### **SMT Power Inductors**

Flat Coils - PG0426 Series











Height: 3.2mm Max

Footprint: 7.5mm x 7.0mm Max

@ Current Rating: 60Apk

Inductance Range: 0.1µH to 1.5µH

High temperature core material, no thermal

aging below 150°C

Electrical Specifications @ 25°C – Operating Temperature –40°C to +130°C¹									
Part	Inductance @ Irated (µH ±20%)	DCR (m\O)		Saturation <sup>2</sup> Current Isat	Heating <sup>3</sup> Current loc	Core Loss⁴ Factor			
Number		ТҮР	MAX	(A)	(A)	K2			
PG0426.101NL	0.10	1.3	1.5	60	34.5	44.4			
PG0426.151NL	0.15	2.0	2.2	57	26.0	40.0			
PG0426.201NL	0.20	2.0	2.2	46	26.0	53.3			
PG0426.221NL	0.22	2.0	2.2	40	26.0	58.6			
PG0426.331NL	0.33	3.2	3.4	34	20.0	62.8			
PG0426.471NL	0.47	3.2	3.4	26	20.0	89.4			
PG0426.681NL	0.68	5.2	5.4	25	15.5	100.6			
PG0426.821NL	0.82	7.8	8.0	24	13.0	99.3			
PG0426.102NL	1.00	7.8	8.0	22	13.0	121.1			
PG0426.152NL	1.50	11.5	11.8	18	9.0	153.6			

#### **Notes:**

- The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.
- The saturation current, ISAT, 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.
- The heating current, IDC, 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. The temperature is measured by placing the thermocouple on top of the unit under test. Take note that the component's performance varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
- Core loss approximation is based on published core data:

Core Loss = K1 \*  $(f)^{1.33}$  \*  $(K2\Delta I)^{2.51}$ Where: Core Loss = in Watts

f = switching frequency in kHz

**K1 & K2** = core loss factors

 $\Delta I$  = delta I across the component in Ampere  $K2\Delta I$  = one half of the peak to peak flux density across the component in Gauss

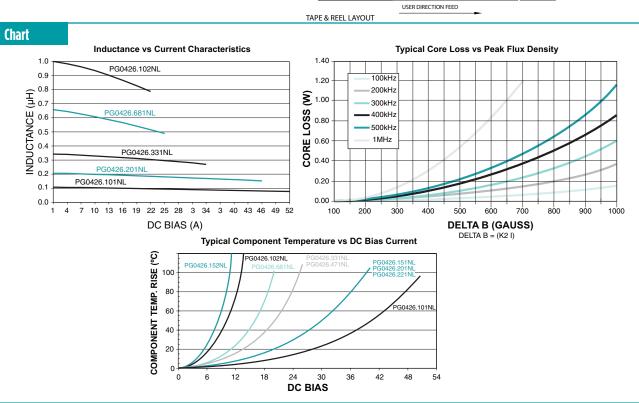
- Unless otherwise specified, all testing is made at 100kHz, 0.1V<sub>AC</sub>.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PG0426.101NL becomes PG0426.101NL**T**). Pulse complies to industry standard tape and reel specification EIA481.

# **SMT Power Inductors**

Flat Coils - PG0426 Series



## 



_			
For 1	More	Inform	ation

- 01 111010 111101111010101	/1 11010 1111011110111						
Pulse Worldwide Headquarters 15255 Innovation Drive Ste 100 San Diego, CA 92128 U.S.A.	Pulse Europe Pulse Electronics GmbH Am Rottland 12 58540 Meinerzhagen Germany	Pulse China Headquarters Pulse Electronics (ShenZhen) CO., LTD D708, Shenzhen Academy of Aerospace Technology, The 10th Keji South Road, Nanshan District, Shenzhen, P.R. China 518057	Pulse North China Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Road West Shanghai 200336 China	Pulse South Asia 3 Fraser Street 0428 DUO Tower Singapore 189352	Pulse North Asia 1F., No.111 Xiyuan Road Zhongli District Taoyuan City 32057 Taiwan (R.O.C)		
Tel: 858 674 8100 Fax: 858 674 8262	Tel: 49 2354 777 100 Fax: 49 2354 777 168	Tel: 86 755 33966678 Fax: 86 755 33966700	Tel: 86 21 62787060 Fax: 86 2162786973	Tel: 65 6287 8998 Fax: 65 6280 0080	Tel: 886 3 4356768 Fax: 886 3 4356820		

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. © Copyright, 2019. Pulse Electronics, Inc. All rights reserved.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

#### Pulse:

<u>PG0426.102NLT</u> <u>PG0426.471NLT</u> <u>PG0426.681NLT</u> <u>PG0426.331NLT</u> <u>PG0426.101NLT</u> <u>PG0426.152NLT</u> PG0426.821NLT PG0426.221NLT PG0426.201NLT PG0426.151NLT