

## Low Cost, High Performance Isolated Transmission Line Interconnects

IsoRate™ is a high isolation interconnect system that can offer substantial savings over traditional RF connectors. IsoRate™ utilizes Edge Rate™ contacts to achieve high isolation at approximately half the cost of screw-machined RF systems.

1 Meter Cable Assembly	Frequency
Insertion Loss = 3 dB	9.5 GHz
Return Loss = 15 dB	2.2 GHz
VSWR = 1.4	2.1 GHz
Isolation = 60 dB	3.1 GHz

10mm Mezzanine Stackers	Frequency
Insertion Loss = 3 dB	10.5 GHz
Return Loss = 15 dB	5.5 GHz
VSWR = 1.4	5.4 GHz
Isolation = 60 dB	8.8 GHz
Isolation = 70 dB	7.6 GHz
Isolation = 80 dB	1.3 GHz

Contact <u>SIG@samtec.com</u> for additional test data.

IsoRate<sup>™</sup> systems are available for Board-to-Board (<u>IP5/IJ5</u> Series) and Cable-to-Board (<u>IJ5C</u> Series)



applications. Both application sets are currently compatible for  $50\Omega$  systems, while the <u>IJ7</u> and <u>IP7</u> are compatible for  $75\Omega$  systems.

Cable assemblies are available with high performance 50Ω, 26 AWG, RG 316 discrete wire. IsoRate™ assemblies range in

length from 10mm to 1m and offer a rugged positive latching mechanism as standard. Additional specifications and product links appear in the chart to the left.

IsoRate<sup>™</sup> Board-to-Board interconnects offer rugged Edge Rate<sup>™</sup> contacts in vertical and right angle configurations. The board-to-board stack height is 10mm, and the contact pitch is 4mm. IsoRate<sup>™</sup> contacts can also be incorporated into traditional board-to-board connectors.

For more information, contact our Signal Integrity Group at <u>SIG@</u> samtec.com.

## Isolated Transmission Line Jack & Plug



• Rows: Single or Double

• **Positions:** 1, 2, 4, 6, or 8 per row

Centerline: 4mm (.1575")Stack Height: 10mm

• Orientation: Vertical and Right Angle

· Status: Released

• **Jack:** IJ5 • **Plug:** IP5

## Isolated Transmission Line Cable Assembly



• Rows: Single

• **Positions:** 1, 2, 4, 6, or 8 per row

• Centerline: 4mm (.1575")

• Wire: 26 AWG, RG 316 coax cable

· Features: Positive Latching

End Options: PlugStatus: Released

• Cable Assembly: IJ5C