

Flyback Transformer

For Silicon Labs Si828x 5kV Isolated DC-DC Converter



- Developed for use with Silicon Labs Si828x isolated dc-dc-converter reference designs.
- 5000 Vrms, one minute isolation from primary to secondary
- Designed to meet reinforced insulation class with 8 mm creepage and clearance.
- AEC-200 Grade 1 (-40°C to +125°C)

Core material Ferrite

Terminations RoHS tin-silver-copper (95.5/3.8/0.7) over tin over nickel over phos bronze.

Weight 1.1 g

Ambient temperature -40°C to +125°C

Maximum part temperature +160°C

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 ¹	Input voltage (V)	Inductance ² ±5% (µH)	Leakage inductance ³ max (µH)	DCR max (Ohms)			Turns ratio pri:sec1:sec2	Isat ⁴ (A)	Output ⁵
				pri	sec1	sec2			
TA7788-AL_	7 – 24	25.0	0.60	0.265	0.437	0.235	1 : 1.25 : 0.75	1.4	15 V, 0.13 A

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

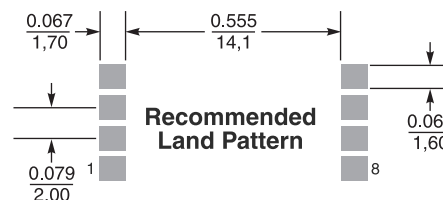
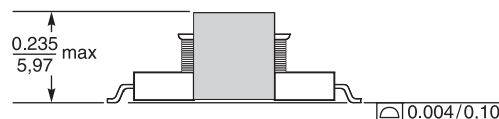
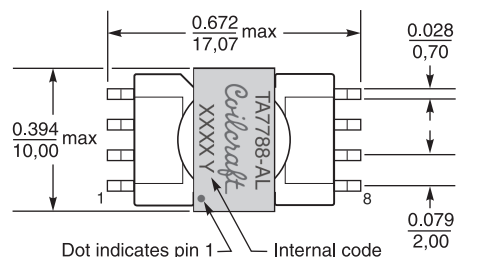
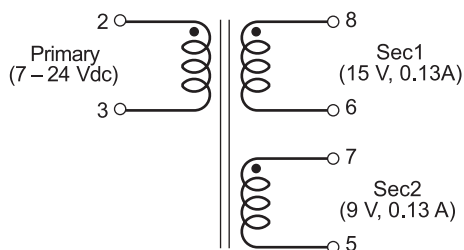
TA7788-ALD

Packaging: **D** = 13" machine ready reel. EIA-481 embossed plastic tape. 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 on an Agilent/HP 4284 at 250 kHz, 0.1 Vrms, 0 Adc.
- Leakage inductance measured between pins 2 and 3 at 250 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.
- DC current that causes an inductance drop of 30% (typ) from its value without current
- Output of Sec1 is 15 V, 0.13 A. Output of Sec2 is 9 V, 0.13 A.
- Electrical specifications at 25°C.

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



Dimensions are in inches/mm