

**Series:** QTH / QSH

**Description:** Parallel Board-to-Board, 0.5mm Pitch, 8mm (0.315") Stack Height

## Connector Overview

Q Strip® .5mm (.0197") pitch interfaces (QSH/QTH Series) are available with up to 300 I/Os and with standard board-to-board spacing of 5mm (0.197"), 8mm (0.315"), 11mm (0.433"), and 16mm (0.630") between boards. Data in this report is applicable only to the 8mm (0.315") board-to-board stack height version.

## Connector System Speed Rating

QSH/QTH Series, Parallel Board-to-Board, 0.5mm Pitch, 8mm (0.315") Stack Height

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended:	<b>8.5 GHz / 17 Gbps</b>
Differential:	<b>8.0 GHz / 16 Gbps</b>

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 trace losses are 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.