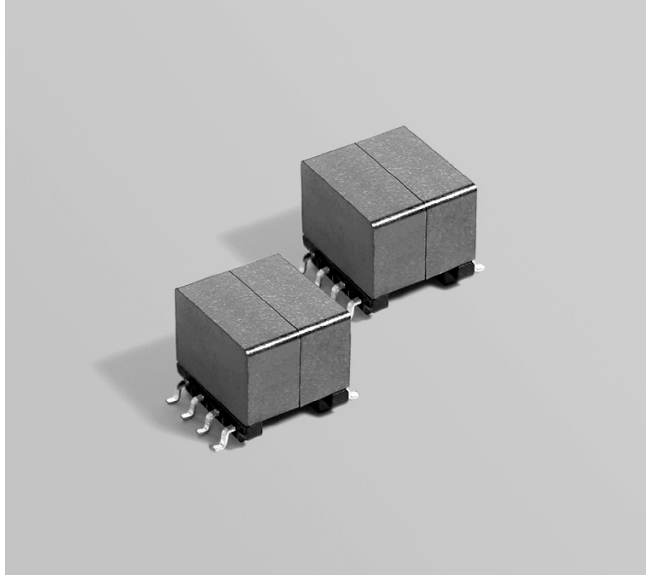


# 8 W Forward-Mode Transformers



- 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 **Texas Instruments** 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.

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: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 11.2 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>	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:

**FCT1-50L2SLD**

**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.

2. Inductance is measured at 250 kHz, 0.3 Vrms, 0 Adc.

3. DCR for the secondary is measured with the windings connected in parallel.

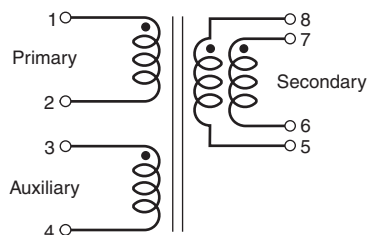
4. Leakage inductance is for the primary and is measured with the secondary shorted.

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

6. Output is with the secondary windings connected in parallel. Auxiliary winding output is 10 V, 20 mA.

7. 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.

