

**NEW!**

# 15 W Forward Mode Transformers



- Designed for forward topology operating at 250 kHz
- Five different outputs from 3.3 V to 15 V; 36 – 75 V input
- 1500 Vrms isolation from primary and aux to the secondary
- FCT1-50M2SL was developed for use with **National Semiconductor LM5015** and is referenced on application note AN-1724 as CA2983-CL and on AN-1725 as GA2983-CL.

**Core material** Ferrite

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

**Weight** 6.9 – 7.1 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** 175 per 13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 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	
FCT1-33M2SL_	705	55	6.0	320	0.510	36 – 75	1 : 0.24	1 : 0.67	3.3 V, 4.6 A
FCT1-50M2SL_	705	55	13.5	320	0.425	36 – 75	1 : 0.33	1 : 0.67	5.0 V, 3.0 A
FCT1-90M2SL_	705	55	33.5	320	0.340	36 – 75	1 : 0.57	1 : 0.67	9.0 V, 1.67 A
FCT1-120M2SL_	705	55	46.5	320	0.340	36 – 75	1 : 0.71	1 : 0.67	12 V, 1.25 A
FCT1-150M2SL_	705	55	72.5	320	0.310	36 – 75	1 : 0.90	1 : 0.67	15 V, 1.0 A

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

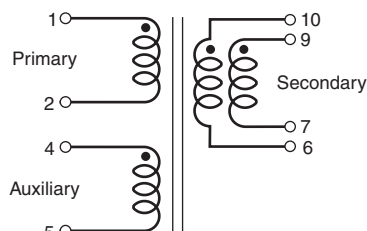
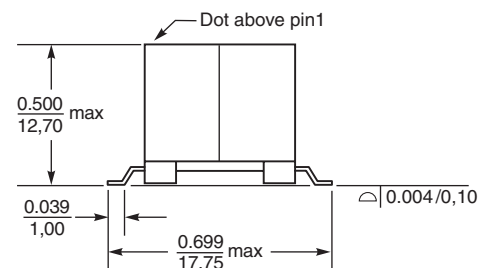
**FCT1-50M2SLD**

**Packaging: D** = 13" machine ready reel. EIA-481 embossed plastic tape (175 parts per full reel).

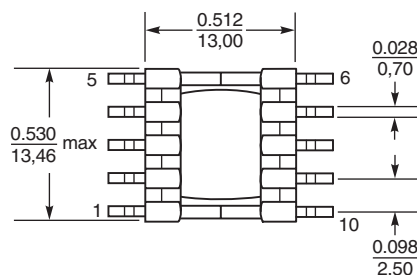
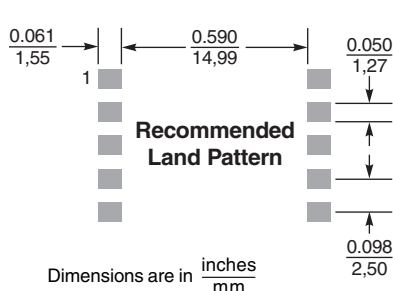
**B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance is measured at 250 kHz, 0.5 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®**

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

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