

# M1506GR Antenna Specification

**Application number:** T13-047-1039

**Manufacturer:** Staf Corporation

**Location:** STAF Building, 2-6-12 Shin Yokohama, Kohoku-ku Yokohama, Kanagawa Japan, 222-0033

Approval	check	charge
		

Application form  
to  
Technical standards conformity certification

T13-047-1039

21 Feb. 2017

STAF corporation  
electric design department

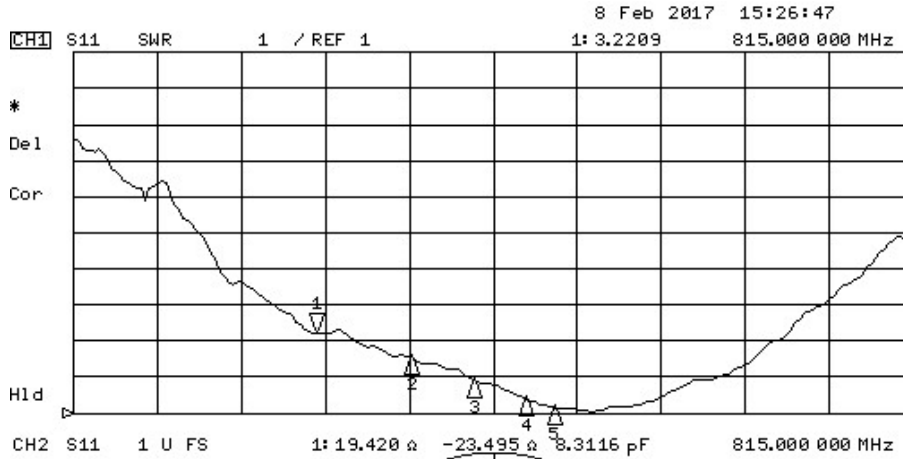
# 1. Specification

Item	Contents
Manufacturer	STAF corporation
Product name	Antenna
Application number	T13-047-1039
Frequency	860~928[MHz]
Antenna type	monopole antenna ( $\lambda/2$ )
Maximum absolute gain	3dBi or less
Impedance	50 $\Omega$
Connector type	SMA-P (REVERSE)

## 2. Outside dimension drawing

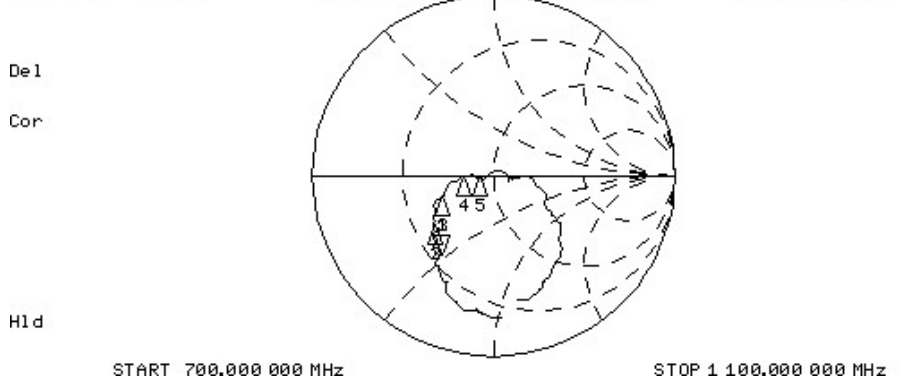


# 3. VSWR/impedance characteristics



- CH1 Markers
- 2: 2.5442  
860.000 MHz
  - 3: 1.9201  
890.000 MHz
  - 4: 1.4281  
915.000 MHz
  - 5: 1.1769  
928.000 MHz

Frequency : [MHz]	VSWR
860	2.54
890	1.92
915	1.42
928	1.18



- CH2 Markers
- 2: 21.916 Ω  
-15.443 Ω  
860.000 MHz
  - 3: 26.766 Ω  
-7.1016 Ω  
890.000 MHz
  - 4: 35.031 Ω  
-712.89 mΩ  
915.000 MHz
  - 5: 42.533 Ω  
-880.86 mΩ  
928.000 MHz

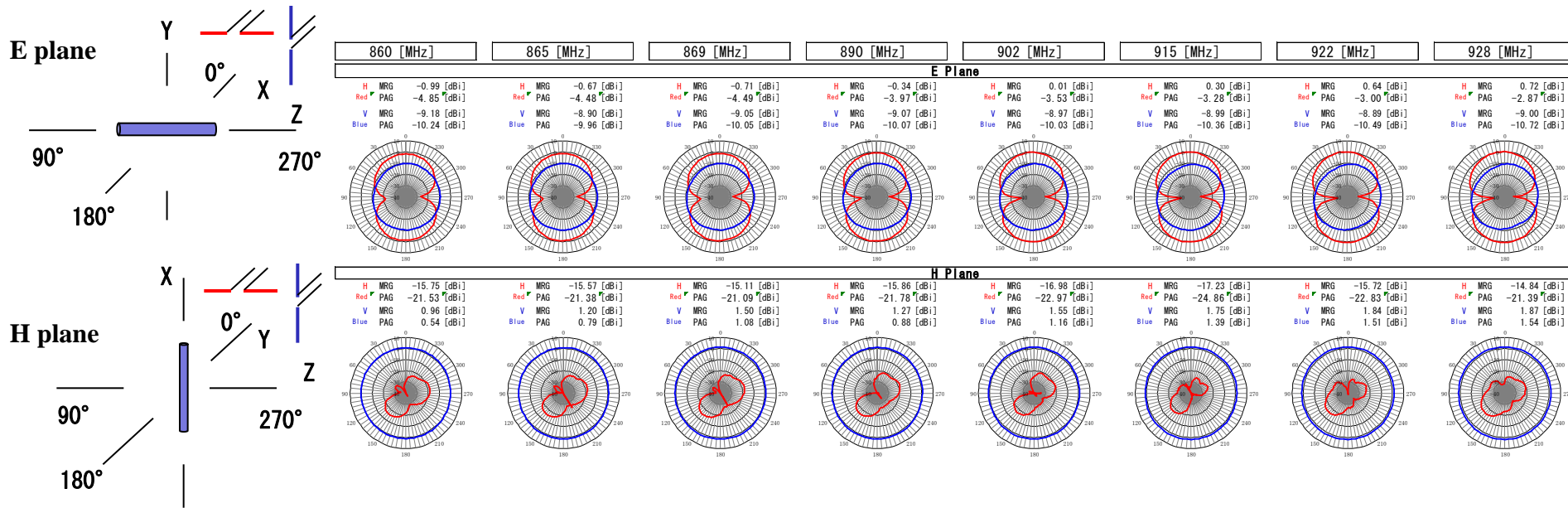
# 4. Gain - Radiation pattern characteristics

█ Horizontal polarized wave

█ Vertical polarized wave

MRG = Maximum radiation gain

PAG = Pattern average gain

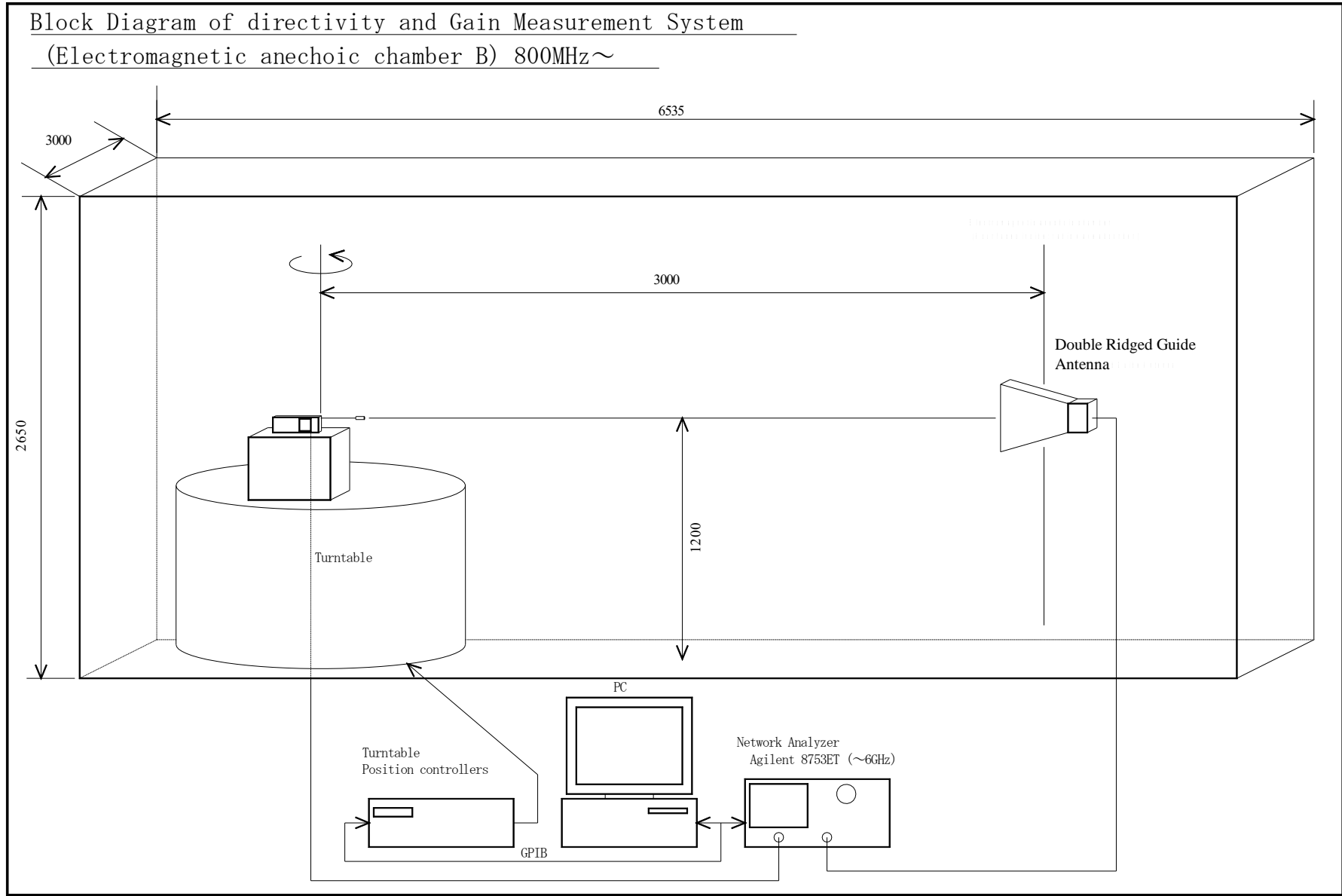


承認	検認	検認	担当

# Staf Corporation Antenna Measurement System

2022/11/01  
Staf Corporation

# Block Diagram of directivity and Gain Measurement System





# Antenna Measurement Test Method

- ① Measure the reference antenna (made by Anritsu).
- ② The antenna gain of the reference antenna is used as the reference value.
- ③ Measure the object to be measured.
- ④ The antenna gain and directivity are calculated by relative comparison between the object under test and the reference antenna.

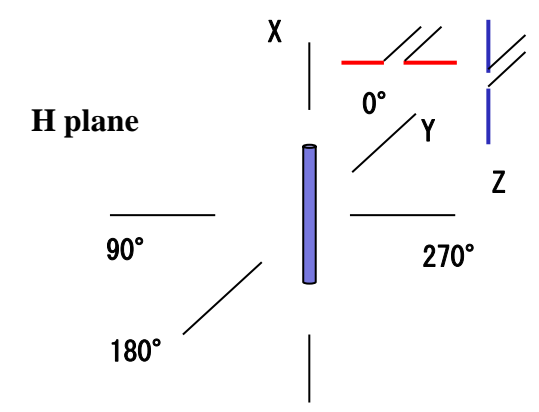
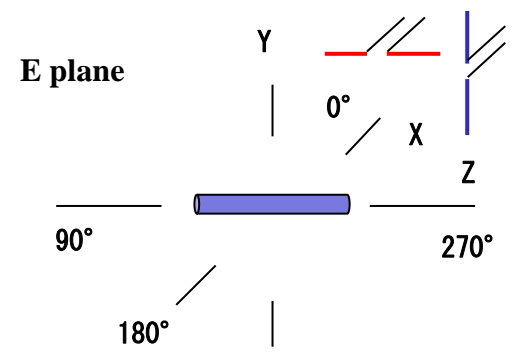
# Photo of setup during measurement

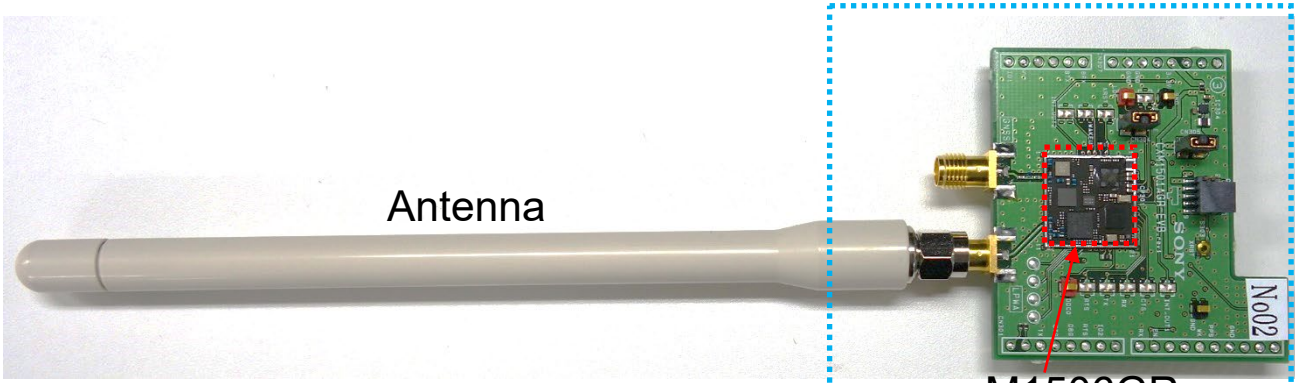


**E plane**



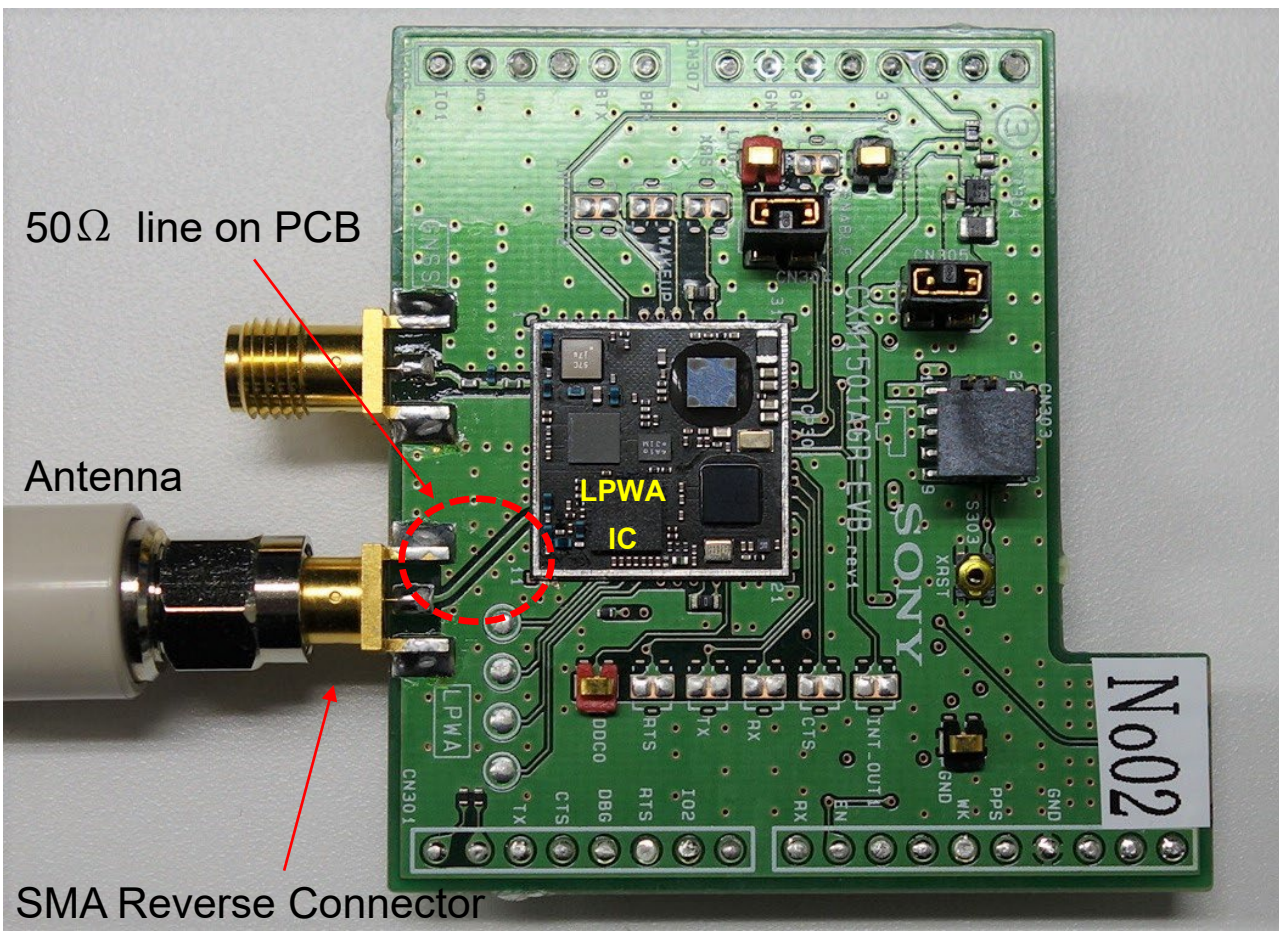
**H plane**





Antenna

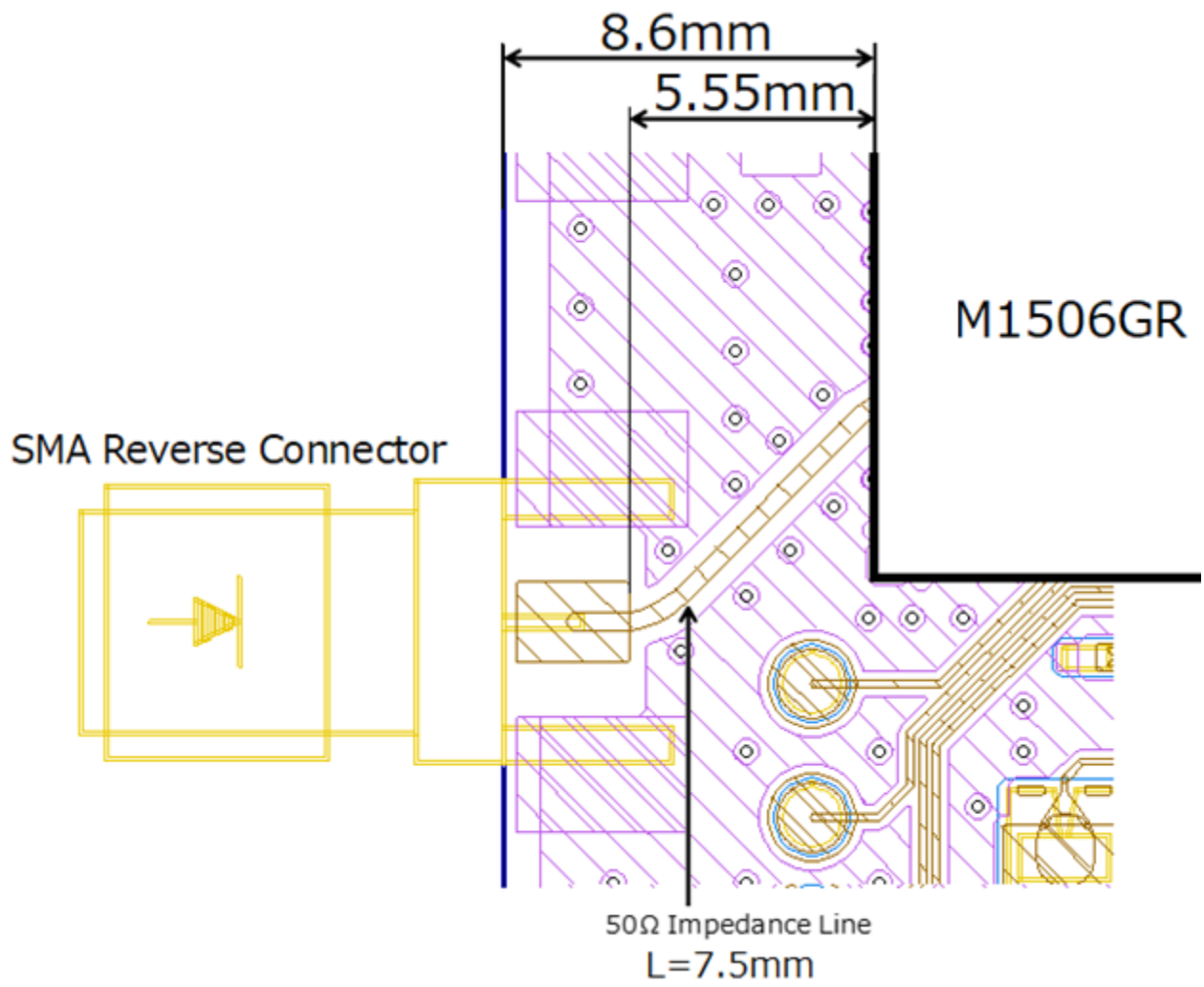
M1506GR



50Ω line on PCB

Antenna

SMA Reverse Connector



PCB Layout (from "905M\_ANT" pin to antenna connector)