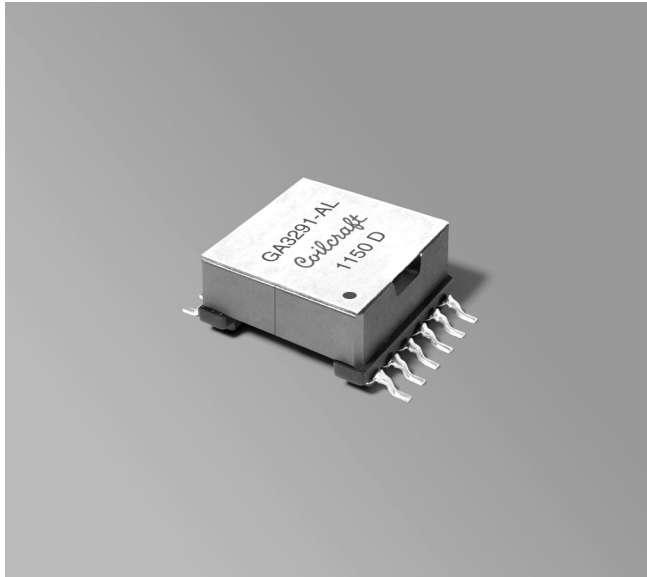




# Forward Converter Transformer

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)

**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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance is measured at 300 kHz, 0.6 Vrms, 0 Adc.

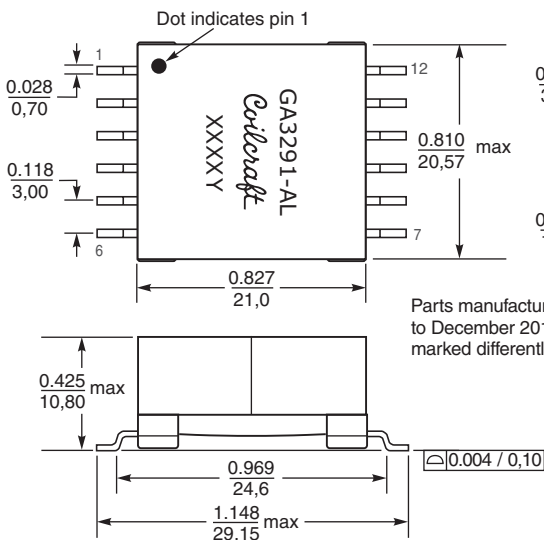
3. DCR for the primary is measured from pin 1 to pin 3.

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.

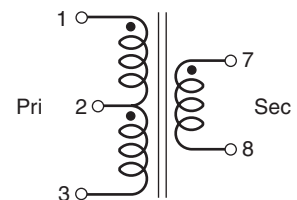
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Parts manufactured prior to December 2011 may be marked differently.

Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

**Recommended Land Pattern**



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



**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

Document 674 Revised 11/17/21  
 © Coilcraft Inc. 2021  
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.