Murata Power Solutions

2400 Series

Bobbin Wound Surface Mount Inductors

FEATURES

- RoHS compliant
- Up to 3.1A I_{DC}
- 2.7µH 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 2400 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, 100mVAC)	Inductance Range (1kHz, 100mVAC)	DC Current[1]	DC Resistance	SRF (100mVrms)
	Nom.	Min. - Max.	Max.	Max.	Nom.
	µH	µH	A	mΩ	MHz
242R7C	2.7	2.04 - 3.78	2.60	39	57.0
243R3C	3.3	2.44 - 4.54	2.40	42	53.0
244R7C	4.7	3.37 - 6.25	2.10	50	45.0
246R8C	6.8	5.03 - 9.34	1.75	61	37.0
24100C	10	8.00 - 12.0	1.44	100	27.8
24120C	12	8.54 - 15.9	1.36	100	26.0
24150C	15	12.0 - 18.0	1.30	120	22.0
24180C	18	13.0 - 24.1	1.26	150	20.0
24220C	22	17.6 - 26.4	1.11	180	16.5
24330C	33	28.1 - 34.7	0.88	230	13.1
24470C	47	40.8 - 54.1	0.72	370	10.9
24680C	68	61.2 - 74.8	0.61	460	9.38
24101C	100	90.0 - 110	0.52	700	7.03
24151C	150	135 - 165	0.40	1100	5.13
24221C	220	198 - 242	0.35	1570	4.24

SELECTION GUIDE (SHIELDED TYPES)

Order Code	Inductance (1kHz, 100mVAC)	Inductance Range (1kHz, 100mVAC)	DC Current[1]	DC Resistance	SRF (100mVrms)
	Nom.	Min. - Max.	Max.	Max.	Nom.
	µH	µH	A	mΩ	MHz
24S2R7C	2.7	1.78 - 3.52	3.10	28	79.0
24S3R3C	3.3	2.07 - 4.68	2.80	32	63.0
24S4R7C	4.7	2.82 - 6.01	2.39	37	52.0
24S6R8C	6.8	4.40 - 9.17	2.00	45	39.0
24S100C	10	8.50 - 12.5	1.64	70	25.6
24S120C	12	7.65 - 15.2	1.50	74	29.0
24S150C	15	12.8 - 18.8	1.34	90	19.7
24S180C	18	11.1 - 22.7	1.22	91	23.0
24S220C	22	18.7 - 27.5	1.10	120	15.7
24S330C	33	28.1 - 41.3	0.90	190	11.2
24S470C	47	40.0 - 58.8	0.75	240	10.2
24S680C	68	57.8 - 85.0	0.63	370	8.09
24S101C	100	85.0 - 120	0.52	540	6.2
24S151C	150	128 - 180	0.42	860	4.88
24S221C	220	187 - 264	0.35	1310	3.58

ABSOLUTE MAXIMUM RATINGS

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

SOLDERING INFORMATION[2]

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 80% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

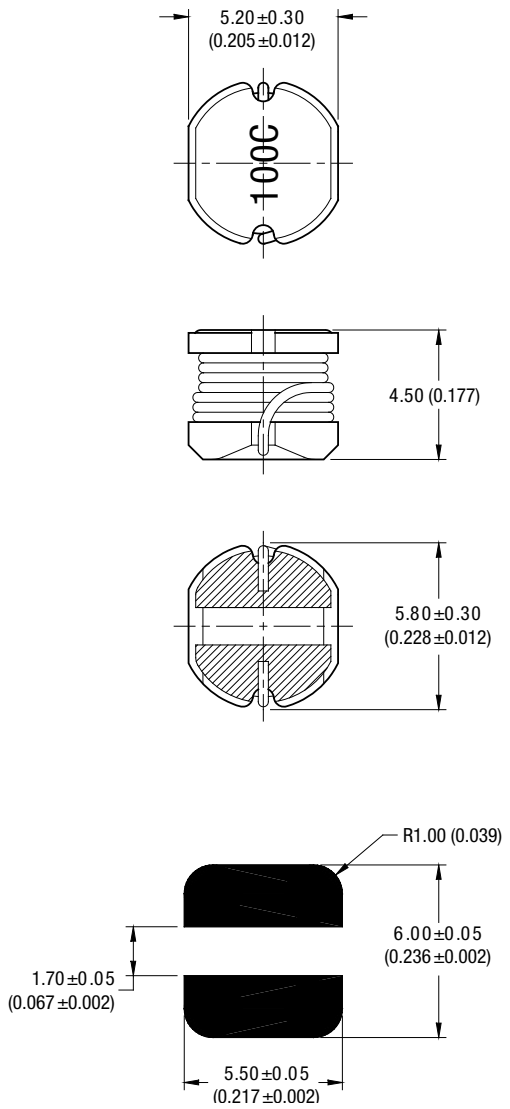
2 For further information, please visit www.murata-ps.com/rohs

RoHS COMPLIANT 2002/95/EC

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

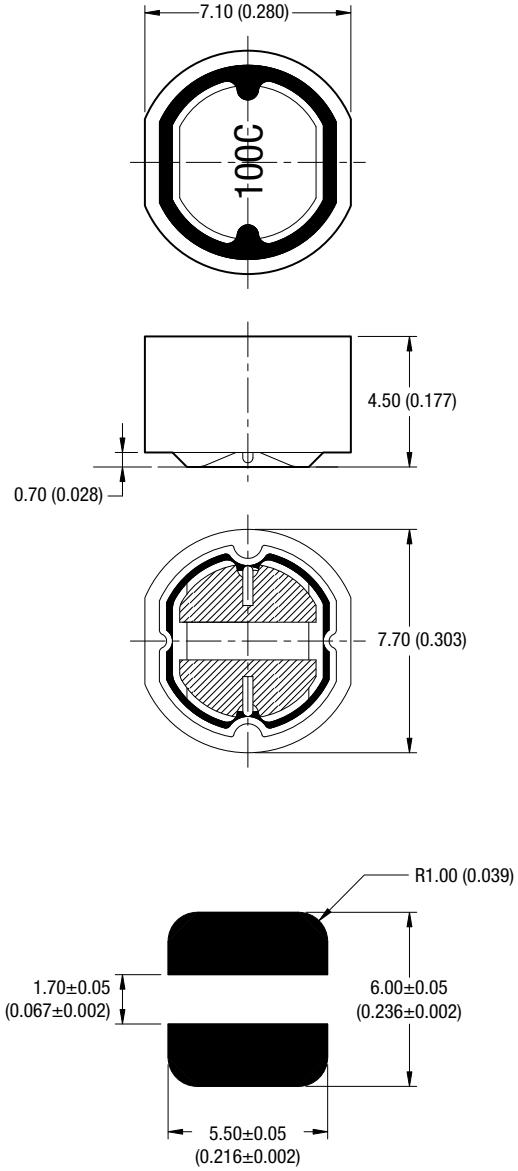
MECHANICAL DIMENSIONS

UNSHIELDED TYPES



Unless otherwise stated all dimensions in mm (inches) ±0.25 (0.01). Package Weight 0.43g Typ.

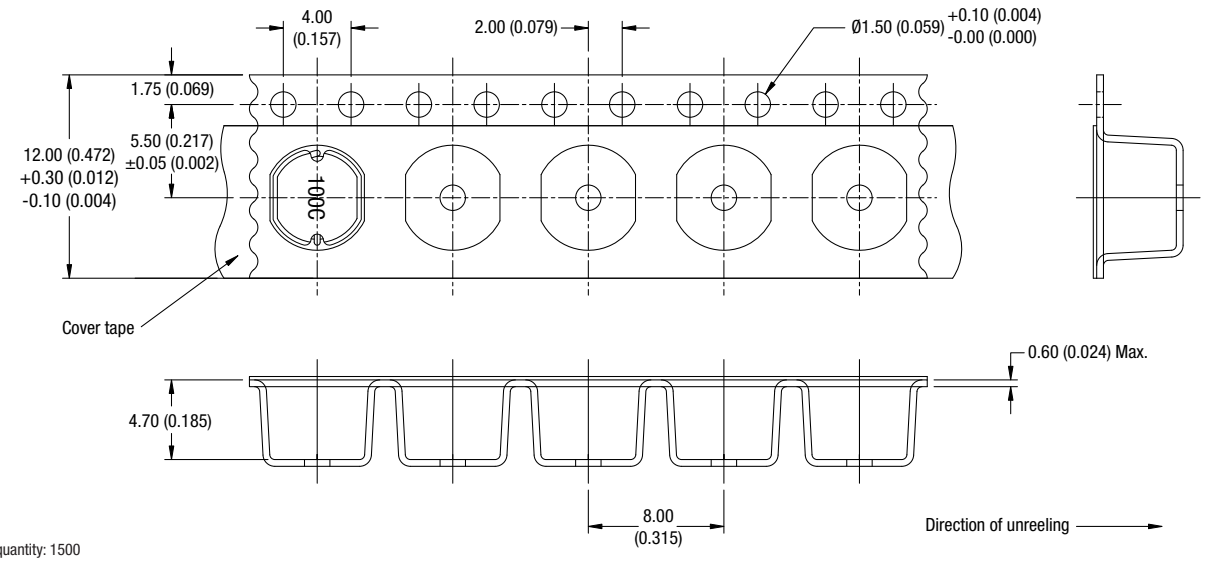
SHIELDED TYPES



Unless otherwise stated all dimensions in mm (inches) ±0.25 (0.01). Package Weight 0.72g Typ.

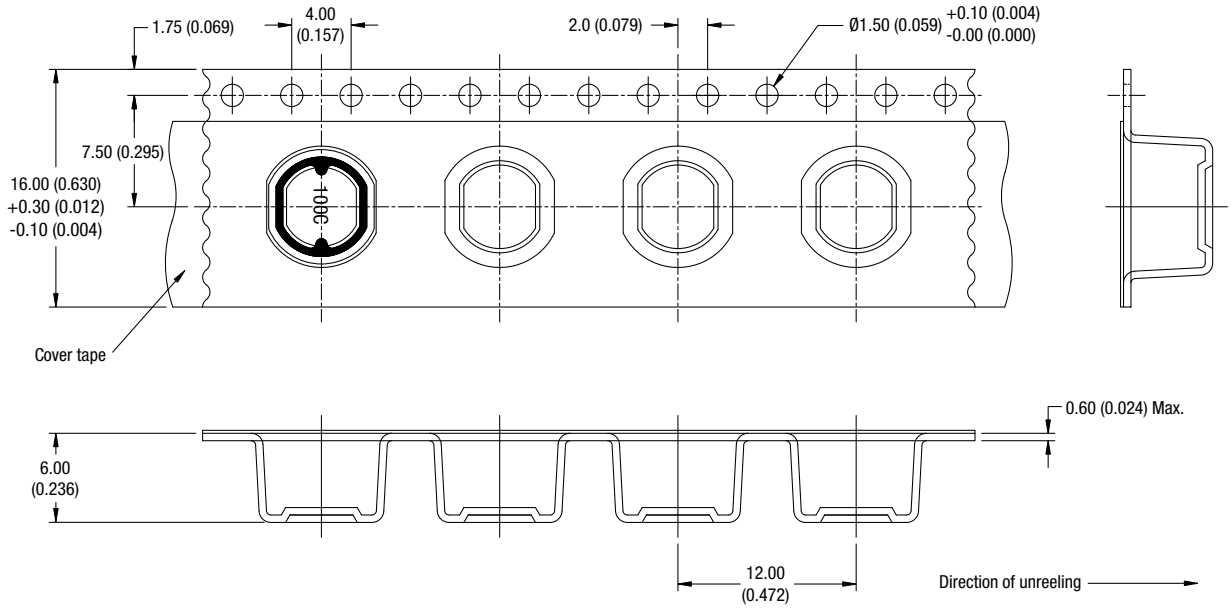
TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS - UNSHIELDED PARTS



Reel quantity: 1500
All dimensions in mm (inches)

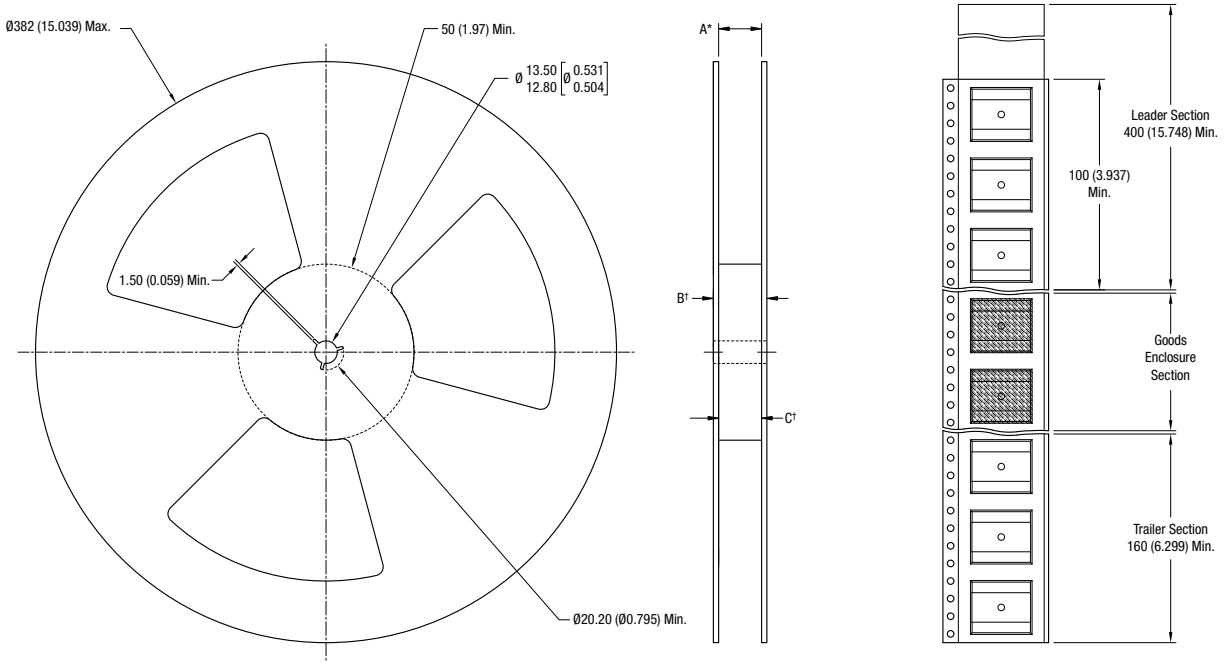
TAPE OUTLINE DIMENSIONS - SHIELDED PARTS



Reel quantity: 1000
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

	A	B (Max.)	C
Unshielded Types	11.9-15.4 (0.469-0.606)	18.4 (0.724)	12.4-12.6 (0.488-0.496)
Shielded Types	15.9-19.4 (0.626-0.764)	22.4 (0.882)	16.4-16.6 (0.646-0.654)

Murata Power Solutions

Murata Power Solutions, Inc.
11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.
Tel: (508) 339-3000 (800) 233-2765 Fax: (508) 339-6356
www.murata-ps.com email: sales@murata-ps.com ISO 9001 REGISTERED

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USA: Mansfield (MA), Tel: (800) 233 2765, email: sales@murata-ps.com
Canada: Toronto, Tel: (866) 740 1232, email: toronto@murata-ps.com
UK: Milton Keynes, Tel: +44 (0)1908 615232, email: mk@murata-ps.com
France: Montigny Le Bretonneux, Tel: +33 (0)1 34 60 01 01, email: france@murata-ps.com
Germany: München, Tel: +49 (0)89-544334-0, email: ped.munich@murata-ps.com
Japan: Tokyo, Tel: 3-3779-1031, email: sales_tokyo@murata-ps.com
Osaka, Tel: 6-6354-2025, email: sales_osaka@murata-ps.com
Website: www.murata-ps.jp
China: Shanghai, Tel: +86 215 027 3678, email: shanghai@murata-ps.com
Guangzhou, Tel: +86 208 221 8066, email: guangzhou@murata-ps.com

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

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Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9