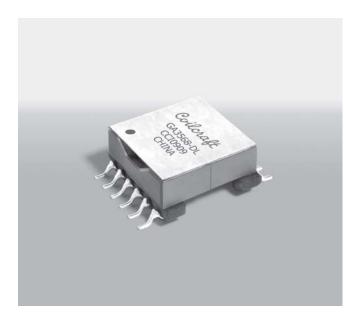




# Flyback Transformers

## For Akros AS1135 **PoE Controller**



- Flyback transformers for IEEE802.3at PoE applications
- Input voltage GA3568: 36 57 V; HA3809: 10 57 V
- · 1500 Vrms isolation from primary and bias to secondary and sync windings.

#### Core material Ferrite

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

**Weight** 11.4 – 11.8 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

□ 0.004/0,10

Part	Inductance Inductance at 0 A <sup>2</sup> at Ipk <sup>3</sup>			DCR max (Ohms)4			Leakage inductance5	Turns ratios <sup>6</sup>			Ipk <sup>3</sup>	
number <sup>1</sup>	±10% (µH)	min (µH)	pri	sec	bias	sync	max (µH)	pri : sec	pri : bias	pri : sync	(A)	Output <sup>7</sup>
GA3568-DL_	60	54	0.132	0.0055	0.220	0.200	1.20	1:0.167	1:0.29	1:0.29	2.6	3.3 V, 9.1 A
HA3809-AL_	30	25	0.042	0.010	0.165	0.165	0.680	1:0.176	1:0.29	1:0.29	3.9	3.3 V, 9.1 A

1. When ordering, please specify termination and packaging codes:

## HA3809-A L D

**Termination:** L = RoHS tin-silver over tin over nickel over phos bronze.

Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

**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 is for the primary, measured at 300 kHz, 0.7 Vrms. For the GA3568-AD inductance is per winding.
- 3. Peak primary current drawn at minimum input voltage.
- 4. DCR for the secondary is with the windings connected in parallel. For GA3568-AD DCR for the primary is with both windings connected in parallel.
- 5. Leakage inductance is for the primary windings with the secondary windings shorted.
- 6. Turns ratios are for the full primary (pni 3 to pin 1) and with the secondary windings connected in parallel.
- 7. Output of the secondary is with the windings connected in parallel. Bias winding output is 5 V, 20 mA.

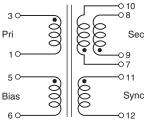
8. Electrical specifications at 25°C.

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

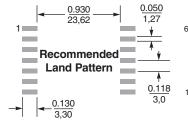
# GA3568-DL 0 10 Sec 09 Sync Bias

Secondary windings to be connected in parallel on PC board.

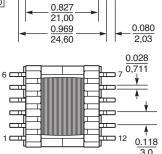
### HA3809-AL



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



Dimensions are in inches



Dot indicates pin 1

1.181 max

30,00

**—**12

 $\frac{0.810}{20,57}$  max

 $\frac{0.425}{10,80}$  max

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

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