

**Series:** SS5/ST5

**Description:** Razor Beam™ Low Profile Terminal/Socket Strip, 0.5mm Pitch, 5mm Stack Height

## Connector Overview

The 0.5mm (0.0197") pitch Razor Beam™ LP Ultra-Fine Pitch Low Profile Terminal/Socket Strip (SS5/ST5 Series) interconnect has been designed in 10, 15, 20, 30, 40 and 50 positions per row. The SS5/ST5 series board-to-board spacing is currently available in 4mm (0.157"), 4.5mm (0.177") and 5mm (0.197") stack heights. The data in this report is applicable only to the 5mm board-to-board mated connector stack height.

## Connector System Speed Rating

SS5/ST5 Series, Board-to-Board, 0.5mm Pitch, 5mm Stack Height

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended:	<b>13.5GHz/ 27Gbps</b>
Differential:	<b>20GHz/ 40Gbps</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 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.