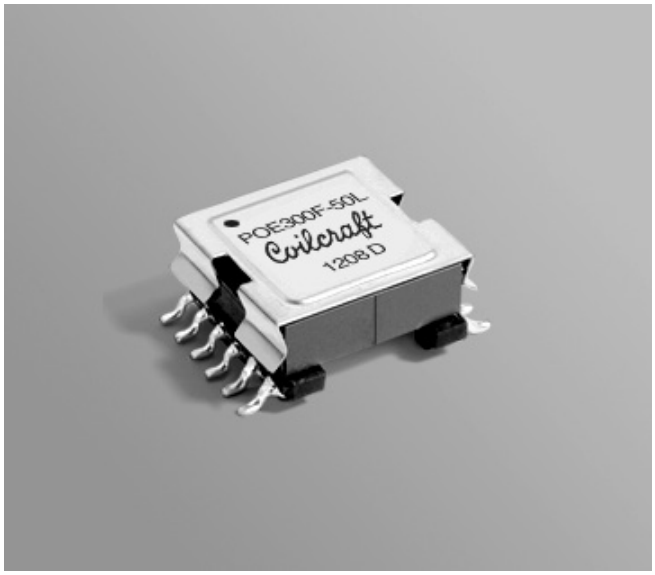
Flyback Transformers

For 30 Watt PoE Applications



- Designed to meet 30 W PoE IEEE 802.3at-2009 standard.
- Operates at 250 kHz with 36–72 Volts input.
- Isolation: 1500 Vrms, one minute pri to sec; 500 Vrms pri to aux

Designer's Kit C398 contains three samples of each part.

Core material Ferrite

Terminations RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 11.9 g

Ambient temperature –40°C to +125°C

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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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 with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

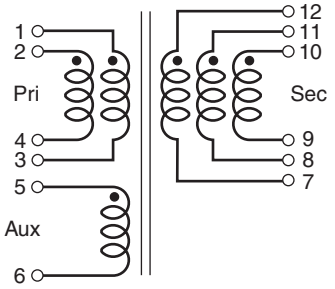
Part number[1]	Inductance at 0 A[2] ±10% (µH)	Inductance at Ipk[3] min (µH)	DCR max (Ohms) pri[4]	sec[4]	aux	Leakage inductance[5] max (µH)	Turns ratio[6] pri:sec	pri:aux	Ipk[3] (A)	Output[7]
POE300F-33L_	42.0	37.8	0.070	0.0023	0.220	3.00	1:0.09	1:0.33	2.6	3.3 V, 9 A
POE300F-50L_	42.0	37.8	0.069	0.0050	0.225	1.60	1:0.14	1:0.33	2.6	5 V, 6 A
POE300F-12L_	42.0	37.8	0.061	0.015	0.195	0.545	1:0.33	1:0.33	2.6	12 V, 2.5 A
POE300F-19L_	42.0	37.8	0.060	0.037	0.195	0.430	1:0.56	1:0.33	2.6	19.5 V, 1.5 A
POE300F-24L_	42.0	37.8	0.060	0.055	0.195	0.310	1:0.67	1:0.33	2.6	24 V, 1.25 A

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

   POE300F-50LD

   Packaging: **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.
2. Inductance is for the primary, measured at 250 kHz, 0.7 Vrms, 0 Adc.
3. Peak primary current drawn at minimum input voltage.
4. DCR is with the windings connected in parallel.
5. Leakage inductance is for the primary winding with the secondary windings shorted.
6. Turns ratio is with the primary and the secondary windings connected in parallel.
7. Output is with the secondary windings connected in parallel. Output of the auxiliary winding is 12 V
8. Electrical specifications at 25°C.

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



The primary windings and the secondary windings to be connected in parallel on the PC board.

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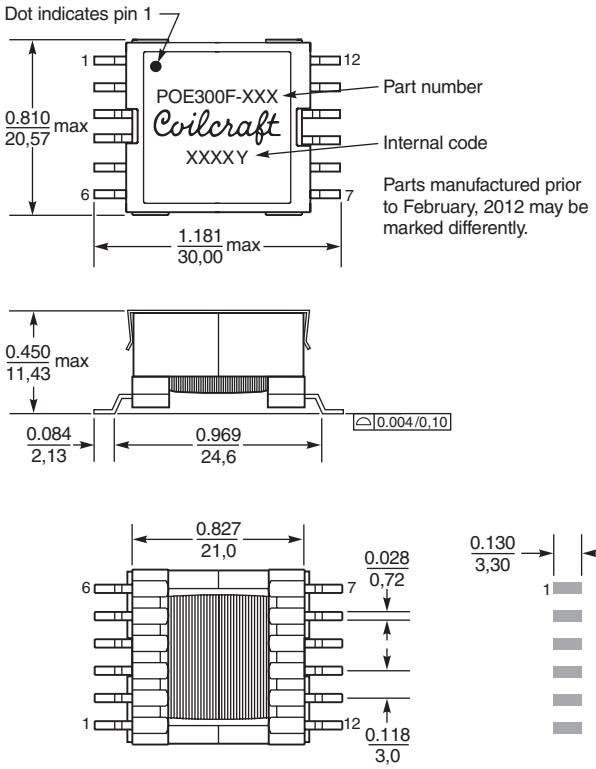
Flyback Transformers for PoE Plus – POE300F



Dimensions are in inches / mm

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