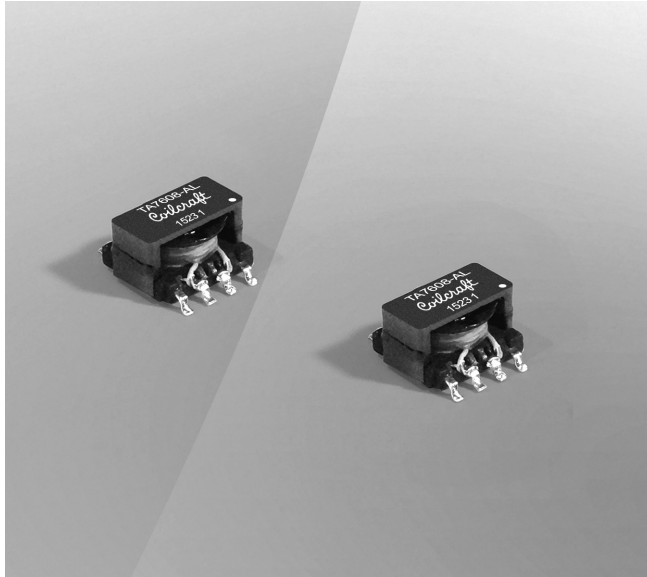




Flyback Transformer

For Silicon Labs Digital Isolators
with DC-DC Converter



- Developed for use with Silicon Labs Si88x2x Dual and Si88x4x Quad ISOVlt isolated DC-DC-Converter reference designs
- Ultra-miniature flyback transformer, measures only 10.00 × 12.07 × 5.97 mm
- 2500 Vrms isolation
- Low leakage inductance at 60 nH
- 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 0.9 g

Ambient temperature –40°C to +125°C

Maximum part temperature +125°C (ambient + temp rise)

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 600 per 13" reel Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.1 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:sec	Isolation ⁴ (Vrms)	Isat ⁵ (A)	Output
				pri	sec				
TA7608-AL_	3.0 – 5.5	2.0	0.06	0.033	0.105	1 : 4	2500	4.25	5 V, 0.4 A

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

TA7608-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 100 kHz, 0.1 Vrms, 0 Adc.

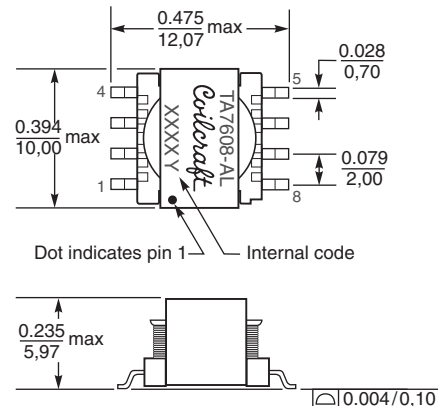
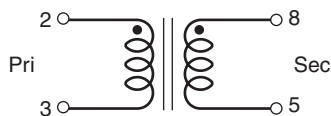
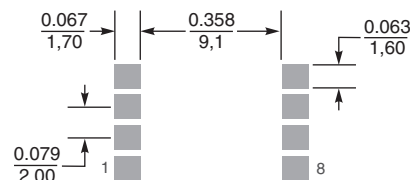
3. Leakage inductance measured between pins 2 and 3 at 100 kHz, 0.1 Vrms, 0 Adc with pins 8 and 5 shorted.

4. Isolation (hipot) measured between windings for one minute.

5. DC current that causes an inductance drop of 30% (typ) from its value without current

6. Electrical specifications at 25°C.

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



Recommended Land Pattern

Dimensions are in $\frac{\text{inches}}{\text{mm}}$



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