

**Series:** QRM8-DP / QRF8-DP Series

**Description:** 0.8 mm Q Rate® High-Speed Ground Plane, Slim Body, Differential Pair, 10mm Stack Height

## Connector Overview

The 0.8mm (.0315”) centerline terminal (QRM8-DP) and socket (QRF8-DP) strip series is designed for high-speed board-to-board applications where signal integrity is essential. Q Rate® Interconnects are a rugged contact design offering a slim footprint. Q Rate® connectors combine Edge Rate™ contacts with an integral ground/power plane to improve electrical performance. QRM8-DP/QRF8-DP is a double row contacts system available with up to 108 I/Os in stack heights from 7mm (.276”) through 14mm (0.551”). The data in this report is applicable only to a 10mm stack height

## Connector System Speed Rating

QRF8-DP/QRM8-DP Series, 0.8mm (.0315”) Centerline, 10mm (0.394”) Stack Height

### Signaling

### Speed Rating

Differential:

**20 GHz/ 40Gbps**

The Speed Rating is based on the -3 dB insertion loss point of the connector system. The -3 dB point can be used to estimate usable system bandwidth in a typical, two-level signaling environment.

To calculate the Speed Rating, the measured -3 dB point is rounded-up to the nearest half-GHz level. The up rounding corrects for a portion of the test board’s trace loss, since a short length of trace loss included in the loss data in this report. The resulting loss value is then doubled to determine the approximate maximum data rate in Gigabits per second (Gbps).

For example, a connector with a -3 dB point of 7.8 GHz would have a Speed Rating of 8 GHz/ 16 Gbps. A connector with a -3 dB point of 7.2 GHz would have a Speed Rating of 7.5 GHz/ 15 Gbps.