



FEATURES

- RoHS compliant
- Up to 2.1A I_{DC}
- 2.2μH to 220μH
- Optional integral EMI shield
- Low R_{DC}
- Surface mount
- Compact size
- Tape and reel packaging
- J-STD-020C reflow
- Backward compatible with Sn/Pb soldering systems

DESCRIPTION

The 2300 series is a range of bobbin-wound, surface-mount inductors designed for use in switching power supply, and power line filter circuits. The parts are suitable for any application requiring a high saturation current in a miniature surface-mount footprint. Where EMI is a critical factor, the devices are available with an integral ferrite EMI shield.

2300 Series

Bobbin Wound Surface Mount Inductors

SELECTION GUIDE (UNSHIELDED TYPES)

Order Code	Inductance (1kHz, 100mV _{AC})	Inductance Range (1kHz, 100mV _{AC})	DC Current ¹	DC Resistance	Recommended Alternative
	Nom.	Min. - Max.	Max.	Max.	
	μH	μH	A	Ω	
Discontinued					
232R2C	2.2	1.7 - 2.8	2.10	0.040	84222C
233R3C	3.3	2.3 - 3.9	1.80	0.058	29332C
234R7C	4.7	3.6 - 6.0	1.48	0.068	84472C
236R8C	6.8	5.1 - 8.6	1.22	0.102	84682C
23100C	10	7.6 - 12.7	1.02	0.138	84103C
23150C	15	11.3 - 18.9	0.86	0.210	84153C
23220C	22	16.8 - 28.1	0.74	0.361	29223C
23330C	33	24.6 - 41.0	0.64	0.497	84333C
23470C	47	34.6 - 57.6	0.55	0.683	29473C
23680C	68	51.0 - 85.0	0.49	1.051	29683C
23101C	100	74.2 - 124	0.43	1.281	29104C

SELECTION GUIDE (SHIELDED TYPES)

Order Code	Inductance (1kHz, 100mVAC)	Inductance Range (1kHz, 100mVAC)	DC Current ¹	DC Resistance	Recommended Alternative
	Nom.	Min. - Max.	Max.	Max.	
	μH	μH	A	Ω	
Discontinued					
23S2R2C	2.2	1.8 - 3.0	2.10	0.025	29222C
23S3R3C	3.3	2.7 - 4.5	1.80	0.031	29332C
23S4R7C	4.7	3.8 - 6.4	1.60	0.044	29472C
23S6R8C	6.8	5.2 - 8.6	1.40	0.064	29682C
23S100C	10	7.5 - 12.6	1.18	0.087	29103C
23S120C	12	9.4 - 15.6	1.08	0.107	29153C
23S150C	15	11.4 - 19.0	0.96	0.131	29153C
23S180C	18	13.6 - 22.6	0.88	0.143	29153C
23S220C	22	16.0 - 26.7	0.80	0.175	29223C
23S270C	27	20.0 - 33.3	0.72	0.218	29223C
23S330C	33	24.4 - 40.7	0.65	0.241	29333C
23S390C	39	29.3 - 48.8	0.60	0.370	29333C
23S470C	47	34.6 - 57.7	0.54	0.460	29473C
23S560C	56	42.4 - 70.6	0.50	0.509	29473C
23S680C	68	50.9 - 84.9	0.45	0.641	29683C
23S101C	100	75.8 - 126	0.37	0.782	29104C
23S151C	150	112 - 187	0.30	1.190	29154C
23S221C	220	167 - 279	0.25	2.280	29224C

ABSOLUTE MAXIMUM RATINGS

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

SOLDERING INFORMATION²

Peak reflow temperature	250°C
Pin finish	Hot dipped tin

Specifications typical at T_A = 25°C

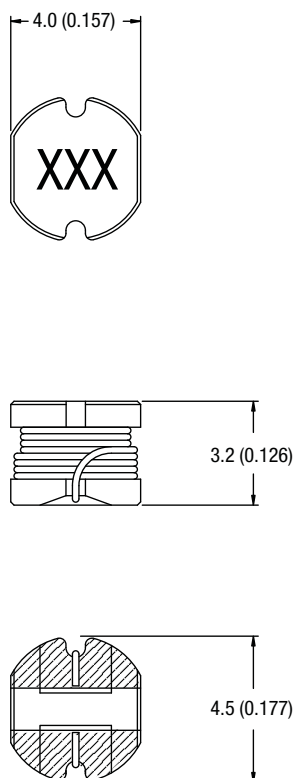
- The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- For further information, please visit www.murata.com/en-global/products/power/rohs



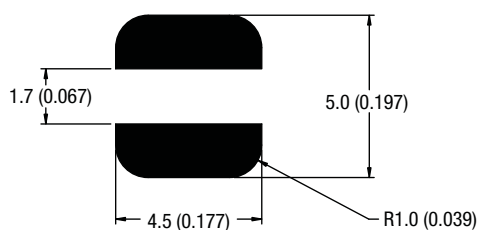
For full details go to
<https://www.murata.com/en-global/products/power/rohs>

MECHANICAL DIMENSIONS

UNSHIELDED TYPES



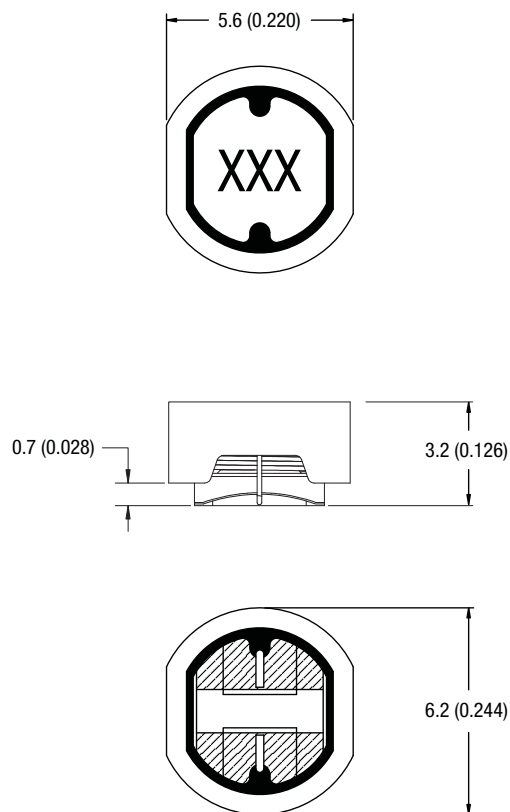
RECOMMENDED FOOTPRINT



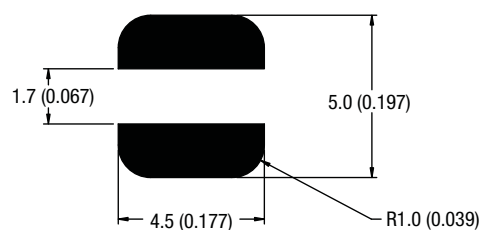
Unless otherwise stated all dimensions in mm (inches) ± 0.25 (0.01).
Hatching represents solder pads.

Package Weight 0.20g Typ.

SHIELDED TYPES



RECOMMENDED FOOTPRINT

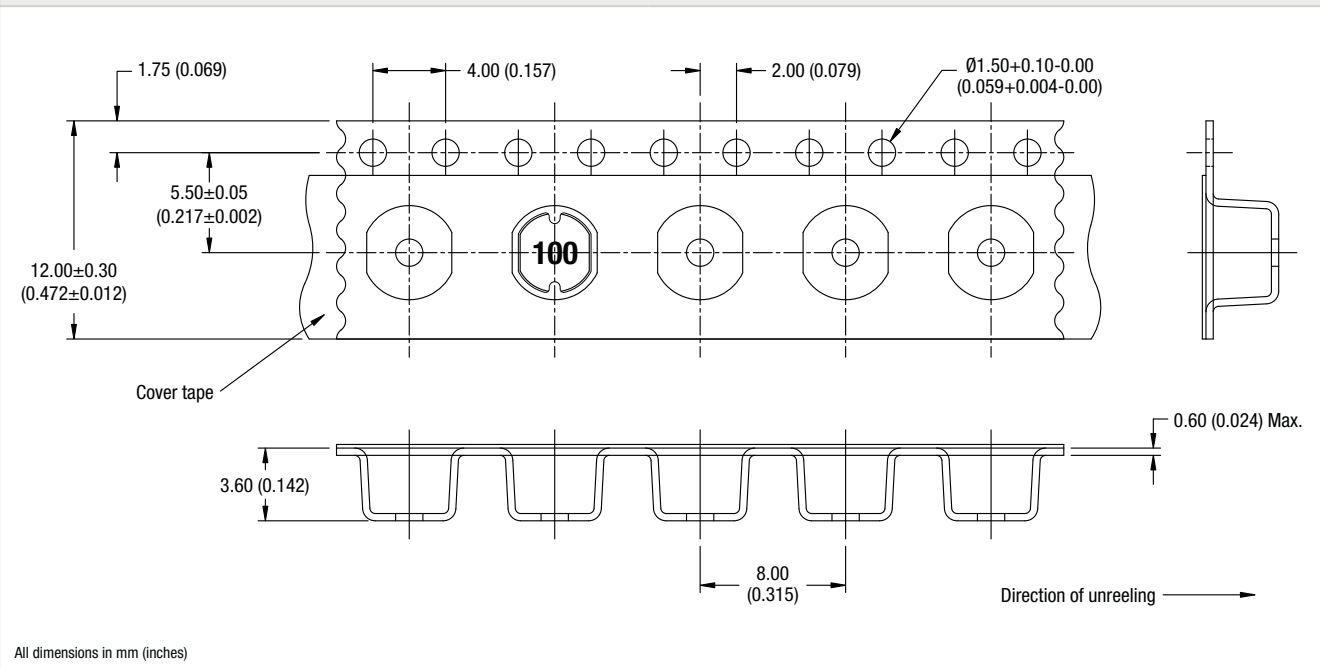


Unless otherwise stated all dimensions in mm (inches) ± 0.25 (0.01).
Hatching represents solder pads.

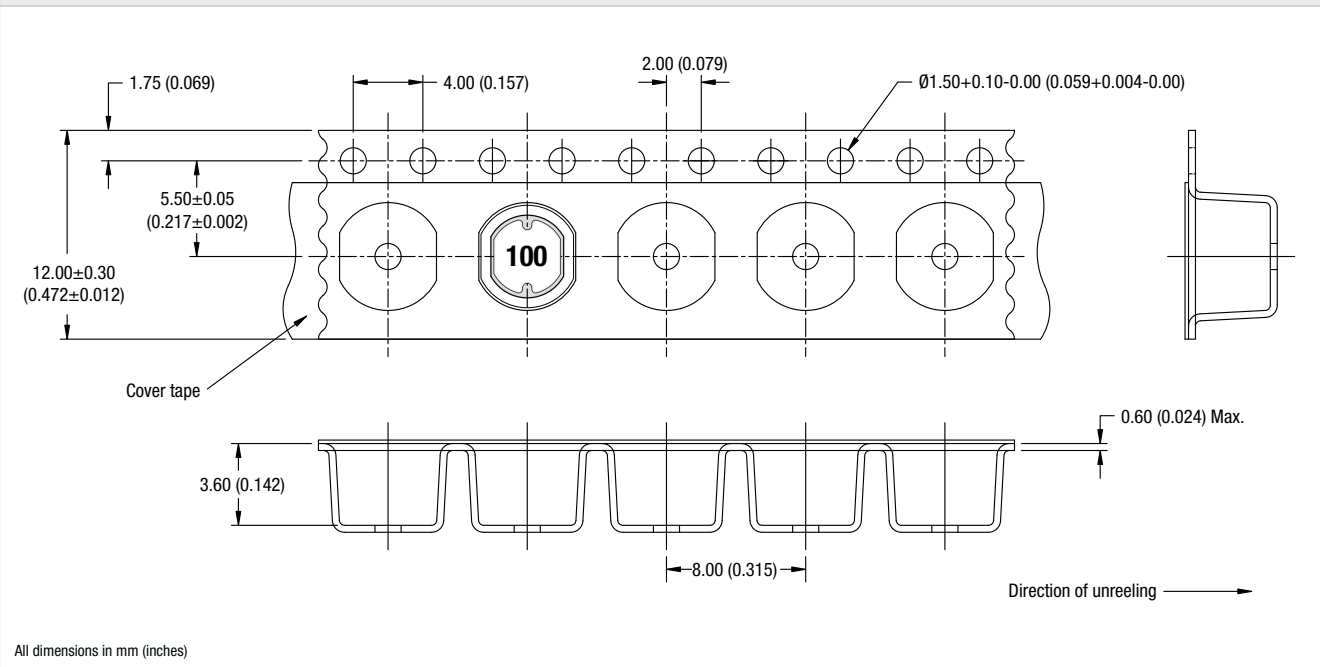
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TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS - UNSHIELDED PARTS

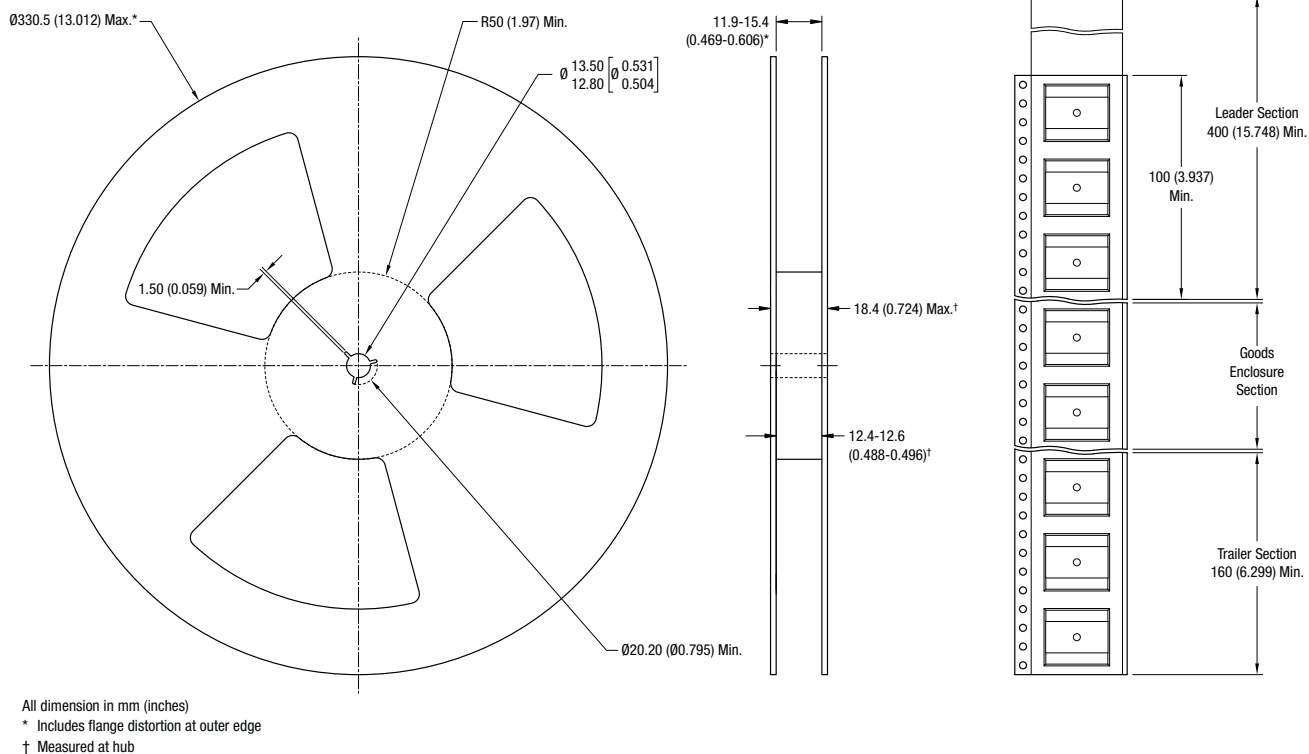


TAPE OUTLINE DIMENSIONS - SHIELDED PARTS



TAPE & REEL SPECIFICATIONS (Continued)

REEL OUTLINE DIMENSIONS



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- Traffic signal equipment
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- Data Processing equipment

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