

24220C Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	24220C-DG
Manufacturer	Murata Power Solutions
Manufacturer Product Number	24220C
Description	FIXED IND 22UH 1.11A 180MOHM SMD
Detailed Description	22 μ H Unshielded Wirewound Inductor 1.11 A 180m Ohm Max Nonstandard



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RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

24220C

Series:

2400

Type:

Wirewound

Inductance:

22 μ H

Current Rating (Amps):

1.11 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.228" L x 0.205" W (5.80mm x 5.20mm)

Base Product Number:

24

Manufacturer:

Murata Power Solutions

Product Status:

Active

Material - Core:

-

Tolerance:

-

Current - Saturation (Isat):

-

DC Resistance (DCR):

180mOhm Max

Frequency - Self Resonant:

16.5MHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.177" (4.50mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

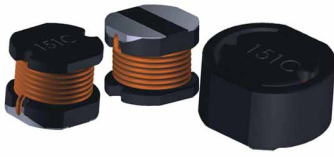
ECCN:

EAR99



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, 100mV _{AC})	Inductance Range (1kHz, 100mV _{AC})	DC Current ¹	DC Resistance	SRF
	Nom. μH	Min. - Max. μH	Max. A	Max. mΩ	Nom. 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, 100mV _{AC})	Inductance Range (1kHz, 100mV _{AC})	DC Current ¹	DC Resistance	SRF
	Nom. μH	Min. - Max. μH	Max. A	Max. mΩ	Nom. 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 INFORMATION²

Peak reflow temperature	250°C
Pin finish	Hot dipped tin

Specifications typical at T_A = 25°C

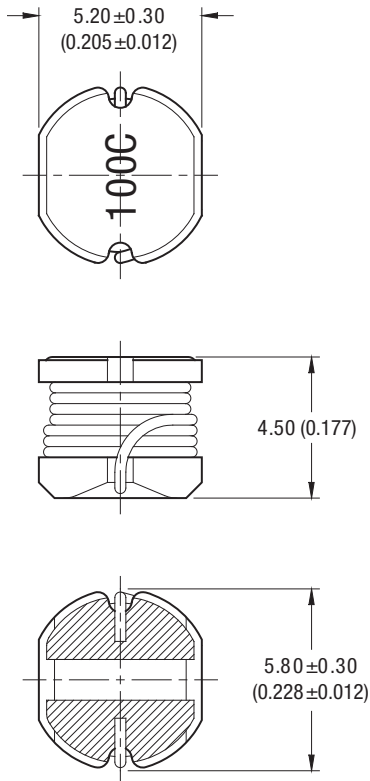
- 1 The maximum DC current is the value at which the inductance falls to 80% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs



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

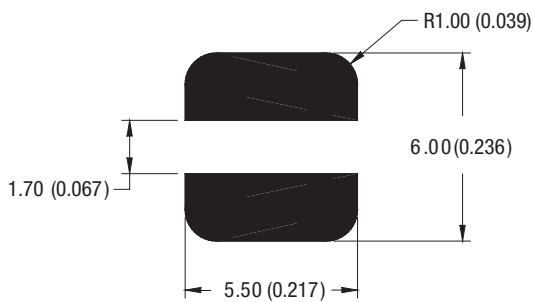
MECHANICAL DIMENSIONS

UNSHIELDED TYPES

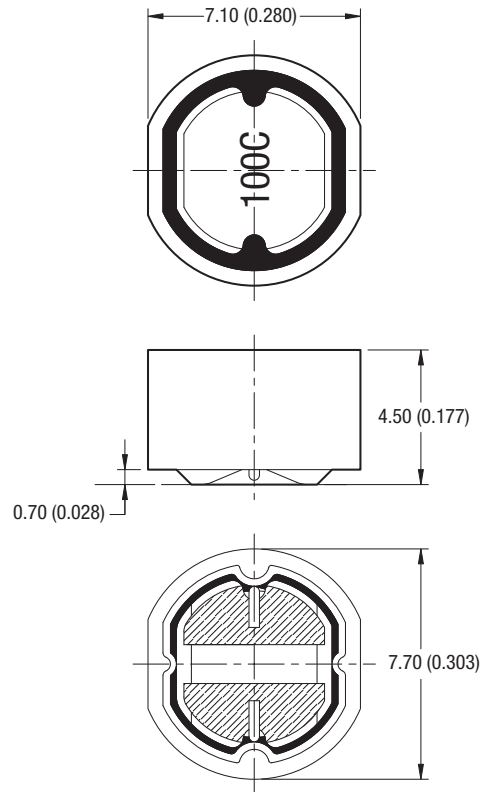


Unless otherwise stated all dimensions in mm (inches) ±0.25 (0.01). Package Weight 0.43g Typ.

RECOMMENDED FOOTPRINT

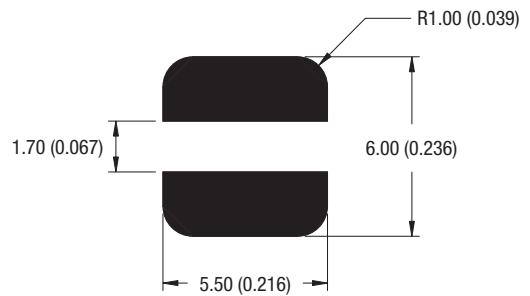


SHIELDED TYPES



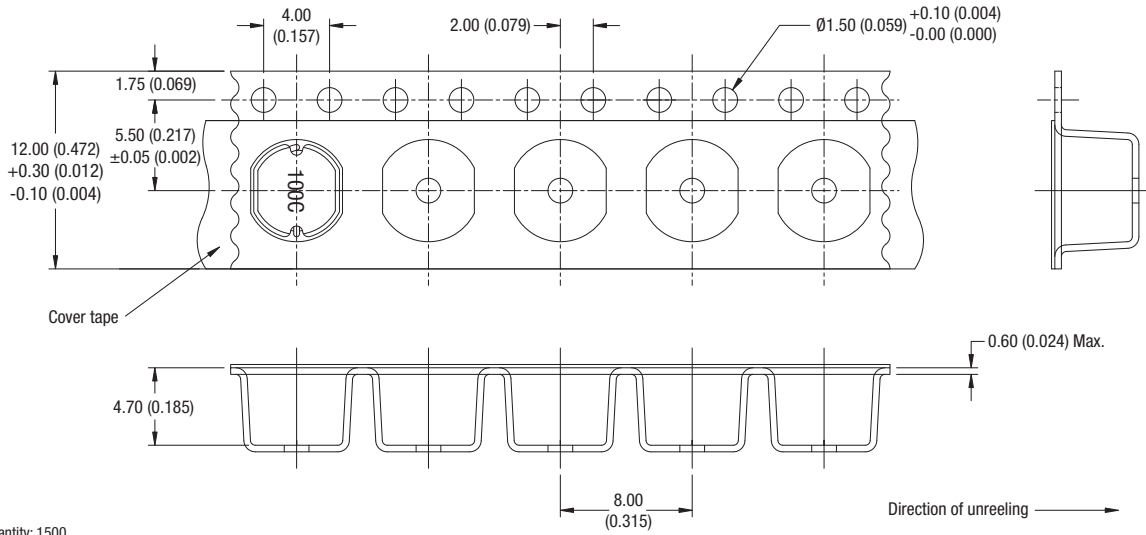
Unless otherwise stated all dimensions in mm (inches) ±0.25 (0.01). Package Weight 0.72g Typ.

RECOMMENDED FOOTPRINT



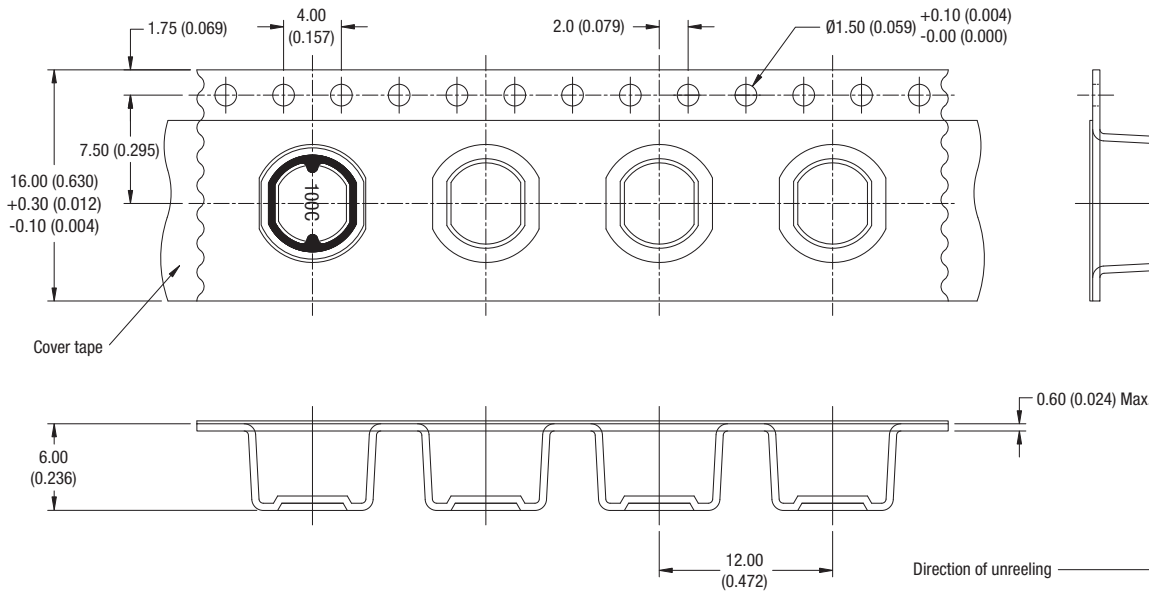
TAPE & REEL SPECIFICATIONS

TAPE OUTLINE DIMENSIONS - UNSHIELDED PARTS



Reel quantity: 1500
All dimensions in mm (inches)

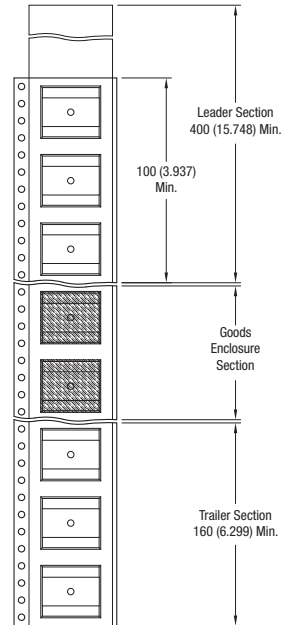
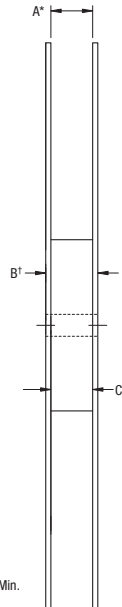
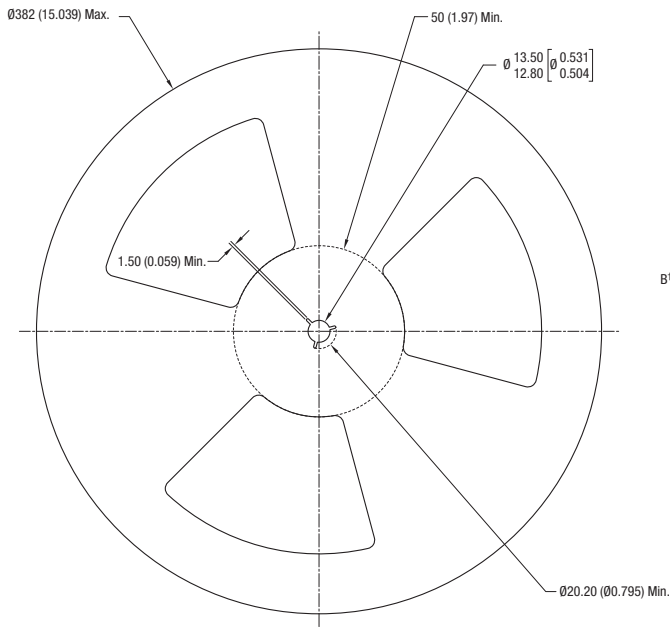
TAPE OUTLINE DIMENSIONS - SHIELDED PARTS



Reel quantity: 1000
All dimensions in mm (inches)

TAPE & REEL SPECIFICATIONS (Continued)

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)

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