

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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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 ¹	Inductance at 0 A ² ±10% (µH)	Inductance at I _{pk} ³ min (µH)	DCR max (Ohms)			Leakage inductance max (µH) ⁴	Turns ratio		I _{pk} ³ (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 tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

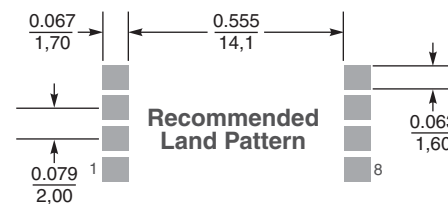
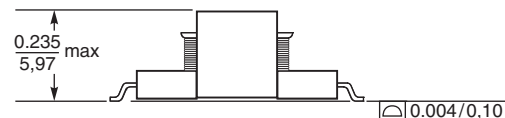
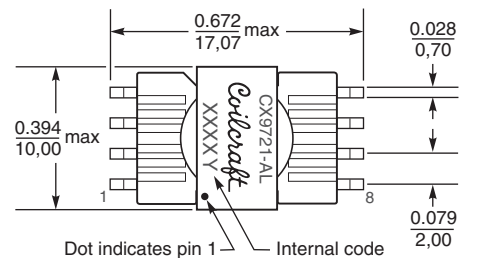
2. Inductance is for the primary, measured at 100 kHz, 0.1 Vrms, 0 Adc.

3. I_{pk} 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 $\frac{\text{inches}}{\text{mm}}$

