





SMT POWER INDUCTORS

Unshielded Drum Core - P0648 Series



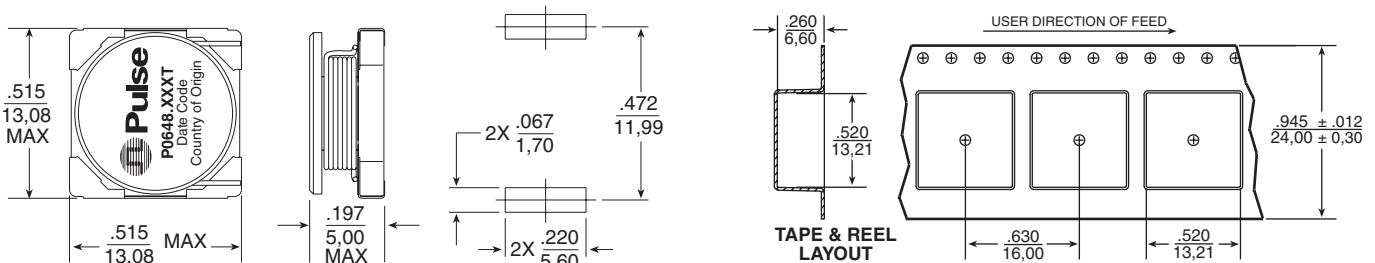
-  **Height:** 5.0mm Max
-  **Footprint:** 13.1mm x 13.1mm Max
-  **Current Rating:** up to 12.2A
-  **Inductance Range:** 1 μ H to 1030 μ H

Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

Part ^{6,7} Number	Inductance @ I _{PK ADC} (μ H \pm 20%)	I _{rated} ⁵ (A)	DCR (MAX) (m Ω)	Saturation Current (A) @ 25°C	Heating Current (A)
P0648.102	1.05	12.2	5.5	17.7	12.2
P0648.192	1.9	9.6	7.5	12.9	9.6
P0648.282	2.8	8.1	9.8	10.5	8.1
P0648.342	3.4	7.6	9.6	9.1	7.6
P0648.462	4.6	6.5	15.5	7.8	6.5
P0648.682	6.8	5.1	22	6.6	5.1
P0648.103	10.2	4.3	33	5.4	4.3
P0648.153	15.2	3.6	44	4.4	3.6
P0648.223	22	3.3	61	3.7	3.3
P0648.323	32	2.5	90	2.9	2.5
P0648.463	46	2.1	148	2.4	2.1
P0648.653	65	1.8	166	2.0	1.8
P0648.104	100	1.4	262	1.7	1.4
P0648.154	152	1.2	410	1.3	1.2
P0648.214	214	1.0	557	1.1	1.0
P0648.324	320	0.9	880	0.9	0.9
P0648.454	450	0.7	1230	0.8	0.7
P0648.644	645	0.6	1660	0.6	0.6
P0648.105	1030	0.5	2680	0.5	0.5

- NOTES:**
- The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.
 - Inductance tested at 100kHz, 10 mV_{RMS}
 - Inductance drop = 10% typical at the Saturation Current
 - ΔT = 40°C rise typical at the Heating Current
 - The rated current is the lower of the saturation or heating current.
 - Add suffix "T" to part number for tape and reel packaging (i.e. P0648.102T).
 - RoHS compliant parts are being introduced. Please contact Pulse for RoHS compliant part availability. If available, order part by adding the suffix "NL" to the part number (i.e. P0648.102 becomes P0648.102NL and P0648.102T becomes P0648.102NLT).

Mechanical

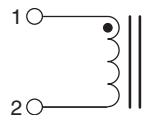


Weight 2.2 grams
Tape & Reel 500/reel

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

Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

Schematic



For More Information:

Pulse Worldwide Headquarters 12220 World Trade Drive San Diego, CA 92128 U.S.A. www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262	Pulse Northern Europe 3 Huxley Road Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701	Pulse Southern Europe Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41	Pulse China Headquarters No. 1 Industrial District Changan, Dongguan China TEL: 86 769 5538070 FAX: 86 769 5538870	Pulse North China Room 1503 XinYin Building No. 888 YiShan Road Shanghai 200233 China TEL: 86 21 54643211/2 FAX: 86 21 54643210	Pulse South Asia 150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 6287 8998 FAX: 65 6280 0080	Pulse North Asia No. 26 Kao Ching Road Yang Mei Chen Taoyuan Hsien Taiwan, R. O. C. TEL: 886 3 4641811 FAX: 886 3 4641911
---	--	---	---	---	--	---

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, 2006. Pulse Engineering, Inc. All rights reserved.

www.pulseeng.com

P521.A (2/06)