

SMT Planar Transformers For Applications up to 300 Watts



- Rated for 300 Watts
- Designed to operate between 200 kHz and 700 kHz with a nominal 48 V input.
- High efficiency; excellent DCR; very low leakage inductance; 1500 Vrms, one minute primary to secondary isolation.
- Provides 0.009" (0.229 mm) clearance above the seating plane
- May be special ordered with an auxiliary winding

Core material Ferrite

Terminations Matte tin over nickel over brass. Weight 22.5 – 26.0 g Ambient temperature –40°C to +125°C Storage temperature Component: –40°C to +125°C.

Tray packaging: -40°C to +80°C Resistance to soldering heat Max three 40 second reflows at

+260°C, parts cooled to room temperature between cycles **Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332 Packaging 25 per tray

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part	Primary turns		Primary inductance ²	Leakage inductance ³	DCR max (mOhms)			Volt-time product typ ⁵	Height max
number ¹	N 1	N2	min (µH)	max (µH)	Primary (N1)	Primary (N ₂)	Secondary ⁴	(Vµsec)	(in/mm)
PL300-100L	4	4	287	0.25	7.2	7.2	4.2	206	0.410/10.4
PL300-101L	5	5	448	0.35	9.0	9.0	4.2	258	0.410/10.4
PL300-102L	6	6	635	0.50	10.6	10.6	4.2	310	0.450/11.4
PL300-103L	7	7	864	0.75	12.3	12.3	4.2	361	0.450/11.4
PL300-104L	8	8	1075	1.0	13.8	13.8	4.2	413	0.475/12.1

1. To order a transformer with an optional auxiliary winding, add an "X" and the turn count after the PL300, e.g. PL300X3-100L.

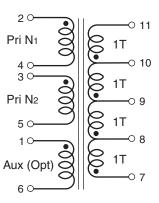
Turn counts of 2, 3, 4, 5, 7 and 9 are available for the auxiliary winding. Transformers with auxiliary windings are not stocked.

2. Inductance measured on an Agilent/HP 4284 at 200 kHz, 0.5 Vrms, 0 Adc between pins 2 and 5 with pins 3 and 4 connected.

3. Leakage inductance measured at 200 kHz, 0.5 Vrms, 0 Adc between pins 2 and 5, with pins 3 and 4 connected, and with all secondary pins shorted.

- 4. DCR for secondary is measured between pins 7 and 11.
- 5. Volt-time product is based on primary windings connected in series.
- 6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.





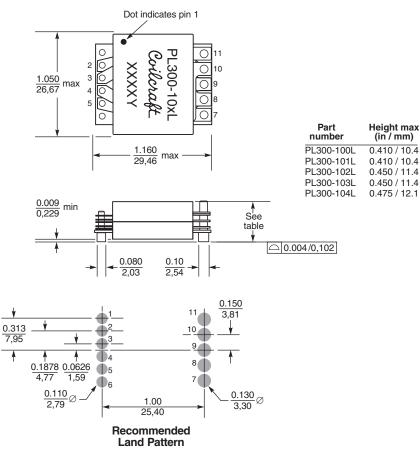
US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw China +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1122-1 Revised 07/05/17

© Coilcraft Inc. 2017 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



PL300 Series SMT Planar Transformers



Dimensions are in $\frac{inches}{mm}$



US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw China +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg Document 1122-2 Revised 07/05/17

© Coilcraft Inc. 2017 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

Mouser Electronics

Authorized Distributor

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

Coilcraft:

PL300-104L PL300-101L PL300-100L PL300-102L PL300-103L