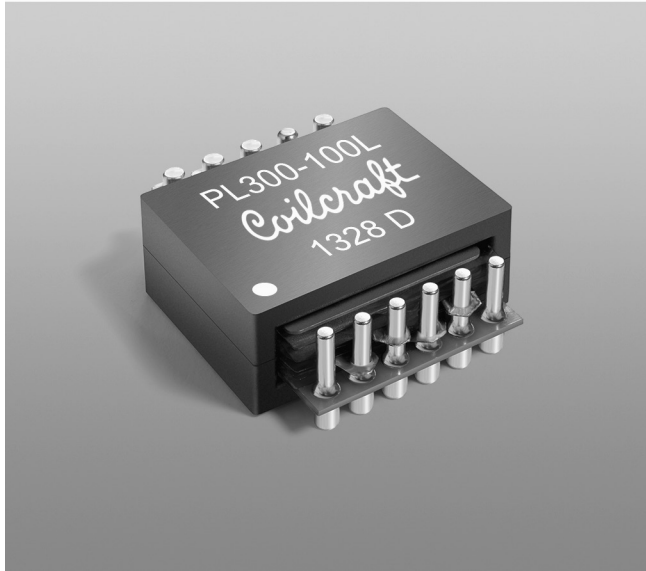


SMT Planar Transformers

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)

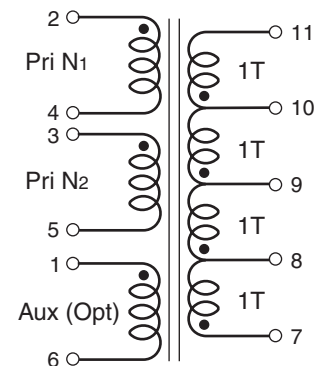
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 25 per tray

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

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



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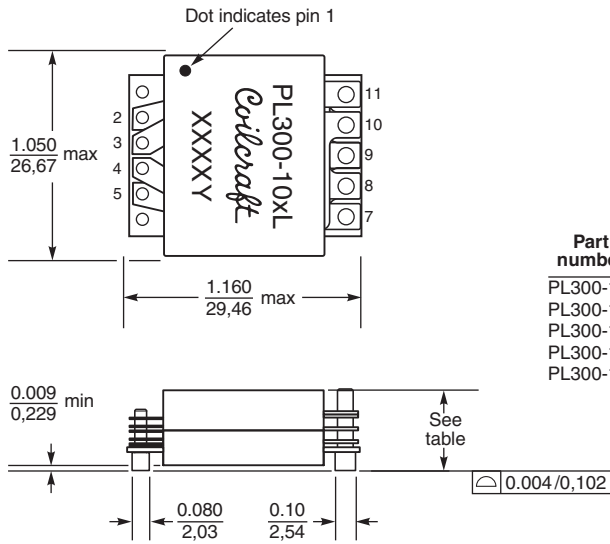
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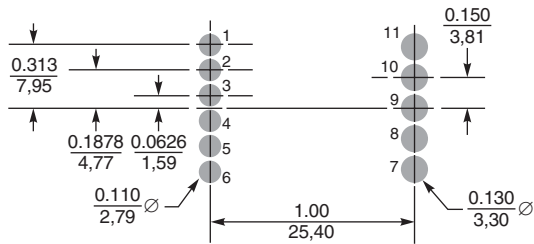
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PL300 Series SMT Planar Transformers



| 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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