

# HV-LR-SR2 RF Report

HIROSE ELECTRIC CO.,LTD.  
Nov. 2019  
Rev.2  
RF-19065

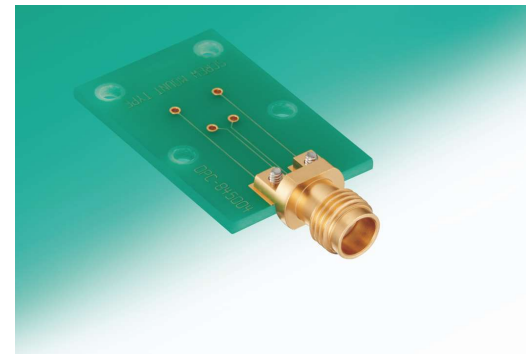
# Outline

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

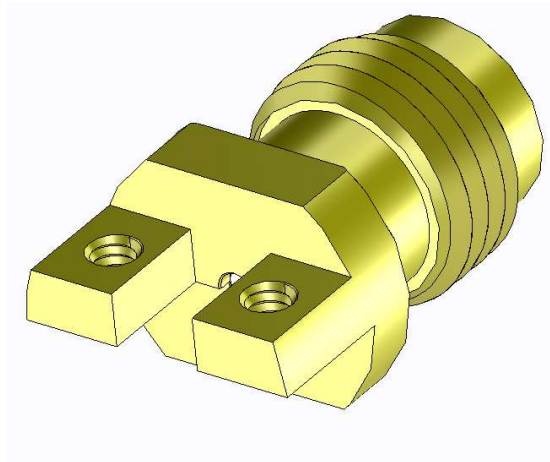
# 1. Feature

- Complies with IEC 61169-32 Standard
- Supports up to 65GHz frequency
- Screw mounting
  - Provides excellent high frequency performance and consistent assembly quality
  - Reusable
  - Reduces mounting complexity
- Flexible PCB thickness
- RoHS compliant

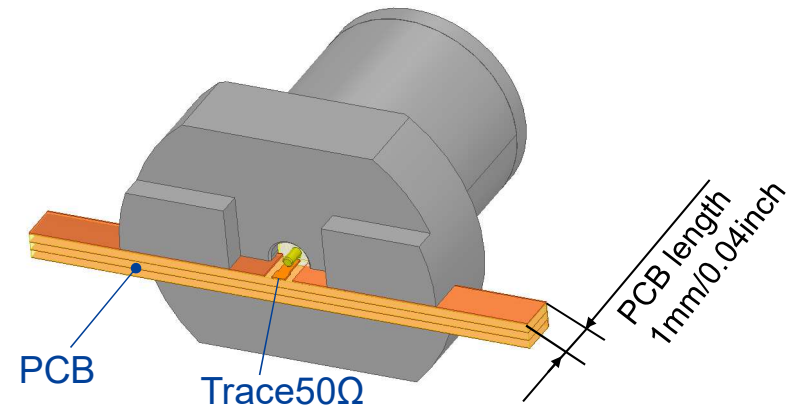
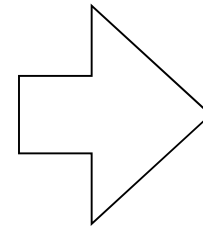


## 2. Simulation model

s2p file is created by HFSS.



Original model



HFSS simulation model

Please see the details below:

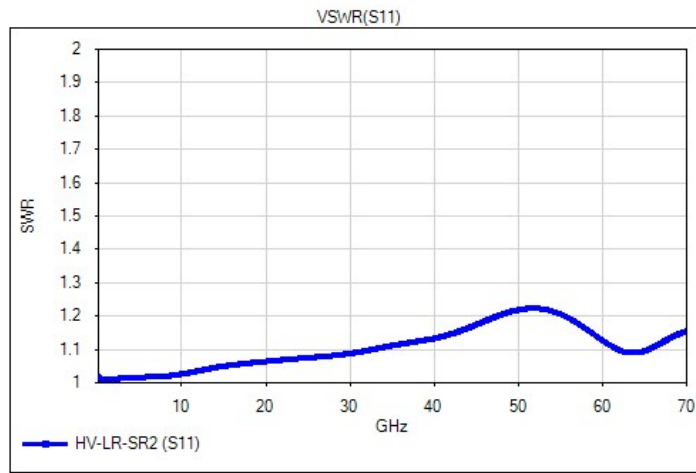
<https://www.hirose.com/product/en/pr/mmwave/>

Simulation Model PCB layer	
Top	43 micron (Copper foil + Plating)
	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 FR-4 $\epsilon_r=4.4$ )
L4	43 micron (Copper foil+ Plating)

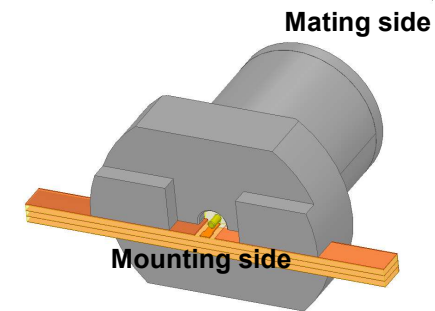
(0.7mm/0.028in)

### 3. Electrical performance

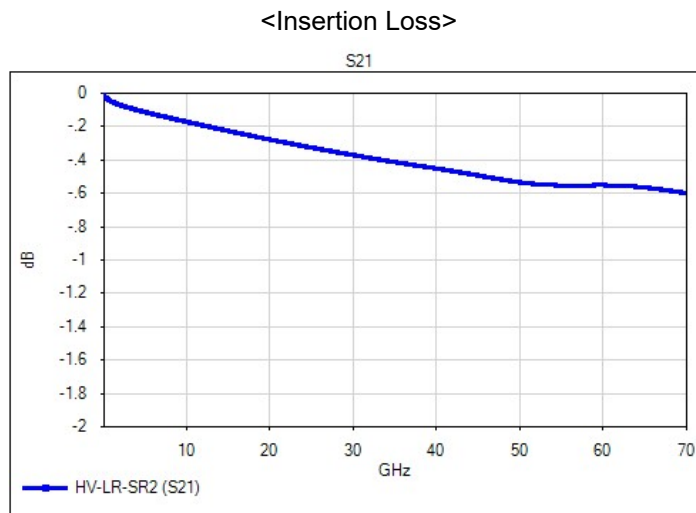
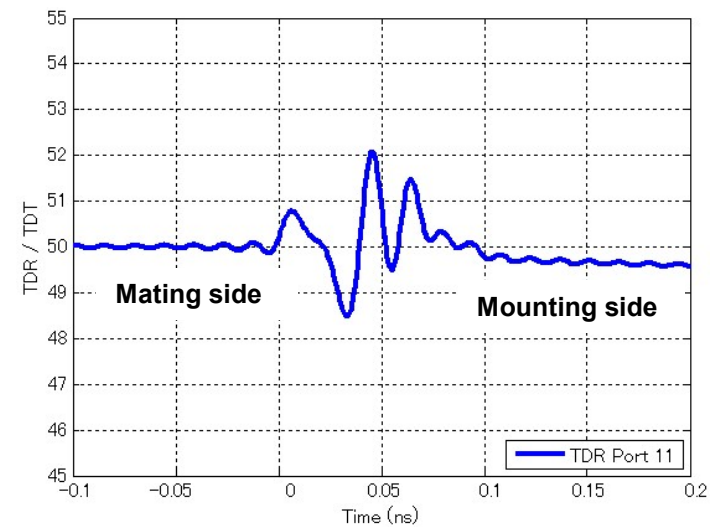
&lt; VSWR &gt;



Simulation result: s2p

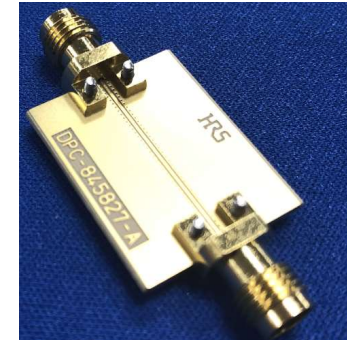
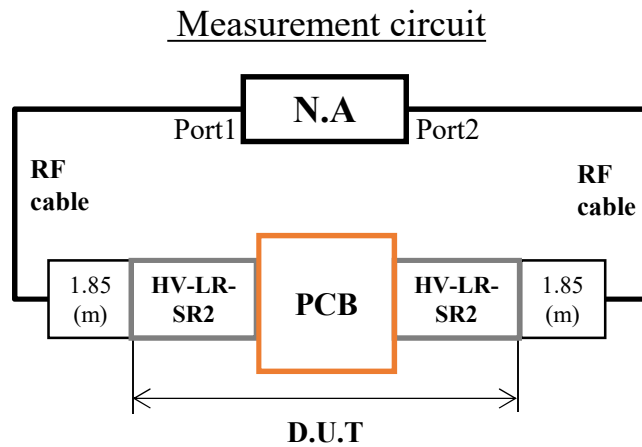


&lt;TDR&gt;



## 4. Measurement data

### ◆ Measurement setup



【Keysight PNA Network Analyzer N5227B】

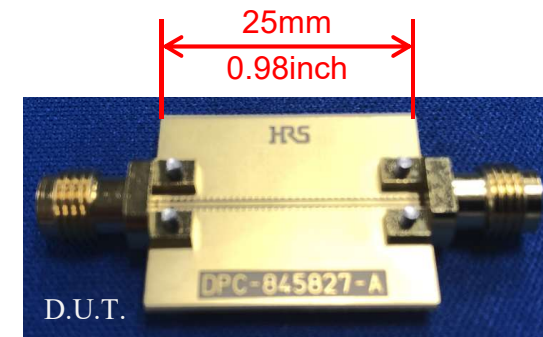


PNA set up

Frequency range : 10MHz – 65GHz

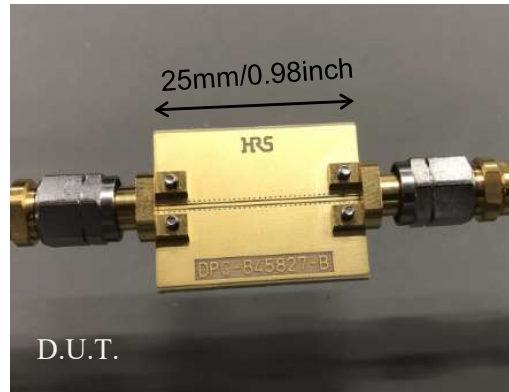
IF bandwidth : 500Hz

Number of point : 1601 points



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

# Measurement results



Measurement results

