

**Series:** TOLC/SOLC, 1.27mm (0.050") Contact Pitch, 0.64mm (0.025") Footprint Pitch  
**Description:**, Board-to-Board, Surface Mount, 6.35mm (0.250") Stack Height

### Connector Overview

SOLC/TOLC Series interfaces are available as a 1.27mm (.050") square pitch quad row connector system. The staggered row system results in a surface mount 0.635mm (.025") terminal pitch. The quad series is available with up to 50 contacts per row and has standard board-to-board spacings of 6.35mm (0.250) and 12mm (0.472). The data in this report is applicable only to the 6.35mm (0.250) board-to-board stack height version.

### Connector System Speed Rating

SOLC/TOLC Series, Quad Row, 1.27mm (.050") pitch, 6.35mm (0.250") Stack Height

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended:	<b>7 GHz / 14 Gbps</b>
Differential:	<b>6.5 GHz / 13 Gbps</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 trace losses are 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.