Series: QFS-RA/QMS (-06.75 lead style)
Description: Q2™ High-Speed Rugged Ground Plane Terminal/Socket Strip, 0.635mm Pitch, Right Angle to Vertical Board-to-Board

Connector Overview

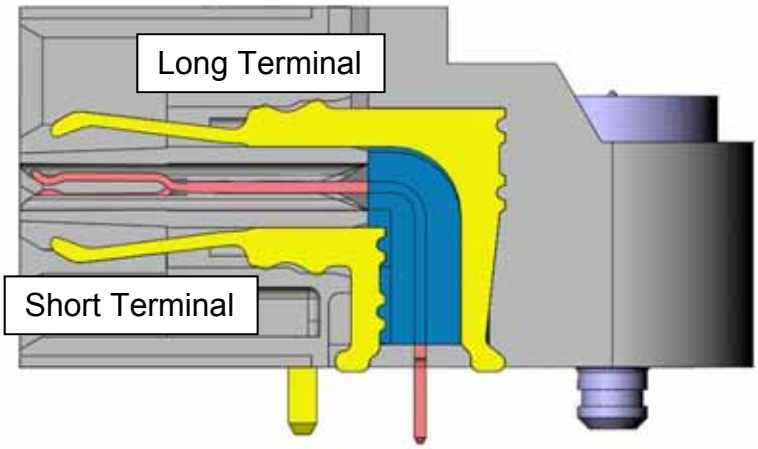
Q2™ High-Speed Rugged Ground Plane Terminal/Socket Strip, 0.635mm (0.0250") pitch interfaces (QMS/QFS Series) are available with up to 104 contacts per row.

QMS/QFS series connecter styles include double row vertical, right angle and edge-mount styles. The data in this report is applicable only to QFS right angle connector mated to QMS vertical connector.

There are two terminal types in the right angle connector and each terminal has slightly different performance. The terminology used in this report to define which connector terminal is as follows:

*The short terminal of the connector is referred to as “Case 1”
*The long terminal of the connector is referred to as “Case 2”

This is illustrated in the following figure.



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Connector System Speed Rating

QFS-RA/QMS (-06.75 lead style), Micro High Speed Board-to-Board, 0.635mm Pitch, Right Angle to Vertical

Case	Signaling	Speed Rating
1 (Short Row)	Single-Ended:	**16.5 GHz/ 33 Gbps**
	Differential:	**18.5 GHz/ 37 Gbps**
2 (Long Row)	Single-Ended:	**17 GHz/ 34 Gbps**
	Differential:	**20 GHz/ 40 Gbps**

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.