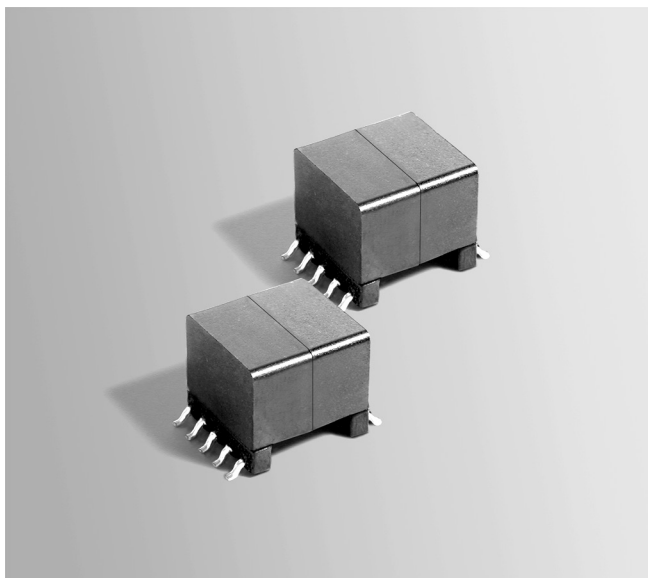




# Flyback Transformer

For Microsemi  
PoE PD Power Supply



- Developed for use with Microsemi UC3844 Current Mode Controller and LX1752 Buck Regulator
- 1500 Vrms, one minute isolation from primary, auxiliary and reset to secondary; 500 Vrms from primary and reset to auxiliary
- Designed for 36 V – 57 V input; 200 kHz

**Core material** Ferrite

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

**Weight** 6.7 g

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

**Storage temperature** Component: -40°C to +85°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)

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

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

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	L at 0 A <sup>2</sup> ±10% (μH)	L at I <sub>pk</sub> <sup>3</sup> min (μH)	Input voltage (V)	DCR max (Ohms)	Leakage L <sup>4</sup> max (μH)	Turns ratios	I <sub>pk</sub> <sup>3</sup> (A)	Outputs <sup>5</sup>
HA3905-CL_	27.0	24.3	37 –57	0.170 (pri) 0.015 (sec) 0.385 (aux) 0.371 (reset)	1.9	3.75 : 1 (pri : sec ) 1.36 : 1 (pri : aux) 1 : 1 (pri : reset)	1.2	5 V, 2.5 A (sec) 12 V, 20 mA (aux)

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

**HA3905-CLD**

**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, 0.1 Vrms, 0 Adc.

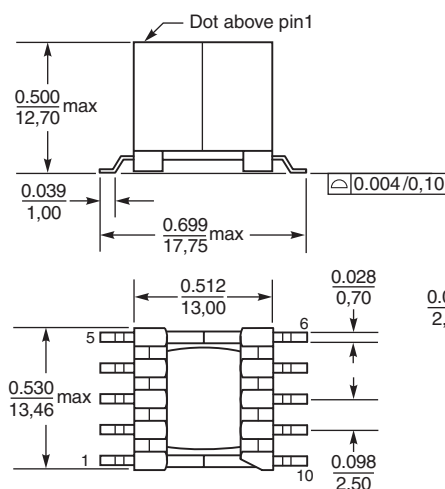
3. I<sub>pk</sub> is peak primary current drawn at minimum input voltage.

4. Leakage inductance measured on the primary winding with all secondary pins shorted.

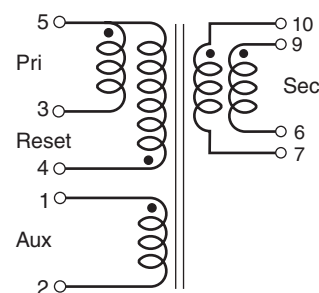
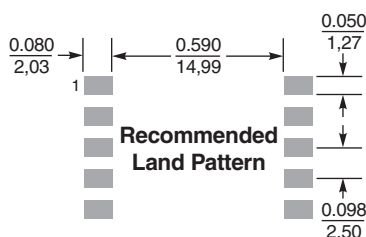
5. Output of the secondary is with the windings connected in parallel.

6. Electrical specifications at 25°C.

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



Dimensions are in inches  
mm



Secondary windings to be connected in parallel on the PC board



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