

SMT POWER INDUCTORS

Unshielded Drum Core - P0250 Series



-  **Height:** 7.1mm Max
-  **Footprint:** 18.5mm x 15.0mm Max
-  **Current Rating:** up to 8.6A
-  **Inductance Range:** 1μH to 1030μH

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

Part ^{6,7} Number	Inductance @ I _{PK} A _{DC} (μH ± 15%)	I _{rated} ⁵ (A)	DCR (MAX) (mΩ)	Saturation Current (A) @ 25°C	Heating Current (A)
P0250.102	1.0	8.6	9	20.0	8.60
P0250.222	2.2	7.1	14	16.0	7.10
P0250.332	3.3	6.2	15	14.0	6.20
P0250.562	5.6	5.3	20	12.0	5.30
P0250.103	10	4.3	31	10.0	4.30
P0250.153	15	4.0	36	8.0	4.00
P0250.223	22	3.5	47	7.0	3.50
P0250.333	33	3.0	66	5.5	3.00
P0250.473	47	2.6	86	4.5	2.60
P0250.683	68	2.3	130	3.5	2.30
P0250.104	100	1.8	190	3.0	1.80
P0250.154	150	1.5	250	2.6	1.50
P0250.224	220	1.2	380	2.4	1.20
P0250.334	330	1.0	560	1.9	1.00
P0250.474	470	.82	850	1.4	0.82
P0250.684	680	.72	1100	1.2	0.72
P0250.105	1000	.56	1800	1.0	0.56

NOTES: 1. The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.

2. Inductance tested at 100kHz, 0.1 mV_{RMS}

3. Inductance drop = 10% typical at the saturation current.

4. ΔT = 40°C rise typical at the heating current.

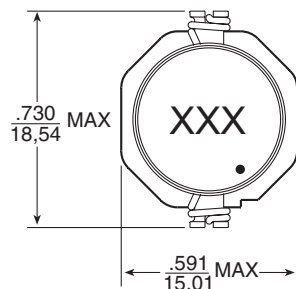
5. The rated current is the lower of the saturation or heating current.

6. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. P0250.102 becomes P0250.102T). Pulse complies to industry standard tape and reel specification EIA481.

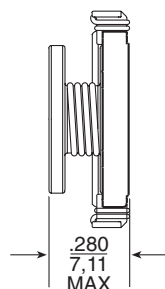
7. To order RoHS compliant part, add the suffix "NL" to the part number (i.e. P0250.102 becomes P0250.102NL and P0250.102T becomes P0250.102NLT).

Mechanical

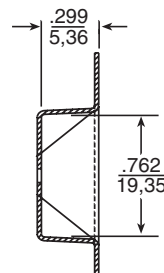
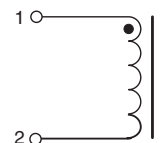
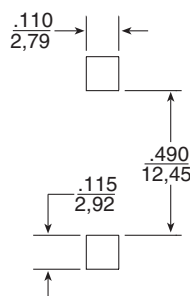
Schematic



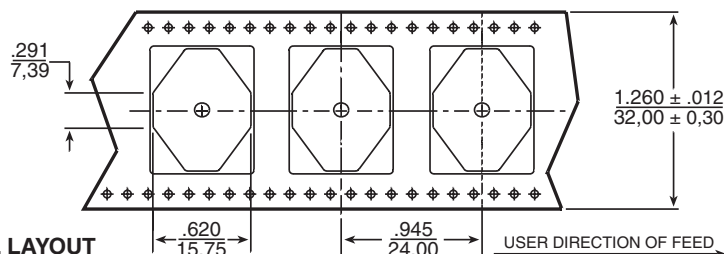
NOTE: Dot indicates start of winding



SUGGESTED PAD LAYOUT



TAPE & REEL LAYOUT



Weight 3.6 grams
Tape & Reel 250/reel

Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are ± .010
0.25