50 Ω DUT Board TB-50/SMA

Advanced TLP/HMM/HBM Solutions

1 Features

- 50 Ω DUT Board with SMA interface for TLP measurement of packaged devices
- DUT pad pitch range from 0.5 mm up to 25 mm with excellent RF performance due to grounded coplanar transmission line design and GND via array
- ROGERS high frequency RO4003C, 0.032 " (0.813 mm) thick hydrocarbon ceramic laminate
- Gold-plated
- typ. 0.2 dB at 3 GHz insertion loss
- 30 mm x 14 mm size

2 Description

The TB-50/SMA DUT board can be used for TLP measurement of packaged devices in a 50 Ω system. The transmission line of the DUT board is configured as a grounded coplanar structure with 0.5 mm gap. The design parameter of the grounded coplanar transmission line are shown in Fig. 1.

![Figure 1: TB-50/SMA DUT board grounded coplanar transmission line design. Dimensions are in [mm] and [MHz] if not specified.](image1)

Fig. 2 shows top and bottom view of the board. For 0.5 mm pad pitch the DUT should be soldered at location A and B. For DUT pad pitch up to 25 mm the device can be soldered at location C and D without any loss in RF performance of the TLP measurement due to the GND via array of the board.

![Figure 2: TB-50/SMA DUT board top and bottom view (size 30 mm x 14 mm).](image2)

3 Electrical Characteristics

3.1 Frequency Response

Fig. 3 shows the typical insertion loss of the DUT board with reference planes at the SMA connectors.

![Figure 3: TB-50/SMA DUT board typical insertion loss.](image3)

4 Ordering Information

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>01</td>
<td>50 Ω DUT Board</td>
<td>TB-50/SMA</td>
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</tbody>
</table>

General

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