

# AEC

## **Isolation Transformers**

### For Analog Devices ADuM347x Quad-Channel Digital Isolators



- AEC-Q200 Grade 1 (-40°C to +125°C)
- Developed to work with Analog Devices ADuM347x quadchannel, digital isolators in automotive applications
- · Power rating: 2 Watts
- Designed to meet UL/CSA/IEC 60950 Basic Insulation with 1.5 mm creepage and clearance.

#### Core material Ferrite

**Terminations** Tin-silver over tin over nickel over phos bronze **Isolation** 2500 Vrms primary to secondary; 1250 Vrms windings to core

**Weight** 0.95 – 0.99 g

Ambient temperature -40°C to +125°C

Maximum part temperature +150°C (ambient + temp rise)

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  $<30^{\circ}$ C / 85% relative humidity)

**Packaging** 600/13" reel; Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.1 mm pocket depth

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

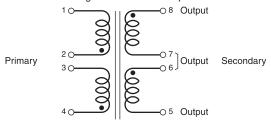
				Pri / output voltages				max	Leakage V	Volt-time
Part number <sup>1</sup>	Inductance <sup>2</sup> min (uH)	Turns ratio	pri	output (pin8)	output (pins 6 & 7)	output (pin 5)	(Oh pri	ms) <sup>3</sup> sec	inductance <sup>4</sup> max (µH)	product⁵ (V-usec)
PA6547-AL	_ 63.75	1:2	5 V	+3.3 to +5 V	0 V	No output	0.095	0.190	0.460	17.6
PA6548-AL	_ 63.75	1:3	5 V	+12 to +15 V	+6 to +7.5 V	0 V	0.122	0.260	0.660	17.6
PA6549-AL_	_ 63.75	1:5	5 V	+12 to +15 V	0 V	-12 to -15 V	0.095	1.17	0.515	17.6

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

#### PA6549-ALD

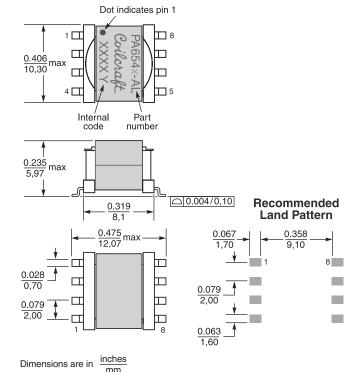
- Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (600 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
  - B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.
- 2. Inductance is for the primary, measured from pins 4-3 at 1 kHz, 0.1 Vrms.
- 3. DCR is for each winding of the primary and secondary.
- Leakage inductance is for the primary windings, measured from pins 1-4 with all secondary windings shorted.
- 5. Based on Bsat of the core at 25°C and the number of turns on winding 4 3.
- 6. Electrical specifications at 25°C.

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



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

Analog Devices is a trademark of Analog Devices, Inc.





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 1251 Revised 07/09/24

© Coilcraft Inc. 2024

This product may not be used in medical or high risk applications without prior Collcraft approval. Specification subject to change without notice. Please check web site for latest information.