



SMT Planar Transformers For Applications up to 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)

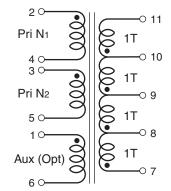
Packaging 25 per tray

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 typ5	Height max
number ¹	N ₁	N ₂	min (μH)	max (µH)	Primary (N ₁)	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 1, 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
- 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.

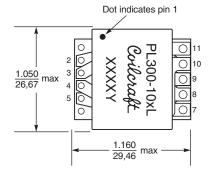




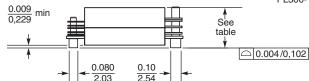


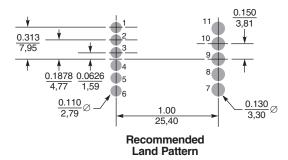
PL300 Series SMT Planar Transformers





Part number	Height max (in / mm)
PL300-100L	0.410 / 10.4
PL300-101L	0.410 / 10.4
PL300-102L	0.450 / 11.4
PL300-103L	0.450 / 11.4
PI 300-104I	0 475 / 12 1





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

