



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





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.

SELECTION GUIDE (UNSHIELDED TYPES)

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

SELECTION GUIDE (SHIELDED TYPES)

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

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

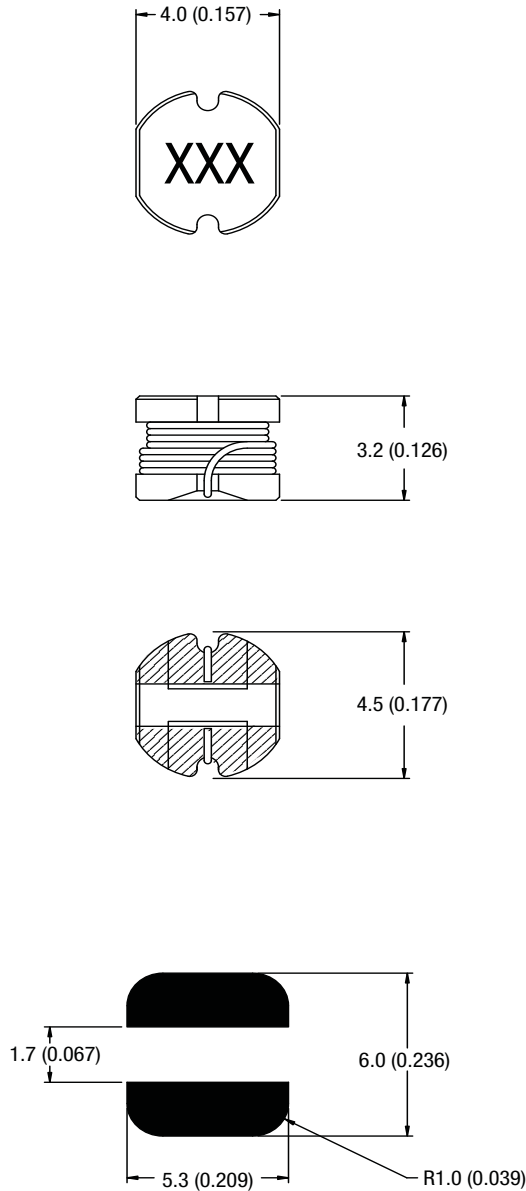
1 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

2 For further information, please visit www.murata-ps.com/rohs



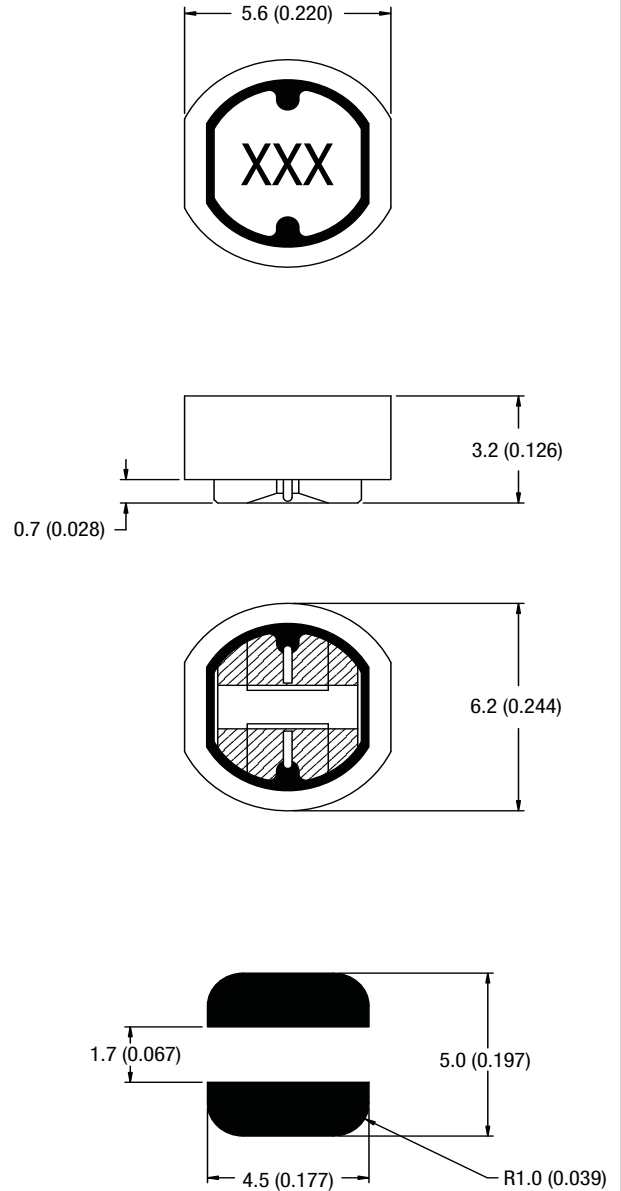
MECHANICAL DIMENSIONS

UNSHIELDED TYPES



Unless otherwise stated all dimensions in mm (inches) ± 0.25 (0.01).
 Package Weight 0.20g Typ.
 Hatching represents solder pads.

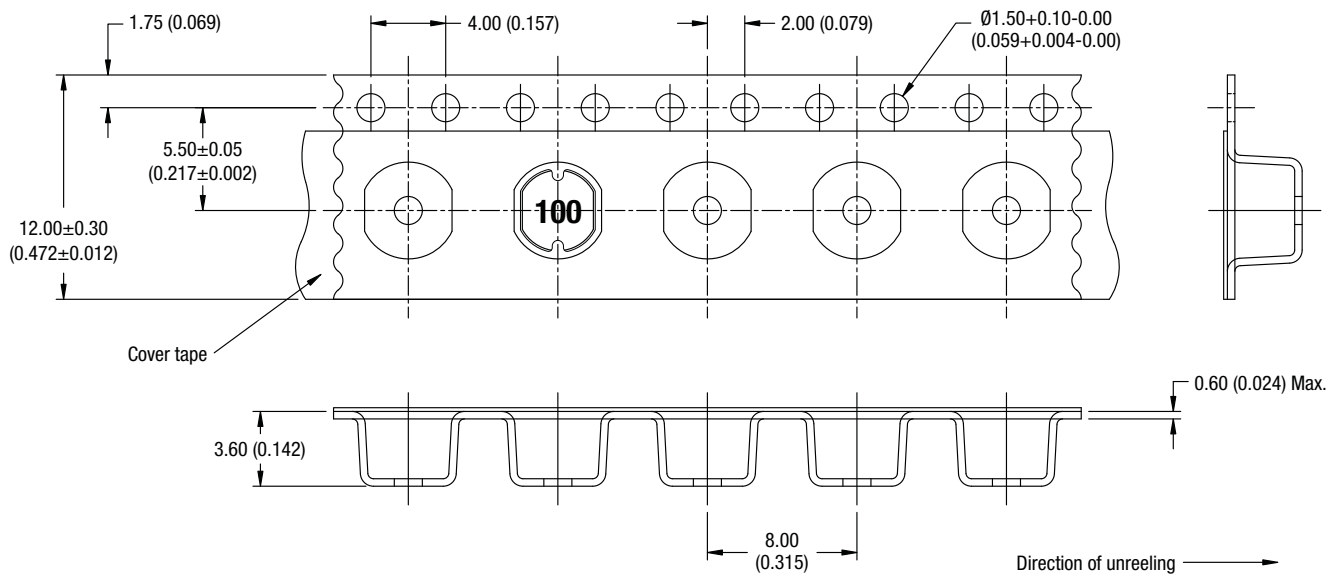
SHIELDED TYPES



Unless otherwise stated all dimensions in mm (inches) ± 0.25 (0.01).
 Package Weight 0.34g Typ.
 Hatching represents solder pads.

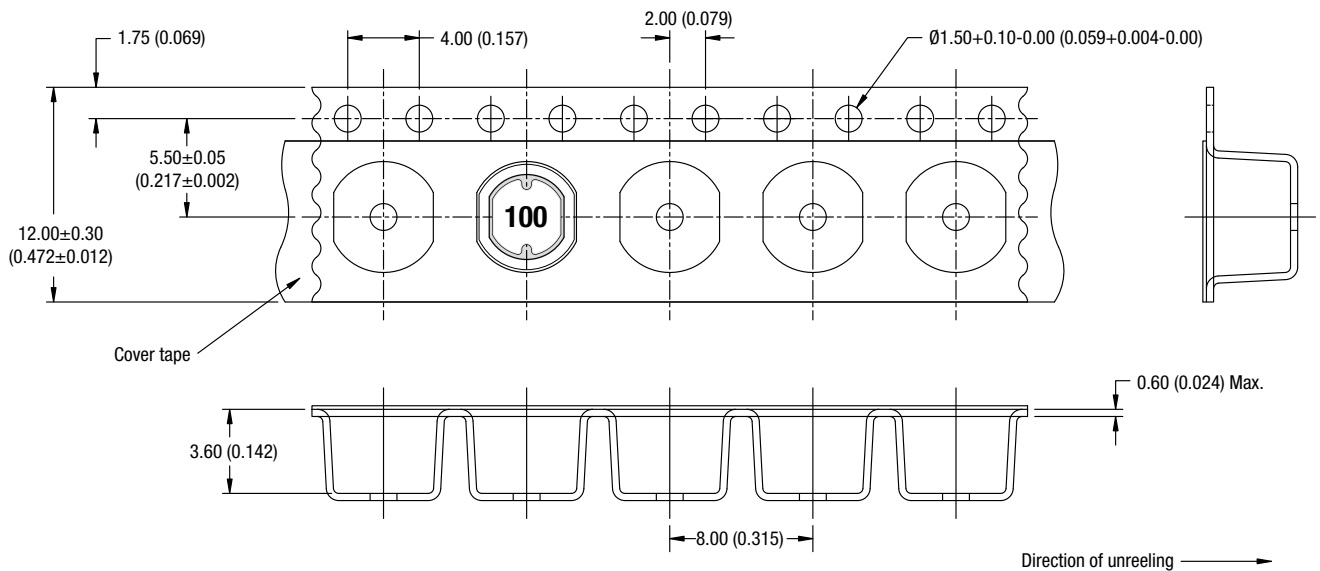
TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS - UNSHIELDED PARTS



All dimensions in mm (inches)

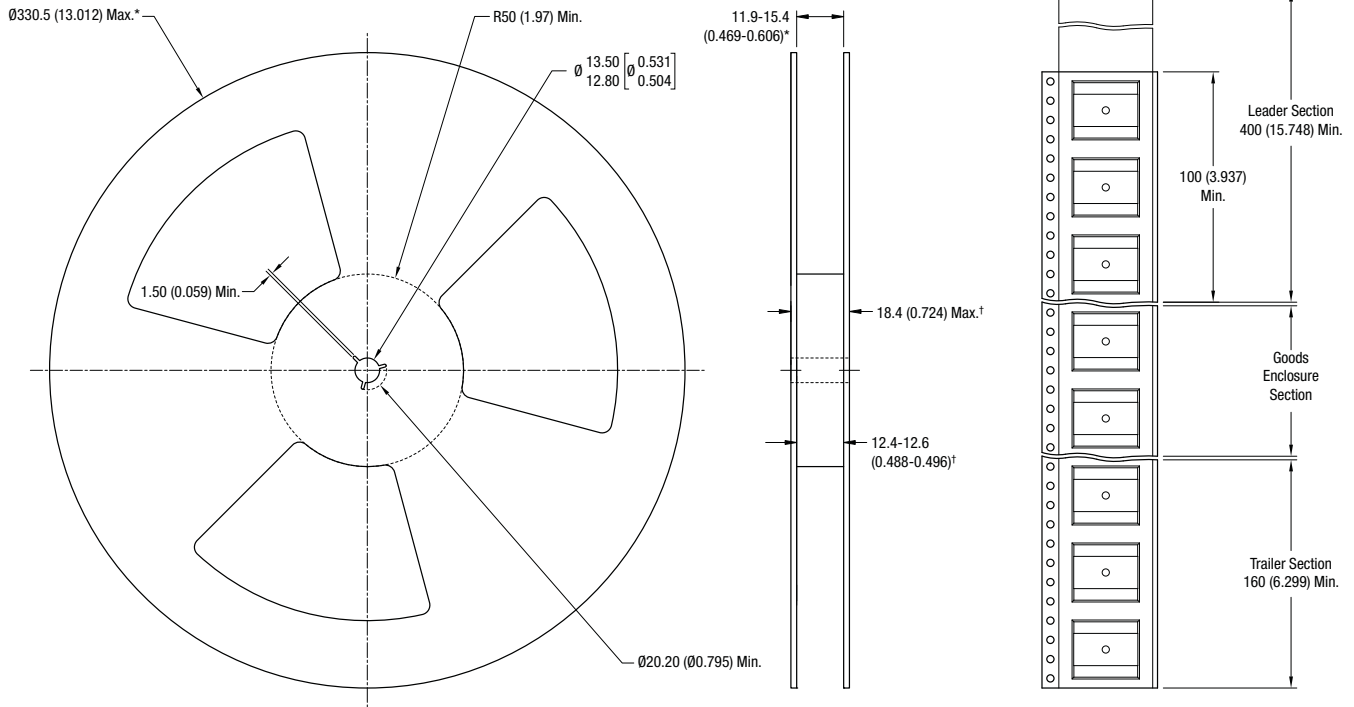
TAPE OUTLINE DIMENSIONS - SHIELDED PARTS



All dimensions in mm (inches)

TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



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

Murata Power Solutions, Inc.
 11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.
 ISO 9001 and 14001 REGISTERED

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.
 © 2011 Murata Power Solutions, Inc.