



**NEW!**

# 8 W Forward-Mode Transformers



- Designed for forward topology operating at 250 kHz
- Five outputs from 3.3 V to 15 V; 18 – 36 V input
- 1500 Vrms isolation from primary and aux to the secondary
- Specified by **National Semiconductor** for its LM5015 Two-Switch Forward Regulator

**Core material** Ferrite

**Terminations** RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 4.0 – 4.3 g

**Ambient temperature** –40°C to +85°C

**Storage temperature** Component: –40°C to +85°C.  
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: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 11.2 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	Inductance <sup>2</sup> nom (µH)	DCR max (mOhms) <sup>3</sup>			Leakage inductance <sup>4</sup> max (µH)	Input voltage range (V)	Turns ratio <sup>5</sup>		Output <sup>6</sup>
		pri	sec	aux			pri : sec	pri : aux	
FCT1-33L2SL_	324	65	22.5	460	0.530	18–36	1 : 0.5	1 : 1.39	3.3 V, 2.4 A
FCT1-50L2SL_	324	65	31	490	0.585	18–36	1 : 0.72	1 : 1.39	5 V, 1.6 A
FCT1-90L2SL_	324	65	105	490	0.570	18–36	1 : 1.17	1 : 1.39	9 V, 0.89 A
FCT1-120L2SL_	324	65	150	535	0.525	18–36	1 : 1.56	1 : 1.39	12 V, 0.67 A
FCT1-150L2SL_	324	65	223	470	0.600	18–36	1 : 1.89	1 : 1.39	15 V, 0.53 A

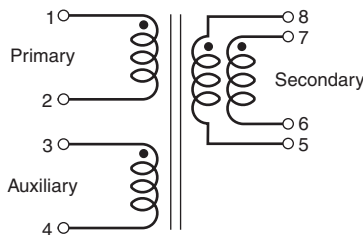
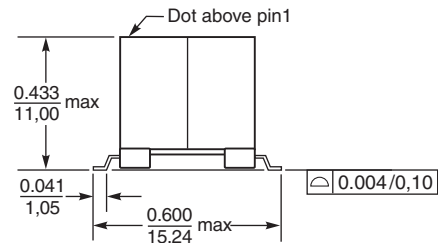
1. When ordering, please specify a **packaging** code:

**FCT1-50L2SL D**

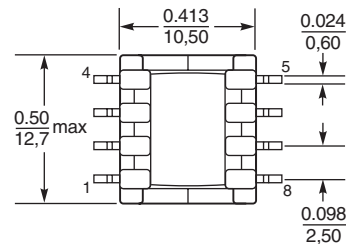
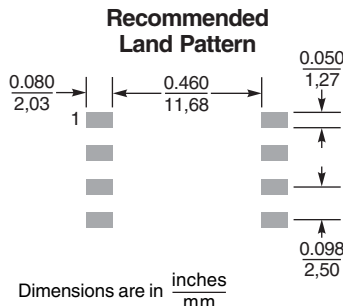
**Packaging: D** = 13" machine ready reel. EIA-481 embossed plastic tape (200 parts per full reel).

**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.

- Inductance is measured at 250 kHz, 0.3 Vrms, 0 Adc.
  - DCR for the secondary is measured with the windings connected in parallel.
  - Leakage inductance is for the primary and is measured with the secondary shorted.
  - Turns ratio is with the secondary windings connected in parallel.
  - Output is with the secondary windings connected in parallel. Auxiliary winding output is 10 V, 20 mA.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Secondary windings to be connected in parallel on PC board.



**Coilcraft**<sup>®</sup>

Specifications subject to change without notice. Please check our website for latest information.

Document 714 Revised 02/18/09

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web http://www.coilcraft.com