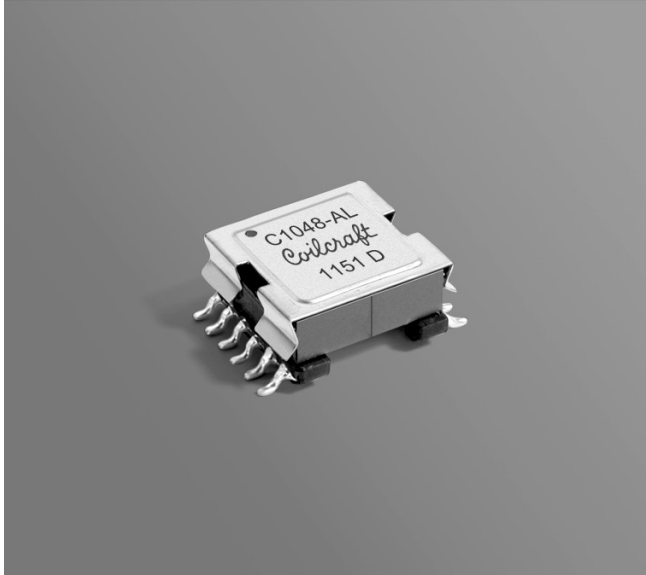




# SMT Power Transformer

For Linear Technology LT1725  
Isolated Flyback Controller



- Can be used in isolated and non-isolated designs
- Operates with 36–72 Volts input; can be used for PoE.
- 1500 Vrms, one minute isolation between the primary and the secondary

**Core material** Ferrite

**Terminations** RoHS tin-silver (96.5/3.5) over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 5.1 g

**Ambient temperature** –40°C to +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** 200 per 13" reel Plastic tape: 44 mm wide, 0.35 mm thick, 28 mm pocket spacing, 9.6 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf.

Part number <sup>1</sup>	Power	L at 0A <sup>2</sup> ±10% (µH)	L at I <sub>pk</sub> <sup>3</sup> min (µH)	DCR max (Ohms)			Leakage L max <sup>5</sup> (µH)	Turns ratio		I <sub>pk</sub> <sup>3</sup> (A)	Output <sup>7</sup>
				pri	sec <sup>4</sup>	bias		pri:sec <sup>6</sup>	pri:bias		
C1048-AL_	13 W	94.0	84.6	0.210	0.01	0.453	3.9	1:0.12	1:0.47	1.2	5 V, 2 A

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

**C1048-ALD**

**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (200 per full reel).

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 at 250 kHz, 0.3 Vrms, 0 Adc.

3. Peak primary current drawn at minimum input voltage.

4. DCR is for both windings of the secondary connected in parallel.

5. Leakage inductance is for the primary winding with the secondary windings shorted.

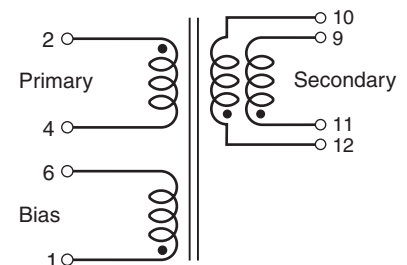
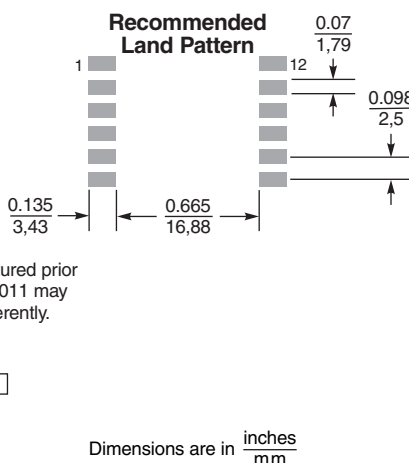
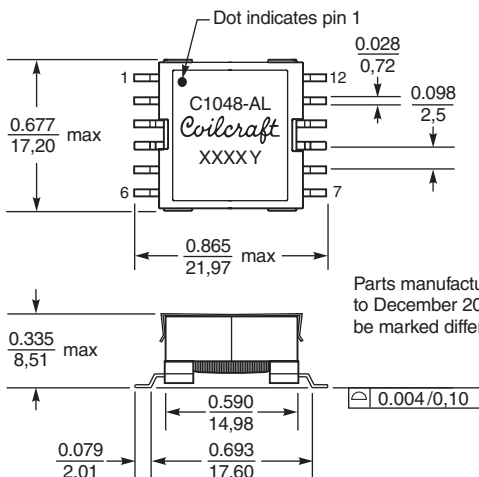
6. Turns ratio is with the secondary windings connected in parallel.

7. Output is with the secondary windings connected in parallel. Output of the bias winding with a 15 V, 0.2 A.

8. Operating temperature range –40°C to +125°C.

9. Electrical specifications at 25°C.

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



Secondary windings to be connected in parallel on PCB board

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

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