
EE273
Demo 1
Transmission Lines
October 16, 1998

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1

Schedule of Demonstrations

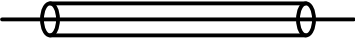
- TDR of basic transmission line
 - open circuit, matched termination, short circuit
- TDR of a line with slots in the ground plane
- TDR of a line with two vias
- Crosstalk demonstration
 - homogeneous medium
 - inhomogeneous medium
 - source terminated
 - perpendicular crosstalk
- Frequency dependent loss
 - TDT of line
 - response to data sequence

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2

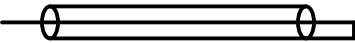
TDR of Basic Line



Open circuit



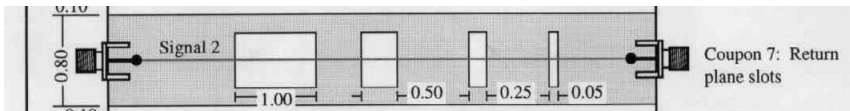
Matched termination









Short circuit

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3

TDR of Line with Slots in Ground Plane

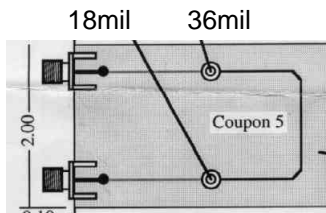


Board layer stackup

18		Signal 1 (0.5 oz)
6		Plane 1 (0.5 oz)
6		Signal 2 (0.5 oz)
12	Dielectric: GE GETEK Laminate	
6		Signal 3 (0.5 oz)
6		Plane 1 (0.5 oz)
18		Signal 4 (0.5 oz)
62 (overall)		

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4

Line with Two Vias

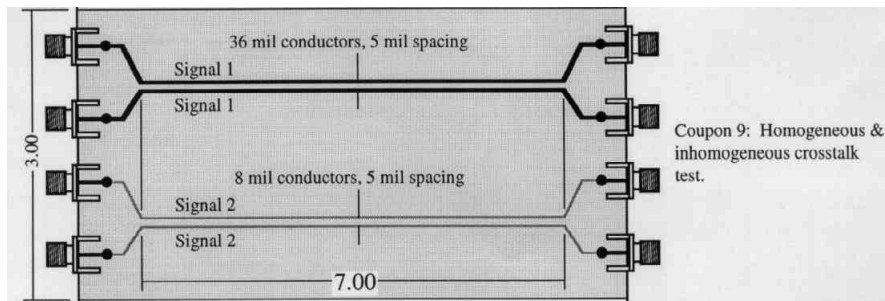


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5

Setup for Crosstalk Demonstration

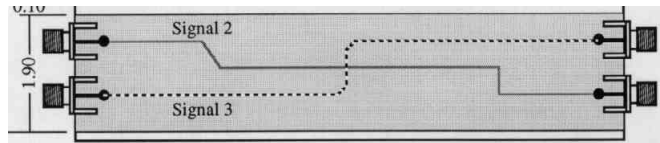


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6

Perpendicular Crosstalk Demonstration

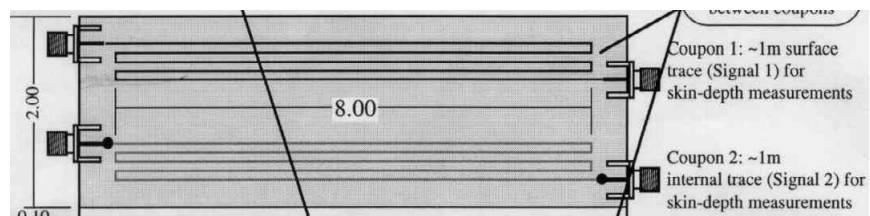


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7

Setup for Frequency-Dependent Loss Demonstration



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8