

Samtec Connector Bandwidth Performance Selector

Differential Pair Standard Configuration - Strips

Series	Pitch	Stack Height	3dB Insertion Loss Point	Series	Pitch	Stack Height	3dB Insertion Loss Point
BTE/BSE	.8mm	5mm 25mm	5.00 GHz 3.00 GHz	QMS-RA/QFS - Q2™	.635mm	-RA	5.50 GHz
BTH/BSH	.5mm	5mm 16mm	8.50 GHz 5.00 GHz	QMS-RA/QFS-RA - Q2™	.635mm	-RA	6.00 GHz
ERM5/ERF5	.5mm	7mm 10mm	9.50 GHz 8.50 GHz	QMSS/QFSS	.635mm	11mm	7.00 GHz
ERM8/ERF8	.8mm	7mm 10mm 16mm	10.50 GHz 8.00 GHz 5.00 GHz	QRM8/QRF8 - Q Rate®	.8mm	7mm 10mm	8.50 GHz 7.00 GHz
ERM8-EM/ERF8	.8mm	-EM	7.50 GHz	QRM8-RA/QRF8	.8mm	-RA	6.00 GHz
ERM8-RA/ERF8	.8mm	-RA	10.00 GHz	QRM8-RA/QRF8-RA	.8mm	-RA	6.50GHz
ERM8-RA/ERF8-RA	.8mm	-RA	9.00 GHz	QTE/QSE - Q Strips®	.8mm	5mm 8mm 11mm 16mm 19mm 25mm	8.00 GHz 8.00 GHz 6.50 GHz 5.00 GHz 5.00 GHz 7.00 GHz
LSHM	.5mm	5mm 12mm	7.00 GHz 6.50 GHz	QTH/QSH - Q Strips®	.5mm	5mm 8mm 11mm 16mm 30mm	8.00 GHz 8.00 GHz 5.00 GHz 5.00 GHz 1.50 GHz
LSHM-DH/LSHM-DV	.5mm		6.00 GHz+	QTS/QSS - Q Strips®	.635mm	5mm 11mm 16mm	8.50 GHz 5.50 GHz 5.00 GHz
LSS	.635mm	6mm 8mm 10mm 12mm	9.00 GHz 7.50 GHz 7.00 GHz 6.00 GHz	QTS-RA/QSS - Q Strips®	.635mm	-RA	6.00 GHz
LTH/LSH	.5mm	2.31mm	4.50 GHz	QTS-RA/QSS-RA - Q Strips®	.635mm	-RA	4.50 GHz
HSEC8-DV	.8mm	7.98mm	10.50 GHz	RU8 - Rise Up®	.8mm	25mm	7.50 GHz
HSEC8-RA	.8mm	7.98mm	6.50 GHz	SAL1	1mm	top bottom	9.00 GHz 10.00 GHz
MEC1-DV	1mm	9.19mm	6.50 GHz	ST4/SS4	.4mm	4mm	4.50 GHz
MEC1-RA	1mm	6.81mm	5.50 GHz	TEM/SEM	.8mm	6mm 10mm	17.00 GHz+ 17.50 GHz
MEC6-DV	.635mm	8.65mm	7.00 GHz	TEM-DH/SEM	.8mm	6mm	20.00 GHz+
MEC6-RA	.635mm	5.78mm	7.00 GHz				
MEC8-DV	.8mm	8.65mm	7.00 GHz				
MEC8-RA	.8mm	5.77mm	8.00 GHz				
MIT/MIS	.635mm	5mm 22mm	8.50 GHz 7.00 GHz				
MTCA	.75mm		11.50 GHz+				
PCIE	1mm	11.1mm	7.00 GHz*				
QDM8/QDF8 - Q Rate®	.8mm	7mm	>20.00 GHz+				
QMS/QFS - Q2™	.635mm	10mm 11mm 16mm	8.00 GHz 7.50 GHz 5.00 GHz				

The information contained in this chart does not represent the potential maximum performance of the interconnect system. If your application appears to exceed the connector's rating from the chart below, the connector solution may still work. Please contact our Signal Integrity Group at sig@samtec.com for additional support.

The data reflects the point where an insertion loss of 3dB occurs within the connector. The data is based from a test circuit with a characteristic impedance and a wiring pattern of G-S-G (where G = return; S = active differential pair) within the pin field of the connector. Please note that performance may not be linear to stack height.

For more information on any of the products included in this chart, click on the series name in the Key to get complete testing information, visit our website at www.samtec.com, or contact our Signal Integrity Group at sig@samtec.com. Click here for more information on our High Speed Characterization Report Test Procedures.

+ DOES NOT INCLUDE TEST BOARD EFFECTS

Samtec Connector Bandwidth Performance Selector

Differential Pair

Differential Pair Configuration - Strips

Standard Configuration - Arrays

Series	Pitch	Stack Height	3dB Insertion Loss Point	Series	Pitch	Stack Height	3dB Insertion Loss Point
MIS-DP/MIT-DP	.635mm	5mm 22mm	9.50 GHz 8.50 GHz	DPAM/DPAF - DP Array™	1.08mm	10mm	7.00 GHz
QFS-DP/QMS-DP - Q2™	.635mm	10mm 11mm 16mm	7.50 GHz 7.00 GHz 5.50 GHz	HDAM/HDAF - HD Mezz	1.2mm	20mm 25mm 30mm 35mm	9.00 GHz** 8.50 GHz 7.50 GHz 9.00 GHz
QFSS-DP/QMSS-DP	.635mm	11mm	7.50 GHz	SEAM/SEAF - SEARAY™	.050"	7mm 10mm 12mm 16mm	9.50 GHz 16.00 GHz 14.00 GHz 11.00 GHz
QRM8-DP/QRF8-DP	.8mm	7mm 10mm	9.00 GHz 7.00 GHz	SEAM-RA/SEAF-RA	.050"	-RA	5.50 GHz
QTE-DP/QSE-DP - Q Pairs®	.8mm	5mm 8mm 11mm 16mm 19mm 25mm	8.50 GHz 9.00 GHz 9.50 GHz 8.00 GHz 7.50 GHz 9.00 GHz	SEAM-DV5/SEAF-RA	.050"	-RA	5.00 GHz
QTH-DP/QSH-DP - Q Pairs®	.5mm	5mm 8mm 11mm 16mm 30mm	9.50 GHz 8.50 GHz 6.00 GHz 5.50 GHz 7.00 GHz	YFS/YFT - Sam Array®	.050"	5mm	9.00 GHz*
QTS-DP/QSS-DP - Q Pairs®		5mm 11mm 16mm	8.50 GHz 6.00 GHz 6.00 GHz				

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