







-  **Height:** 5.0mm max
-  **Footprint:** 13.1mm x 13.1mm
-  **Current Rating:** up to 12.2A
-  **Inductance Range:** 1 $\mu$ H to 1030 $\mu$ H

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

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

**Notes:**

1. The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.
2. Inductance tested at 100kHz, 10mV<sub>RMS</sub>
3. Inductance drop = 10% typical at the Saturation Current
4.  $\Delta$ T = 40°C rise typical at the Heating Current
5. The rated current is the lower of the saturation or heating current.
6. Add suffix "T" to the part number for tape and reel packaging (i.e. P0648.102T)
7. RoHS compliant parts are being introduced. Please contact Pulse for RoHS compliant part availability. If available, order by adding the suffix "NL" to the part number (i.e. P0648.102 becomes P0648.102NL and P0648.102T becomes P0648.102NLT).

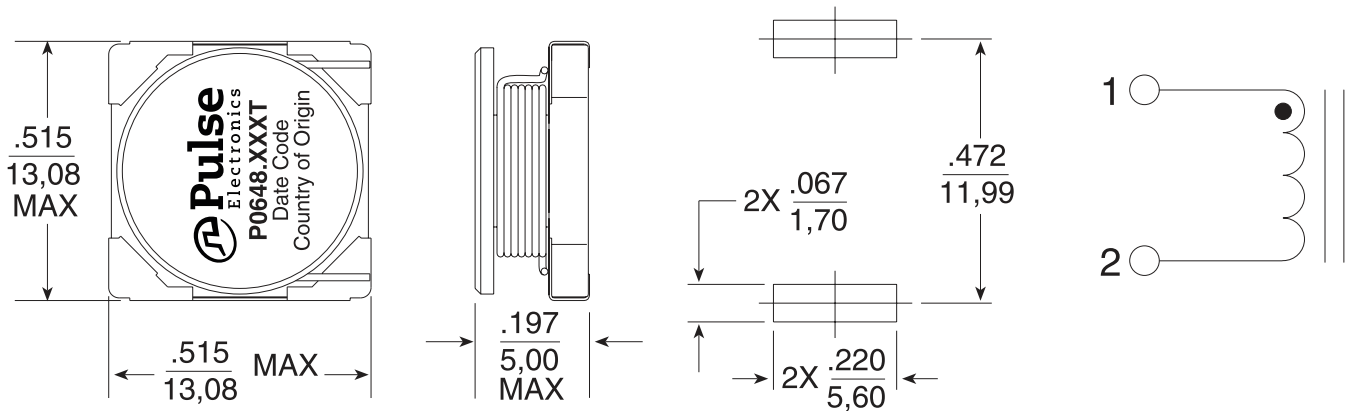
# SMT Power Inductors

Unshielded Drum Core - P0648 Series

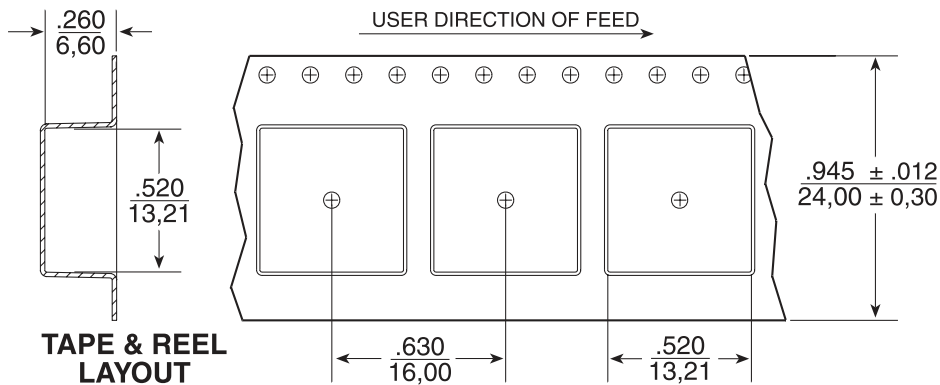
## Mechanical

## Schematic

P0648.XXX



SUGGESTED PAD LAYOUT



TAPE & REEL LAYOUT

## For More Information

### Pulse Worldwide Headquarters

12220 World Trade Drive  
San Diego, CA  
92128  
U.S.A.

Tel: 858 674 8100  
Fax: 858 674 8262

### Pulse Europe

Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

Tel: 49 7032 78060  
Fax: 49 7032 7806 135

### Pulse China Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Road  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China  
518057  
Tel: 86 755 33966678  
Fax: 86 755 33966700

### Pulse North China

Room 2704/2705  
Super Ocean Finance  
Ctr.  
2067 Yan An Road  
West  
Shanghai 200336  
China

Tel: 86 21 62787060  
Fax: 86 2162786973

### Pulse South Asia

135 Joo Seng Road  
#03-02  
PM Industrial Bldg.  
Singapore 368363

Tel: 65 6287 8998  
Fax: 65 6287 8998

### Pulse North Asia

3F, No. 198  
Zhongyuan Road  
Zhongli City  
Taoyuan County 320  
Taiwan R. O. C.  
Tel: 886 3 4356768  
Fax: 886 3 4356823 (Pulse)  
Fax: 886 3 4356820 (FRE)

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