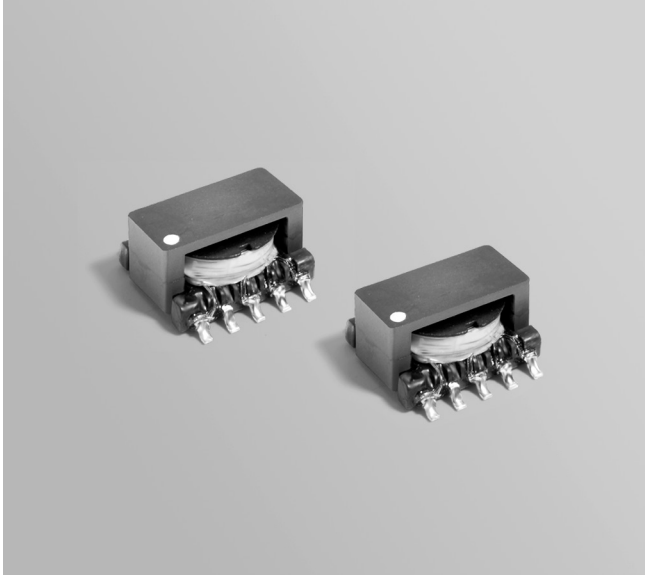


Flyback Transformer

For Texas Instruments TPS23750
PoE Powered Device Controller



- Isolated non-synchronous flyback transformers developed for Texas Instruments PMP717 reference design.
- Designed for discontinuous conduction mode, 34 – 57 V input
- 1500 Vrms isolation primary to secondary windings

Core material Ferrite

Terminations RoHS tin-silver (96.5/3.5) over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 1.4 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)

Packaging 500 per 13" reel Plastic tape: 24 mm wide, 0.36 mm thick, 16 mm pocket spacing, 6.13 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 Adc ² ±10% (µH)	Inductance at Ipk ³ min (µH)	DCR max (Ohms)	Leakage Inductance ⁴ max (µH)	Turns ratio		Ipk ³ (A)	Output ⁶
					pri : sec ⁵	pri : bias		
C1453-AL_	50	40	0.185 (pins 3 – 1) 0.030 (pins 6 – 10) 0.030 (pins 7 – 9) 0.385 (pins 4 – 5)	1.10	1 : 0.166	1 : 0.5	1.22	3.3 V, 1.5A

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

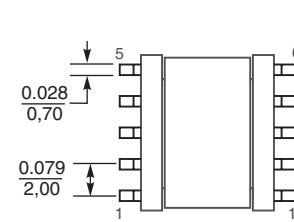
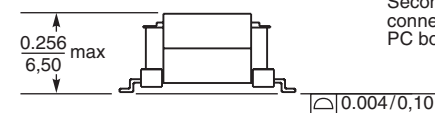
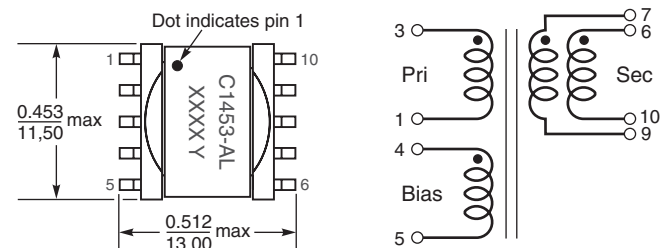
C1453-ALD

Packaging: **D** = 13" machine ready reel. EIA-481 embossed plastic tape (500 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

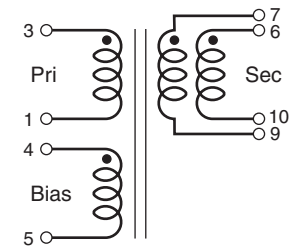
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

- Inductance is for the primary, measured at 250 kHz, 0.3 Vrms.
- Peak primary current drawn at minimum input voltage.
- Leakage inductance is for the primary winding with the secondary windings 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 10 V.
- Electrical specifications at 25°C.

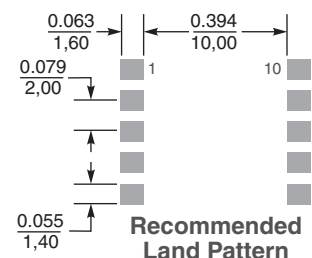
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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



Secondary windings to be connected in parallel on the PC board.



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