

SMT POWER INDUCTORS

Shielded Drum Core - PG0040/41 Series



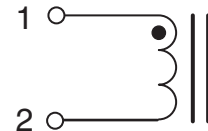
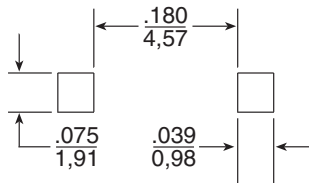
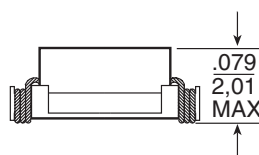
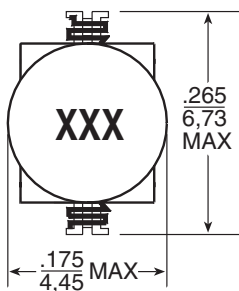
- Small footprint and low profile (6.7 mm x 4.5 mm x 2.0 mm MAX)
- **PG0040** - low inductance/high saturation current for power applications
- **PG0041** - high inductance for EL backlight applications
- Reliable, cost effective self-leaded design

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 I _{sat} (A)	Heating ⁴ Current I _{dc} (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	
PG0040.224T	154	.096	1550	1683	220	.096	.150	40 @ 100kHz	3	
EL Backlight	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 $\pm \frac{.010}{.025}$

SMT POWER INDUCTORS

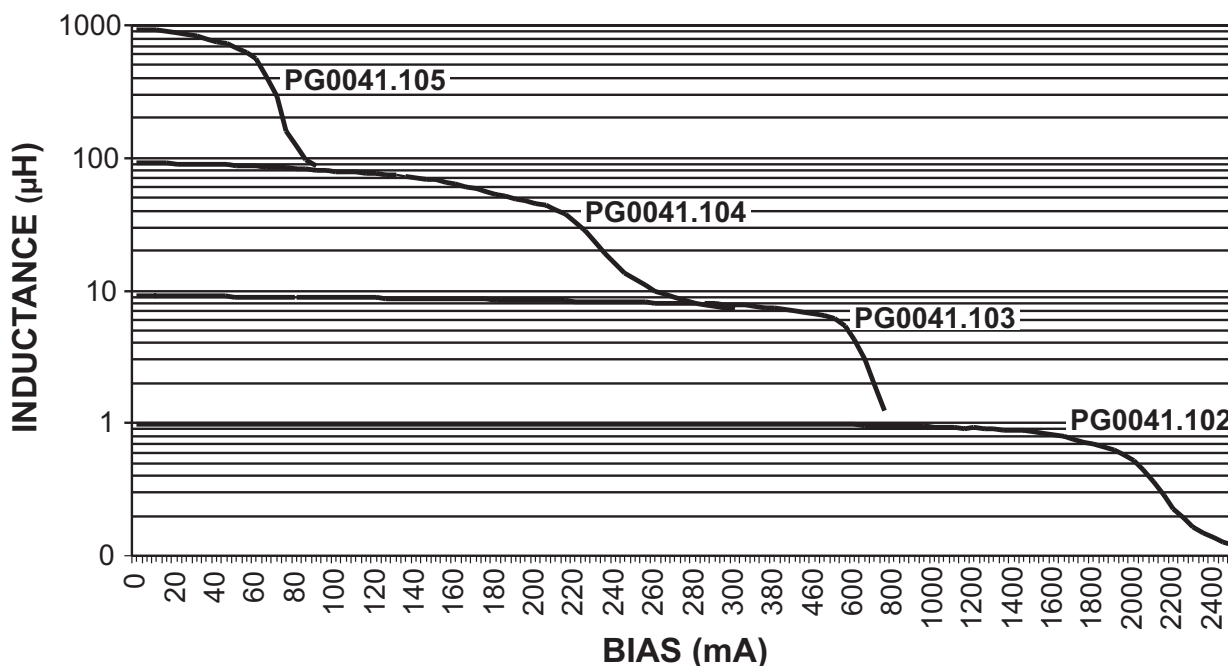
Shielded Drum Core - PG0040/41 Series



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 :

UNITED STATES (Worldwide)	UNITED KINGDOM (Northern Europe)	FRANCE (Southern Europe)	SINGAPORE (Southern Asia)	TAIWAN, R.O.C. (Northern Asia)	HONG KONG (China/Hong Kong)	DISTRIBUTOR
12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262	1 & 2 Huxley Road The 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	150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 287 8998 FAX: 65 280 0080	3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948	19/F, China United Plaza 1008 Tai Nan West Street Cheung Sha Wan, Kowloon Hong Kong, China Tel: 852 2788 6588 FAX: 852 2776 1055	

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.