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 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 windings to core
Weight: 0.95 – 0.99 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)

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


<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance&lt;sub&gt;a&lt;/sub&gt; (µH)</th>
<th>Turns ratio</th>
<th>Pri / output voltages</th>
<th>DCR max (µHms)&lt;sub&gt;b&lt;/sub&gt;</th>
<th>Leakage inductance&lt;sub&gt;c&lt;/sub&gt; (µH)</th>
<th>Volt-time product&lt;sub&gt;d&lt;/sub&gt; (V·µsec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA6547-AL_</td>
<td>63.75</td>
<td>1 : 2</td>
<td>5 V +3.3 to +5 V</td>
<td>0 V</td>
<td>0.095</td>
<td>0.460</td>
</tr>
<tr>
<td>PA6548-AL_</td>
<td>63.75</td>
<td>1 : 3</td>
<td>5 V +12 to +15 V</td>
<td>+6 to +7.5 V</td>
<td>0.122</td>
<td>0.660</td>
</tr>
<tr>
<td>PA6549-AL_</td>
<td>63.75</td>
<td>1 : 5</td>
<td>5 V +12 to +15 V</td>
<td>0 V −12 to −15 V</td>
<td>0.095</td>
<td>0.515</td>
</tr>
</tbody>
</table>

1. When ordering, please specify a packaging code:
   - PA6549-AL<sub>D</sub>

   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.
4. Leakage inductance is for the primary windings, measured from pins 1–4 with all secondary windings shorted.
5. Based on BS of the core at 25°C and the number of turns on winding 4–3.
6. Electrical specifications at 25°C.

Refer to Doc362 “Soldering Surface Mount Components” before soldering.

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