

To our customers,

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## Old Company Name in Catalogs and Other Documents

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

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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

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## Evaluation Board Information

# EC- $\mu$ PG2179TB SPDT SW IC Evaluation Board

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- Evaluation Board Pattern Layout
- Circuit Description
- Insertion Loss Data
- Isolation Data
- Input and Output Return Loss Data
- 1.0 GHz  $P_{in}$  vs.  $P_{out}$  Data
- 2.5 GHz  $P_{in}$  vs.  $P_{out}$  Data
- Loss of The Test Fixture vs. Frequency Data

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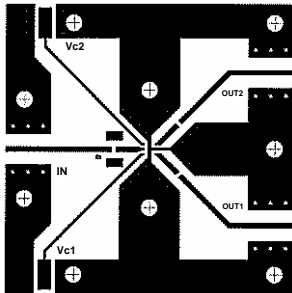
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M8E 00.4-0110

## Evaluation Board Pattern Layout

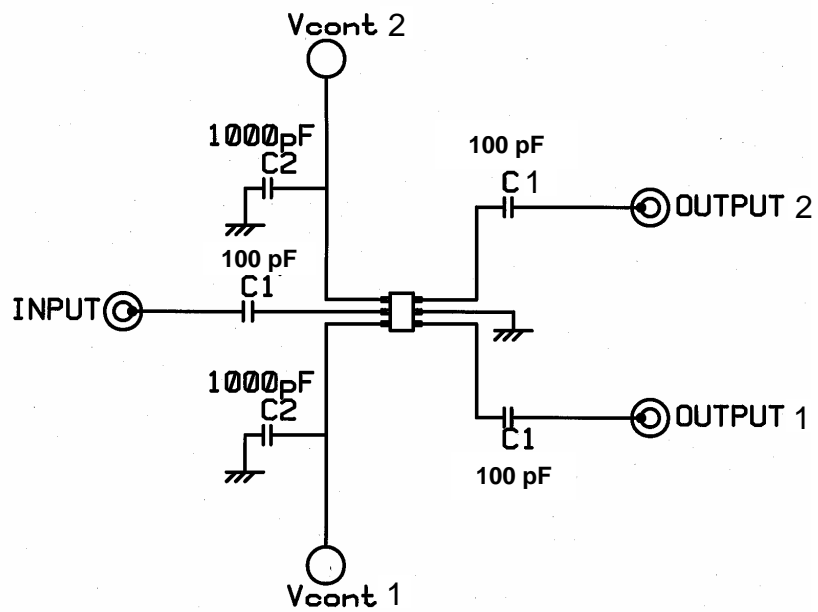


scale 1 : 1

size 38 mm × 38 mm

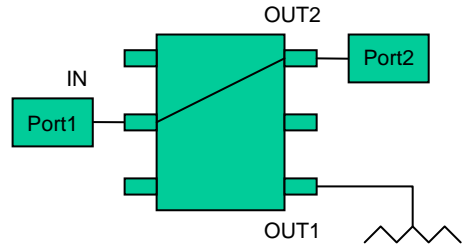
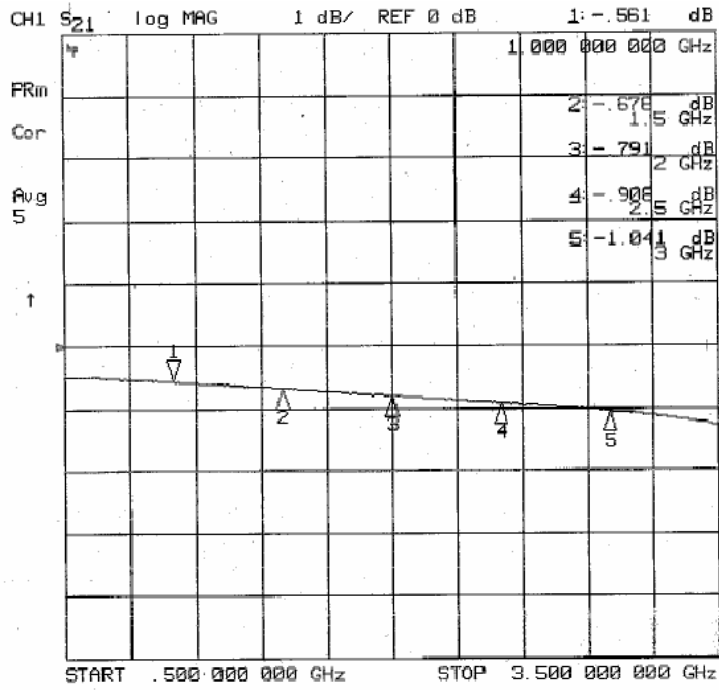
material FR4 (ELC4756/Sumitomo)  
h = 0.4 mm,  $\epsilon r = 4.6$

## Circuit Description

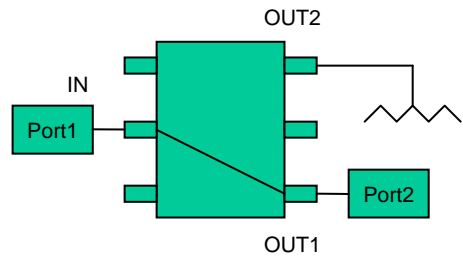
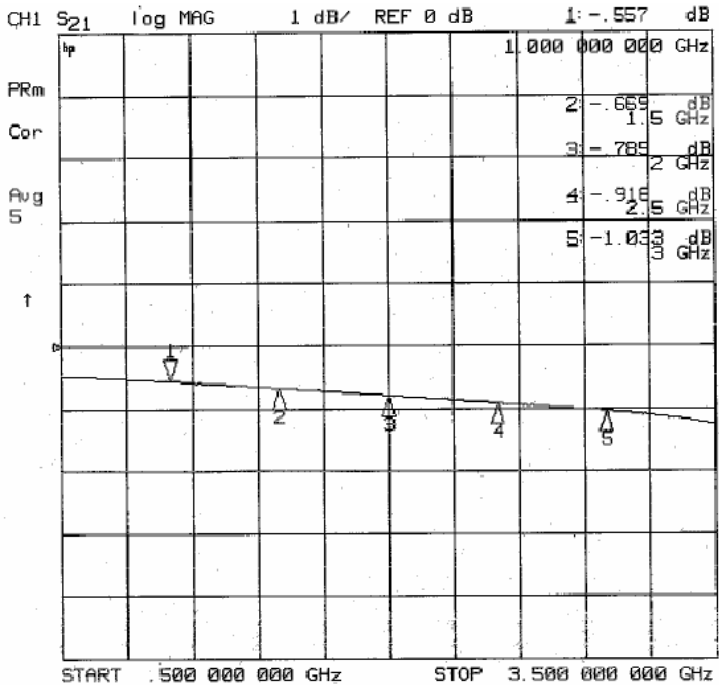


Parts	Model No.	Value	Maker	Symbol
Chip Capacitance	GRM1552C1H101JD01B	100 pF	Murata	C1
	GRM155B11H102KA01B	1 000 pF	Murata	C2
PC Terminal	A2-2PA-2.54DSA	—	Hirose	—
RF Connector	WK72475	—	Waka	—
Substrate	FR4 (t = 0.4 mm)	—	Sumitomo	—

### OUT1 Insertion Loss

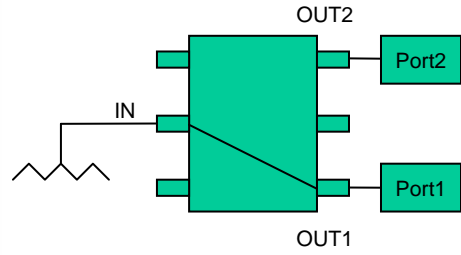
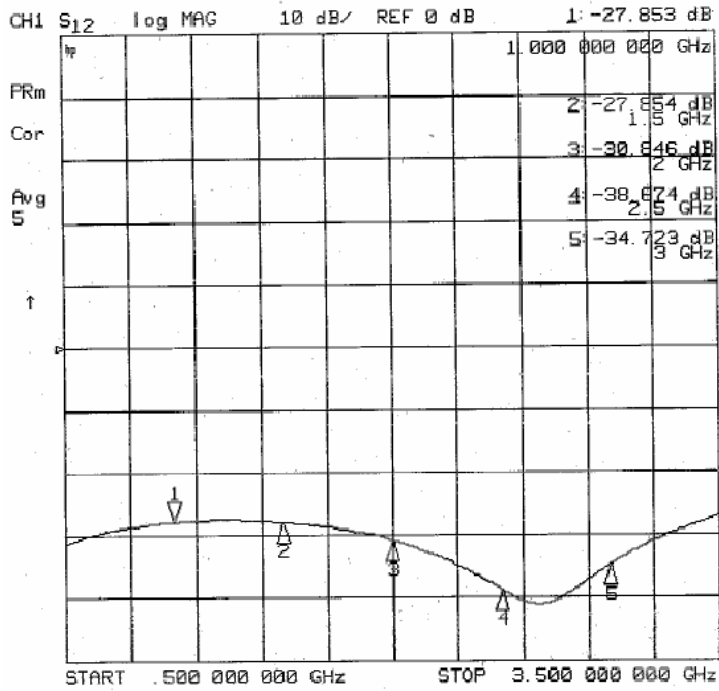


### OUT2 Insertion Loss

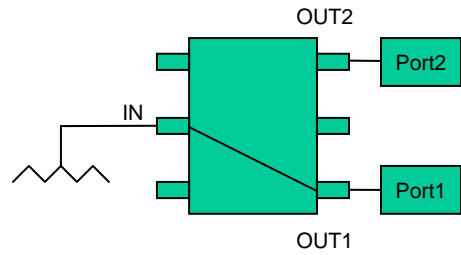
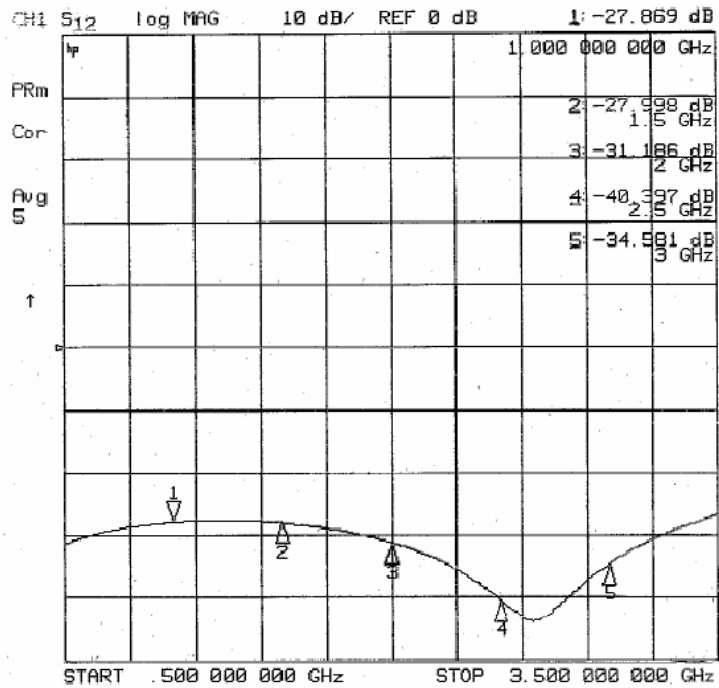




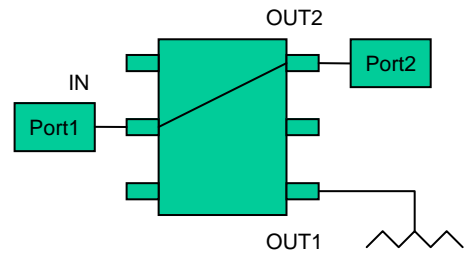
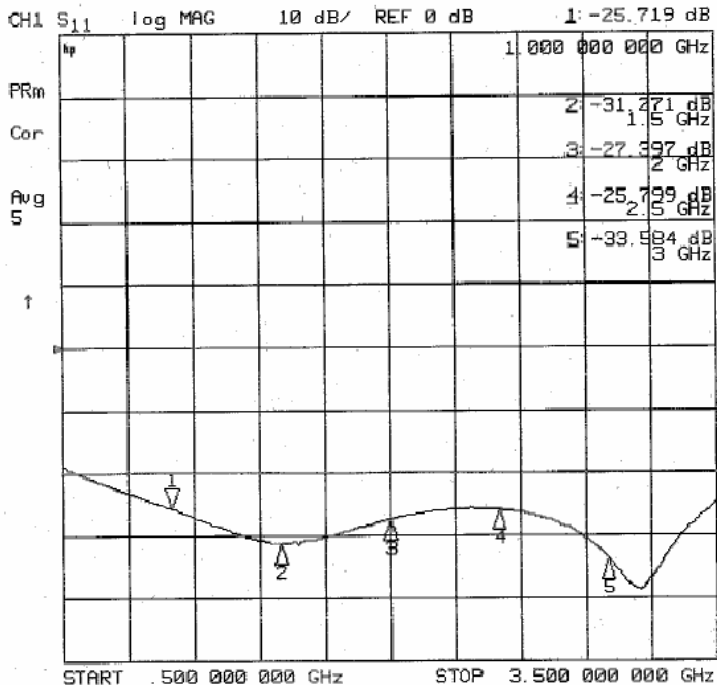
### OUT2-OUT1 (V<sub>cont1</sub> ON) Isolation



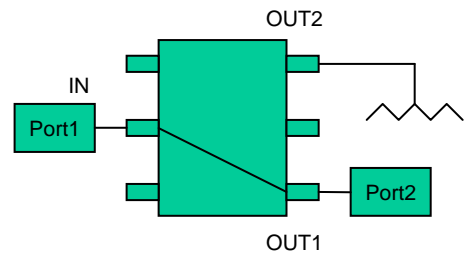
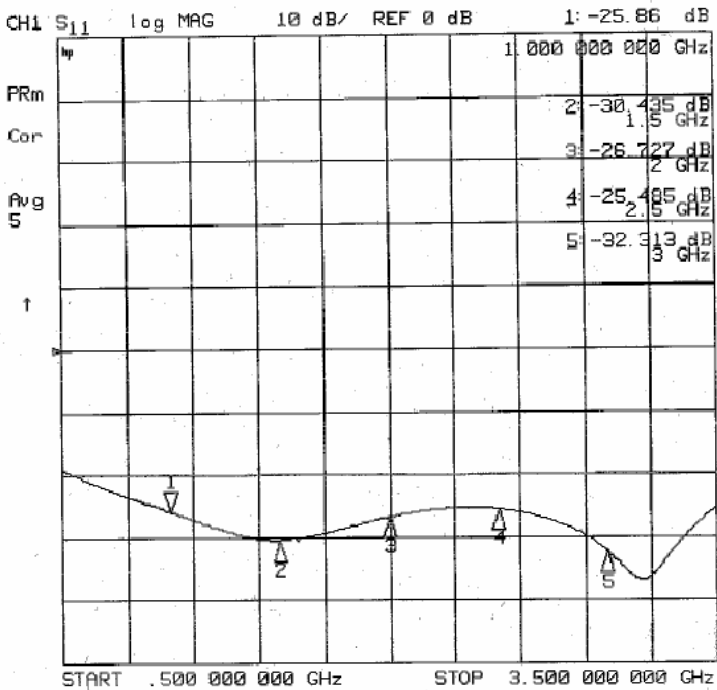
### OUT2-OUT1 (V<sub>cont2</sub> ON) Isolation



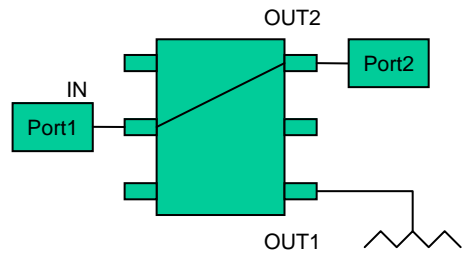
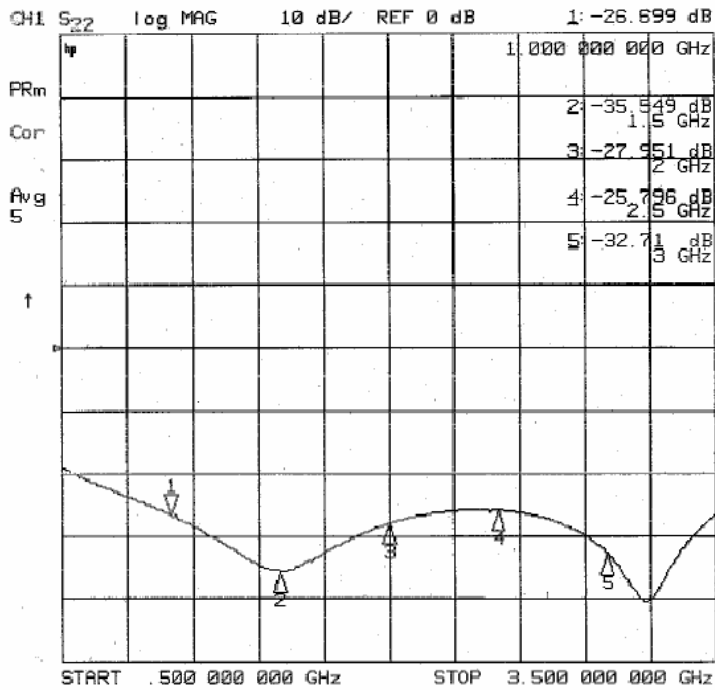
### OUT1 Input Return Loss



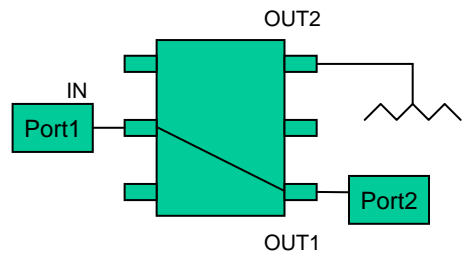
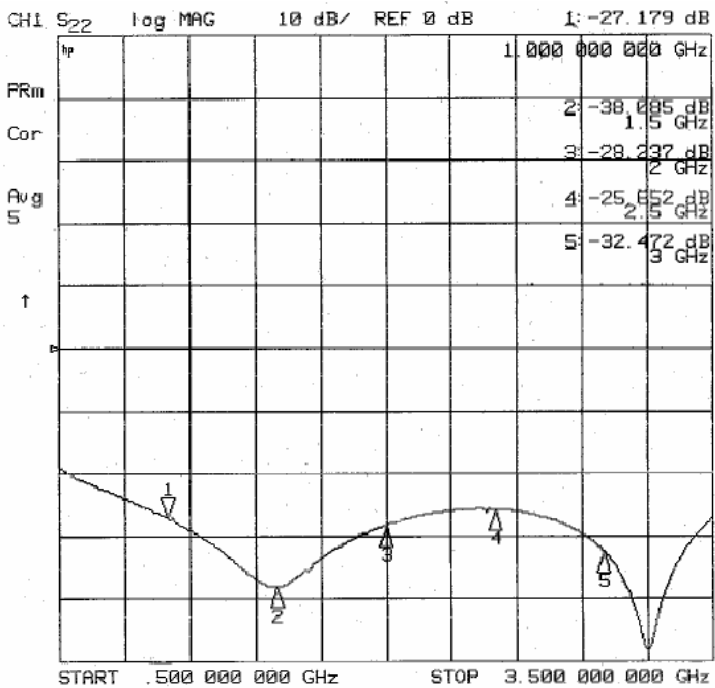
### OUT2 Input Return Loss



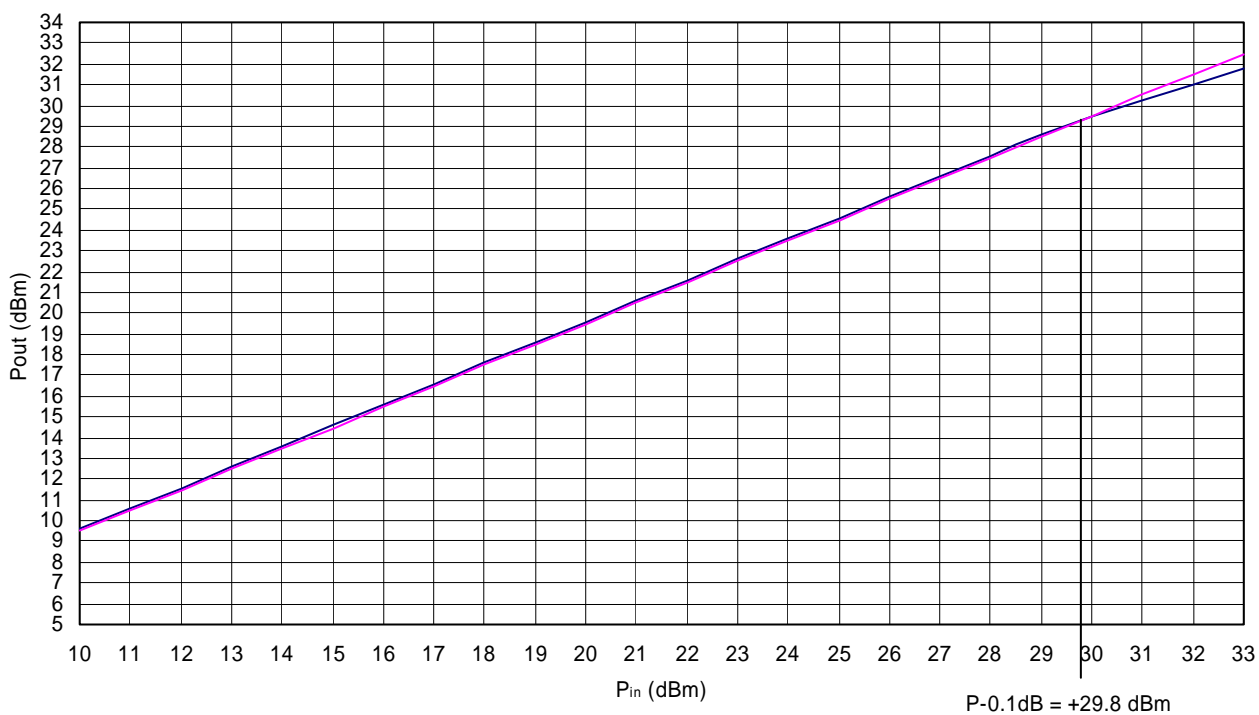
### OUT1 Output Return Loss



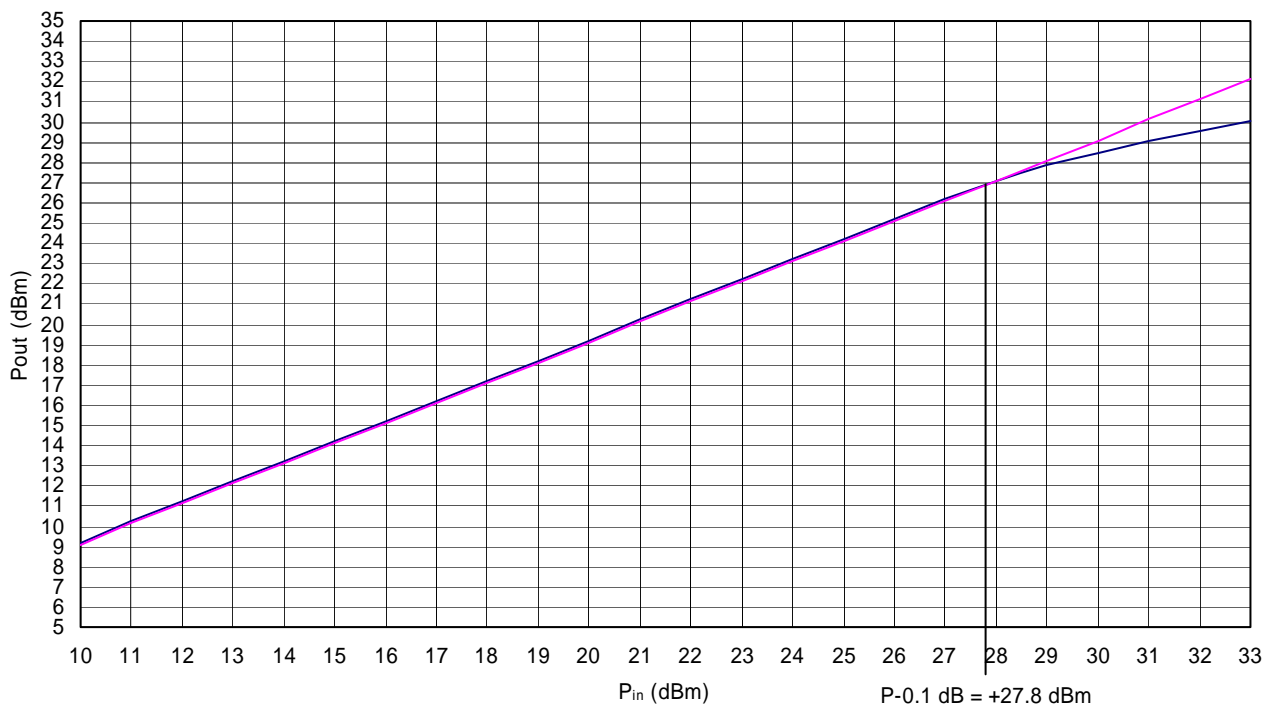
### OUT2 Output Return Loss



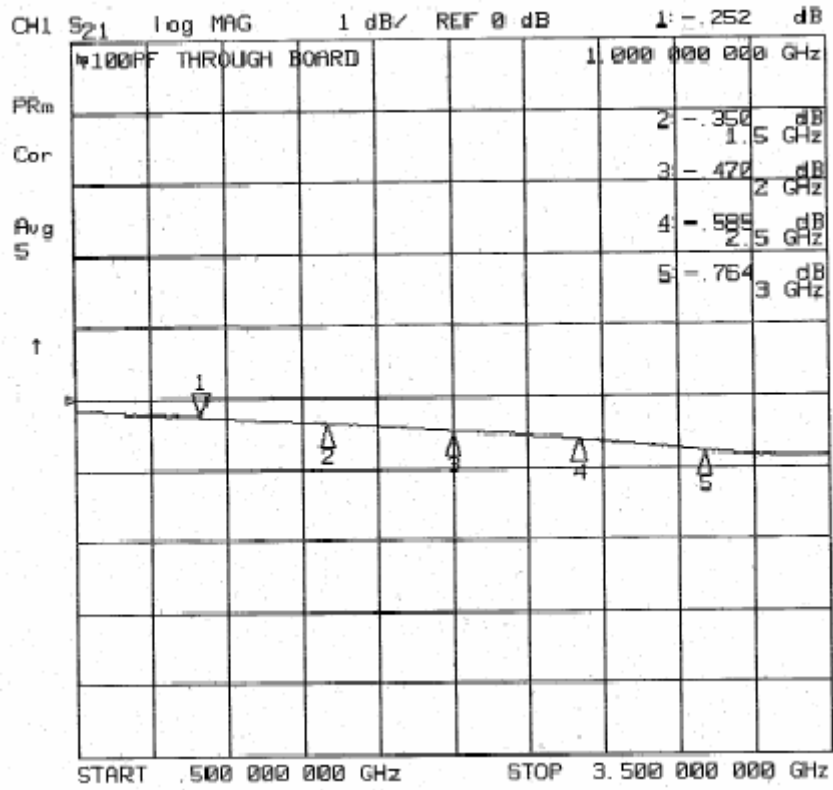
1.0 GHz P<sub>in</sub> vs. P<sub>out</sub>



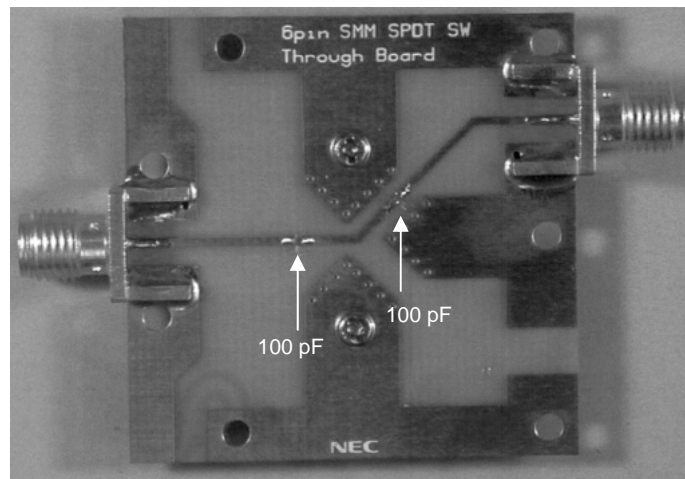
2.5 GHz P<sub>in</sub> vs. P<sub>out</sub>



### Loss of The Text Fixture vs. Frequency



### Through Board (Including DC Block Capacitances)



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► For further information, please contact

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