





# SMT POWER INDUCTORS

## Unshielded Drum Core - PG0063 Series



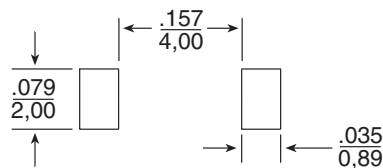
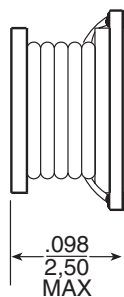
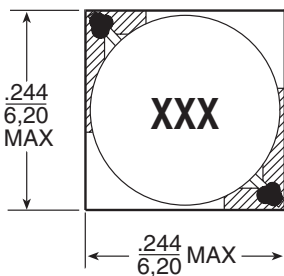
-  **Height:** 2.5mm Max
-  **Footprint:** 6.2mm x 6.2mm Max
-  **Current Rating:** up to 3.5A
-  **Inductance Range:** .9μH to 900μH

### Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

Part Number	Inductance <sup>2</sup> @I <sub>rated</sub> (μH TYP)	I <sub>rated</sub> <sup>3</sup> (A)	DCR (mΩ)		Inductance @0A <sub>DC</sub> (μH ±20%)	Saturation <sup>4</sup> Current I <sub>sat</sub> (A)	Heating <sup>5</sup> Current I <sub>DC</sub> (A)
			TYP	MAX			
PG0063.102	0.9	3.5	15	22	1.0	3.5	4.5
PG0063.152	1.3	3.0	25	30	1.5	3.0	3.8
PG0063.222	1.9	2.5	33	40	2.2	2.5	3.3
PG0063.332	2.9	2.0	55	65	3.3	2.0	2.9
PG0063.472	4.2	1.8	76	90	4.7	1.8	2.7
PG0063.682	6.1	1.5	91	105	6.8	1.5	2.2
PG0063.103	9.0	1.2	128	150	10	1.2	1.9
PG0063.153	13	1.0	181	210	15	1.0	1.6
PG0063.223	19	0.8	250	290	22	0.8	1.3
PG0063.333	29	0.65	342	400	33	0.65	1.2
PG0063.473	42	0.55	492	565	47	0.55	0.96
PG0063.683	61	0.50	728	800	68	0.50	0.76
PG0063.104	90	0.40	1047	1205	100	0.40	0.62
PG0063.154	130	0.30	1590	2020	150	0.30	0.50
PG0063.224	190	0.26	2019	2220	220	0.26	0.42
PG0063.334	290	0.20	3144	3305	330	0.20	0.32
PG0063.474	420	0.16	4800	5040	470	0.16	0.28
PG0063.684	610	0.14	7027	7380	680	0.14	0.22
PG0063.105	900	0.12	11010	11340	1000	0.12	0.18

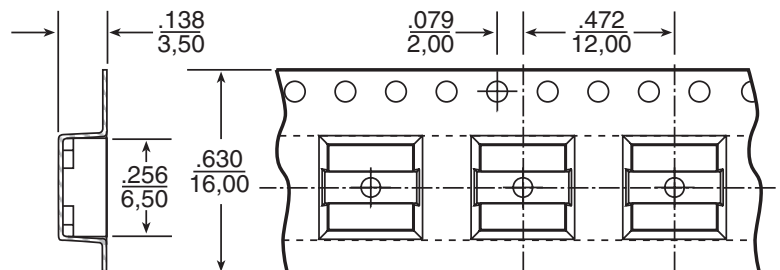
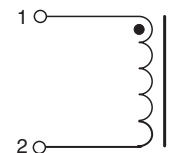
### Mechanical

### Schematic



SUGGESTED PAD LAYOUT

Weight .....0.1 grams  
 Tape & Reel .....1500/reel  
 Tray .....185/tray  
 Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified,  
 all tolerances are  $\pm \frac{.010}{0,25}$



TAPE & REEL LAYOUT

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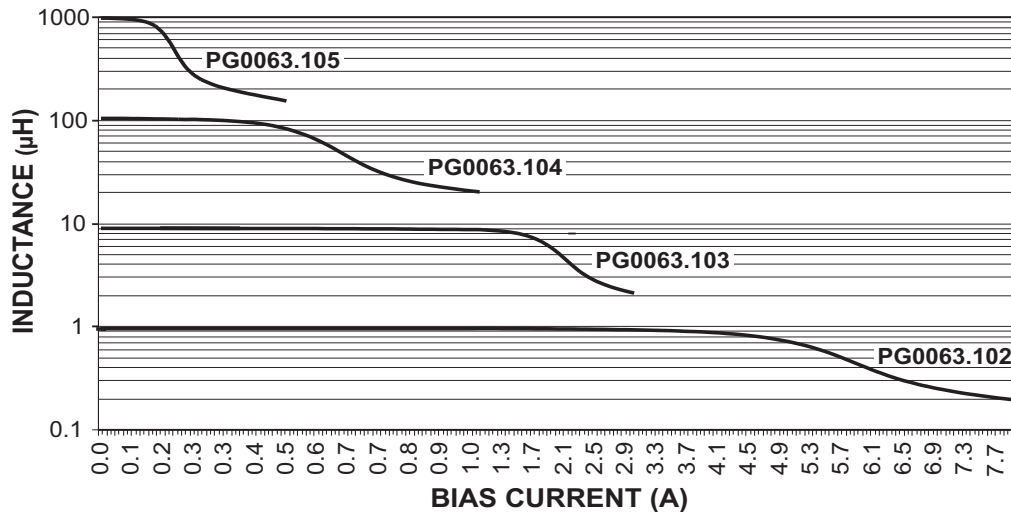
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### Notes from Tables

1. The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.
2. Inductance at Irated is typical inductance value for component taken at rated current.
3. The rated current listed is the lower of saturation current @ 25°C or heating current.
4. The saturation current, Isat, is the current at which the component inductance drops by 10% (typical) at an ambient temperature of 25°C. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
5. The heating current, I<sub>hc</sub>, is the DC current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
6. Testing done @ 100kHz, 100mV<sub>ac</sub>
7. Add suffix "T" to part number for tape and reel packaging (i.e. PG0063.102T).
8. To order RoHS compliant part, add the suffix "NL" to the part number (i.e. PG0063.102 becomes PG0063.102NL and PG0063.102T becomes PG0063.102NLT).

### Inductance vs Current Characteristics



### For More Information:

Pulse Worldwide Headquarters	Pulse Northern Europe	Pulse Southern Europe	Pulse China Headquarters	Pulse North China	Pulse South Asia	Pulse North Asia
12220 World Trade Drive San Diego, CA 92128 U.S.A. <a href="http://www.pulseeng.com">www.pulseeng.com</a> TEL: 858 674 8100 FAX: 858 674 8262	3 Huxley Road Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701	Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41	No. 1 Industrial District Changan, Dongguan China TEL: 86 769 5538070 FAX: 86 769 5538870	Room 1503 XinYin Building No. 888 YiShan Road Shanghai 200233 China TEL: 86 21 54643211/2 FAX: 86 21 54643210	150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 6287 8998 FAX: 65 6280 0080	No. 26 Kao Ching Road Yang Mei Chen Taoyuan Hsien Taiwan, R. O. C. TEL: 886 3 4641811 FAX: 886 3 4641911

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