

**Series:** SEAM/SEAF

**Description:** Open Pin Field Array, 1.27mm x 1.27mm Pitch, 10mm Stack Height

## Connector Overview

SEAM/SEAF is a 1.27mm x 1.27mm pitch interconnects system for elevated high-speed board-to-board applications. The open pin field design allows for both single-ended and differential pair signaling to be employed. The SEAM/SEAF Series is available in 4, 5, 6, 8, and 10 row open pin field arrays. Pins per row selections are 20, 30, 40, or 50. This report reflects only the hi-speed electrical characteristics specific to a mated 10mm stack height SEAM/SEAF test system.

## Connector System Speed Rating

SEAM/SEAF Series, 1.27mm x 1.27mm (.050" x .050") pitch interconnect, 10mm Stack Height.

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended: 1:1 S/G	<b>18.0 GHz/ 36Gbps</b>
Single-Ended: 2:1 S/G	<b>17.0 GHz/ 34Gbps</b>
Differential: Optimal Horizontal	<b>18.0 GHz/ 36Gbps</b>
Differential: Optimal Vertical	<b>17.5 GHz/ 35Gbps</b>
Differential: High Density Vertical	<b>17.0 GHz/ 34Gbps</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.