

# SMT POWER INDUCTORS

## Unshielded Drum Core - P0648 Series



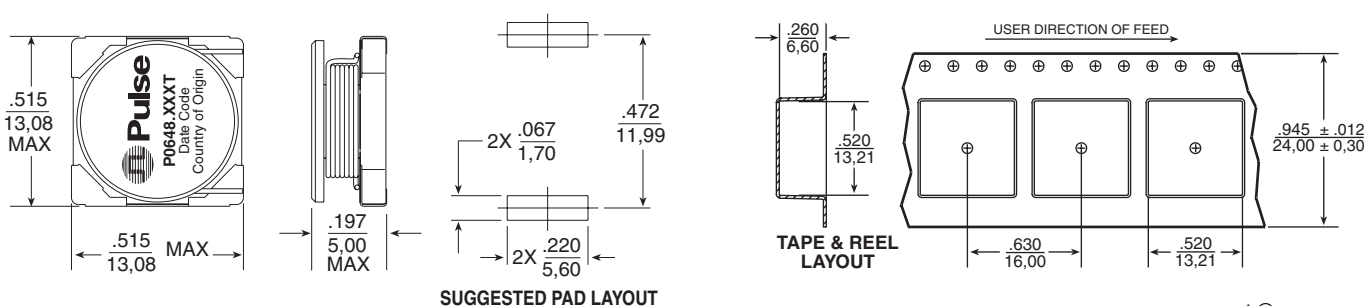
- Height: 5.0mm Max**
- Footprint: 13.1mm x 13.1mm Max**
- Current Rating: up to 12.2A**
- Inductance Range: 1µH to 1030µH**

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

Part <sup>6,7</sup> Number	Inductance @ I <sub>PK ADC</sub> (µH ± 20%)	I <sub>rated</sub> <sup>5</sup> (A)	DCR (MAX) (mΩ)	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<sub>RMS</sub>
  - 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).

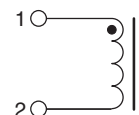
## Mechanical



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:

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