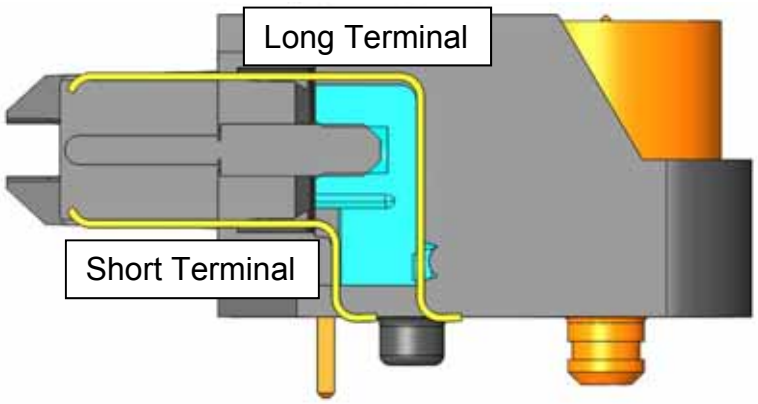
Series: ERF8-RA/ERM8-RA
Description: Edge Rate Series Board-to-Board, 0.8mm Pitch, Right Angle to Right Angle

Connector Overview

Edge Rate Strip Series 0.8mm (0.0315") pitch interfaces (ERF8/ERM8 Series) are available in 5, 10, 11, 13, 20, 25, 30, 35, 40, 49, 50, 60, 70, 75 and 100 positions per row. ERF8/ERM8 series connecter styles include double row vertical, right angle and edge-mount styles. The data in this report is applicable only to ERF8 right angle connector mated to ERM8 right angle connector.

This is a two terminal type right angle connector and each terminal has slightly different performance. The terminology used in this report to define which connector terminal is as follows:

*The short terminal of the connector is referred to as “Case 1”
*The long terminal of the connector is referred to as “Case 2”
This is illustrated in the following figure.



Connector System Speed Rating

ERF8-RA/ERM8-RA Edge Rate Series Board-to-Board, 0.8mm Pitch, Right Angle

Case	Signaling	Speed Rating
1 (Short Row)	Single-Ended:	**15 GHz/ 30 Gbps**
	Differential:	**15.5 GHz/ 31 Gbps**
2 (Long Row)	Single-Ended:	**12 GHz/ 24 Gbps**
	Differential:	**13 GHz/ 26 Gbps**

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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.