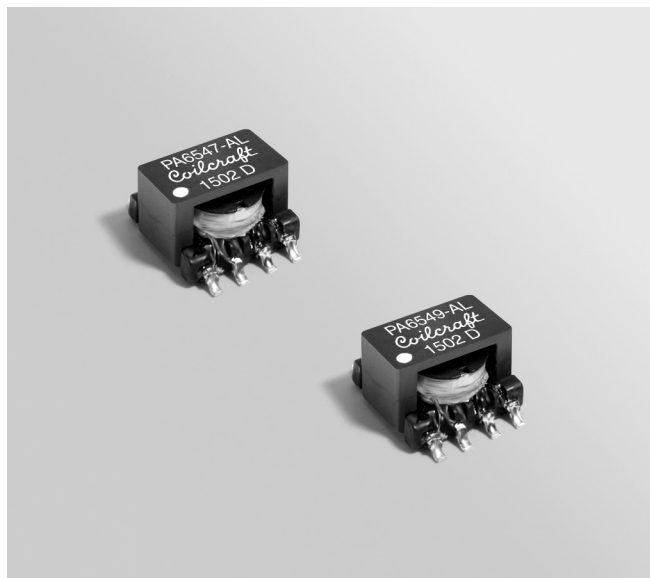


# Isolation Transformers

For Analog Devices ADuM347x  
Quad-Channel Digital Isolators



- AEC-Q200 Grade 1 qualified
- Developed to work with Analog Devices ADuM347x quad-channel, 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 winding to core

**Weight** 0.95 – 0.98 g

**Ambient temperature** –40°C to +125°C

**Maximum part temperature** +165°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°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** 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](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> min (μH)	Turns ratio	Pri / output voltages				DCR max (Ohms) <sup>3</sup>		Leakage inductance <sup>4</sup> max (μH)	Volt-time product <sup>5</sup> (V-μsec)
			pri	output (pin8)	output (pins6 & 7)	output (pin5)	pri	sec		
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).

**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 from pins 4–3 at 1 kHz, 0.1 Vrms.

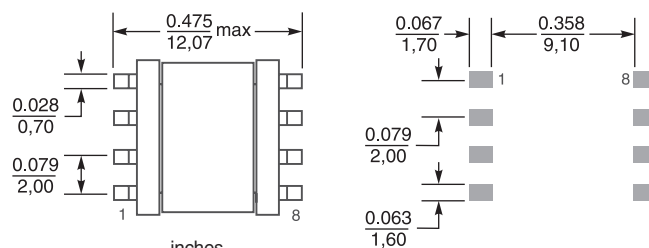
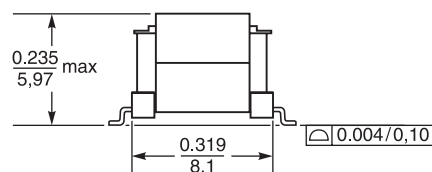
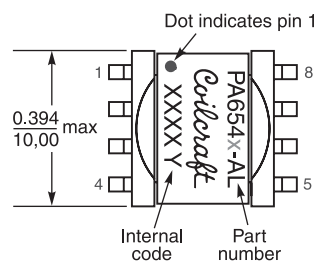
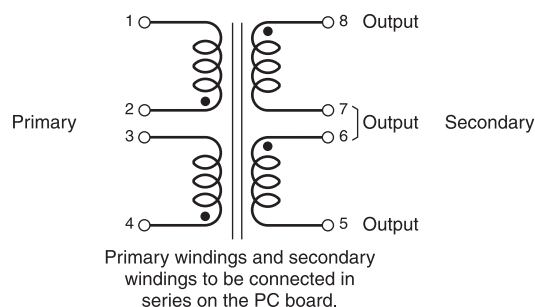
3. DCR is for each winding of the primary and secondary.

4. Leakage inductance is for the primary windings, measured from pins 1–4 with all secondary windings shorted.

5. Based on Bs<sub>at</sub> 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.



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

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