

# H2.4-R-SR2-S RF Report

HIROSE ELECTRIC CO.,LTD.  
July 2020  
Rev.0  
RF-20016

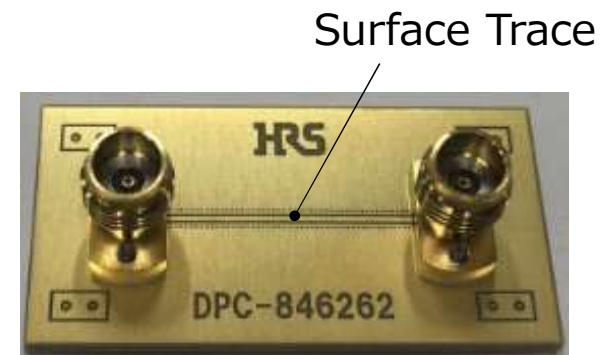
# Outline

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- 1. Feature*
- 2. Simulation model*
- 3. Electrical performance*
- 4. Measurement data*

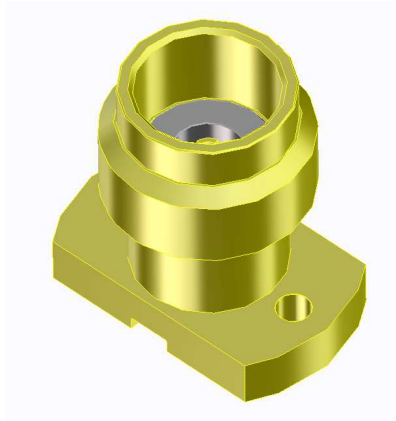
# 1. Feature

- Complies with MIL-STD-348B Standard
- Supports up to 50GHz frequency
- Screw mounting
  - Provides excellent high frequency performance and consistent assembly quality
  - Reusable
  - Reduces mounting complexity
- Flexible PCB thickness
- RoHS compliant

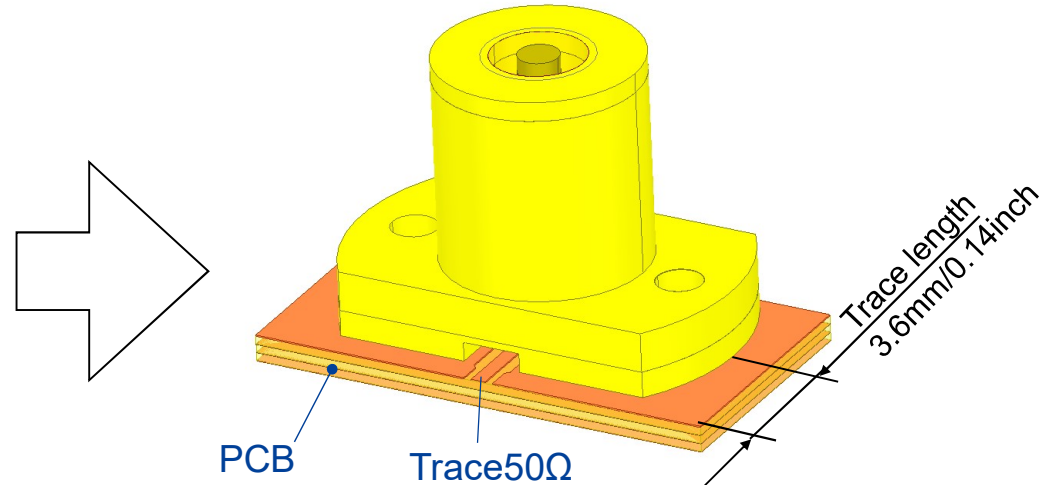


## 2. Simulation model

s2p file is created by HFSS.



Original model



HFSS simulation model

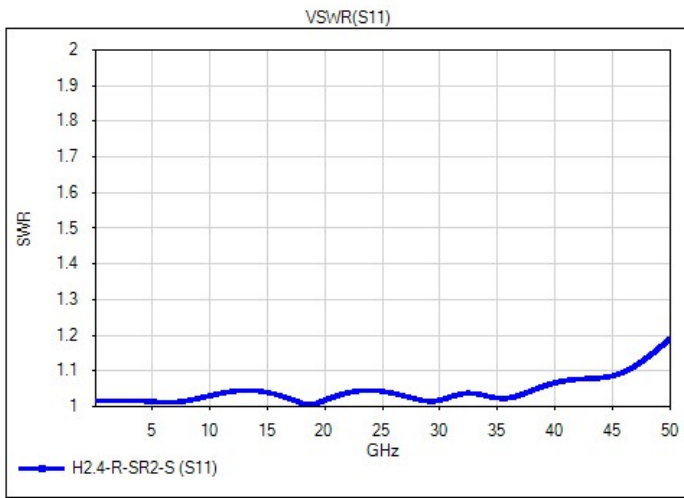
Please see the details below:

<https://www.hirose.com/product/en/pr/mmwave/>

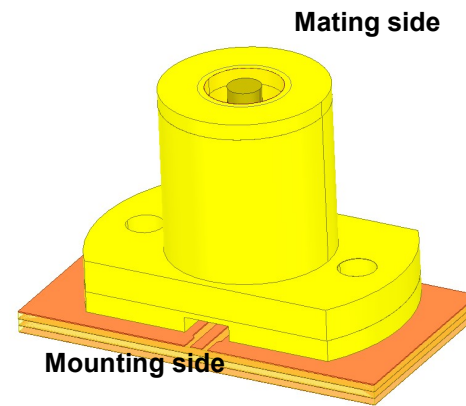
Simulation Model PCB layer		
Top	35 micron (Copper foil + Plating)	(1.0mm/0.04in)
	200 micron (Core Meg6 R-5775K $\epsilon_r=3.62$ )	
L2	18 micron (Copper foil)	
	200 micron (PP Meg6 R-5670KG $\epsilon_r=3.62$ )	
L3	18 micron (Copper foil)	
	200 micron (Core Meg6 R-5775K $\epsilon_r=3.62$ )	
L4	35 micron (Copper foil+ Plating)	

# 3. Electrical performance

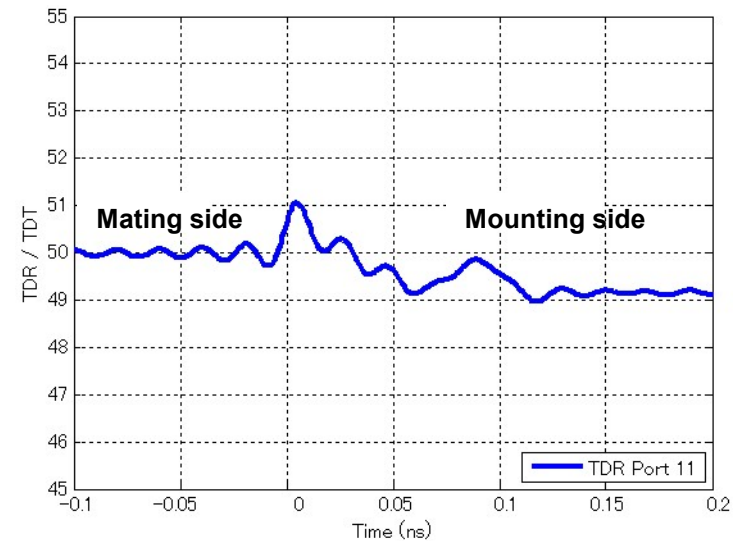
< VSWR >



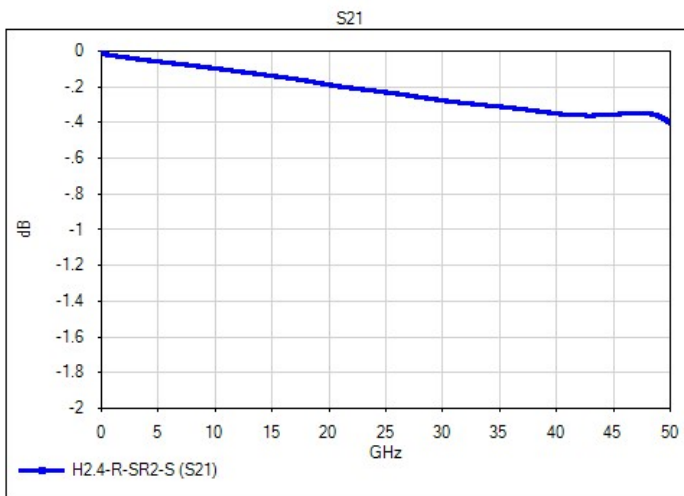
Simulation result: s2p



<TDR>

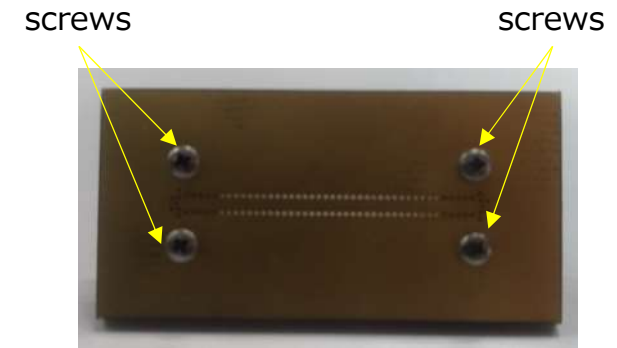
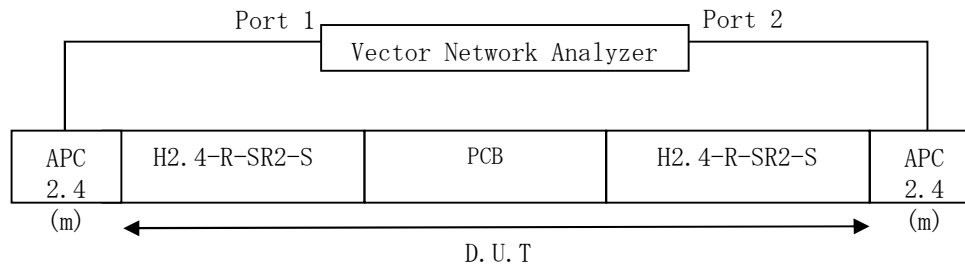


<Insertion Loss>



## 4.Measurement data

### ◆ Measurement setup



Back side of PCB

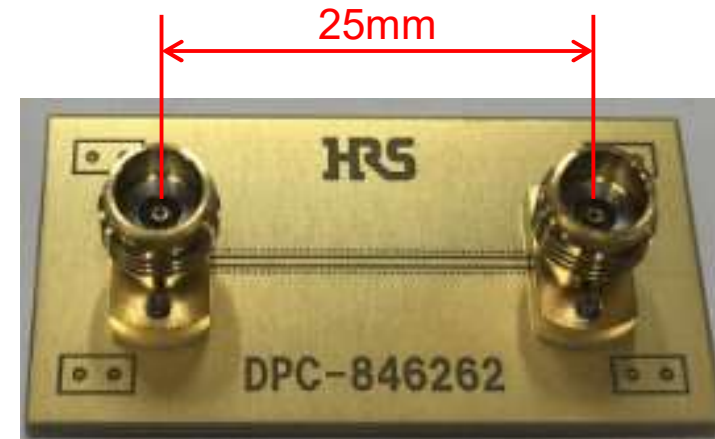
### VNA information

2 port Agilent E8361A PNA

Frequency range : 100MHz – 50GHz

Number of Points : 801 points

IF band : 500Hz



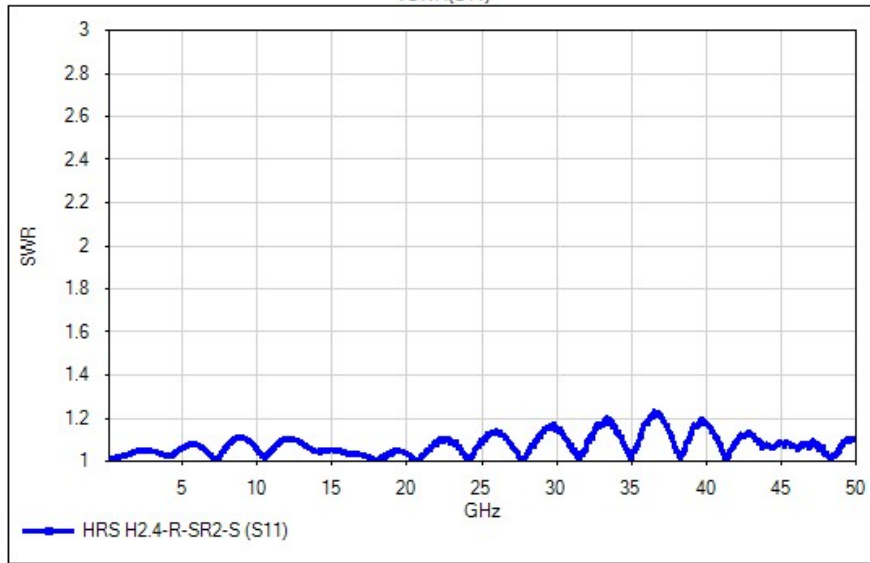
※ Please contact us for detail PCB design.  
We can provide PCB design notes and HFSS encrypted model.

# Measurement results

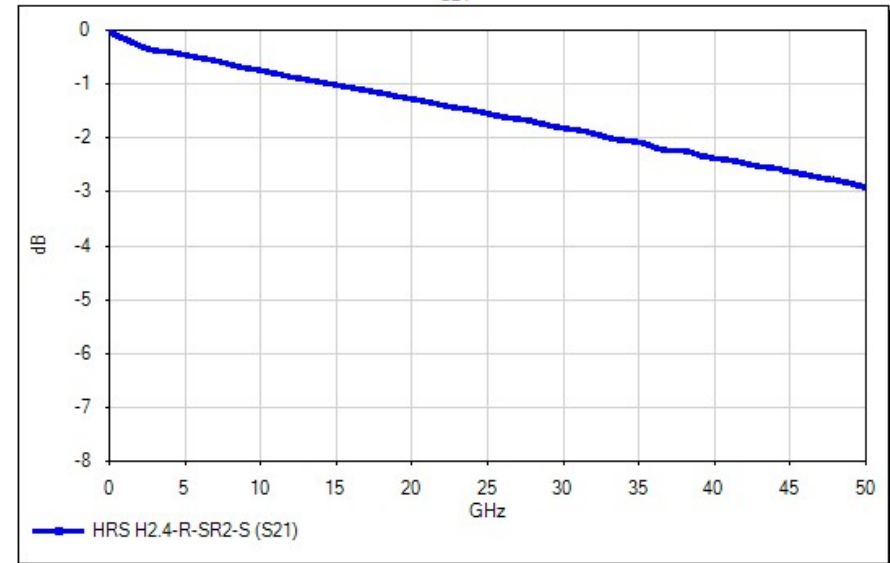


Measurement Results

< VSWR >  
VSWR(S11)



< Insertion Loss >  
S21



# Comparisons

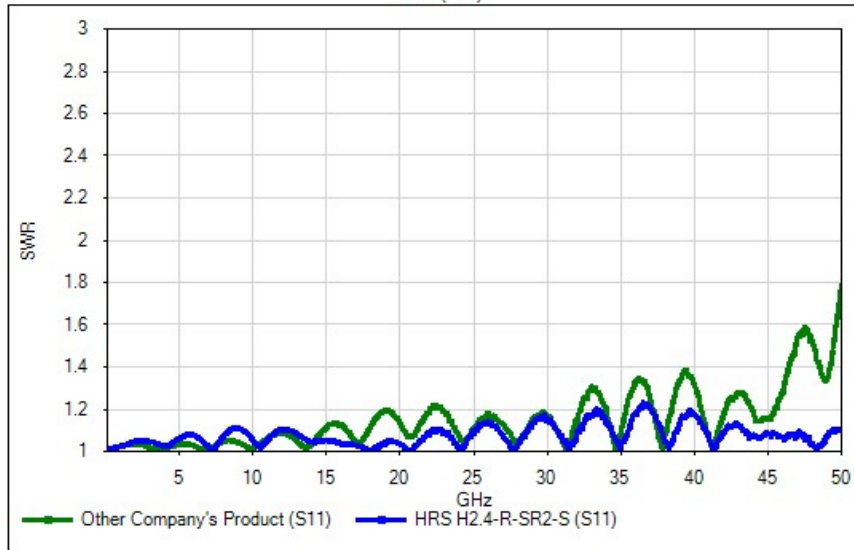
Hirose 2.4mm  
H2.4-R-SR2-S



Measurement results

< VSWR >

VSWR(S11)



< Insertion Loss >

S21

