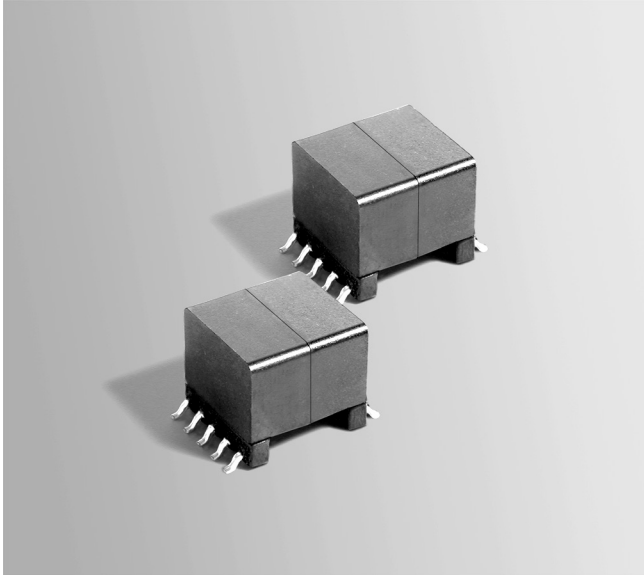




Flyback Transformers

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.
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 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 I _{pk} ³ min (µH)	DCR max (Ohms) ⁴			Leakage inductance ⁵ max (µH)	Turns ratio ⁶		I _{pk} ³ (A)	Output ⁷
				pri	sec	bias		pri : sec	pri : bias		
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:

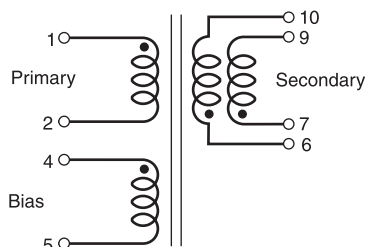
HA3691-ALD

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

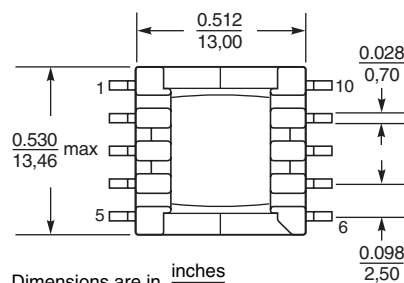
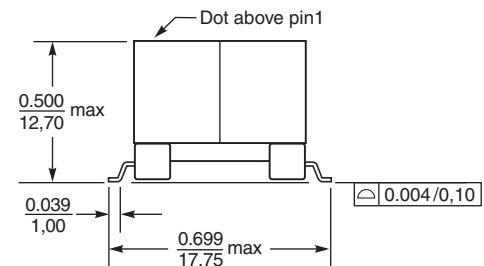
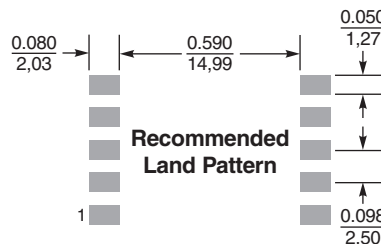
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance measured at 250 kHz, 0.2 Vrms, 0 Adc.
- Peak primary current drawn at minimum input voltage.
- DCR for the secondary is with windings connected in parallel.
- Leakage inductance is for the primary and is measured with the secondary shorted.
- Turns ratio is with the secondary windings connected in parallel.
- Output of the secondary is with the windings connected in parallel. Bias winding output is 10 V, 20 mA.
- 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

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