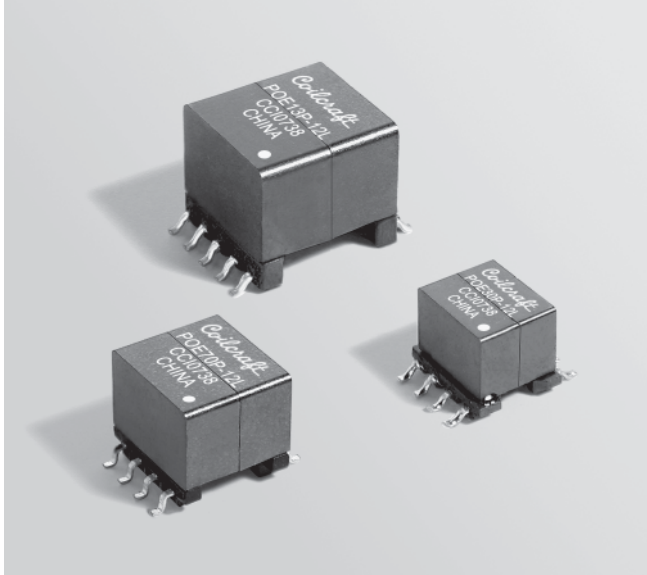




Flyback Transformers

For 3 Watt, 7 Watt and 13 Watt
PoE Applications



- Flyback transformers for PoE applications
- Designed to operate in continuous mode at 250 kHz with an input of 36 – 72 Vdc
- 1500 Vrms isolation from primary and bias to secondary

Designer's Kit C395 contains two of each part shown in bold

Core material Ferrite

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

Weight POE13P: 6.15 g; POE70P: 3.85 g; POE30P: 2.05 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°C.
Packaging: –55°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)

Mean Time Between Failures (MTBF) 26,315,789 hours

PCB washing Only pure water or alcohol recommended

Part number ¹	Power (W)	Inductance at 0 A ² ±10% (µH)	Inductance at I _{pk} ³ min (µH)	DCR max (Ohms) ⁴			Leakage inductance max (µH) ⁵	Turns ratio ⁶		I _{pk} ³ (A)	Output ⁷
				pri	bias	sec		pri : sec	pri : bias		
POE30P-33L	3	310	279.0	1.02	2.01	0.066	4.75	1 : 0.19	1 : 0.70	0.3	3.3 V, 0.91 A
POE30P-50L	3	310	279.0	1.02	2.01	0.118	4.50	1 : 0.28	1 : 0.70	0.3	5.0 V, 0.6 A
POE30P-12L	3	310	279.0	1.04	2.01	0.700	4.25	1 : 0.70	1 : 0.70	0.3	12 V, 0.25 A
POE70P-33L	7	155	139.5	0.414	0.822	0.036	4.00	1 : 0.19	1 : 0.667	0.65	3.3 V, 2.12 A
POE70P-50L	7	155	139.5	0.414	0.822	0.060	3.60	1 : 0.262	1 : 0.667	0.65	5.0 V, 1.4 A
POE70P-12L	7	155	139.5	0.414	0.822	0.343	3.25	1 : 0.667	1 : 0.667	0.65	12 V, 0.6 A
POE13P-33L	13	127	114.3	0.255	0.310	0.024	1.25	1 : 0.166	1 : 0.50	1.0	3.3 V, 4.0 A
POE13P-50L	13	127	114.3	0.222	0.348	0.039	0.950	1 : 0.25	1 : 0.50	1.0	5.0 V, 2.6 A
POE13P-12L	13	127	114.3	0.199	0.308	0.065	0.650	1 : 0.50	1 : 0.50	1.0	12 V, 1.08 A
POE13P-19L	13	127	114.3	0.290	0.355	0.066	0.800	1 : 0.567	1 : 0.50	1.0	19.5 V, 0.67 A
POE13P-24L	13	127	114.3	0.255	0.315	0.067	0.600	1 : 0.667	1 : 0.50	1.0	24 V, 0.54 A

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

POE30P-12L D

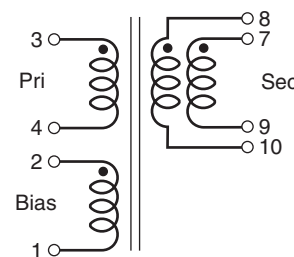
Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape.

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.

- Inductance is for the primary, measured at 250 kHz, 0.1 Vrms, 0 Adc.
- I_{pk} is peak primary current drawn at minimum input voltage.
- DCR for the secondary is per winding.
- Leakage inductance measured between pins 3 and 4 with all other pins shorted.
- Turns ratio is with the secondary windings connected in parallel.
- Output of the secondary is with the windings connected in parallel. Bias winding output is 12 V, 20 mA.
- Operating temperature range –40°C to +85°C.
- Electrical specifications at 25°C.

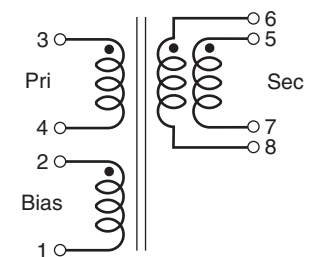
Schematics

POE13P



Secondary windings to be connected in parallel on PCB board

POE70P, POE30P



Secondary windings to be connected in parallel on PCB board

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Specifications subject to change without notice.
Please check our website for latest information.

Document 460-1 Revised 05/05/08

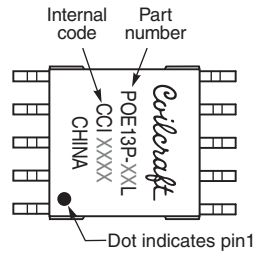
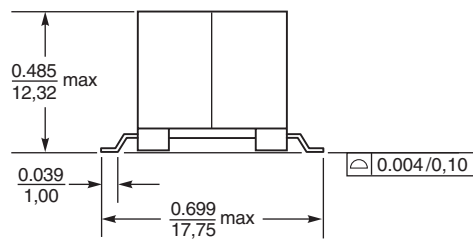
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>

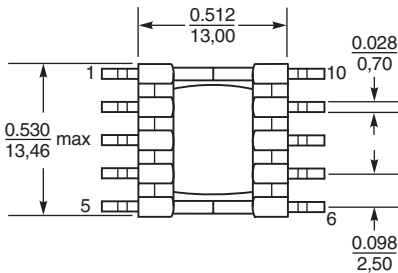


Flyback Transformers for PoE

POE13P

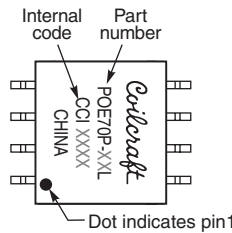
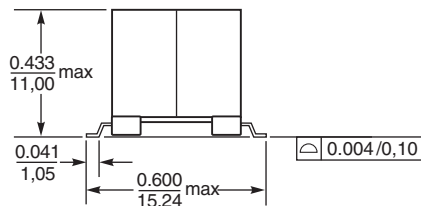


Packaging 175 per 13" reel
 Plastic tape: 32 mm wide, 0.5 mm thick,
 28 mm pocket spacing, 12.93 mm pocket depth

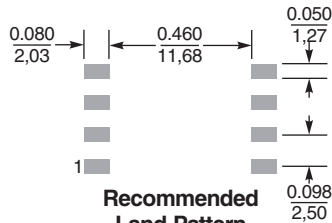
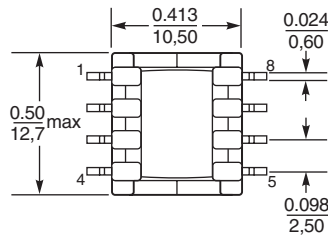


Recommended Land Pattern

POE70P

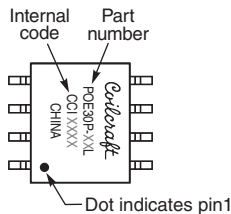
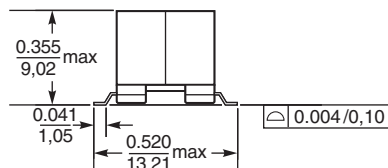


Packaging 200 per 13" reel
 Plastic tape: 32 mm wide, 0.5 mm thick,
 24 mm pocket spacing, 11.2 mm pocket depth

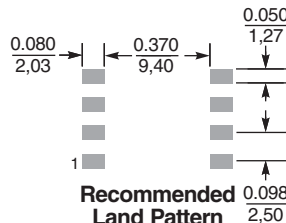
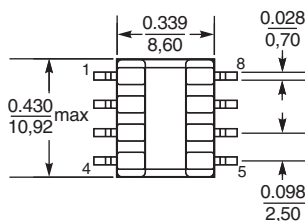


Recommended Land Pattern

POE30P



Packaging 350 per 13" reel
 Plastic tape: 32 mm wide, 0.42 mm thick,
 20 mm pocket spacing, 9.16 mm pocket depth



Recommended Land Pattern



Specifications subject to change without notice.
 Please check our website for latest information.

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