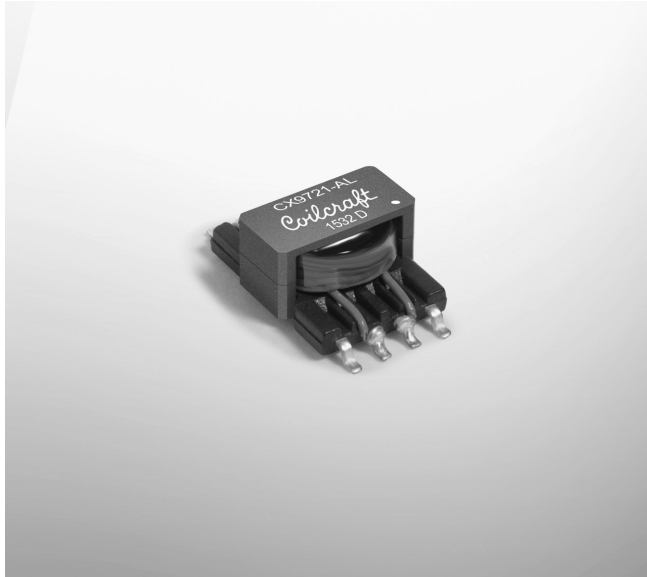


# Flyback Transformer

For Texas Instruments  
TPS61046 Boost Converter



- Developed for TI's Isolated Flyback DC-DC converter reference design (PMP9801) based on the TPS61046 boost converter.
- 5 – 20 V input; 5 V, 250 mA output
- Output of the auxiliary winding is 5 V, 2 mA used to power the IC
- 4000 Vrms, one minute isolation from the primary and auxiliary winding to the secondary

**Core material** Ferrite

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

**Weight** 1.08 g

**Ambient temperature** –40°C to +125°C

**Maximum part temperature** +160°C (ambient + temp rise).

**Storage temperature** Component: –40°C to +160°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** 700 per 13" reel Plastic tape: 32 mm wide, 0.40 mm thick, 16 mm pocket spacing, 5.72 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 0 A <sup>2</sup> ±10% (µH) | Inductance at I <sub>pk</sub> <sup>3</sup> min (µH) | DCR max (Ohms) |      |      | Leakage inductance max (µH) <sup>4</sup> | Turns ratio |           | I <sub>pk</sub> <sup>3</sup> (A) | Output      |
|--------------------------|--|---|----------------|------|------|--|-------------|-----------|----------------------------------|-------------|
|                          |  |   | pri            | bias | sec  |  | pri : sec   | pri : aux |                                  |             |
| CX9721-AL_               | 10                                       | 8   | 0.08           | 0.08 | 0.08 | 0.16                                     | 1 : 1       | 1 : 1     | 1.0                              | 5 V, 250 mA |

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

**CX9721-ALD**

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (700 parts per full reel).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

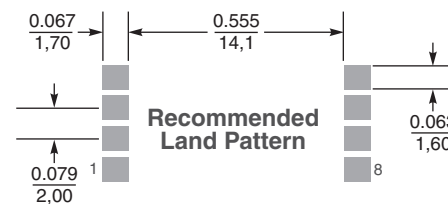
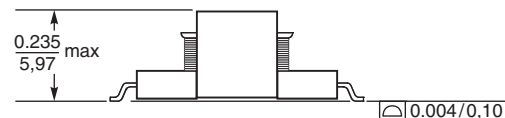
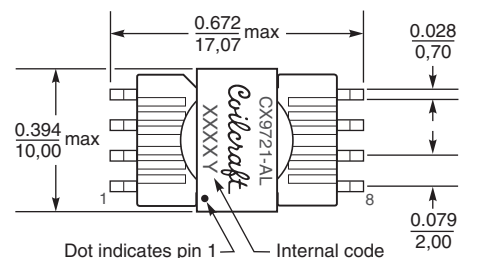
2. Inductance is for the primary, measured at 100 kHz, 0.1 Vrms, 0 Adc.

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

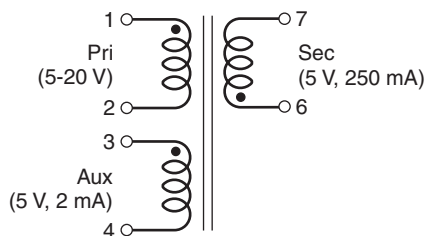
4. Leakage inductance measured at 100 kHz, 0.1 Vrms, between pins 1 and 2 with all other pins shorted.

5. Electrical specifications at 25°C.

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



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



www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com

**UK** +44-1236-730595 sales@coilcraft-europe.com

**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw

**China** +86-21-6218 8074 sales@coilcraft.com.cn

**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

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