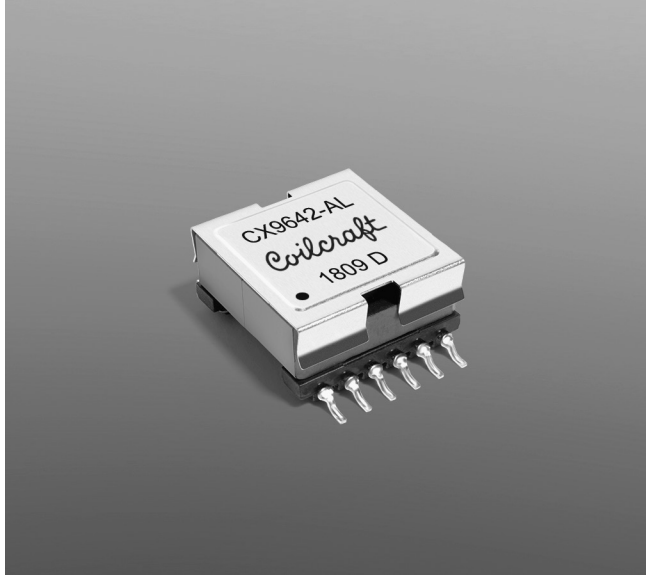


# PoE Flyback Transformer for Si3406x



- Developed for Silicon Labs Si3406, Si34601 and Si34062 30W PD Flyback converter
- Designed to meet 30 W PoE IEEE 802.3at-2009 standard.
- Optimized for 220 kHz with 36 – 57 input voltage; Can also operate from 100 kHz to 500 kHz
- Isolation: 1500 Vrms, one minute pri and aux to sec; 500 Vrms pri to aux

**Core material** Ferrite

**Terminations** RoHS tin-silver-copper over tin over nickel over phos bronze.

**Weight** 13.1 g

**Ambient temperature** -40°C to +85°C

**Maximum part temperature** +125°C (ambient + temp rise)

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

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)

**Packaging** 175 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

**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 at 0A <sup>2</sup> ±15% (µH)	Inductance at Ipk <sup>3</sup> min (µH)	DCR max (Ohms)			Leakage inductance <sup>4</sup> max (µH)	Turns ratio <sup>5</sup>		Ipk <sup>3</sup> (A)	Output <sup>6</sup>
			pri	sec	aux		pri:sec	pri:aux		
CX9642-AL_	70.0	60.0	0.08	0.0027	0.36	1.0	1:0.136	1:0.409	3.0	5.0V, 6A

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

**CX9642-ALD**

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

2. Inductance is for the primary, measured at 333.3 kHz, 0.1 Vrms, 0 Adc.

3. Peak primary current drawn at minimum input voltage. DCR is with the windings connected in parallel.

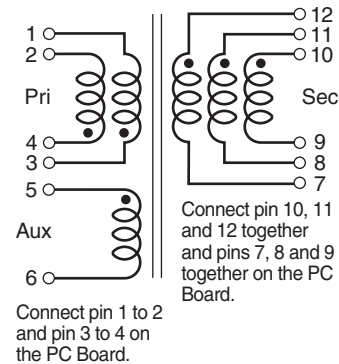
4. Leakage inductance is for the primary winding with the secondary windings shorted.

5. Turns ratio is with the primary and the secondary windings connected in parallel.

6. Output is with the secondary windings connected in parallel. Output of the auxiliary winding is 14.5 V, 25 mA

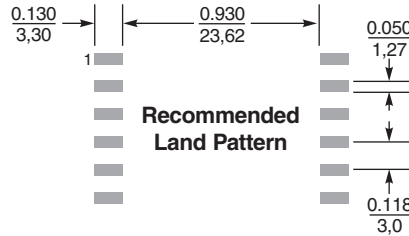
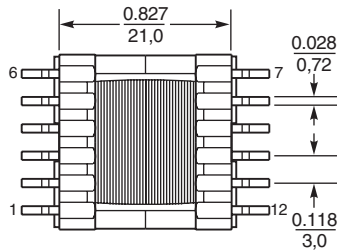
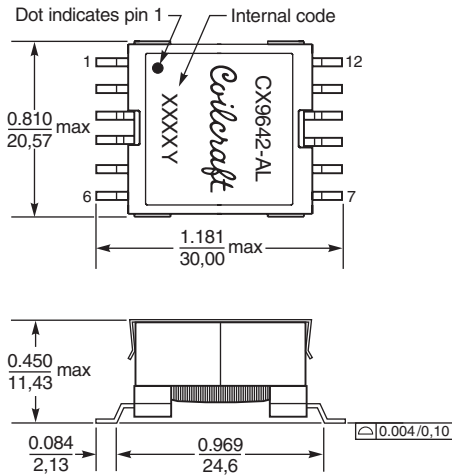
7. Electrical specifications at 25°C.

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





# Flyback Transformer for Si3406x



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



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