To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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RENESAS

NEC

Evaluation Board Information

EC-μPG2214TK
SPDT SW IC Evaluation Board

- **Evaluation Board Pattern Layout**
- **Circuit Description**
- **Insertion Loss Data (Including loss of the test fixture)**
- **Isolation Data**
- **Input Return Loss Data**
- **Output Return Loss Data**
- **2 GHz P_{out} vs. P_{in} Data**
- **Loss of The Test Fixture vs. Frequency Data (Microstrip Line + RF Connectors)**

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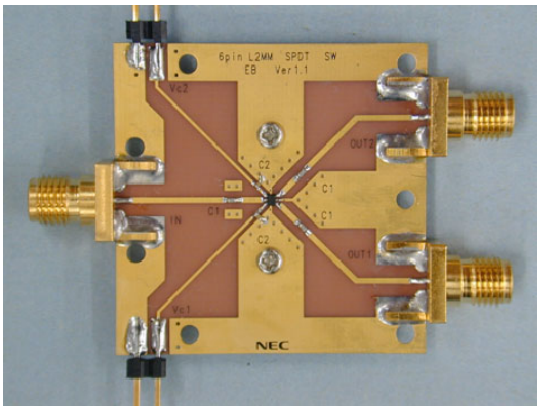
M8E 00.4-0110

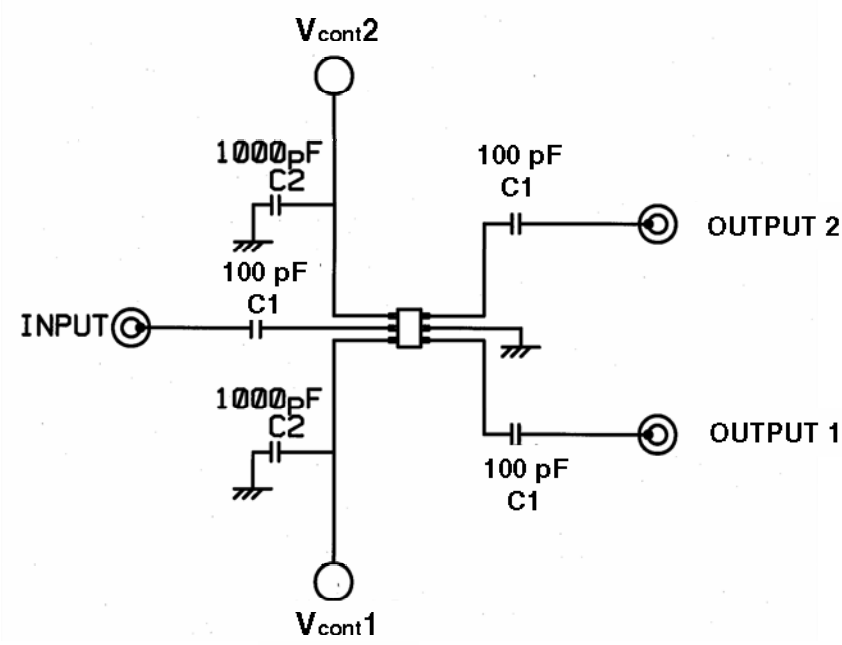
Evaluation Board Pattern Layout



size 38 mm × 38 mm

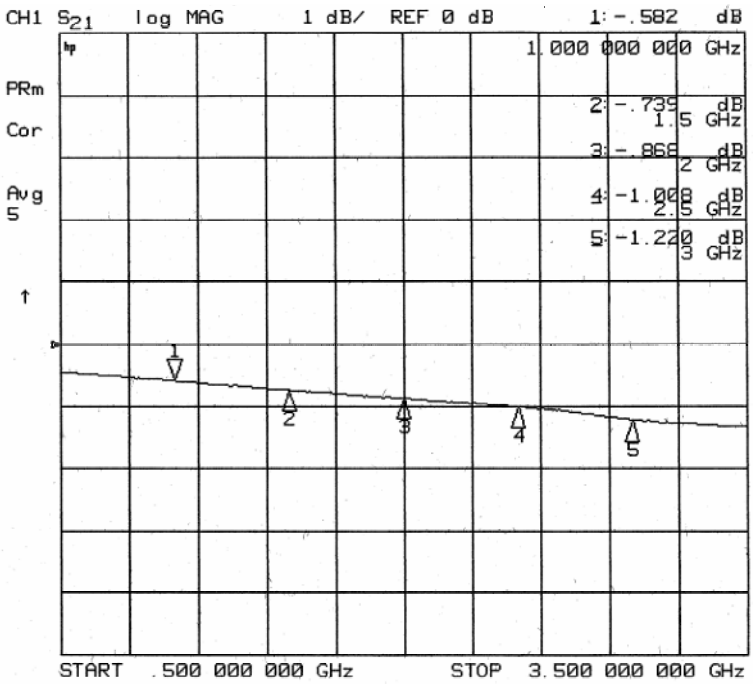
substrate FR4 (ELC4756UV/Sumitomo)
t = 0.4 mm, εr = 4.6

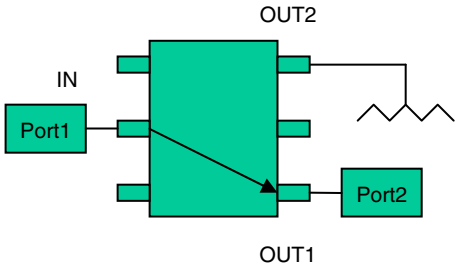
Circuit Description



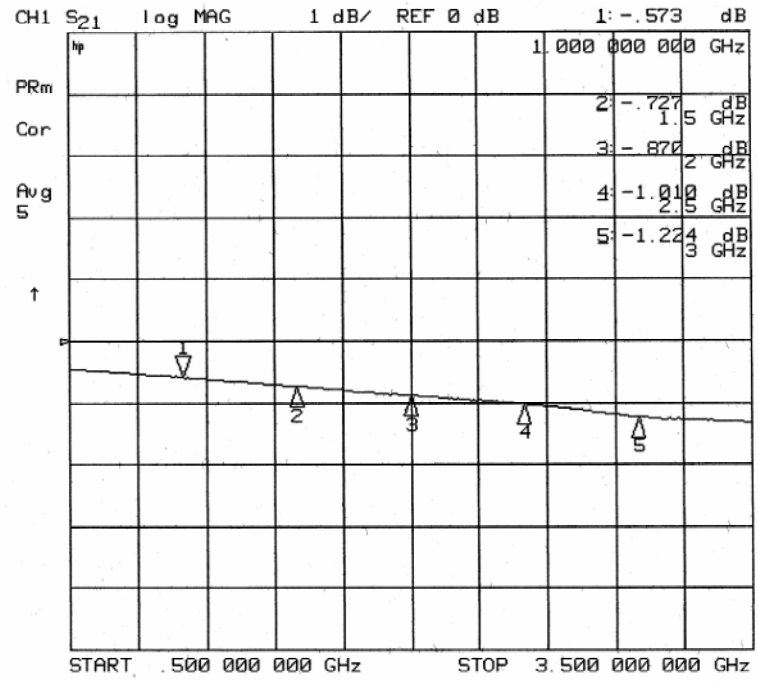
Parts	Model No.	Value	Maker	Symbol
Chip Capacitance	GRM1552C1H101JD01D	100 pF	Murata	C1
	GRM155B11H102KA01B	1 000 pF	Murata	C2
PC Terminal	A2-2PA-2.54DSA	—	Hirose	—
RF Connector	WK72475	—	WAKA	—
Substrate	ELC-4756UV (t = 0.4 mm)	—	Sumitomo	—

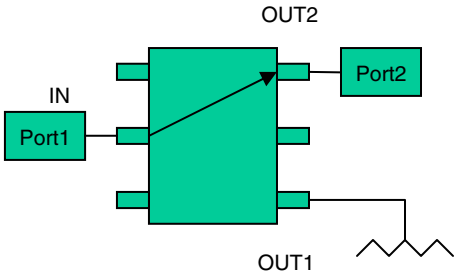
OUT1 Insertion Loss



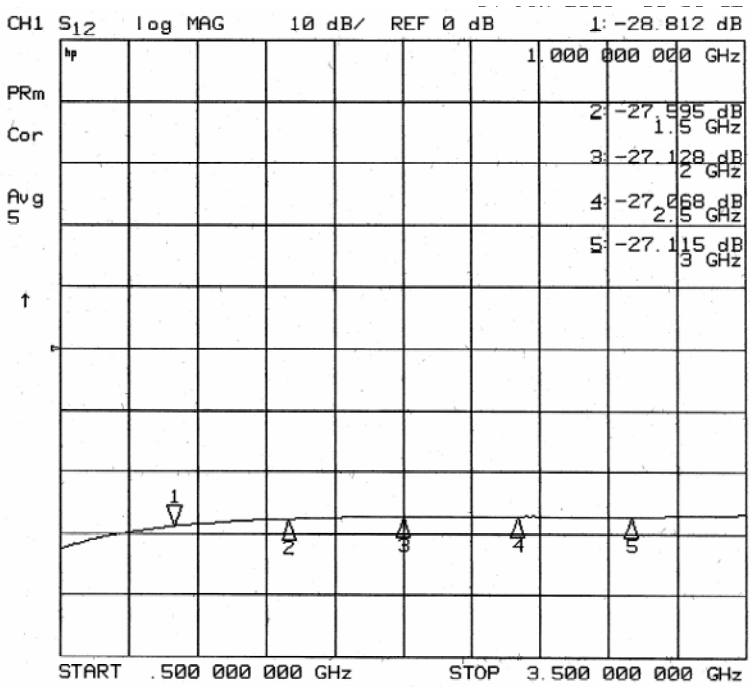


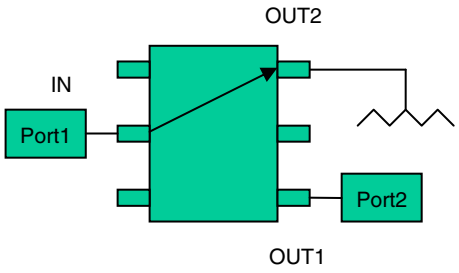
OUT2 Insertion Loss



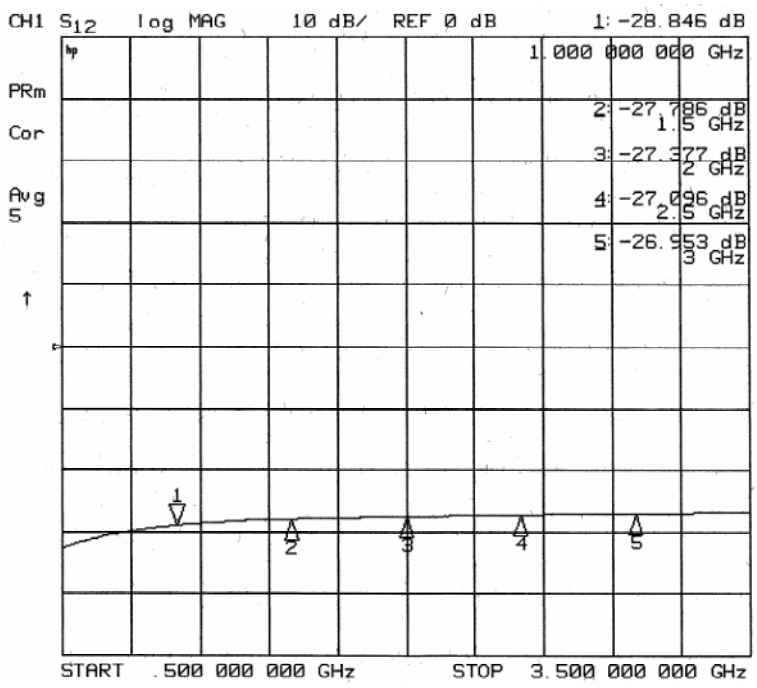


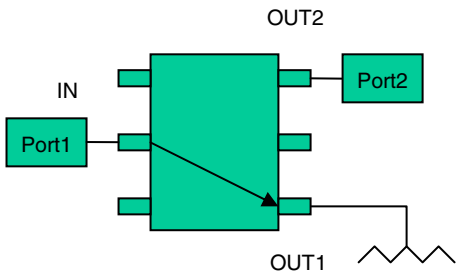
IN-OUT1 Isolation



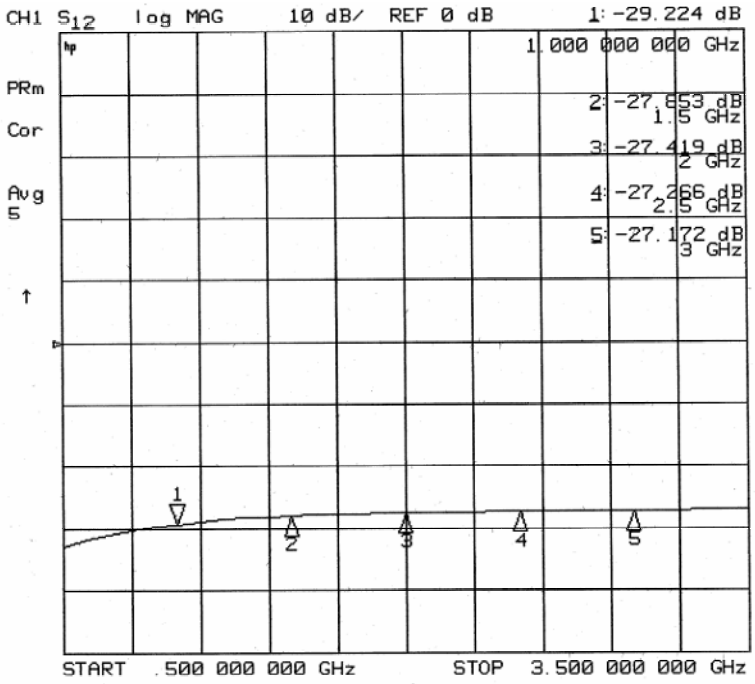


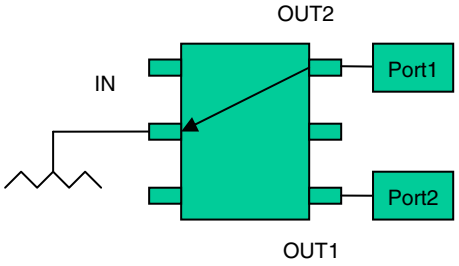
IN-OUT2 Isolation



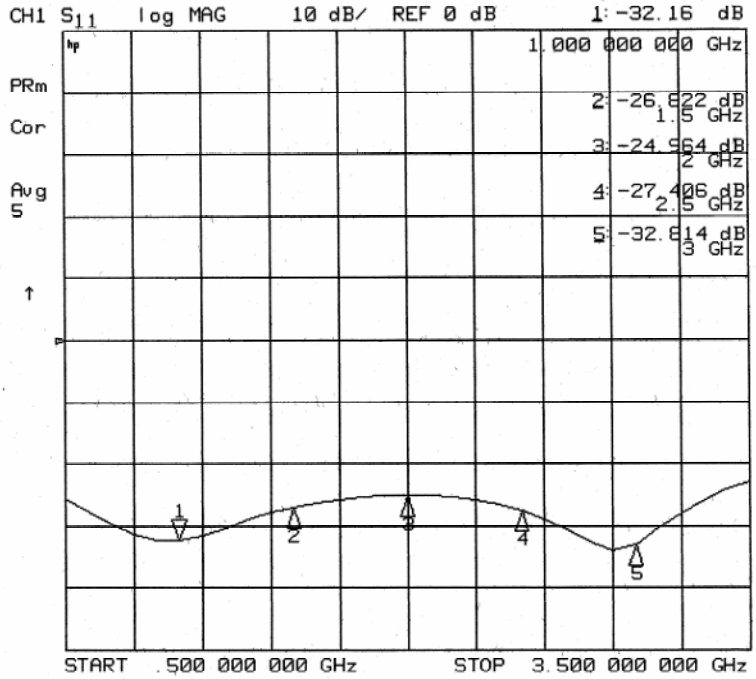


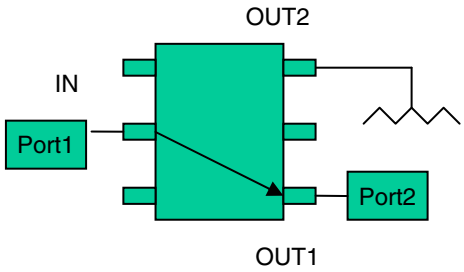
OUT2-OUT1 Isolation ($V_{cont}1$ ON)



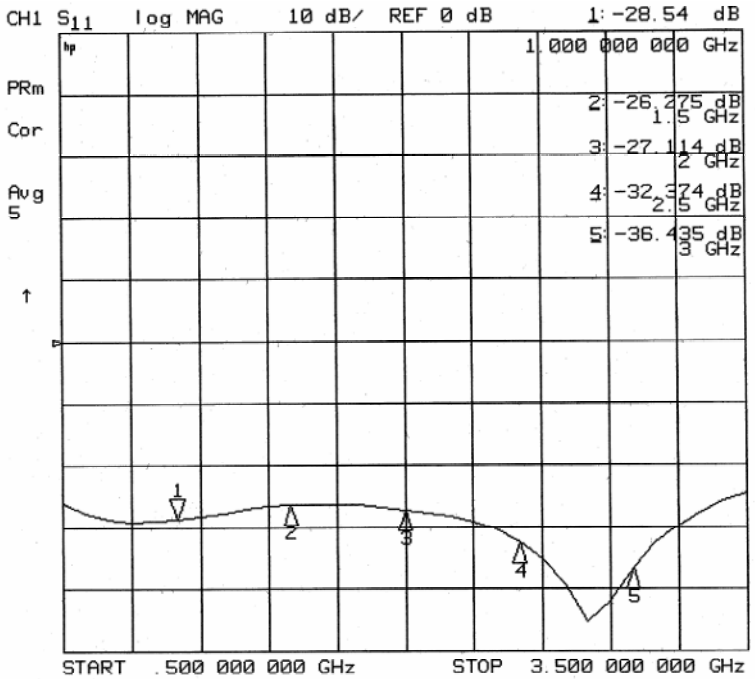


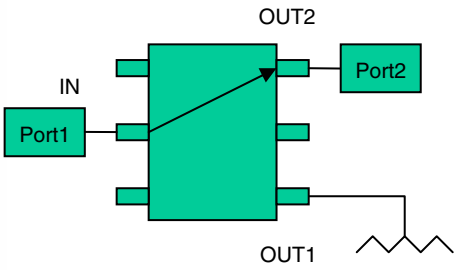
OUT1 Input Return Loss



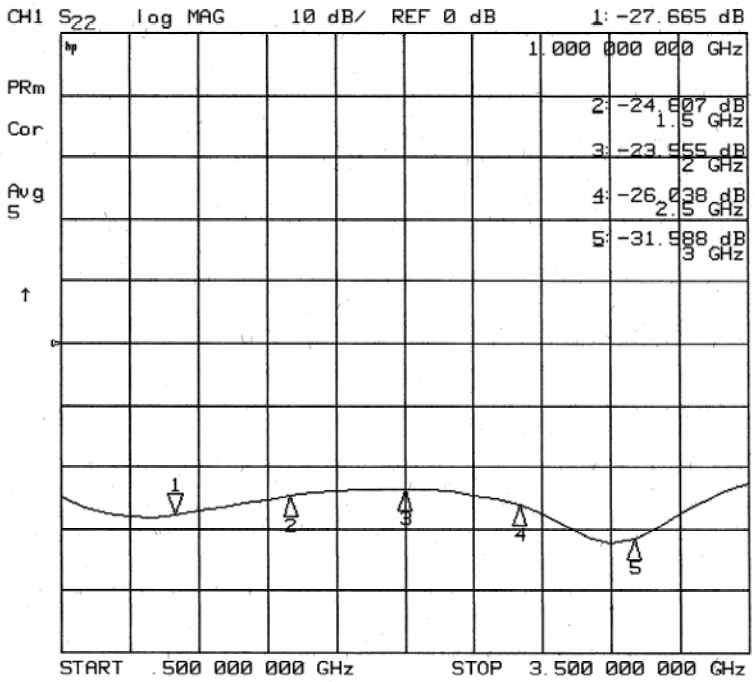


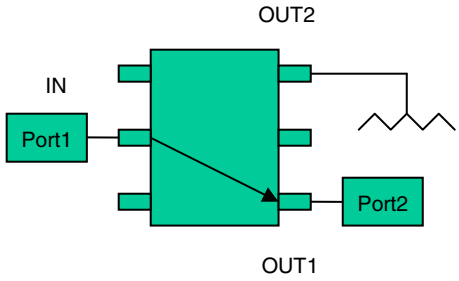
OUT2 Input Return Loss



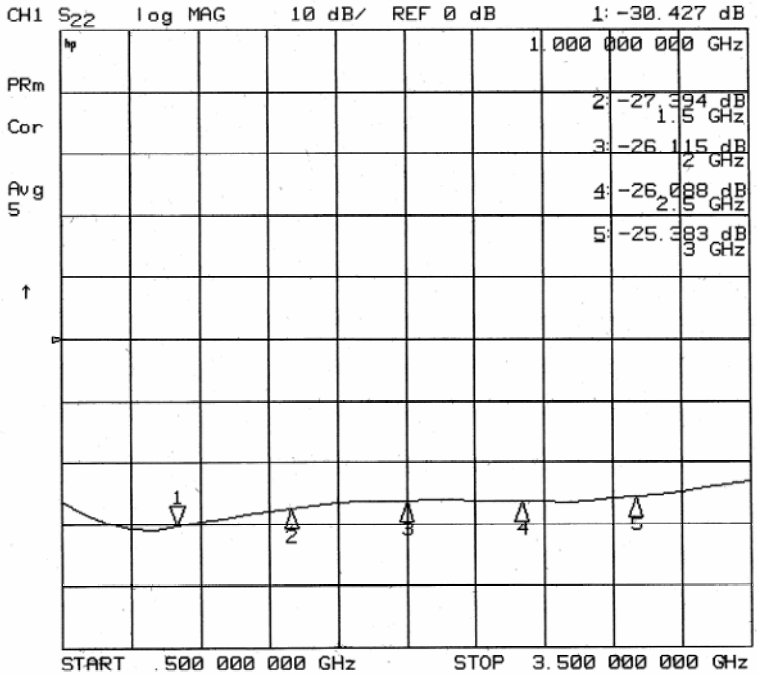


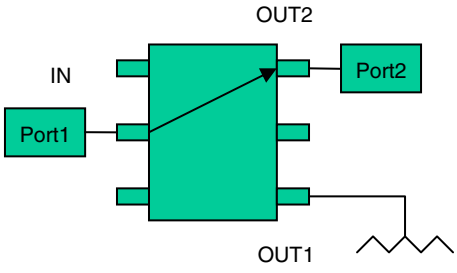
OUT1 Output Return Loss



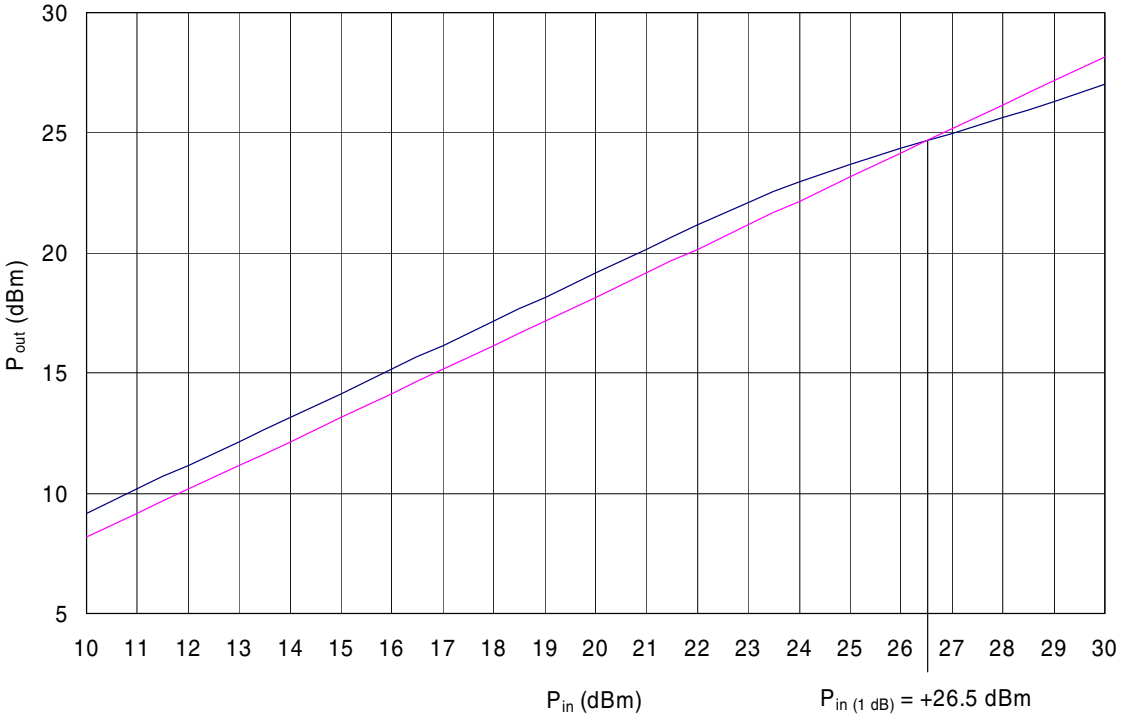


OUT2 Output Return Loss

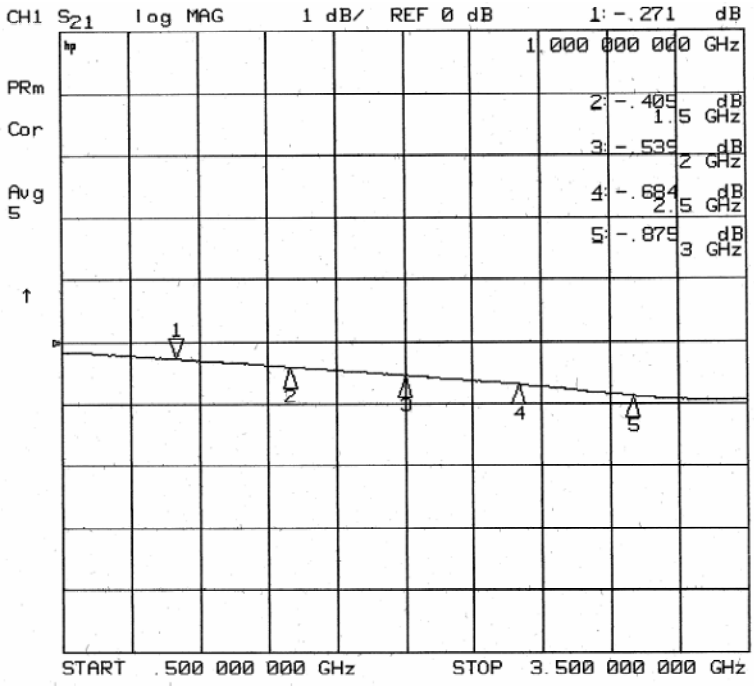




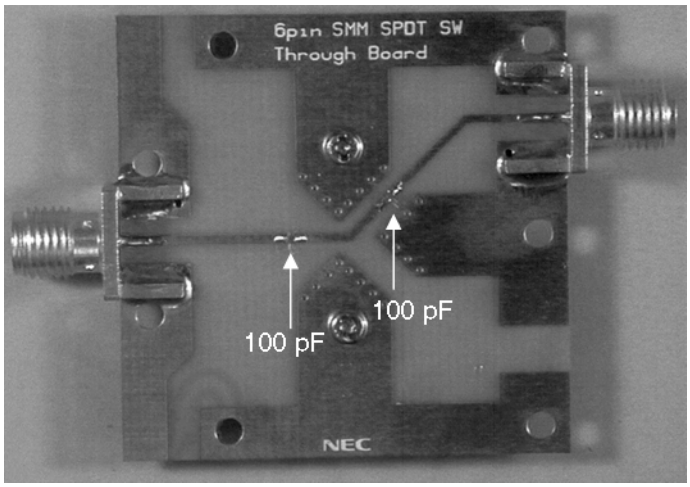
2 GHz P_{out} vs. P_{in}



Loss of The Test Fixture vs. Frequency



Through Board
(Including DC Block Capacitances)



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