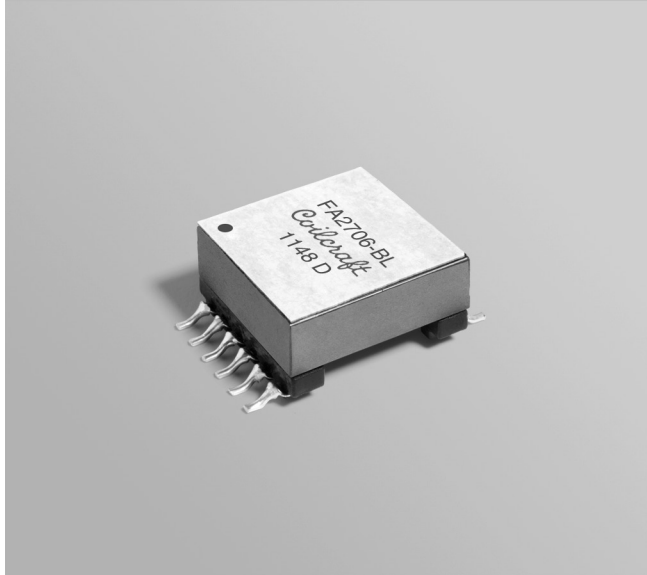




Flyback Transformers

For STMicroelectronics PM8800
PoE Powered Device Controller



- Flyback transformers developed for STMicroelectronics
- Operates at 250 kHz with 30 – 60 V input
- Versions for 5 V and 3.3 V output in 20 Watt applications
- 1500 Vrms, one minute isolation primary and bias to secondary windings

Core material Ferrite

Weight 8.3 – 8.5 g

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

Ambient temperature –40°C to +125°C

Storage temperature Component: –40°C to +125°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 200 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 24 mm pocket spacing, 11.5 mm pocket depth

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

| Part number ¹ | L at 0A ² ±10% (µH) | L at Ipk ³ min (µH) | DCR max (Ohms) ⁴ | | | | Leakage inductance ⁵ max (µH) | Turns ratio ⁶ | | | Ipk ³ (A) | Output ⁷ |
|--------------------------|-----------------------------------|-----------------------------------|-----------------------------|-------|-------|-------|---------------------------------------------|--------------------------|-----------|---------|-------------------------|---------------------|
| | | | pri | sec | drive | aux | | pri:sec | pri:drive | pri:aux | | |
| FA2706-BL | 77.8 | 70.0 | 0.155 | 0.008 | 0.215 | 0.382 | 1.53 | 6.80:1 | 4.25:1 | 2.43:1 | 3.0 | 3.3 V, 6 A |
| FA2707-BL | 77.8 | 70.0 | 0.155 | 0.019 | 0.210 | 0.380 | 1.10 | 4.86:1 | 4.25:1 | 2.43:1 | 3.0 | 5.0 V, 4 A |

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

FA2707-BLD

Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (200 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, 0.2 Vrms.

3. Peak primary current drawn at minimum input voltage.

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

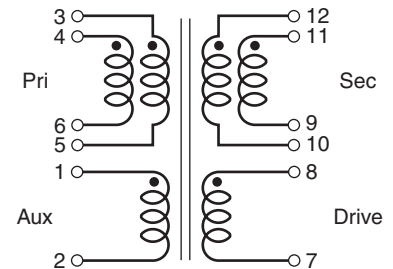
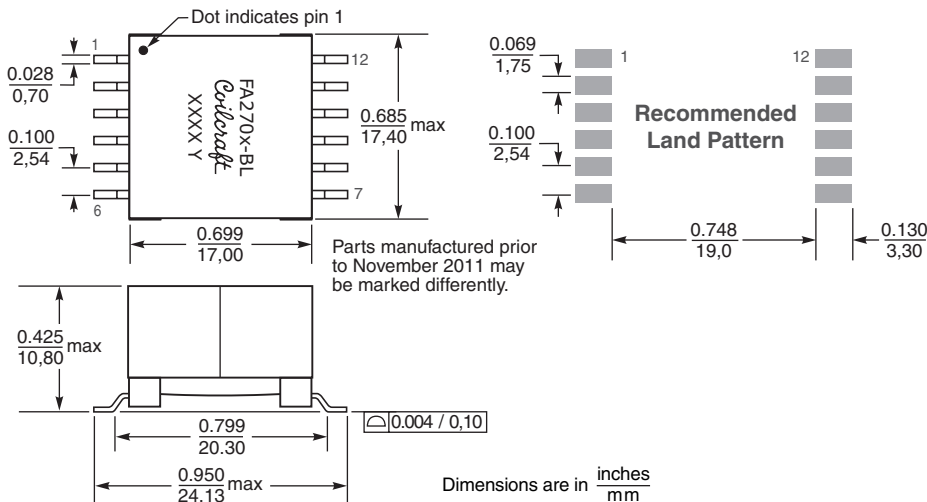
5. Leakage inductance is for the primary, measured with the secondary and drive windings shorted.

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

7. Output of the secondary is with the windings connected in parallel. Aux winding output is 10 V; drive winding output is 5.5 V.

8. Electrical specifications at 25°C.

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



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