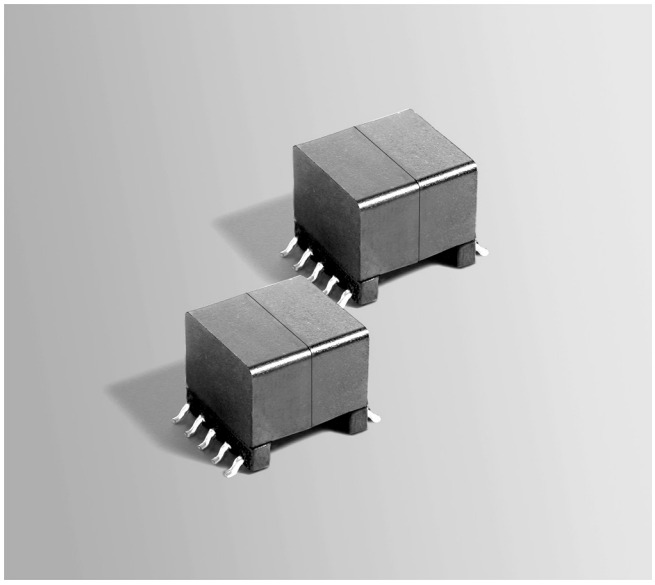
Flyback Transformers

For STMicroelectronics PM8803 PoE Plus Powered Device Controller



- Designed to operate at 250 kHz in continuous conduction mode with 42–57 Volts input
- 1500 Vrms, one minute isolation from the primary and bias windings to the secondary windings

Core material Ferrite

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

Weight 6.5 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°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: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number[1]	Power (W)	Inductance at 0 A[2] ±10% (µH)	Inductance at Ipk[3] min (µH)	DCR max (Ohms)[4] pri	sec	bias	Leakage inductance[5] max (µH)	Turns ratio[6] pri : sec	pri : bias	Ipk[3] (A)	Output[7]
HA3691-AL_	20	100	90.0	0.185	0.0085	0.340	0.805	1 : 0.25	1 : 0.469	1.3	5 V, 4 A
JA4173-AL_	20	100	90.0	0.211	0.0060	0.404	1.60	1 : 0.156	1 : 0.50	1.3	3.3 V, 6 A

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

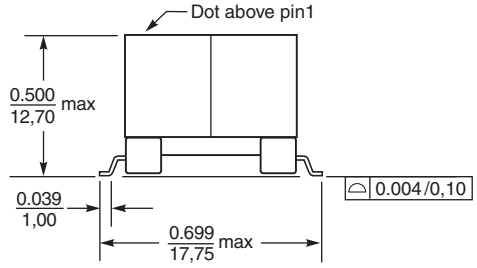
HA3691-ALD

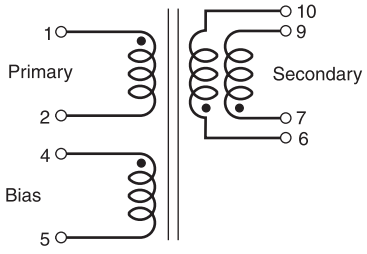
Packaging: D = 13″ machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel).

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.

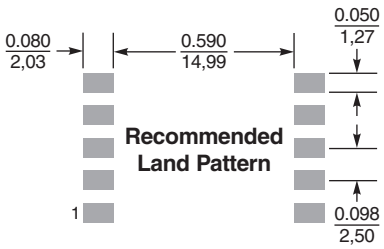
2. Inductance measured at 250 kHz, 0.2 Vrms, 0 Adc.
3. Peak primary current drawn at minimum input voltage.
4. DCR for the secondary is with windings connected in parallel.
5. Leakage inductance is for the primary and is measured with the secondary shorted.
6. Turns ratio is with the secondary windings connected in parallel.
7. Output of the secondary is with the windings connected in parallel. Bias winding output is 10 V, 20 mA.
8. Electrical specifications at 25°C.

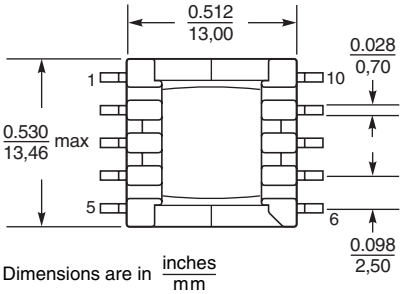
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.





Secondary windings to be connected in parallel on PC board





Dimensions are in inches / mm

Coilcraft®
www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg