Flyback Transformer For Silicon Labs ISODriver Isolated DC-DC Converter



- Developed for use with Silicon Labs Si828x ISODriver isolated DC-DC-Converter reference designs
- Ultra-miniature flyback transformer, only 10.0×17.07×5.97 mm
- 5000 Vrms, one minute isolation primary to secondary
- Designed to meet reinforced insulation class with 8 mm creepage and clearance.

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 +85°C

Maximum part temperature +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)

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.

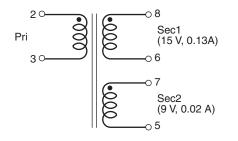
Part number ¹	Input voltage (V)	Inductance ² ±5% (μΗ)	Leakage inductance ³ max (µH)	DCF pri	R max (0 sec1	Ohms) sec2	Turns ratio pri:sec1:sec2	Isat ⁴ (A)
TA7788-AL_	12 – 24	25.0	0.554	0.462	0.683	0.472	1:1.25:0.75	1.4

1. When ordering, specify a packaging code:

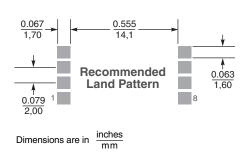
TA7788-ALD

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

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



 $\frac{0.672}{17,07}$ max 0.028 0 70 ŝ llora 0.394 887 max 10.00 0.079 2.00 Dot indicates pin 1 $^{-1}$ Internal code 0.235 max 5,97





US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw China +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1320 Revised 04/22/16

© Coilcraft Inc. 2016

This product may not be used in medical or high risk applications without prior Coilcraft approval Specification subject to change without notice. Please check web site for latest information.