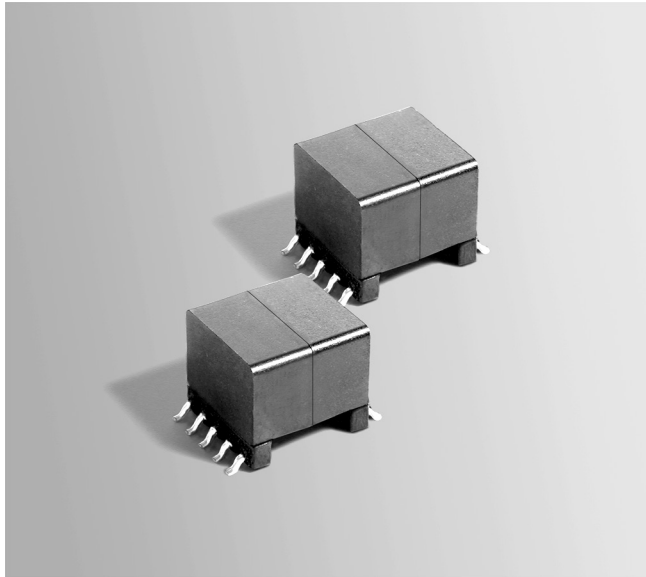


**NEW!**

# Flyback Transformer

For Texas Instruments  
TPS23753A PoE controller



- Flyback transformer for 10 W PoE applications
- Developed to work with TITPS23753A PoE controller (PMP8896 and PMP9175 Reference Design)
- 1500 Vrms isolation from primary and bias to secondary and sync

**Core material** Ferrite

**Terminations** RoHS tin-silver (96.5/3.5) over tin over nickel over phos bronze.

**Weight** 6.2 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)

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

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

**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** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

| Part number <sup>1</sup> | L at 0A <sup>2</sup><br>±10% (µH) | L at Ipk <sup>3</sup><br>min (µH) | DCR max (Ohms) <sup>4</sup> |        |       |       | Leakage inductance max (µH) <sup>5</sup> | Turns ratio <sup>6</sup> |            |            | Output <sup>7</sup> |
|--------------------------|-----------------------------------|-----------------------------------|-----------------------------|--------|-------|-------|--|--------------------------|------------|------------|---------------------|
|                          |                                   |                                   | pri                         | sec    | bias  | sync  |  | pri : sec                | pri : bias | pri : sync |                     |
| NA6223-AL_               | 180                               | 162                               | 0.330                       | 0.0135 | 0.230 | 0.190 | 1.20                                     | 1 : 0.167                | 1 : 0.361  | 1 : 0.167  | 5.0 V, 2.0 A        |

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

**NA6223-ALD**

**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 1 kHz, 0.5 Vrms, 0 Adc.

3. Peak primary current (1.1 A) drawn at minimum input voltage.

4. DCR for the primary is from pin 1 to pin 2.

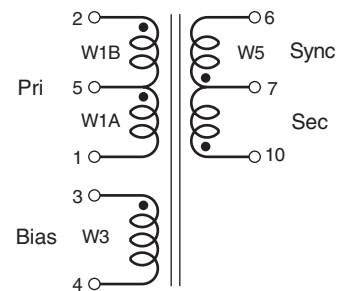
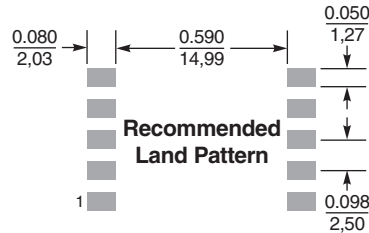
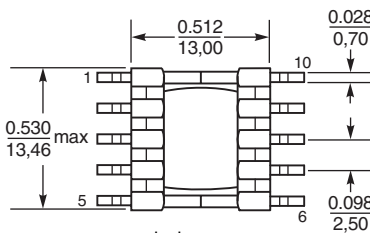
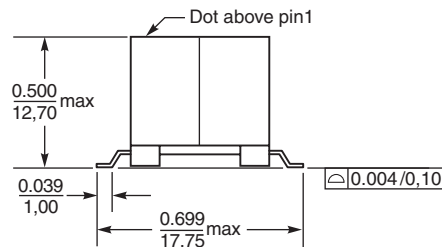
5. Leakage inductance measured between pins 1 and 2 with all other windings shorted.

6. Turns ratio is with the primary windings connected in series.

7. Output is between pins 7 and 10. Bias winding output is 10 V, 20 mA. Sync winding output is a 5 V Sync FET gate drive signal.

8. Electrical specifications at 25°C.

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



Dimensions are in inches  
mm



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