

SMT POWER INDUCTORS

Shielded Drum Core - PG0040/41 Series



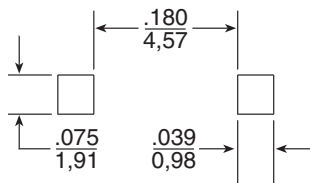
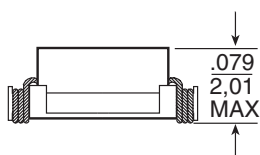
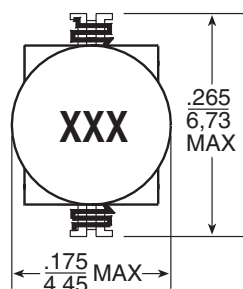
- Small footprint and low profile
(6.7 mm x 4.5 mm x 2.0 mm MAX)
- PG0040** - low inductance/high saturation current for power applications
- PG0041** - high inductance for EL backlight applications
- Reliable, cost effective self-leaded design

Electrical Specifications @ 25°C — Operating Temperature -25°C to +85°C

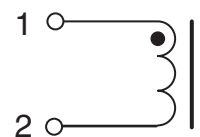
	Part Number	Inductance @ I _{rated} ¹ (μH TYP)	I _{rated} ² (A)	DCR (mΩ)		Inductance @ 0Adc (μH ±20%)	Saturation ³ Current Isat (A)	Heating ⁴ Current Idc (A)	Q-Factor (Ref.)	SRF (MHz Ref.)
				TYP	MAX					
Power Applications	PG0040.102T	0.7	1.2	30	40	1.0	1.2	2.2	30 @ 200kHz	>40
	PG0040.152T	1.0	1.0	40	54	1.5	1.0	1.9	30 @ 200kHz	>40
	PG0040.222T	1.5	.960	50	64	2.2	.960	1.6	40 @ 200kHz	>40
	PG0040.332T	2.3	.750	55	68	3.3	.750	1.3	40 @ 200kHz	>40
	PG0040.472T	3.3	.650	65	74	4.7	.650	1.1	40 @ 200kHz	32
	PG0040.682T	4.8	.500	75	89	6.8	.500	1.0	40 @ 200kHz	24
	PG0040.103T	7.0	.400	80	106	10	.400	.800	40 @ 200kHz	18
	PG0040.153T	10.5	.300	120	154	15	.300	.600	40 @ 100kHz	13
	PG0040.223T	15.4	.230	163	188	22	.230	.500	40 @ 100kHz	12
	PG0040.333T	23.1	.205	240	278	33	.205	.400	40 @ 100kHz	10
	PG0040.473T	32.9	.195	360	406	47	.195	.330	40 @ 100kHz	9
	PG0040.683T	47.6	.150	550	594	68	.150	.270	40 @ 100kHz	7
	PG0040.104T	70	.120	810	857	100	.120	.250	40 @ 100kHz	5
	PG0040.154T	105	.105	1210	1397	150	.105	.190	40 @ 100kHz	4
EL Backlight	PG0040.224T	154	.096	1550	1683	220	.096	.150	40 @ 100kHz	3
	PG0041.334T	231	.070	2350	2650	330	.070	.120	40 @ 100kHz	2.8
	PG0041.474T	329	.062	3620	3830	470	.062	.105	40 @ 100kHz	2.6
	PG0041.604T	420	.048	4230	4520	600	.048	.096	40 @ 100kHz	2.2
	PG0041.684T	476	.045	4700	4800	680	.045	.090	40 @ 100kHz	1.6
	PG0041.824T	574	.040	5700	6350	820	.040	.080	40 @ 100kHz	1.2
	PG0041.105T	700	.035	6600	6800	1000	.035	.076	40 @ 100kHz	1.0
	PG0041.205T	1400	.032	14700	15600	2000	.032	.054	40 @ 100kHz	0.9
	PG0041.305T	2100	.024	24700	26000	3000	.024	.042	40 @ 100kHz	0.7
	PG0041.505T	3500	.019	37000	39000	5000	.019	.030	40 @ 100kHz	0.5

Mechanical

Schematic



SUGGESTED PAD LAYOUT



Weight 0.1 grams

Tape & Reel 2500/reel

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are $\pm \frac{.010}{.025}$

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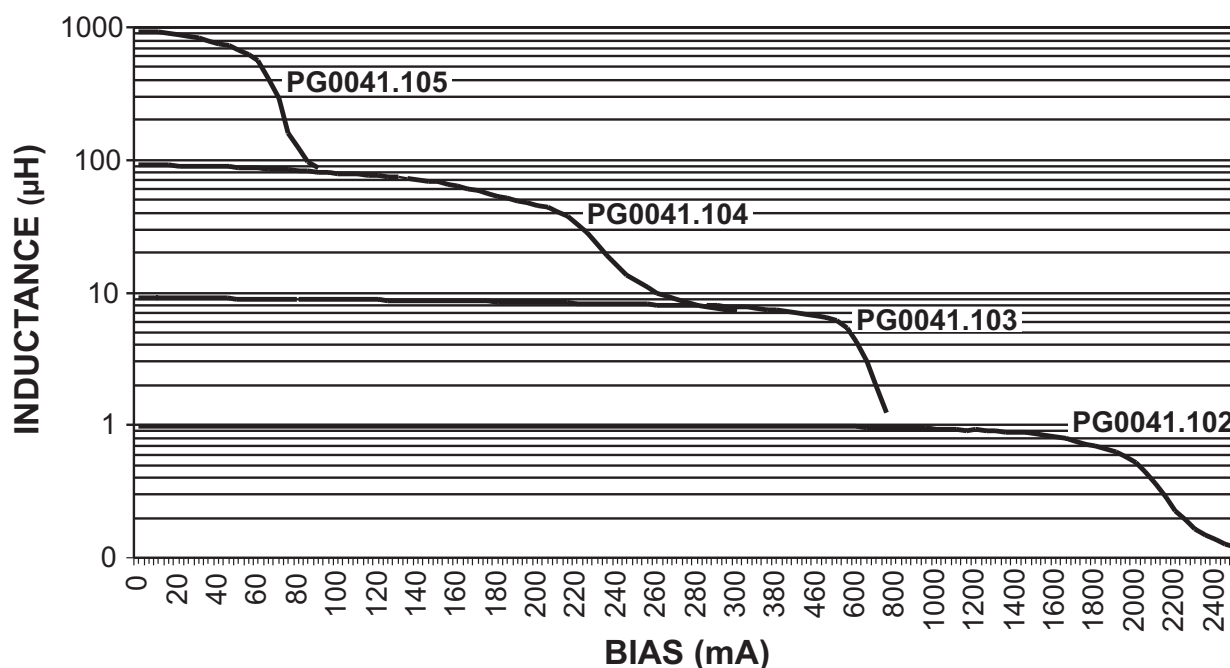
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Notes from Tables

1. Inductance at I_{rated} is a typical inductance value for the component taken at rated current.
2. The rated current listed is the lower of the saturation current @ 25°C or the heating current.
3. The saturation current, I_{sat} , is the current at which the component inductance drops by 30% (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.
4. 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.

PG0040/PG0041 TYPICAL INDUCTANCE VS. DC BIAS



For More Information :

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