Skew Matched Pair 2.92mm Male to 2.92mm Male Cable FM-125LLS Coax and RoHS

The 2.92mm male to 2.92mm male skew matched coaxial pair, part number FMCA1557, from Fairview Microwave is in-stock and ships same day. This 2.92mm to 2.92mm flexible cable assembly pair is delay matched to reduce skew, supporting signal integrity, jitter measurements and SERDES applications. Fairview Microwave phase matches these coaxial pairs to control the time delay so signals can be applied to differential circuits with minimal skew. The FMCA1557-24 2.92mm male to 2.92mm male matched cable pair operates to 40 GHz.

Fairview’s 2.92mm to 2.92mm male skew matched pair FMCA1557 datasheet, specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and high speed digital connections allows designers to configure and customize their signals however they like. From reducing skew, improving jitter performance or performing signal integrity testing, Fairview Microwave has the right delay matched cable solutions to meet your needs.

Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>0.05</td>
<td>40</td>
<td></td>
<td>GHz</td>
</tr>
<tr>
<td>VSWR</td>
<td></td>
<td>1.4</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>1.4</td>
<td></td>
<td>4.59</td>
<td>dB/ft</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dB/m</td>
</tr>
<tr>
<td>Velocity of Propagation</td>
<td>74</td>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Capacitance</td>
<td>27</td>
<td></td>
<td></td>
<td>pF/ft [pF/m]</td>
</tr>
<tr>
<td>Channel-to-Channel Delay Match</td>
<td>1</td>
<td></td>
<td></td>
<td>ps</td>
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</tbody>
</table>

Performance by Frequency

<table>
<thead>
<tr>
<th>Description</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>GHz</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>0.19</td>
<td>0.43</td>
<td>0.63</td>
<td>0.92</td>
<td>1.37</td>
<td>dB/ft</td>
</tr>
<tr>
<td></td>
<td>0.62</td>
<td>1.41</td>
<td>2.07</td>
<td>3.02</td>
<td>4.49</td>
<td>dB/m</td>
</tr>
</tbody>
</table>

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Electrical specifications are per channel. Delay match applies when cables are bent in same shape/configuration.

Mechanical Specifications

Cable Assembly

Cable
- Cable Type: FM-125LLS
- Impedance: 50 Ohms
- Inner Conductor Type: Stranded
- Inner Conductor Material and Plating: Copper, Silver
- Dielectric Type: PTFE
Number of Shields: 1
Shield Layer 1: Silver Plated Copper
Outer Conductor Material and Plating: Copper, Silver
Outer Conductor Plating Specification: Flat Braid
Outer Conductor Diameter: 0.084 in [2.13 mm]
Jacket Material: FEP
Jacket Diameter: 0.124 in [3.15 mm]

Connectors

<table>
<thead>
<tr>
<th>Description</th>
<th>Connector 1</th>
<th>Connector 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>2.92mm Male</td>
<td>2.92mm Male</td>
</tr>
<tr>
<td>Contact Material &amp; Plating</td>
<td>Beryllium Copper, Gold</td>
<td>Beryllium Copper, Gold</td>
</tr>
<tr>
<td>Dielectric Type</td>
<td>Polyphenylene Oxide</td>
<td>Polyphenylene Oxide</td>
</tr>
<tr>
<td>Body Material &amp; Plating</td>
<td>Steel, Passivated</td>
<td>Steel, Passivated</td>
</tr>
<tr>
<td>Coupling Nut Material &amp; Plating</td>
<td>Steel, Passivated</td>
<td>Steel, Passivated</td>
</tr>
<tr>
<td>Seal Gasket Material</td>
<td>Silicone Rubber</td>
<td>Silicone Rubber</td>
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</tbody>
</table>

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
Typical Performance Data

ELECTRICAL LENGTH (TWO WAY) = 10974PS
ELECTRICAL LENGTH (ONE WAY) = 5487PS
VSWR IS 1.4 max INSERTION LOSS IS 6 db
TEST PASSED

How to Order

Part Number Configuration:  

FMCA1557 - xx uu

Example: FMCA1557-12 = 12 inches long cable
         FMCA1557-100cm = 100 cm long cable
Skew Matched Pair 2.92mm Male to 2.92mm Male Cable FM-125LLS Coax and RoHS from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Skew Matched Pair 2.92mm Male to 2.92mm Male Cable FM-125LLS Coax and RoHS FMCA1557

Skew Matched Pair 2.92mm Male to 2.92mm Male Cable FM-125LLS Coax and RoHS

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

FAIRVIEW MICROWAVE INC.
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

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STD TOL
.X   ±0.2
.XX  ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES