

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	5.00 GHz	QFS/QMS - Q2™	.635mm	10mm	8.00 GHz
		25mm	3.00 GHz			11mm	7.50 GHz
						16mm	5.00 GHz
BTH/BSH	.5mm	5mm	8.50 GHz	QFS/QMS-RA - Q2™	.635mm	-RA	5.50 GHz
		16mm	5.00 GHz				
ERM8/ERF8	.8mm	7mm	9.50 GHz	QFS-RA/QMS-RA - Q2™	.635mm	-RA	6.00 GHz
		10mm	8.00 GHz				
		16mm	5.00 GHz	QFSS/QMSS - Q2™	.635mm	11mm	1.40 GHz**
ERM8-EM/ERF8	.8mm	-EM	7.50 GHz	QRM8/QRF8 - Q Rate®	.8mm	7mm	8.50 GHz
						10mm	7.00 GHz
ERM8-RA/ERF8	.8mm	-RA	10.00 GHz	QTE/QSE - Q Strips®	.8mm	5mm	8.00 GHz
ERM8-RA/ERF8-RA	.8mm	-RA	9.00 GHz			8mm	8.00 GHz
						11mm	6.50 GHz
						16mm	5.00 GHz
						19mm	5.00 GHz
				25mm	7.00 GHz		
FTSH/FW/CLP	.050"	5.13mm	8.50 GHz	QTH/QSH - Q Strips®	.5mm	5mm	8.00 GHz
		17.7mm	4.00 GHz			8mm	8.00 GHz
						11mm	5.00 GHz
						16mm	5.00 GHz
LSS	.635mm	6mm	9.00 GHz	QTS/QSS - Q Strips®	.635mm	5mm	8.50 GHz
		8mm	7.50 GHz			11mm	5.50 GHz
		10mm	7.00 GHz			16mm	5.00 GHz
		12mm	6.00 GHz				
HSEC8-DV	.8mm	7.98mm	10.50 GHz	RU8 - Rise Up®	.8mm	25mm	7.50 GHz
MEC1-DV	1mm	9.19mm	6.50 GHz	SAL1	1mm	top	9.00 GHz
						bottom	10.00 GHz
MEC1-RA	1mm	6.81mm	5.50 GHz	SFM/TFM	.050"	6.35mm	7.00 GHz
						11.81mm	4.50 GHz
MEC6-DV	.635mm	8.65mm	7.00 GHz	SS4/ST4	.4mm	4mm	4.50 GHz
MEC6-RA	.635mm	5.78mm	7.00 GHz	TMMH/TW/CLT	2mm	4.77mm	6.50 GHz
						18mm	3.00 GHz
MEC8-DV	.8mm	8.65mm	7.00 GHz	TOLC/SOLC	.025"	6.35mm	6.50 GHz
						12mm	5.50 GHz
MEC8-RA	.8mm	5.77mm	8.00 GHz				
MIS/MIT	.635mm	5mm	8.50 GHz				
		22mm	7.00 GHz				
PCIE	1mm	11.1mm	7.00 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 a -3dB insertion loss 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.

* Based on Final Inch simulations

** Based on +/- 10% impedance/cross talk

Samtec Connector Bandwidth Performance Selector Differential Pair

Differential Pair Configuration - Strips

Series	Pitch	Stack Height	-3dB Insertion Loss Point
MIS-DP/MIT-DP	.635mm	5mm	9.50 GHz
		22mm	8.50 GHz
QFS-DP/QMS-DP - Q2™	.635mm	10mm	7.50 GHz
		11mm	7.00 GHz
		16mm	5.50 GHz
QTE-DP/QSE-DP - Q Pairs®	.8mm	5mm	8.50 GHz
		8mm	9.00 GHz
		11mm	9.50 GHz
		16mm	8.00 GHz
		19mm	7.50 GHz
		25mm	9.00 GHz
QTH-DP/QSH-DP - Q Pairs®	.5mm	5mm	9.50 GHz
		8mm	8.50 GHz
		11mm	6.00 GHz
		16mm	5.50 GHz
		30mm	7.00 GHz
QTS-DP/QSS-DP - Q Pairs®	.635mm	5mm	8.50 GHz
		11mm	6.00 GHz
		16mm	6.00 GHz

Standard Configuration - Arrays

Series	Pitch	Stack Height	-3dB Insertion Loss Point
DPAM/DPAF - DP Array™	1.08mm	10mm	7.00 GHz
HDAM/HDAF - HD Mezz**	1.2mm	20mm	9.00 GHz
		25mm	8.50 GHz
		30mm	7.50 GHz
		35mm	9.00 GHz
SEAM/SEAF - SEARAY™	.050"	7mm	10.50 GHz
		10mm	16.00 GHz
		12mm	14.00 GHz
		16mm	11.00 GHz
YFS/YFT - Sam Array®	.050"	5mm	9.00GHz*

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