Flyback Transformer

For Texas Instruments TPS23753A PoE controller

- Flyback transformer for 10 W PoE applications
- Developed to work with TI TPS23753A 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 phosph 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 +60°C

Resistance to soldering heat  Max three 40 second refloows 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, 0.6 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth

PCB washing  Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

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). 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.

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.

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**Dimensions are in inches**

**Recommended Land Pattern**

**Internal code**

**NA6223-ALXXXX**

**Recommended Part Number**

**L at 0A ±10% (µH)**

**L at Ipk (µH)**

**DCR max (Ohms)**

**Leakage inductance max (µH)**

**Turns ratio**

**Output**

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**Part number**

**L at 0A ±10% (µH)**

**L at Ipk (µH)**

**DCR max (Ohms)**

**Leakage inductance max (µH)**

**Turns ratio**

**Output**

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**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

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For more details, please refer to the document. This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check website for latest information.