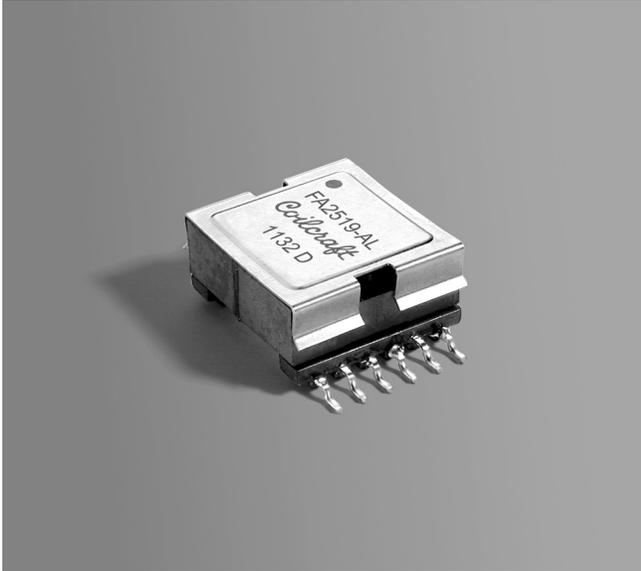




# PoE Transformer

For National Semiconductor LM5071 & LM5072 PD Controllers



The FA2519-AL surface mount flyback transformer was developed specifically for National Semiconductor LM5071 and LM5072 Powered Devices Controllers in 13 Watt Power over Ethernet (PoE) applications.

It is designed to operate at 250 kHz with a PoE input voltage of 36– 72 Volts. It can also accept a 12 V input from auxiliary sources. Output with the secondary windings connected in parallel, is 3.3V, 3.3A. Output of the auxiliary winding is 10V, 20 mA.

Coilcraft can also design custom transformers with voltage, inductance and DCR values to meet your specific requirements.

For free evaluation samples, contact Coilcraft or order them on-line at [www.coilcraft.com](http://www.coilcraft.com).

Part number <sup>1</sup>	L at 0 A <sup>2</sup> ±10% (µH)	L at Ipk <sup>3</sup> ±10% (µH)	DCR max (Ohms) <sup>4</sup>			Leakage L <sup>5</sup> (µH)	Turns ratio <sup>6</sup>		Ipk <sup>3</sup> (A)	Isolation <sup>7</sup> (Vrms)
			pri	aux	sec		pri : sec	pri : aux		
FA2519-AL_	55	40.2	0.026	0.388	0.0026	0.62	1 : 0.20	1 : 0.60	2.4	1500

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

**FA2519-ALD**

**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (175 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 for the primary, measured at 250 kHz, 0.7 Vrms, 0 Adc.

3. Ipk is the peak current drawn at minimum input voltage.

4. DCR for the primary and for the secondary is with the windings connected in parallel.

5. Leakage inductance measured on the primary windings with all secondary pins shorted.

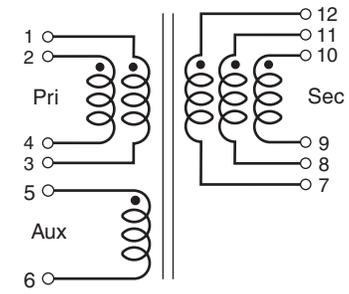
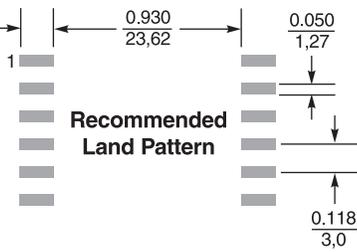
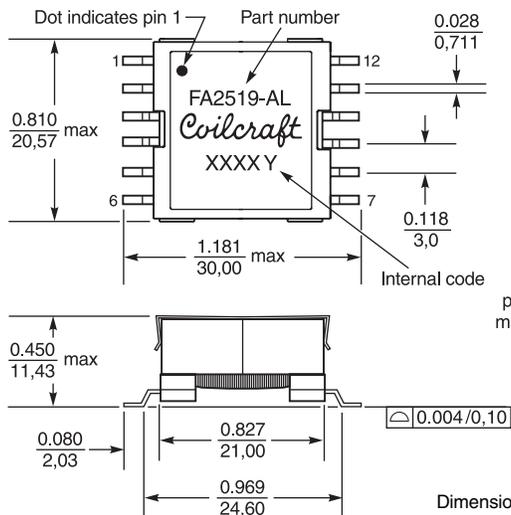
6. Turns ratio is with the primary windings and the secondary windings connected in parallel.

7. Isolation is from primary and auxiliary windings to secondary windings for one minute.

8. Operating temperature range -40°C to +125°C.

9. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Primary windings and secondary windings to be connected in parallel on PC board.

**Weight** 13.5 g  
**Terminations** Tin-silver over tin over nickel over phos bronze  
**Packaging** 175 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 28 mm pocket spacing, 11.9 mm pocket depth



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