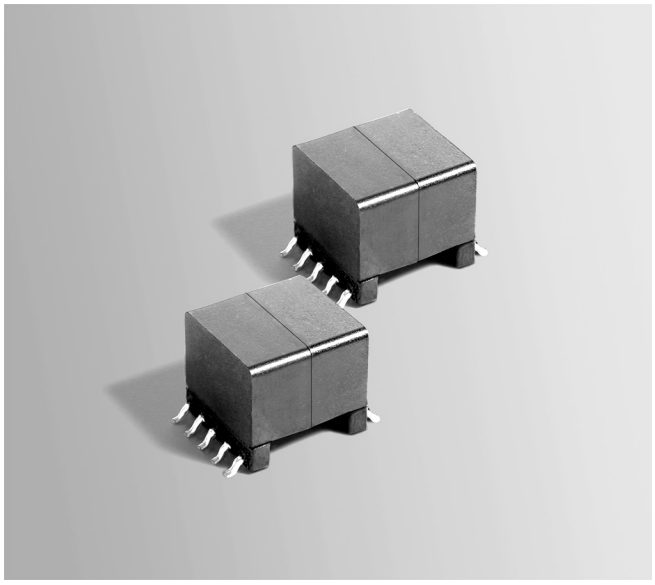
25 W Forward Mode Transformers



- Designed for forward topology operating at 250 kHz
- Three different outputs: 3.3 V, 5.0 V and 12 V
- 33 – 57 V input; excellent for PoE applications
- 1500 Vrms, one minute isolation primary and bias to secondary

Core material Ferrite

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

Weight 6.5 – 6.7 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)

Mean Time Between Failures (MTBF) / Failures in Time (FIT) Calculated per Telcordia SR-322 26,315,789 hours / 38 per billion hours

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 Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number[1]	Inductance[2] nom (µH)	DCR max (mOhms)[3] pri	sec	bias	Leakage inductance[4] max (µH)	Input voltage range (V)	Turns ratio[5] pri : sec	pri : bias	Output[6]
FCT1-33M22SL_	95	115	8.0	347	1.44	33 – 57	1 : 0.16	1 : 0.63	3.3 V, 7.2 A
FCT1-50M22SL_	95	144	18.0	298	0.880	33 – 57	1 : 0.25	1 : 0.53	5.0 V, 4.8 A
FCT1-120M22SL_	95	150	62.5	352	0.725	33 – 57	1 : 0.53	1 : 0.53	12 V, 2.0 A

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

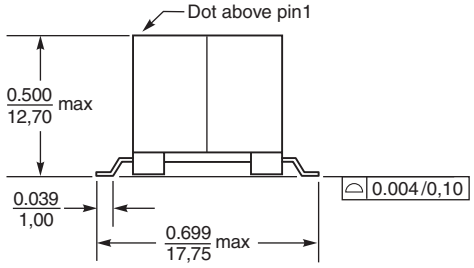
FCT1-50M22SLD

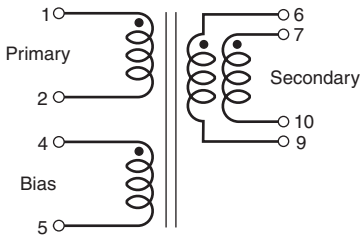
Packaging: **D** = 13″ machine ready reel. EIA-481 embossed plastic tape (175 parts per full reel).

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.

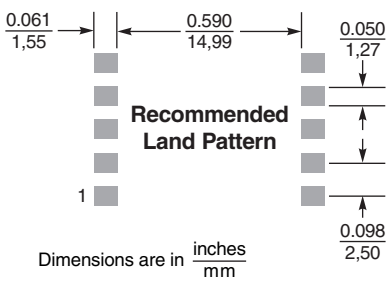
2. Inductance is measured at 250 kHz, 0.1 Vrms, 0 Adc.
3. DCR for the secondary is measured with the windings connected in parallel.
4. Leakage inductance is for the primary and is measured with the secondary shorted.
5. Turns ratio is with the secondary windings connected in parallel.
6. Output is with the secondary windings connected in parallel. Bias winding output is 12 V, 20 mA.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

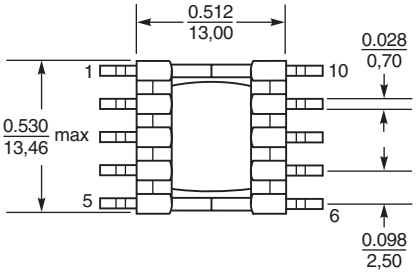




Secondary windings to be connected in parallel on PC board.



Dimensions are in inches / mm



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