



# Flyback Transformers

For National Semiconductor  
LM5072 High Power PD



- Designed for 25 Watt PoE application
- Input range from 18 to 57 V
- Primary to secondary isolation: 1500 Vrms
- Auxiliary winding output: 11 V, 20 mA

**Core material** Ferrite

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

**Weight** 13.6 – 13.9 g

**Ambient temperature** –40°C to +125°C

**Storage temperature** Component: –40°C to +125°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: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	L at 0 A <sup>2</sup> ±10% (µH)	L at Ipk <sup>3</sup> min (µH)	DCR max (mOhms) <sup>4</sup>			Leakage L (µH) <sup>5</sup>	Turns ratio <sup>6</sup>		Ipk <sup>3</sup> (A)	Output <sup>7</sup>
			pri	sec	aux		pri : sec	pri : aux		
FA2677-AL_	50	40.8	26	2.6	328	2.20	1:0.12	1:0.41	2.9	3.3 V, 7.5 A
FA2898-AL_	50	40.8	26	4.0	315	1.05	1:0.18	1:0.41	2.9	5 V, 5 A
FA2899-AL_	50	40.8	26	13	315	0.473	1:0.35	1:0.41	2.9	9 V, 2.8 A
FA2900-AL_	50	40.8	26	20	315	0.409	1:0.47	1:0.41	2.9	12 V, 2.1 A
FA2901-AL_	50	40.8	26	37	305	0.381	1:0.59	1:0.41	2.9	15 V, 1.7 A

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

**FA2898-AL D**

**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (175 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 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 the secondary is with windings connected in parallel.

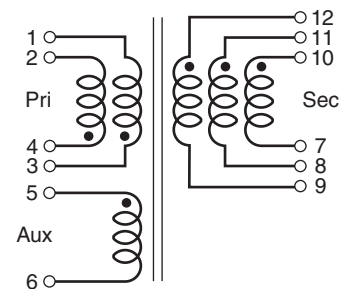
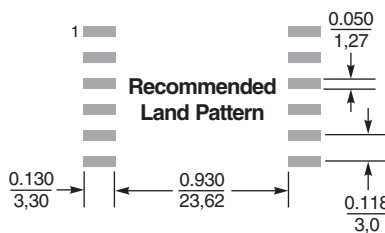
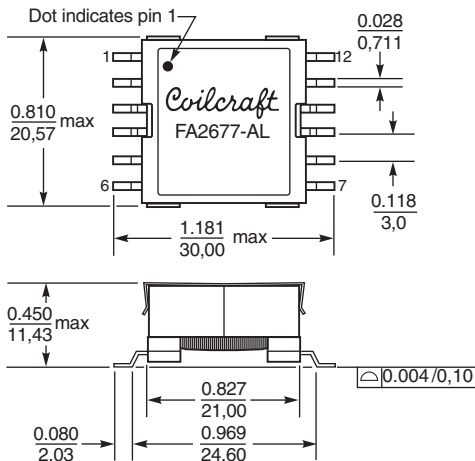
5. Leakage inductance measured on the primary windings with all secondary pins shorted.

6. Turns ratios are with the primary windings and the secondary windings connected in parallel.

7. Output is with the secondary windings connected in parallel.

8. Electrical specifications at 25°C.

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



The primary windings and the secondary windings are to be connected in parallel on the PC board.

Dimensions are in inches  
mm



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

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