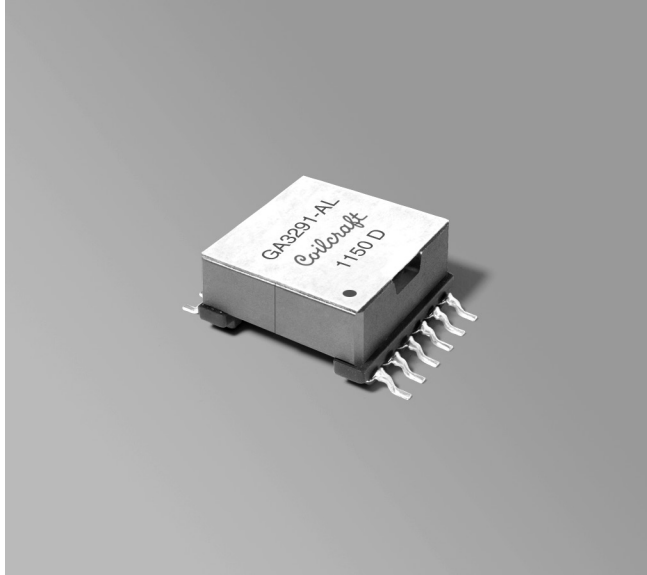




# Forward Converter Transformer

For Akros AS1130  
PoE Controller



- Developed for Akros Silicon AS1130, 30 W PoE Controller with Integrated DC-DC Conversion
- Designed for forward topology operating at 350 kHz
- 1500 Vrms, one minute isolation from primary to secondary

**Core material** Ferrite

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

**Weight** 10.7 g

**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** 175 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±25% (µH)	DCR max (Ohms) <sup>3</sup>		Leakage inductance <sup>4</sup> max (µH)	Input voltage range (V)	Turns ratio <sup>5</sup> pri : sec	Output	Input filter inductor	Output filter inductor
		pri	sec						
GA3291-AL_	203	0.065	0.031	0.215	36 – 57	1 : 0.923	12 V, 2.5 A	DO1608C-103	MSS1278-683

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

**GA3291-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 is measured at 300 kHz, 0.6 Vrms, 0 Adc.

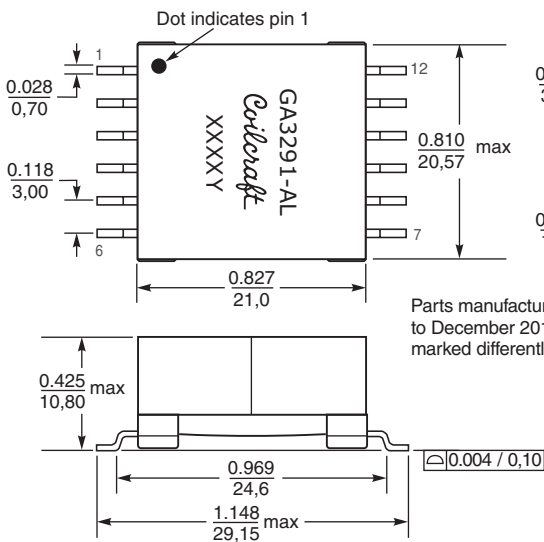
3. DCR for the primary is measured from pin 1 to pin 3.

4. Leakage inductance is for the primary (pin 1 to pin 3) and is measured with the secondary shorted.

5. Turns ratio is based on the entire the primary winding (pin 1 to pin 3).

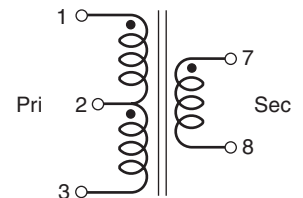
6. Electrical specifications at 25°C.

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



Parts manufactured prior to December 2011 may be marked differently.

Dimensions are in inches / mm



Primary is pin 1 to pin 3. Terminal 2 is for internal connection only. Do not connect terminal 2 to ground or any circuitry.



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