

**NEW!**

# Flyback Transformer

For Silicon Labs Si88xxx 5kV Isolated DC-DC Converter



- Developed for use with Silicon Labs Si88xxx 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 qualified (-40°C to +125°C ambient)

**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)

**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 <sup>1</sup>	Input voltage (V)	Inductance <sup>2</sup> ±5% (µH)	Leakage inductance <sup>3</sup> max (µH)	DCR max (Ohms)		Turns ratio pri:sec	Isolation <sup>4</sup> (Vrms)	Isat <sup>5</sup> (A)	Output
				pri	sec				
UA7902-AL_	7 – 24	25.0	0.971	0.075	0.106	3 : 1	5000	1.3	5 V, 0.4 A

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

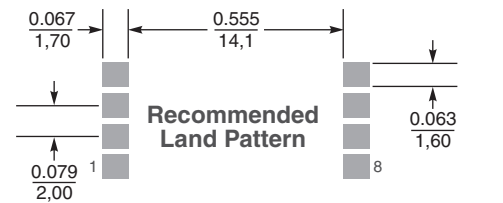
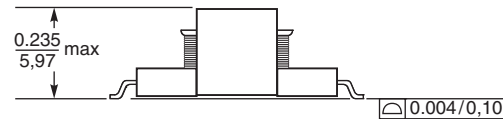
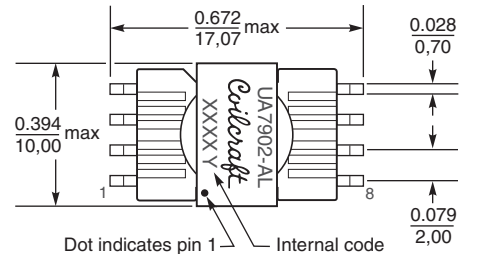
**UA7902-ALD**

**Packaging:** **D** = 13" machine ready reel. EIA-481 embossed plastic tape.

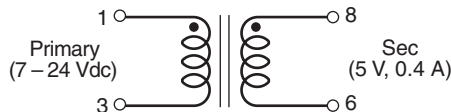
**B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- 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.
- Isolation (hipot) measured between windings for one minute.
- DC current that causes an inductance drop of 30% (typ) from its value without current
- Electrical specifications at 25°C.

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



Dimensions are in inches/mm



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