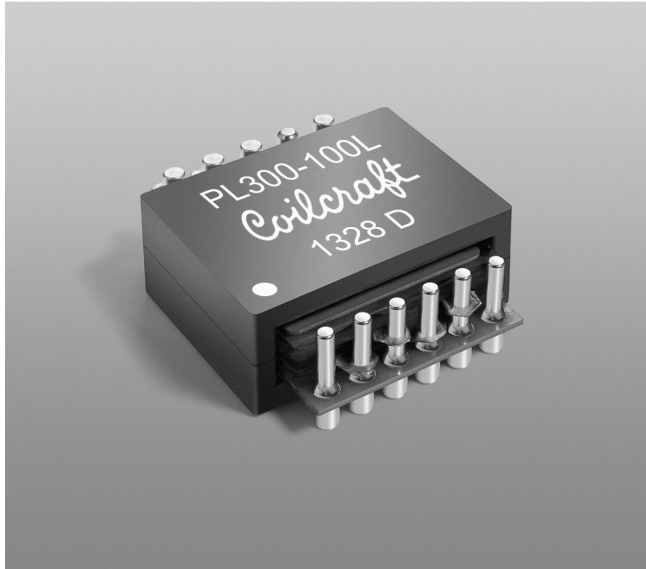


# SMT Planar Transformers

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)**

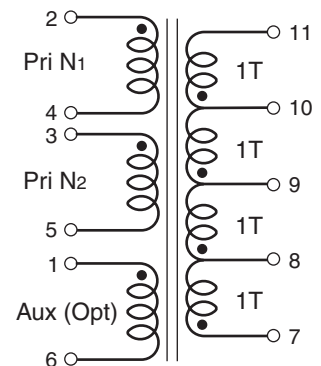
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 25 per tray

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

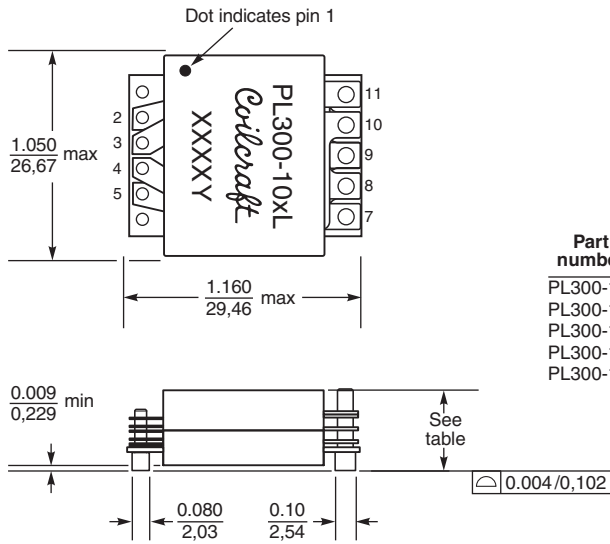
Part number <sup>1</sup>	Primary turns		Primary inductance <sup>2</sup> min (µH)	Leakage inductance <sup>3</sup> max (µH)	DCR max (mOhms)			Volt-time product typ <sup>5</sup> (Vµsec)	Height max (in/mm)
	N <sub>1</sub>	N <sub>2</sub>			Primary (N <sub>1</sub> )	Primary (N <sub>2</sub> )	Secondary <sup>4</sup>		
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

- 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.
  - 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.
  - 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.
  - DCR for secondary is measured between pins 7 and 11.
  - Volt-time product is based on primary windings connected in series.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

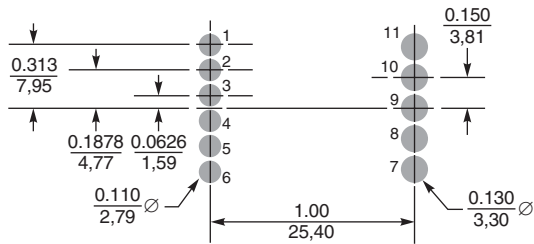




# PL300 Series SMT Planar Transformers



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
PL300-104L	0.475 / 12.1



**Recommended Land Pattern**

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



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