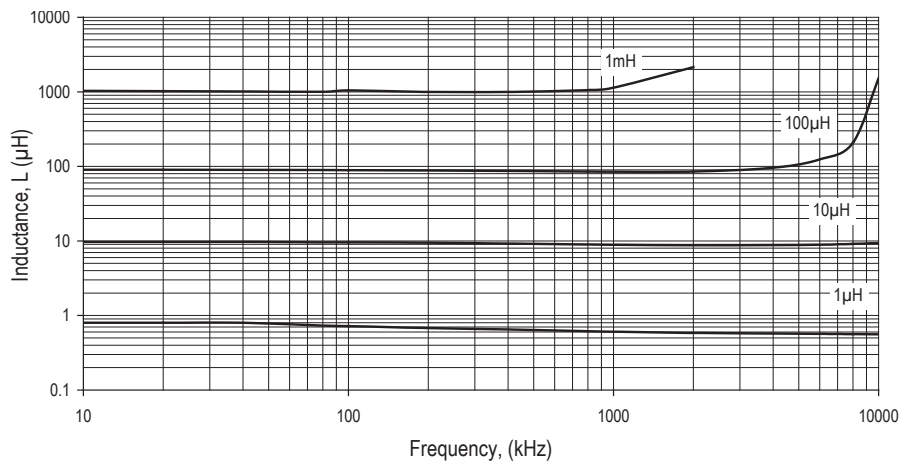
INDUCTANCE Vs CURRENT



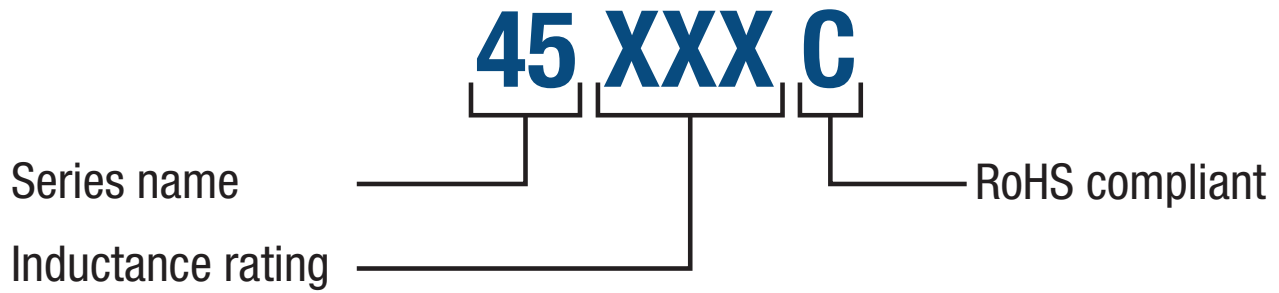
TEMPERATURE Vs CURRENT



INDUCTANCE Vs FREQUENCY

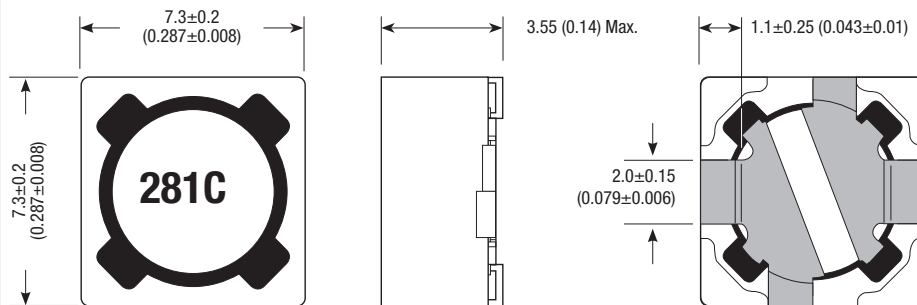


PART NUMBER STRUCTURE



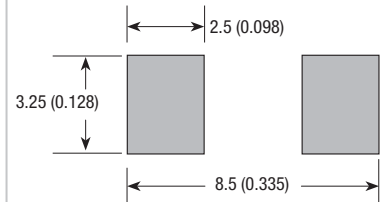
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS

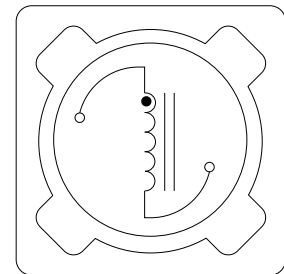


* Distance between the outside ends of the terminations is 7.1±0.1 (0.28±0.004)
Unless otherwise stated, all dimensions in mm (inches) ± 0.25 (0.010).
Package weight: 0.64g Typ.

RECOMMENDED FOOTPRINT DETAILS*

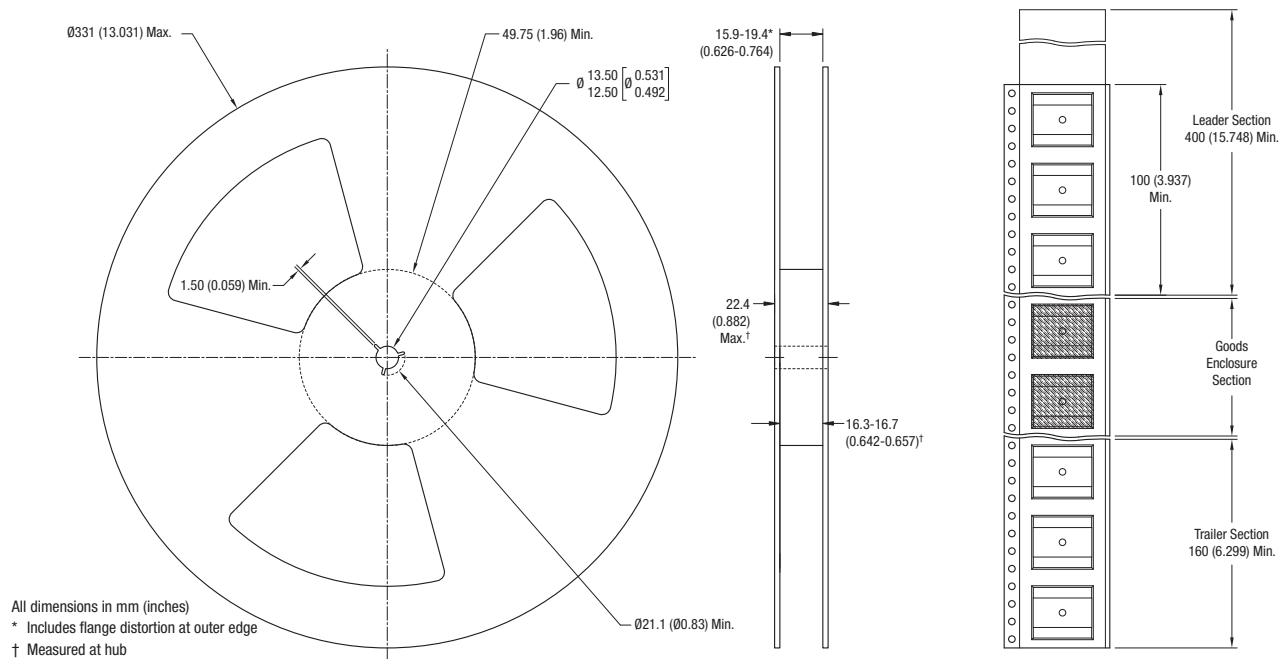


PIN CONNECTIONS (TOP VIEW)

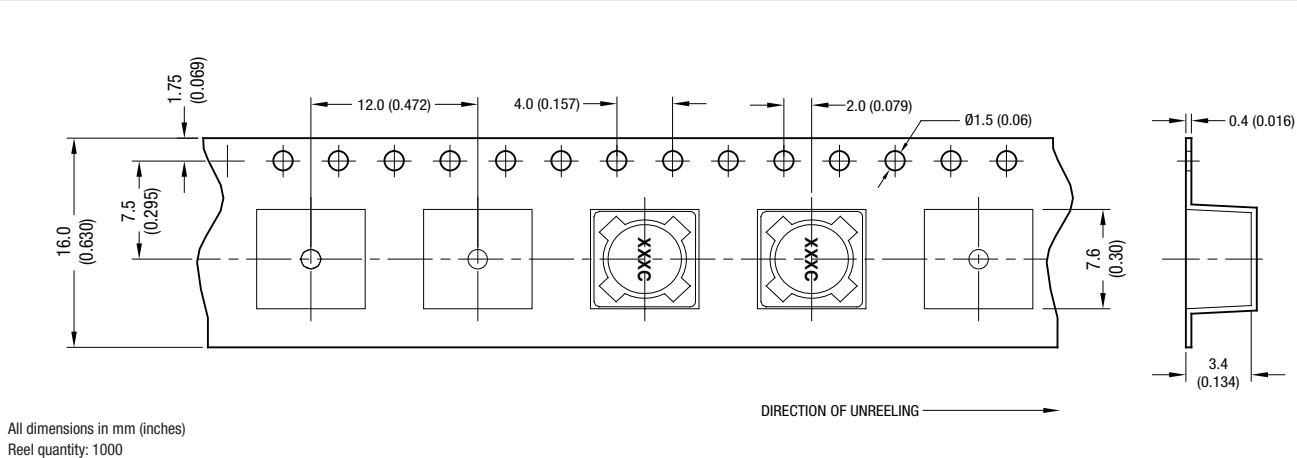


TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



TAPE OUTLINE DIMENSIONS



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- Power plant control equipment
- Medical equipment
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- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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