

**Series:** SEAM8/SEAF8

**Description:** Open Pin Field Array, 0.8mm Pitch, 10mm Stack Height

## Connector Overview

SEAM8/SEAF8 is a 0.8mm pitch interconnect system for high-speed board-to-board applications. The open pin field design allows for the assignment of both single-ended and differential pair signaling.

The SEAM8/SEAF8 design includes 4, 6, 8 and 10 row open pin field arrays. Pins per row selections are 10, 20, 30, 40 or 50. This report reflects only the hi-speed electrical characteristics specific to a mated 10mm stack height SEAM8/SEAF8 test system.

## Connector System Speed Rating

SEAM8/SEAF8 Series, 0.8mm x 0.8mm (0.0315" x 0.0315") pitch interconnect, 10mm Stack Height.

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended: 1:1 S/G	<b>10 GHz/ 20Gbps</b>
Single-Ended: 2:1 S/G	<b>10 GHz/ 20Gbps</b>
Differential: Optimal Horizontal	<b>9.5 GHz/ 19Gbps</b>
Differential: Optimal Vertical	<b>17.5 GHz/ 35Gbps</b>
Differential: High Density Vertical	<b>10 GHz/ 20Gbps</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 is 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.