



NEW!

4 W Forward Mode Transformers



- Designed for forward topology operating at 250 kHz
- Five outputs from 3.3 V to 15 V; 9 – 18 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 2.0 – 2.1g

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 350 per 13" reel Plastic tape: 32 mm wide, 0.42 mm thick, 20 mm pocket spacing, 9.16 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² nom (µH)	DCR max (mOhms) ³			Leakage inductance ⁴ max (µH)	Input voltage range (V)	Turns ratio ⁵		Output ⁶
		pri	sec	aux			pri : sec	pri : aux	
FCT1-33K2SL_	120	48	53	720	0.195	9 – 18	1 : 1.0	1 : 2.8	3.3 V, 1.2 A
FCT1-50K2SL_	120	48	88	735	0.205	9 – 18	1 : 1.4	1 : 2.8	5 V, 0.8 A
FCT1-90K2SL_	120	48	218	745	0.165	9 – 18	1 : 2.3	1 : 2.8	9 V, 0.44 A
FCT1-120K2SL_	120	48	420	705	0.170	9 – 18	1 : 3.0	1 : 2.8	12 V, 0.33 A
FCT1-150K2SL_	120	48	532	732	0.215	9 – 18	1 : 3.7	1 : 2.8	15 V, 0.27 A

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

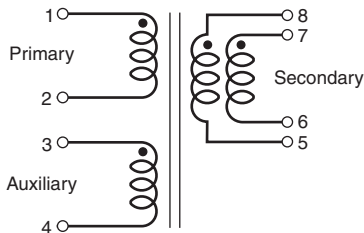
FCT1-50K2SLD

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (350 parts per full reel).

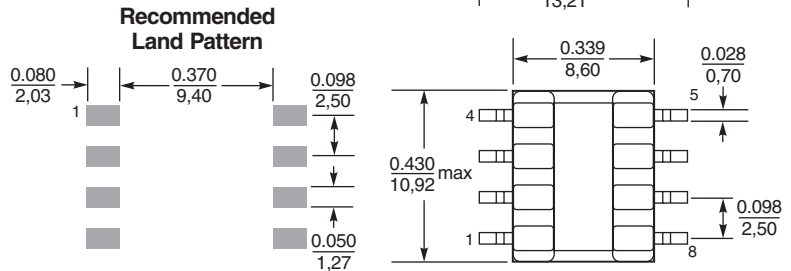
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance is measured at 250 kHz, 0.2 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 winding 7 – 6 not used on FCT1-120K2SL and FCT1-150K2SL. For other parts, secondary windings to be connected in parallel on PC board.



Dimensions are in inches / mm

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

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