





# SMT POWER INDUCTORS

## Unshielded Drum Core - PG0063 Series



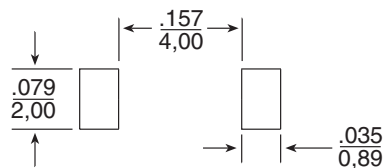
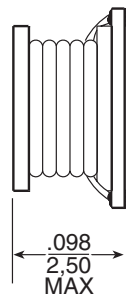
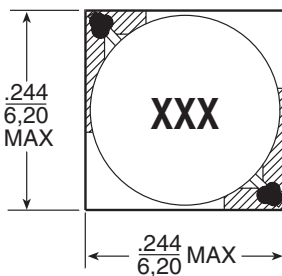
-  **Height:** 2.5mm Max
-  **Footprint:** 6.2mm x 6.2mm Max
-  **Current Rating:** up to 3.5A
-  **Inductance Range:** .9μH to 900μH

### 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

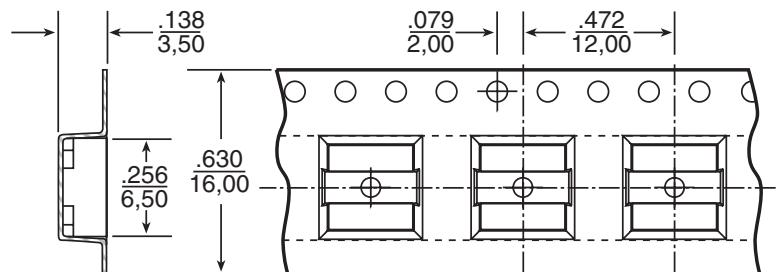
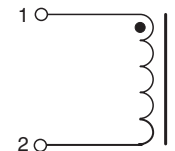
### Mechanical

### 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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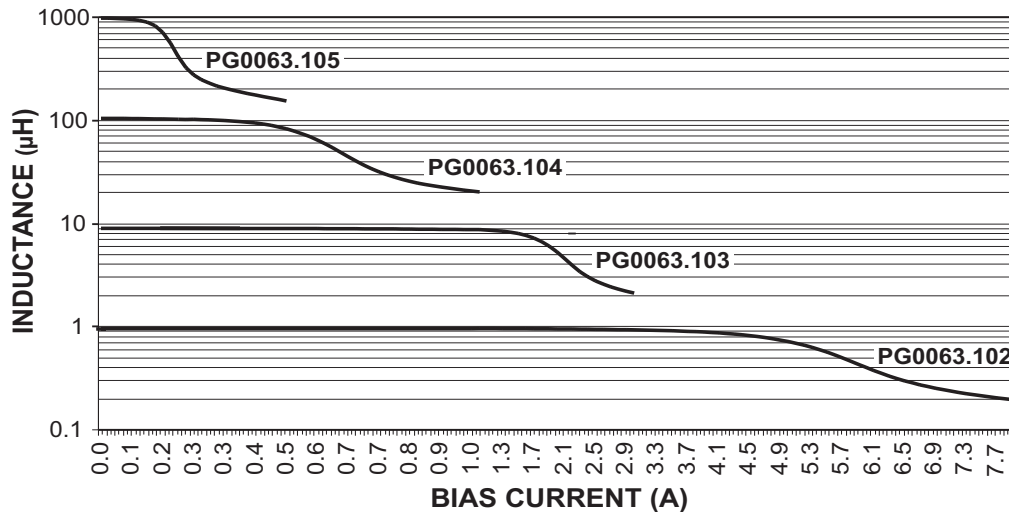
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### Notes from Tables

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:

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