

HK-LR-SR2 RF Report

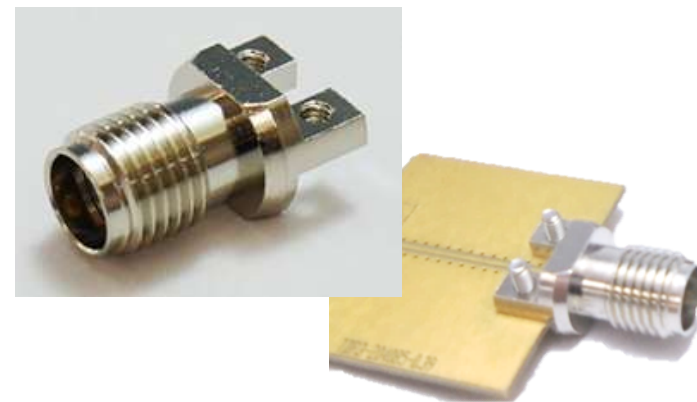
HIROSE ELECTRIC CO.,LTD.
Nov. 2019
Rev.2
RF-16096

Outline

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

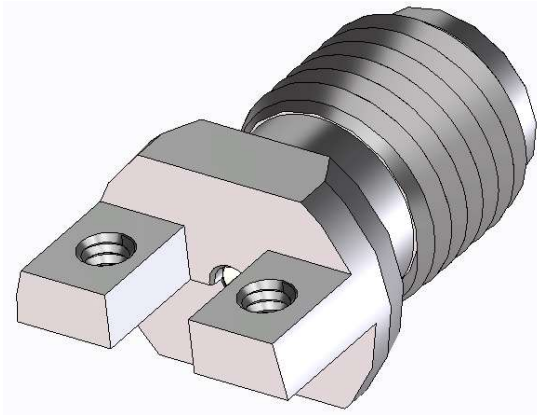
1. Feature

- Complies with MIL-STD-348B Standard
- Supports up to 40GHz frequency
- Screw mounting
 - Provides excellent high frequency performance and consistent assembly quality
 - Reusable
 - Reduces mounting complexity
- Flexible PCB thickness
- RoHS compliant

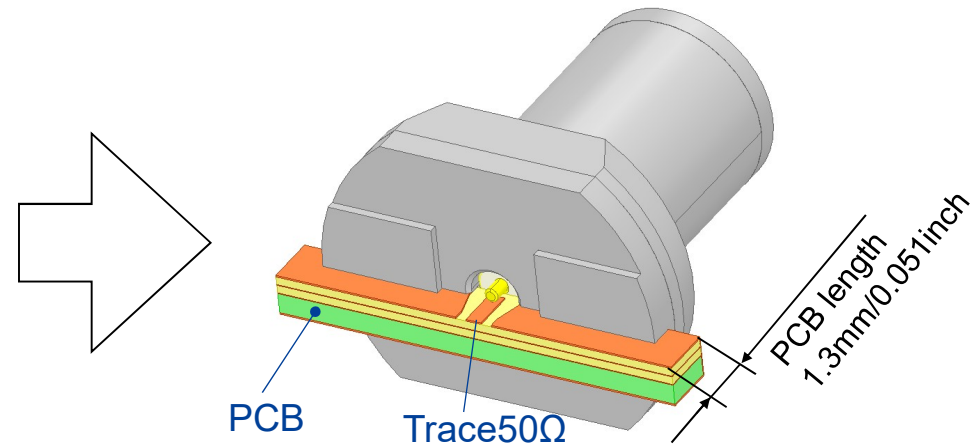


2. Simulation model

s2p file is created by HFSS.



Original model



HFSS simulation model

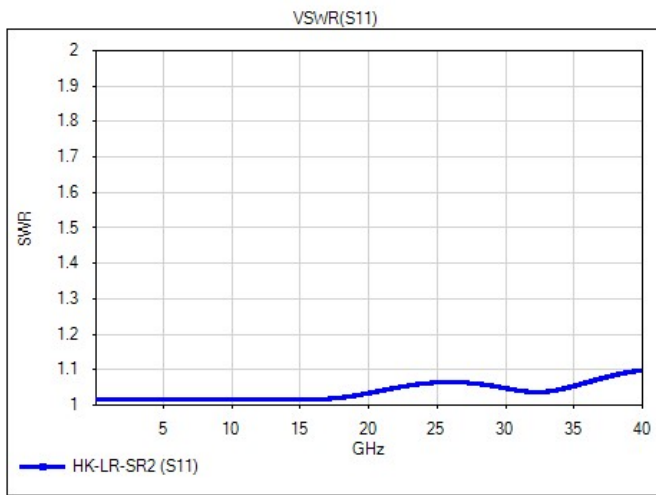
Please see the details below:

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

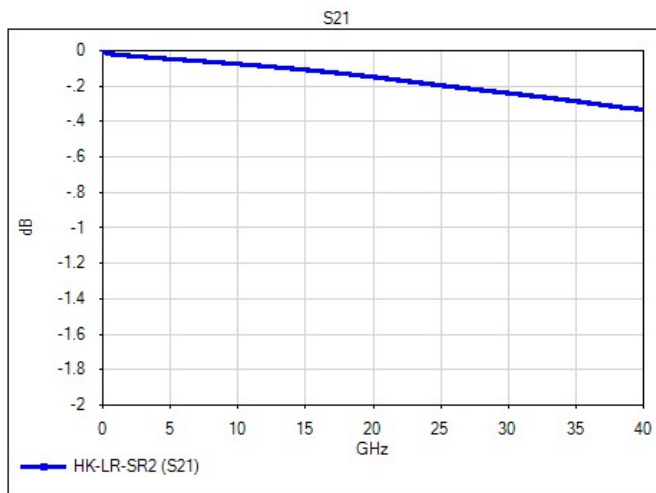
Simulation Model PCB layer		
Top	43 micron (Copper foil + Plating)	(1.0mm/0.04in)
	200 micron (Core Meg6 R-5775K $\epsilon_r=3.62$)	
L2	18 micron (Copper foil)	
	200 micron (PP Meg6 R-5670KG $\epsilon_r=3.62$)	
L3	18 micron (Copper foil)	
	500 micron (Core FR-4 $\epsilon_r=4.4$)	
L4	43 micron (Copper foil+ Plating)	

3. Electrical performance

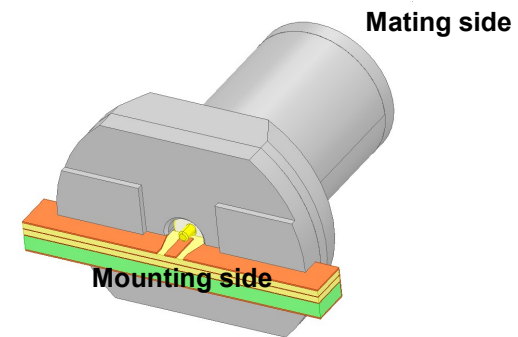
< VSWR >



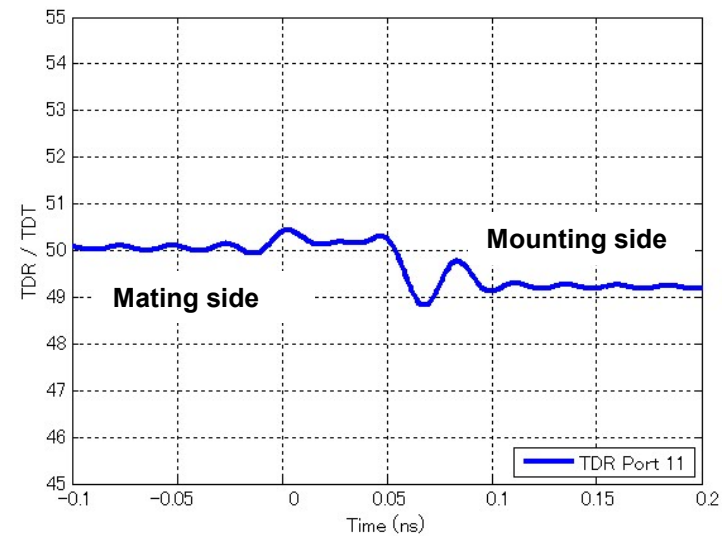
< Insertion Loss >



Simulation result: s2p

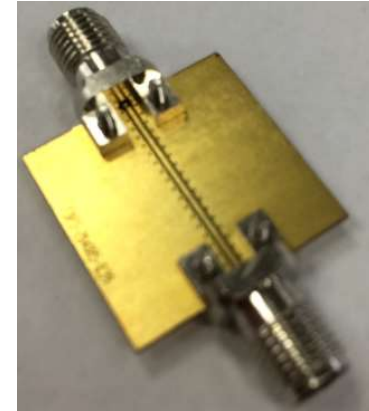
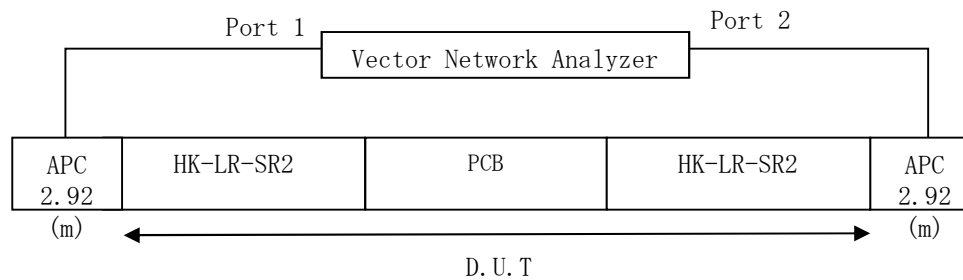


< TDR >



4. Measurement data

◆ Measurement setup



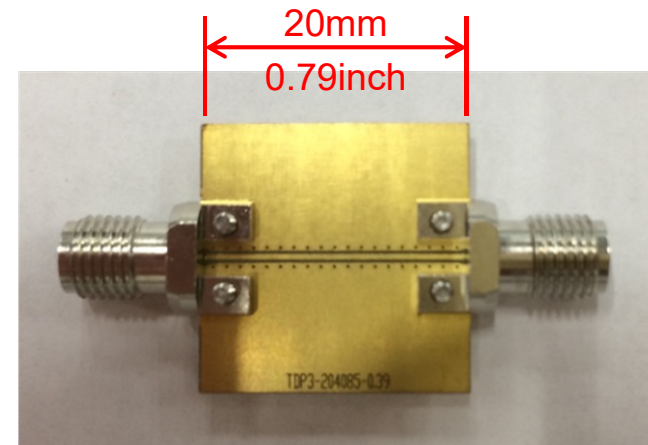
VNA information

2 port Agilent E8361A PNA

Frequency range : 100MHz – 40GHz

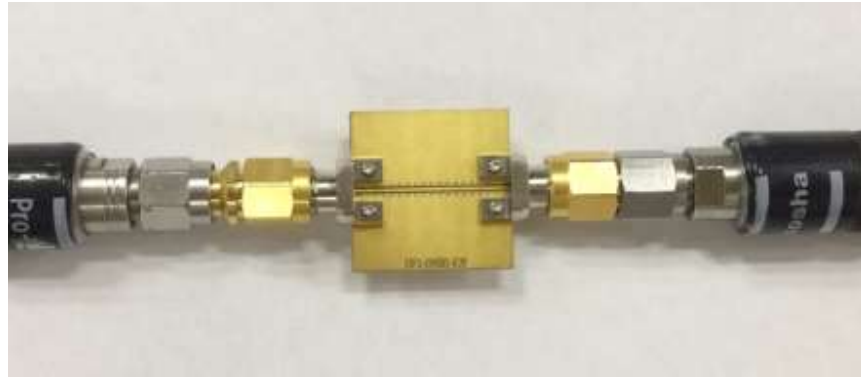
Number of Points : 801 points

IF band : 300Hz



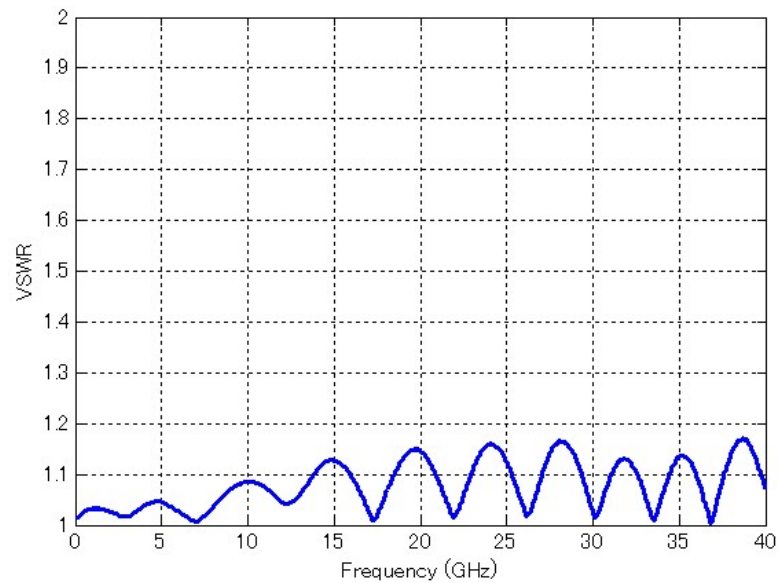
※ Please contact us for detail PCB design.
We can provide PCB design notes and HFSS encrypted model.

Measurement results



Measurement results

< VSWR >



< Insertion Loss >

