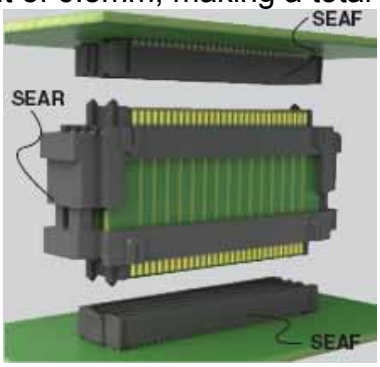
Series: SEAF/SEAR/SEAF
Description: High-Speed, High-Density Array, 85 Ohm Differential Impedance, 1.27mm x 1.27mm Pitch, 43mm Stack Height

Connector Overview

SEAF/SEAR/SEAF series is a 1.27mm x 1.27mm pitch array interconnect system for elevated high-speed board-to-board applications. The SEAF/SEAR/SEAF series has been designed in 4, 6, 8, and 10 rows arrays. Positions per row options that are designed include 10, 15, 20, 30, 40, and 50. The SEAR series riser can be designed to varying impedance and pinout configurations.

This report presents the high-speed electrical characteristics specific to a SEAR 30mm riser, with traces specified at 85 ohm differential impedance, mated to 2 SEAF series socket connectors with a height of 6.5mm; making a total mated stack height of 43mm.



Connector System Speed Rating

SEAF-6.5mm/SEAR-30mm/SEAF-6.5mm Series, 1.27mm x 1.27mm (.050” x .050”) pitch, 85 ohm interconnect

Signaling	Speed Rating
Differential	**8.5 GHz/ 17Gbps**

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.