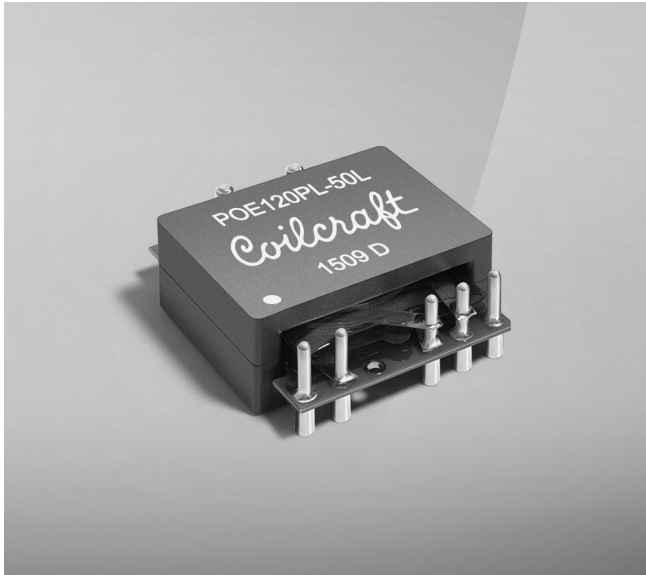


**NEW!**

# 120 W PoE Planar Transformers

For Active Clamp  
Forward Topology



- Designed for active clamp forward topology
- Operates at 200 kHz, with 36 – 72 Volt input
- High efficiency; excellent DCR; very low leakage inductance
- Isolation: 1500 Vrms one minute primary and aux to secondary.
- Provides 0.009" (0.229 mm) clearance above the seating plane
- Includes a 12-Volt auxiliary winding

**Core material** Ferrite

**Terminations** Matte tin over nickel over brass.

**Weight** 11.1 – 11.9 g

**Ambient temperature** –40°C to +125°C

**Maximum part temperature** +165°C (ambient + temp rise)

**Storage temperature** Component: –40°C to +125°C.

Tray or tape and reel 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 (standard). Optional tape and reel (additional cost). Factory order only, not stocked.

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±20% (µH)	DCR max (mOhms) pri : sec : aux	Leakage inductance <sup>3</sup> max (µH)	Turns ratio pri : sec : aux	Output
POE120PL-33L_	50	27.6 : 1.26 : 270	0.70	6 : 1 : 3.5	3.3 V, 36 A
POE120PL-50L_	50	18.9 : 1.26 : 123	0.31	4 : 1 : 2.5	5.0 V, 24 A
POE120PL-12L_	50	18.9 : 6.80 : 58.5	0.37	2 : 1 : 1	12 V, 10 A
POE120PL-24L_	50	18.9 : 13.6 : 58.5	0.39	1 : 1 : 0.5	24 V, 5 A

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

**POE120PL-24LD**

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

**D** = Optional tape and reel (additional cost), 13" machine-ready reel. EIA-481 embossed plastic tape. See tape and reel specifications on page 2. Factory order only, not stocked.

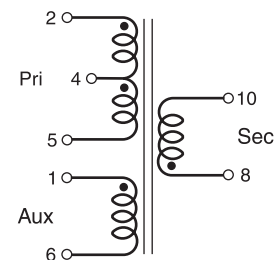
**B** = Optional tape and reel (additional cost), less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead. Factory order only, not stocked.

2. Inductance is for the primary, measured at 200 kHz, 0.5 Vrms, 0 Adc.

3. Leakage inductance is for the primary and is measured with the secondary winding shorted.

4. Electrical specifications at 25°C.

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



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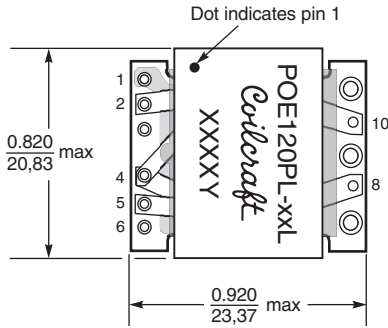
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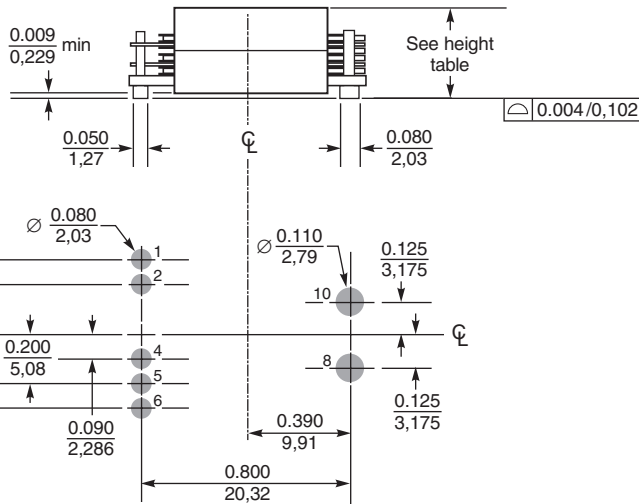
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

**NEW!**

# 120 W Planar Transformers for PoE – POE120PL



Dash number	Height max (inches / mm)
-12L	0.352 / 8.94
-24L	0.380 / 9.64
-33L	0.407 / 10.34
-50L	0.375 / 9.53



**Recommended Land Pattern**

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

**Optional tape and reel packaging (additional cost). Factory order only, not stocked.**

- POE120PL-12:** 250/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 9.40 mm pocket depth
- POE120PL-24:** 200/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 28 mm pocket spacing, 9.98 mm pocket depth
- POE120PL-33:** 200/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 28 mm pocket spacing, 10.68 mm pocket depth
- POE120PL-50:** 250/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 9.78 mm pocket depth



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