



**FEATURES**

- Bobbin Format
- Up to 2.1A IDC
- 2.2µH to 220µH
- Low DC Resistance
- Surface Mounting
- Compact Size
- Tape and Reel Packaging
- Optional Integral EMI Shield

**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)<sup>1</sup>**

	Nominal Inductance	Inductance Range	DC Resistance	DC Current Continuous <sup>2</sup>	Package Style
Order Code	µH 1kHz 100mV AC	µH 1kHz 100mV AC	Ω  MAX	A  MAX	
<b>232R2</b>	2.2	1.7 - 2.8	0.029	2.10	1
<b>233R3</b>	3.3	2.3 - 3.9	0.044	1.80	
<b>234R7</b>	4.7	3.6 - 6.0	0.068	1.48	
<b>236R8</b>	6.8	5.1 - 8.6	0.102	1.22	
<b>23100</b>	10	7.6 - 12.7	0.138	1.02	
<b>23150</b>	15	11.3 - 18.9	0.210	0.86	
<b>23220</b>	22	16.8 - 28.1	0.285	0.74	
<b>23330</b>	33	24.6 - 41.0	0.497	0.64	
<b>23470</b>	47	34.6 - 57.6	0.683	0.55	
<b>23680</b>	68	51.0 - 85.0	0.838	0.49	
<b>23101</b>	100	74.2 - 124	1.281	0.43	

**SELECTION GUIDE (EMI SHIELDED TYPES)<sup>1</sup>**

	Nominal Inductance	Inductance Range	DC Resistance	DC Current Continuous <sup>2</sup>	Package Style
Order Code	µH 1kHz 100mV AC	µH 1kHz 100mV AC	Ω  MAX	A  MAX	
<b>23S2R2</b>	2.2	1.8 - 3.0	0.025	2.10	2
<b>23S3R3</b>	3.3	2.7 - 4.5	0.031	1.80	
<b>23S4R7</b>	4.7	3.8 - 6.4	0.044	1.60	
<b>23S6R8</b>	6.8	5.2 - 8.6	0.064	1.40	
<b>23S100</b>	10	7.5 - 12.6	0.087	1.18	
<b>23S120</b>	12	9.4 - 15.6	0.107	1.08	
<b>23S150</b>	15	11.4 - 19.0	0.131	0.96	
<b>23S180</b>	18	13.6 - 22.6	0.143	0.88	
<b>23S220</b>	22	16.0 - 26.7	0.175	0.80	
<b>23S270</b>	27	20.0 - 33.3	0.218	0.72	
<b>23S330</b>	33	24.4 - 40.7	0.241	0.65	
<b>23S390</b>	39	29.3 - 48.8	0.370	0.60	
<b>23S470</b>	47	34.6 - 57.7	0.460	0.54	
<b>23S560</b>	56	42.4 - 70.6	0.509	0.50	
<b>23S680</b>	68	50.9 - 84.9	0.641	0.45	
<b>23S101</b>	100	75.8 - 126	0.782	0.37	
<b>23S151</b>	150	112 - 187	1.190	0.30	
<b>23S221</b>	220	167 - 279	2.280	0.25	

**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<sub>A</sub> =25°C

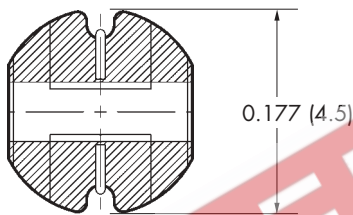
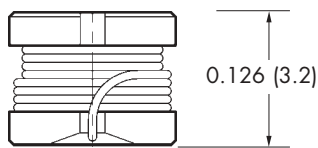
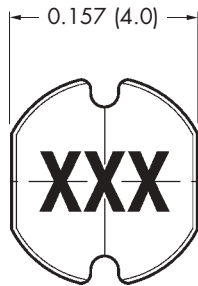
2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or until its temperature rise reaches 40°C, whichever is sooner.

3 For tape and reel packaging details refer to datasheet NDC AN002.

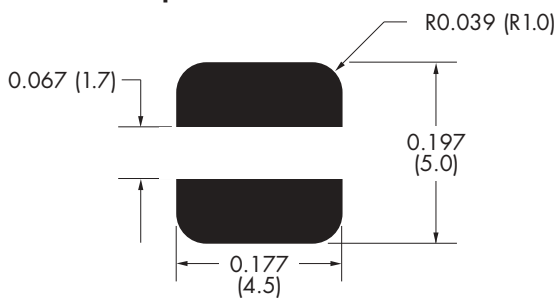
# 2300 SERIES

## Bobbin Wound Surface Mount Inductors

### 1 – MECHANICAL DIMENSIONS (UNSHIELDED TYPES)

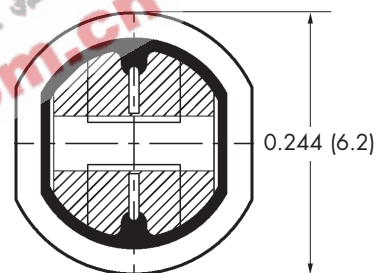
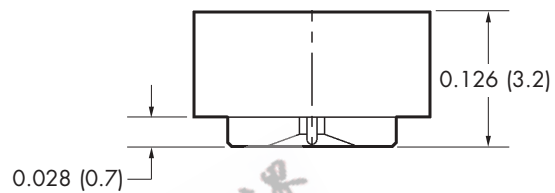
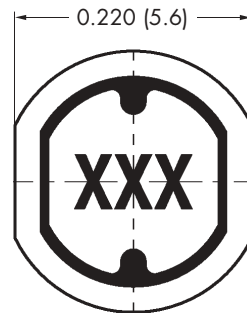


#### Recommended Footprint Details

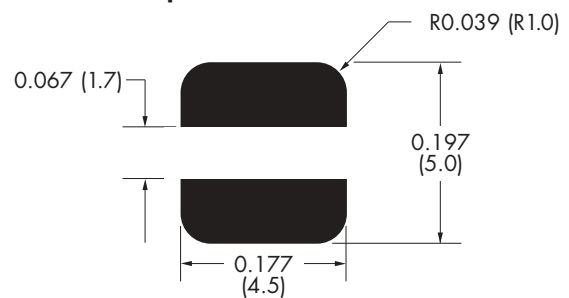


Weight: 0.20g  
 Unless otherwise stated all dimensions in inches (mm)  $\pm 0.1(0.25)$ .  
 Hatching represents solder pads.

### 2 – MECHANICAL DIMENSIONS (EMI SHIELDED TYPES)



#### Recommended Footprint Details



Weight: 0.34g  
 Unless otherwise stated all dimensions in inches (mm)  $\pm 0.1(0.25)$ .  
 Hatching represents solder pads.

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