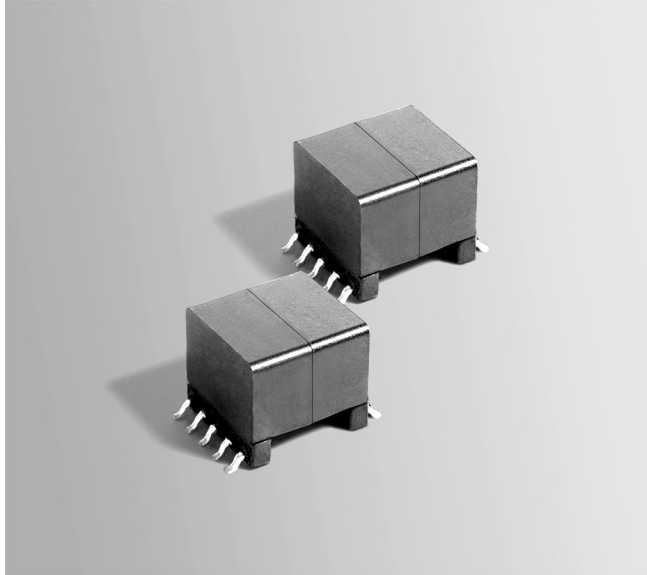


# 25 W Forward Mode Transformers



- 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
- 1500Vrms, 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)

**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 to MIL-STD-202 Method 215 plus an additional aqueous wash. 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	bias			pri : sec	pri : bias	
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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

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.

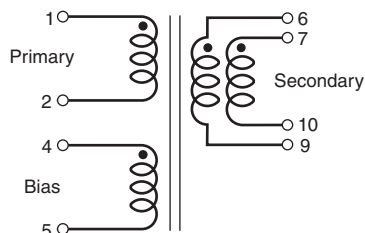
4. Leakage inductance is for the primary and is measured with the secondary shorted.

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.

