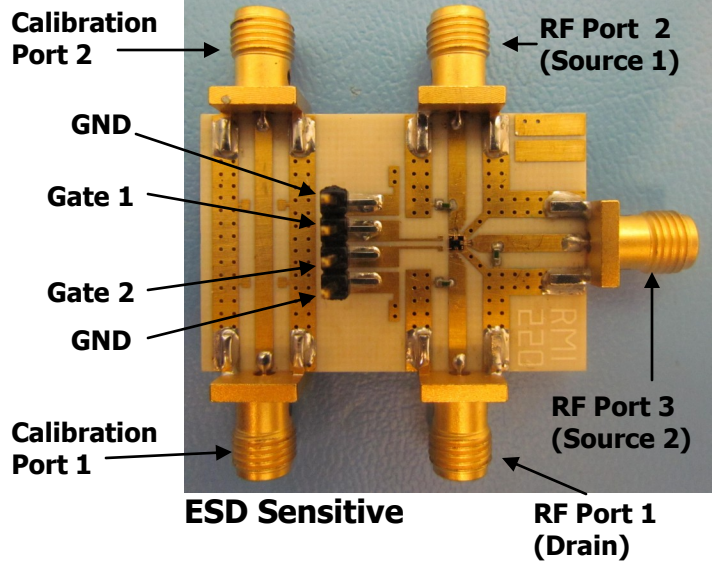


### General Description

The evaluation test board has one RMSW220HP SPDT RF switch connected to three SMA RF connectors, as well as a calibration line. The board requires an external supply to provide the gate actuation voltage.

External DC ground return resistors are provided on the board.

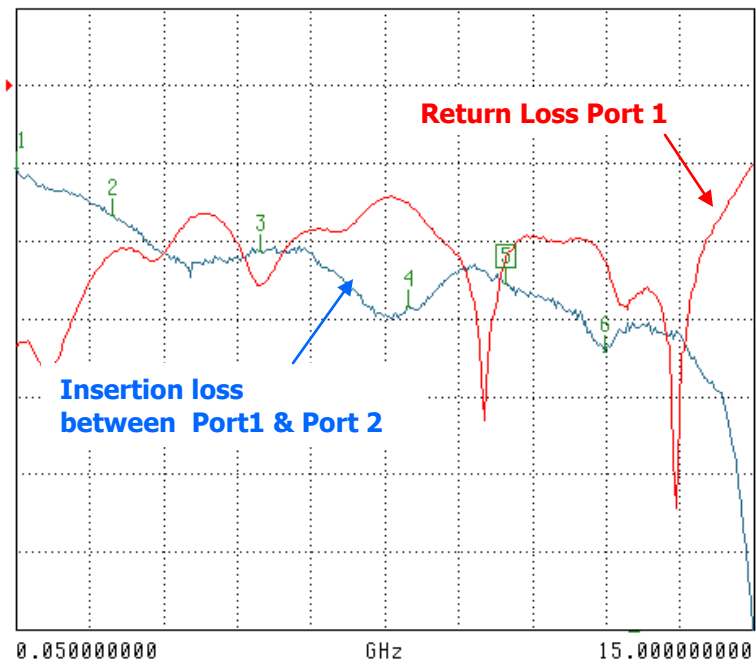
This evaluation board operates at a reduced frequency range in comparison to the native device due to design and material limitations of the evaluation board.



CH1: S11 FWD REFL  
 LOG MAGNITUDE  
 REF= 0.000 dB  
 10.000 dB/DIV

CH3: S21 FWD TRANS  
 LOG MAGNITUDE  
 REF= 0.000 dB  
 0.200 dB/DIV

CH 3 - S21  
 REFERENCE PLANE  
 0.0000 mm



MARKER 5  
 10.000000000 GHz  
 -0.508 dB

MARKER TO MAX  
 MARKER TO MIN

- 1 0.050000000 GHz  
-0.214 dB
- 2 2.000000000 GHz  
-0.332 dB
- 3 5.000000000 GHz  
-0.426 dB
- 4 8.000000000 GHz  
-0.571 dB
- 6 12.000000000 GHz  
-0.687 dB

MARKER READOUT  
 FUNCTIONS

**Insertion Loss (Test Board minus Reference Line Loss)**

Gate 1	Gate 2	RF Port 2	RF Port 3
+/- 90 V	0 V	ON	OFF
0 V	+/- 90 V	OFF	ON

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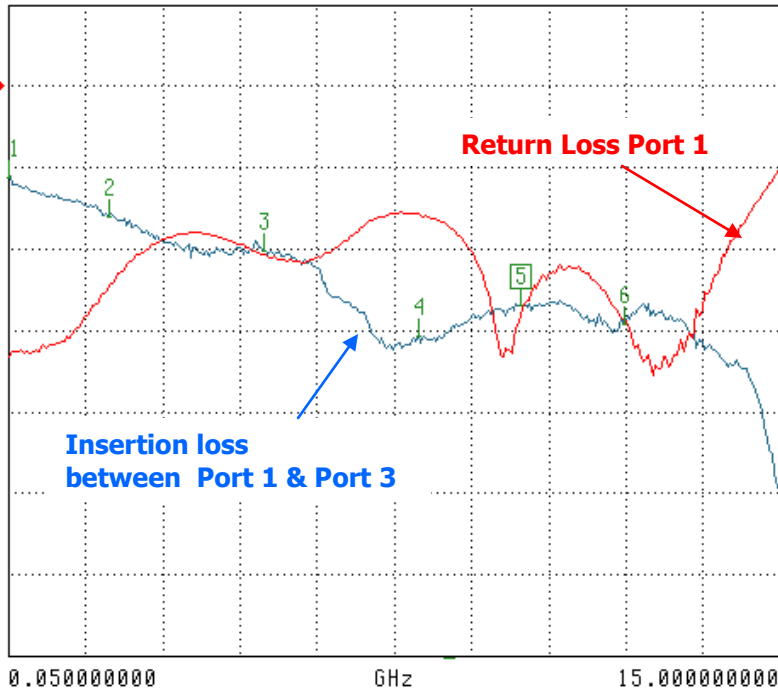
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# RMSW220HP-EV12 Evaluation Test Board

CH1: S11 FWD REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
0.200 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-0.538 dB

MARKER TO MAX  
MARKER TO MIN

- 1 0.050000000 GHz  
-0.225 dB
- 2 2.000000000 GHz  
-0.321 dB
- 3 5.000000000 GHz  
-0.407 dB
- 4 8.000000000 GHz  
-0.615 dB
- 6 12.000000000 GHz  
-0.585 dB

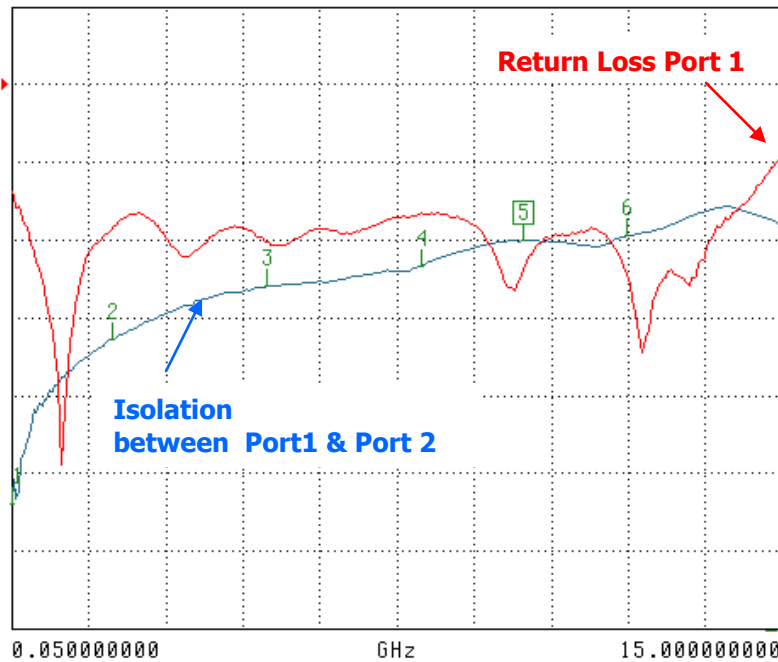
MARKER READOUT  
FUNCTIONS

**Insertion Loss (Test Board minus Reference Line Loss)**

CH1: S11 FWD REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-20.098 dB

MARKER TO MAX  
MARKER TO MIN

- 1 0.050000000 GHz  
-54.018 dB
- 2 2.000000000 GHz  
-32.883 dB
- 3 5.000000000 GHz  
-25.962 dB
- 4 8.000000000 GHz  
-23.320 dB
- 6 12.000000000 GHz  
-19.443 dB

MARKER READOUT  
FUNCTIONS

## Isolation

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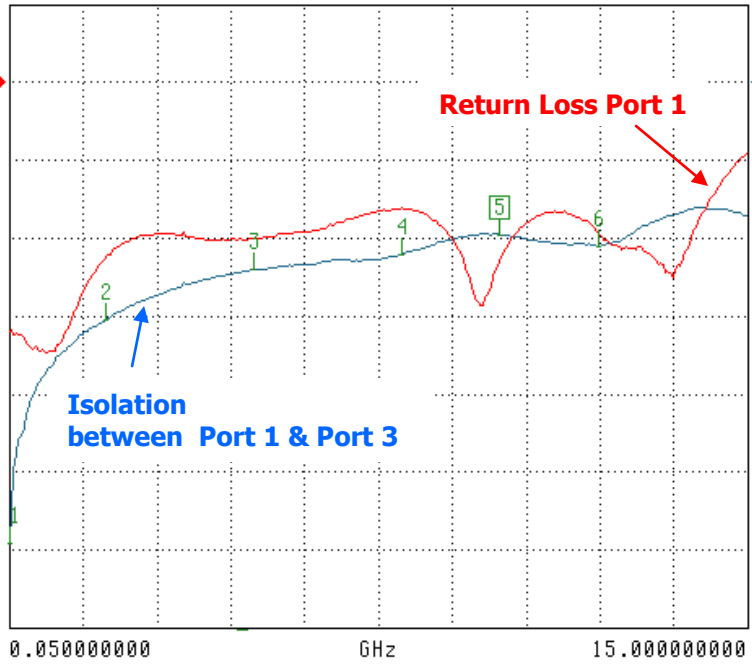
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- Email: sales@radantmems.com
- Visit [www.radantmems.com](http://www.radantmems.com)

# RMSW220HP-EV12 Evaluation Test Board

CH1: S11 FWD REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-19.585 dB

MARKER TO MAX  
MARKER TO MIN

- 1 0.050000000 GHz  
-59.138 dB
- 2 2.000000000 GHz  
-30.440 dB
- 3 5.000000000 GHz  
-24.097 dB
- 4 8.000000000 GHz  
-22.111 dB
- 6 12.000000000 GHz  
-21.025 dB

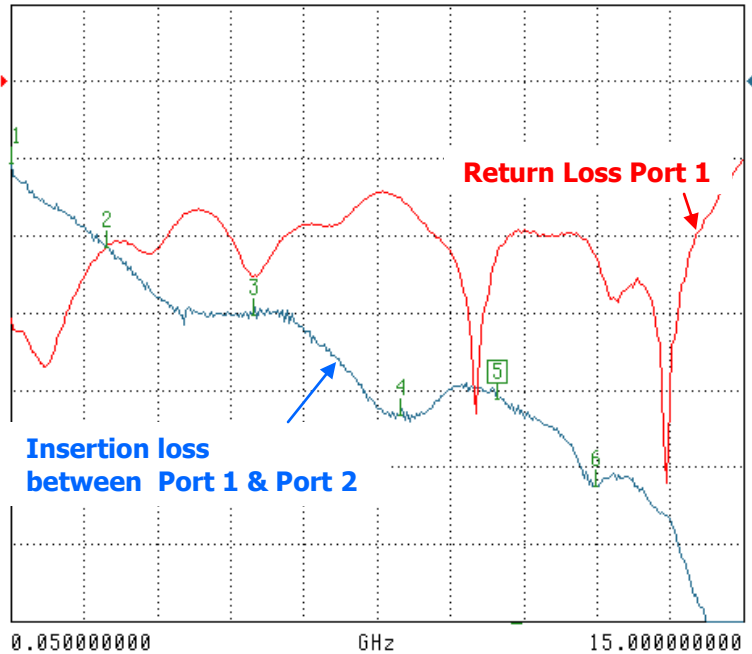
MARKER READOUT  
FUNCTIONS

**Isolation**

CH1: S11 FWD REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
0.200 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-0.824 dB

MARKER TO MAX  
MARKER TO MIN

- 1 0.050000000 GHz  
-0.212 dB
- 2 2.000000000 GHz  
-0.431 dB
- 3 5.000000000 GHz  
-0.606 dB
- 4 8.000000000 GHz  
-0.867 dB
- 6 12.000000000 GHz  
-1.051 dB

MARKER READOUT  
FUNCTIONS

**RADANT MEMS INC.**

**Insertion loss (including transmission lines, connectors and bond-wires)**

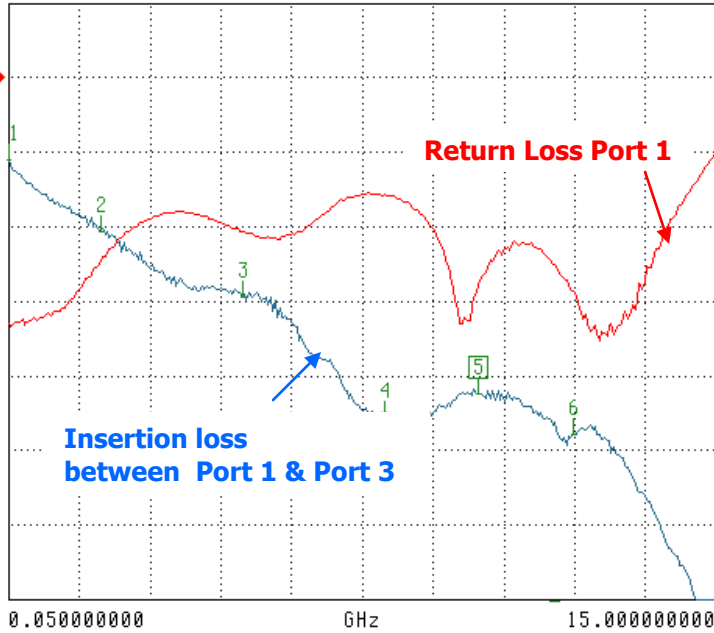
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# RMSW220HP-EV12 Evaluation Test Board

CH1: S11 FWD REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
0.200 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-0.849 dB

MARKER TO MAX  
MARKER TO MIN

1	0.050000000 GHz	-0.220 dB
2	2.000000000 GHz	-0.412 dB
3	5.000000000 GHz	-0.590 dB
4	8.000000000 GHz	-0.914 dB
6	12.000000000 GHz	-0.958 dB

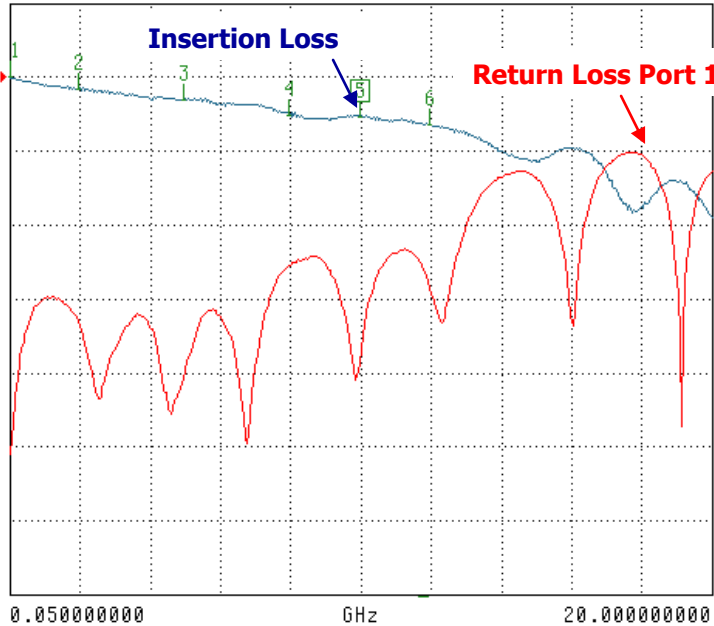
MARKER READOUT  
FUNCTIONS

**Insertion loss (including transmission lines, connectors and bond-wires)**

CH1: S22 REV REFL  
LOG MAGNITUDE  
REF=0.000 dB  
10.000 dB/DIV

CH3: S21 FWD TRANS  
LOG MAGNITUDE  
REF=0.000 dB  
0.500 dB/DIV

CH 3 - S21  
REFERENCE PLANE  
0.0000 mm



MARKER 5  
10.000000000 GHz  
-0.308 dB

MARKER TO MAX  
MARKER TO MIN

1	0.050000000 GHz	0.003 dB
2	2.000000000 GHz	-0.095 dB
3	5.000000000 GHz	-0.178 dB
4	8.000000000 GHz	-0.296 dB
6	12.000000000 GHz	-0.372 dB

MARKER READOUT  
FUNCTIONS

**Reference Line (Insertion Loss and Return Loss)**

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