# Isolation Transformers

For Analog Devices ADuM4070 Isolated Switching Regulator

- Developed to work with Analog Devices ADuM4070 isolated switching regulator with integrated feedback
- Power rating: 2 Watts
- 5000 Vrms, one second isolation from primary to secondary.

## Core material
- Ferrite

## Terminations
- Tin-silver-copper over tin over nickel over phos bronze

## Weight
- 10.1 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 with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

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## Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance (µH)</th>
<th>Turns ratio</th>
<th>Pri / output voltages</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Volt-time product (V-µsec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR7983-CL_1</td>
<td>256</td>
<td>1 : 2</td>
<td>Pri (pin 5)</td>
<td>0.28</td>
<td>0.160</td>
<td>0.75</td>
</tr>
<tr>
<td>CR7984-CL_1</td>
<td>256</td>
<td>1 : 3</td>
<td>Output (pins 6 &amp; 8)</td>
<td>0.354</td>
<td>0.170</td>
<td>0.75</td>
</tr>
<tr>
<td>CR7985-CL_1</td>
<td>256</td>
<td>1 : 5</td>
<td>Output (pin 7)</td>
<td>0.425</td>
<td>0.170</td>
<td>0.72</td>
</tr>
</tbody>
</table>

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

   **CR7985-CLD**

   **Packaging:**
   - **D** = 13” machine ready reel. EIA-481 embossed plastic tape (175 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 12–11 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 12–11 with all secondary windings shorted.
5. Based on $V_{IN}$ max, $F_{SW}$ min and number of primary turns
6. Electrical specifications at 25°C

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.