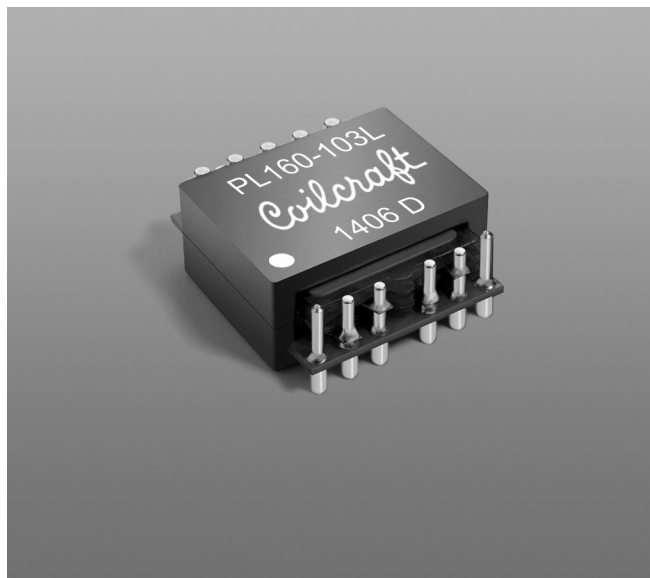


SMT Planar Transformers

For Applications
up to 160 Watts



- Rated for 160 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 12.0 – 12.8 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 36 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 | | |
| PL160-100L | 4 | 4 | 246 | 0.35 | 14.7 | 14.7 | 6.8 | 150 | 0.352 / 8.94 |
| PL160-101L | 4 | 5 | 312 | 0.40 | 14.7 | 18.5 | 6.8 | 168 | 0.352 / 8.94 |
| PL160-102L | 5 | 5 | 378 | 0.45 | 18.5 | 18.5 | 6.8 | 187 | 0.360 / 9.14 |
| PL160-103L | 5 | 6 | 449 | 0.55 | 18.5 | 21.5 | 6.8 | 206 | 0.375 / 9.53 |
| PL160-104L | 6 | 6 | 534 | 0.55 | 21.5 | 21.5 | 6.8 | 224 | 0.375 / 9.53 |

1. When ordering, please specify **packaging** code:

PL160-104LD

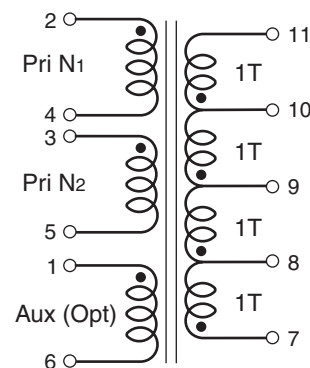
Packaging: Blank In trays, 36 per tray

D = Optional tape and reel (additional cost). Factory order only, not stocked. 13" machine-ready reel. EIA-481 embossed plastic tape. 250/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 9.78 mm pocket depth. Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

To order a transformer with an optional auxiliary winding, add an "X" and the turn count after the PL160, e.g. PL160X3-100LB. 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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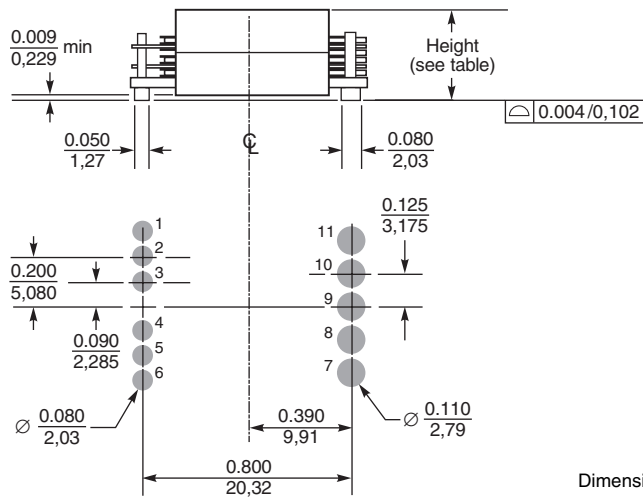
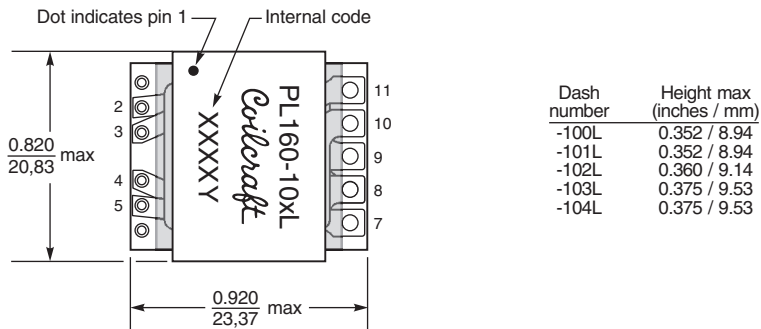
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



PL160 Series SMT Planar Transformers



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

**Recommended
Land Pattern**



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