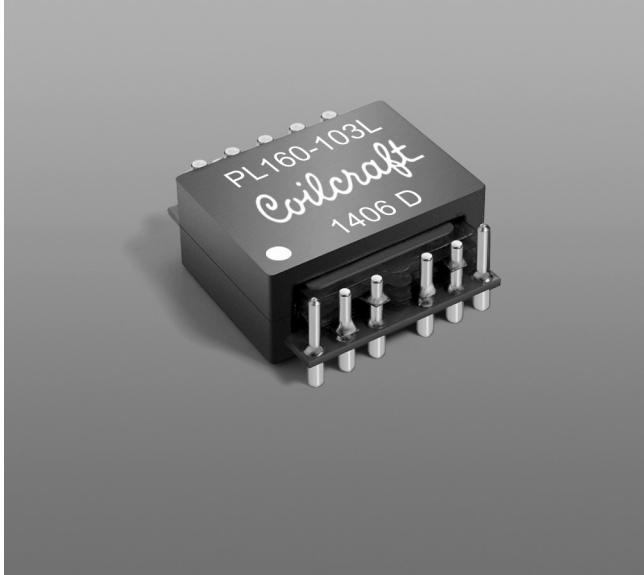


# SMT Planar Transformers

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

**Designer's Kit C460** contains 2 of each PL160 and PL300 part

**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)

**Packaging** 36 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>		
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**

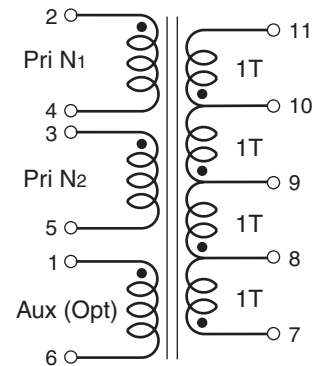
**Packaging: Blank** In trays, 36 per tray

**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.



www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

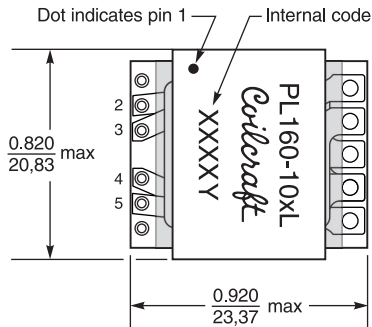
Document 1072-1 Revised 11/11/22

© Coilcraft Inc. 2022

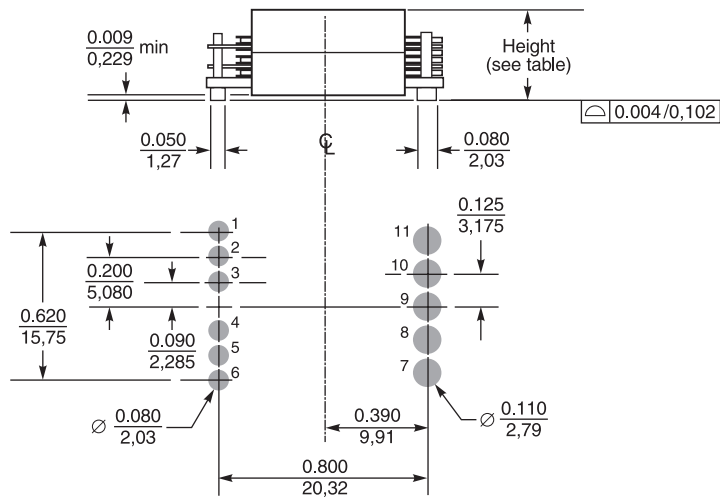
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



# PL160 Series SMT Planar Transformers



Dash number	Height max (inches / mm)
-100L	0.352 / 8.94
-101L	0.352 / 8.94
-102L	0.360 / 9.14
-103L	0.375 / 9.53
-104L	0.375 / 9.53



**Recommended  
Land Pattern**

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



www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

Document 1072-2 Revised 11/11/22

© Coilcraft Inc. 2022

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.

# Mouser Electronics

Authorized Distributor

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

[Coilcraft:](#)

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