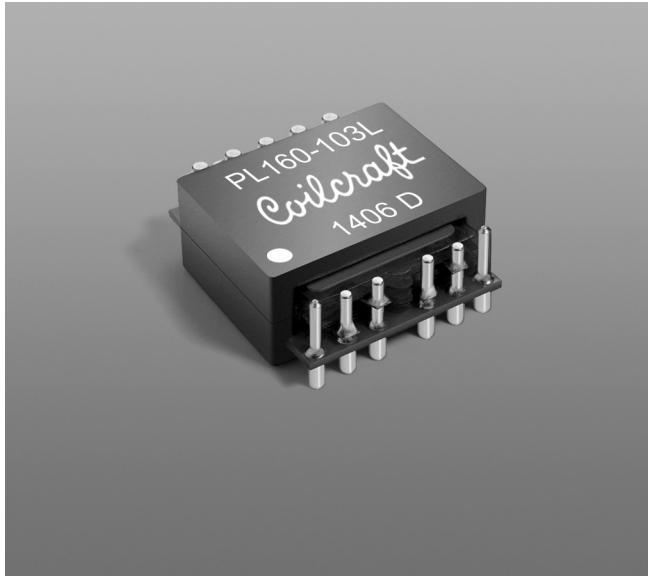


SMT Planar Transformers

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.

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.

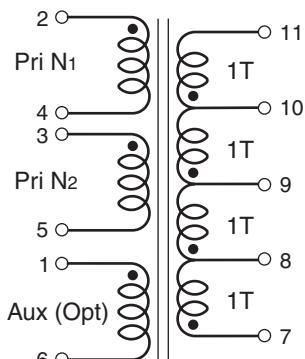
3. Leakage inductance measured at 200 kHz, 0.5 Vrms, 0 Adc between pins 2 and 5, with pins 3 and 4 connected, and with all secondary pins shorted.

4. DCR for secondary is measured between pins 7 and 11.

5. Volt-time product is based on primary windings connected in series.

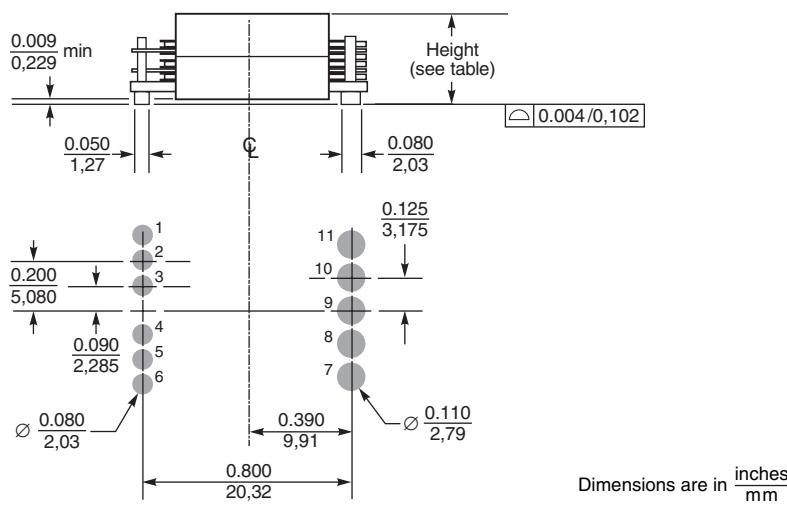
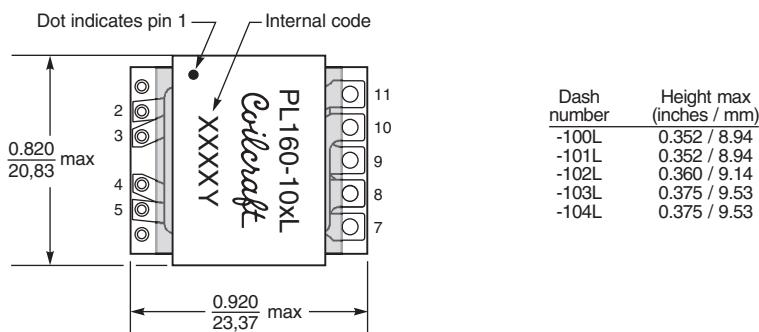
6. Electrical specifications at 25°C.

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





PL160 Series SMT Planar Transformers



Recommended Land Pattern

Mouser Electronics

Authorized Distributor

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

[Coilcraft](#):

[PL160-102L](#) [PL160-101L](#) [PL160-104L](#) [PL160-100L](#) [PL160-103L](#)