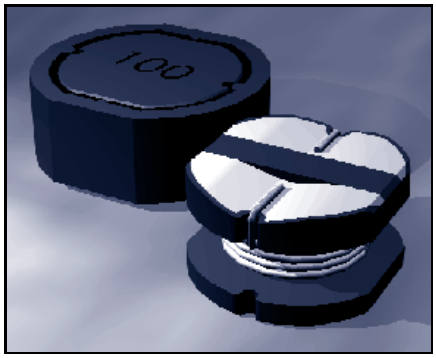
C&D TECHNOLOGIES
Power Solutions

2400 SERIES

Bobbin Wound Surface Mount Inductors



FEATURES

- Bobbin Format
- Up to 3.1A IDC
- 2.7µH to 220µH
- Optional Integral EMI Shield
- Low DC Resistance
- Surface Mounting
- Compact Size
- Tape and Reel Packaging

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)[1]

Order Code	Nominal Inductance µH 1Hz, 100mV	Inductance Range µH 1Hz, 100mV	DC Resistance Ω MAX	Nominal Self DC Current Continuous[2] A MAX	Resonant Frequency MHz 100mVrms	Mechanical Dimensions
242R7	2.7	2.04–3.78	0.039	2.60	57.0	
243R3	3.3	2.44–4.54	0.042	2.40	53.0	
244R7	4.7	3.37–6.25	0.050	2.10	45.0	
246R8	6.8	5.03–9.34	0.061	1.75	37.0	
24100	10	8.00–12.0	0.100	1.44	27.8	
24120	12	8.54–15.9	0.100	1.36	26.0	
24150	15	12.0–18.0	0.140	1.30	22.0	
24180	18	13.0–24.1	0.196	1.26	20.0	1
24220	22	17.6–26.4	0.180	1.11	16.5	
24330	33	28.1–34.7	0.230	0.88	13.1	
24470	47	40.8–54.1	0.370	0.72	10.9	
24680	68	61.2–74.8	0.460	0.61	9.83	
24101	100	90.0–110	0.700	0.52	7.03	
24151	150	135–165	1.100	0.40	5.13	
24221	220	198–242	1.570	0.35	4.24	

SELECTION GUIDE (EMI SHIELDED TYPES)[1]

Order Code	Nominal Inductance µH 1Hz, 100mV	Inductance Range µH 1Hz, 100mV	DC Resistance Ω MAX	Nominal Self DC Current Continuous[2] A MAX	Resonant Frequency MHz 100mVrms	Mechanical Dimensions
24S2R7	2.7	1.78–3.52	0.028	3.10	79.0	
24S3R3	3.3	2.07–4.68	0.032	2.80	63.0	
24S4R7	4.7	2.82–6.01	0.037	2.39	52.0	
24S6R8	6.8	4.40–9.17	0.045	2.00	39.0	
24S100	10	8.50–12.5	0.070	1.64	25.6	
24S120	12	7.65–15.2	0.074	1.50	29.0	
24S150	15	12.8–18.8	0.090	1.34	19.7	
24S180	18	11.1–22.7	0.091	1.22	23.0	2
24S220	22	18.7–27.5	0.120	1.10	15.7	
24S330	33	28.1–41.3	0.190	0.90	11.2	
24S470	47	40.0–58.8	0.240	0.75	10.2	
24S680	68	57.8–85.0	0.370	0.63	8.09	
24S101	100	85.0–120	0.540	0.52	6.20	
24S151	150	128–180	0.860	0.42	4.88	
24S221	220	187–264	1.310	0.35	3.58	

ABSOLUTE MAXIMUM RATINGS

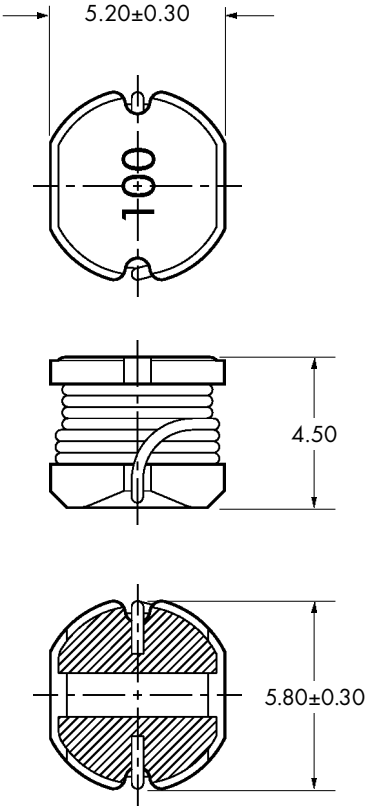
Operating free air temperature range	–40°C to 85°C
Storage temperature range	–40°C to 125°C

1 Specifications typical at T_A =25°C
2 The maximum DC current is the value at which the inductance falls to 80% of its nominal value or until its temperature rise reaches 40°C, whichever is sooner.

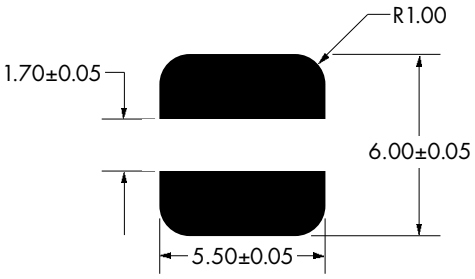
2400 SERIES

Bobbin Wound Surface Mount Inductors

1 - MECHANICAL DIMENSIONS (UNSHIELDED TYPES)

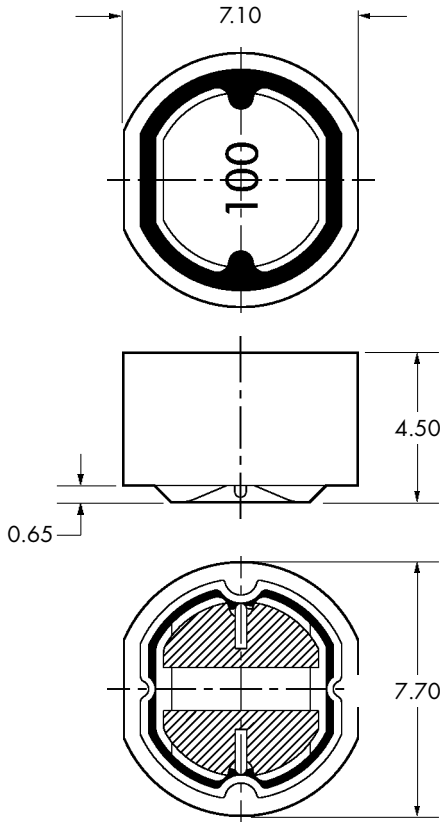


Recommended Footprint Details

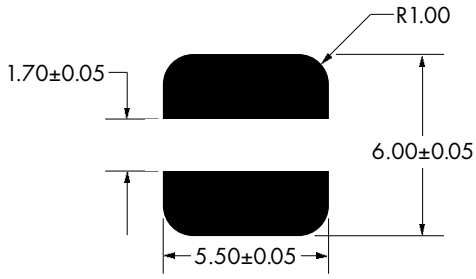


Unless otherwise stated all dimensions in mm ±0.35mm.
Hatching represents solder pads.

2 - MECHANICAL DIMENSIONS (EMI SHIELDED TYPES)



Recommended Footprint Details



Unless otherwise stated all dimensions in mm ±0.35mm.
Hatching represents solder pads.

PACKAGE DETAILS

Order Code	TYP Weight (g)	Packaging Style
24XXX	0.43	Tape & Reel[1]
24SXXX	0.72	

1 For tape and reel packaging details refer to datasheet NDCAN002

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