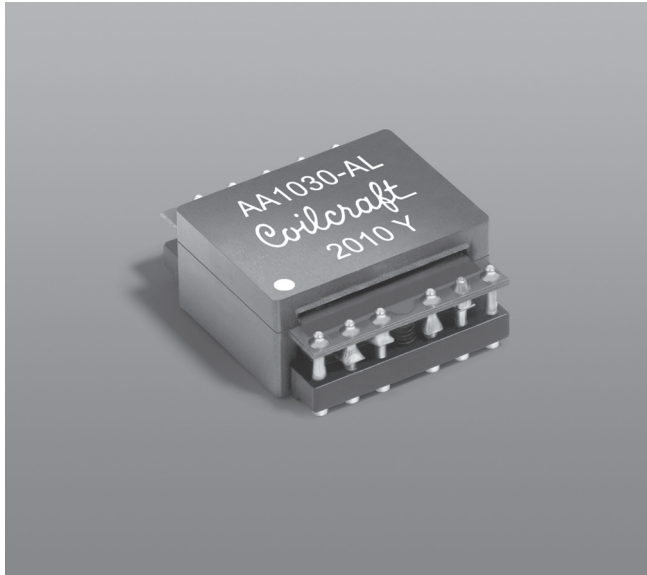


**NEW!**

# SMT Planar Transformer



- Optimized for Silicon Labs Si34071 PoE DC/DC Powered Device (PD) resonant forward converters
- Designed to meet IEEE802.3bt standard
- Perfect solution for high power PoE applications up to 100 W
- Optimized for 200 kHz to 350 kHz with 42.5 – 57 V input
- 1500 Vrms, one minute isolation (hipot) between primary and secondary

**Core material** Ferrite**Terminations** Matte tin over nickel over brass**Weight** 13 g**Ambient temperature** –40°C to +125°C**Storage temperature** Component: –40°C to +125°C.

Tray packaging: –40°C to +80°C

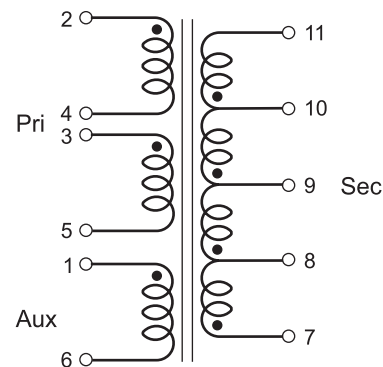
**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

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	Primary inductance <sup>1</sup> ±25% (µH)	Leakage inductance <sup>2</sup> max (µH)	DCR max (mOhms)			Turns Ratio pri : sec : aux	Volt-time product typ <sup>3</sup> (Vµsec)	Isolation <sup>4</sup> (Vrms)	Output <sup>5</sup>
			pri	sec	aux				
AA1030-AL	255	0.30	26.2	6.8	58.5	1 : 0.57 : 0.57	131	1500	12 V, 6 A

1. Inductance measured on an Agilent/HP 4284 at 300 kHz, 0.6 Vrms, 0 Adc between pins 2 and 5 with pins 3 and 4 connected.
  2. Leakage inductance measured at 300 kHz, 0.6 Vrms, 0 Adc between pins 2 and 5, with pins 3 and 4 connected, and with all secondary pins shorted.
  3. Volt-time product is for the primary, based on 3000 gauss.
  4. 1500 Vrms, one minute isolation (hipot) from primary and aux to secondary.
  5. Output is for secondary. Auxiliary winding output is 15 V, 0.2 A.
  6. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Connect pin 4 and pin 3 on PC board.



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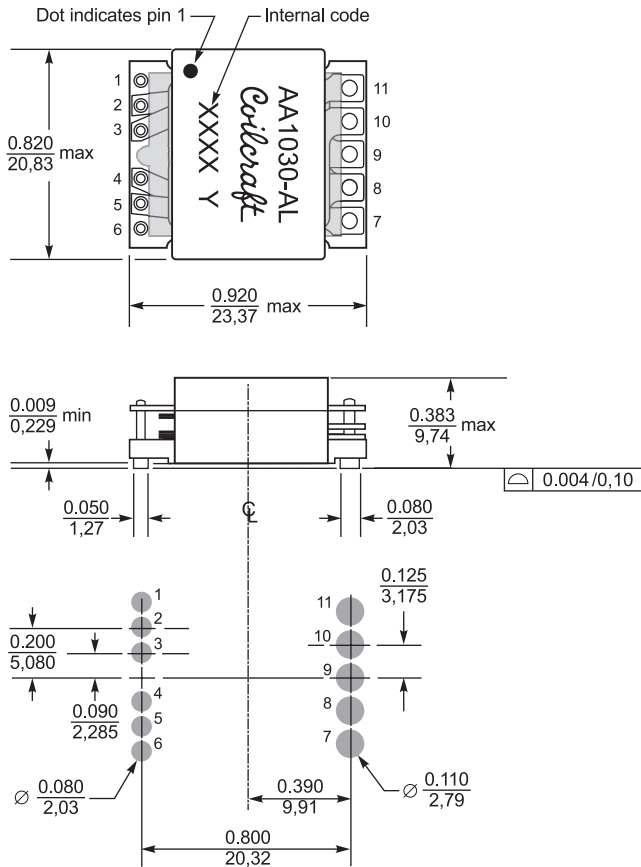
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# AA1030-AL SMT Planar Transformer



**Recommended Land Pattern**

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



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