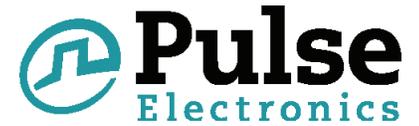


# SMT Power Inductors

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

NOTES FROM TABLE: (See page 43)

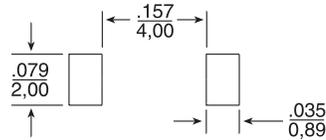
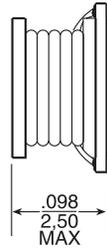
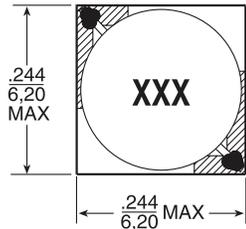
# SMT Power Inductors

Unshielded Drum Core - PG0063 Series

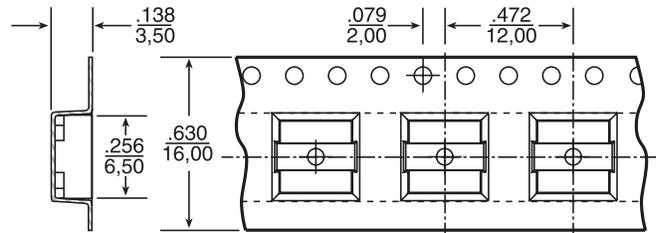
## Mechanicals

## Schematics

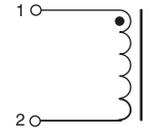
PG0063.102



SUGGESTED PAD LAYOUT



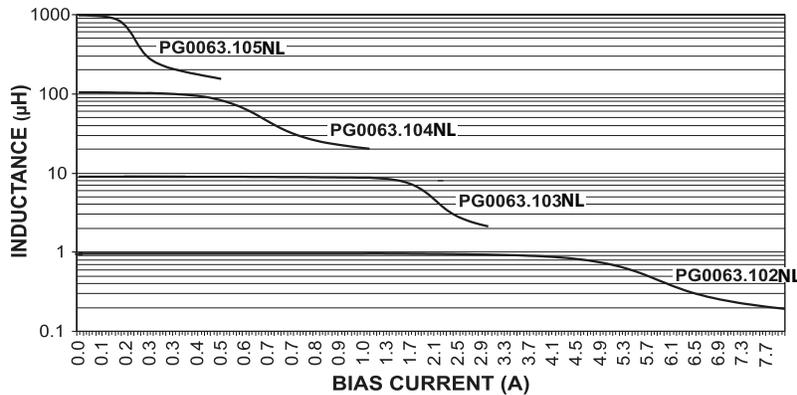
TAPE & REEL LAYOUT



### Notes from Tables

1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
2. Inductance at  $I_{rated}$  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,  $I_{sat}$ , is the current at which the 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,  $I_{DC}$ , 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. PG0063.102NLT).

### Inductance vs Current Characteristics



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