

< PRF-G189 GPS G-Mouse Specifications >

1. Internal Patch Antenna Specifications

Item	Spec
Range of Frequency	1575.42MHz +/- 1,023MHz
Impedance	50 [Ohm]
Bandwidth	10MHz min Return Loss ≤ -10dB
Patch Antenna Size	15.0X15.0X6.4.0T
Polarization	R.H.C.P (Right Hand Circular Polarization)
Frequency Temperature Coefficient (TF)	0±20ppm/°C (-40°C ~ +85°C)

2. G-Mouse Key Features

Item	Spec
Main chip	• MT3337
Receiver Type	• GPS L1 1575.42MHz C/A Code • 66 Search channels, 22 simultaneous tracking channels
Sensitivity	• Acquisition : -160[dBm] • Tracking : -165[dBm]
TTFF	EASY Disabled
	• Cold Start (@ -130 dBm) 35 sec
	• Warm start(@ -130 dBm) 30 sec
	• Hot Start (@ -130 dBm) 1 sec
	EASY Enabled
	• Cold Start (@ -130 dBm) 15 sec
	• Warm start(@ -130 dBm) 5 sec
	• Hot Start (@ -130 dBm) 1 sec
LNA	• Built in LNA
satellite	• GPS and QZSS
Position Updating Rate	• default 1hz, up to 5 Hz

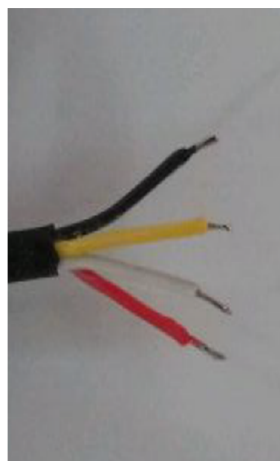
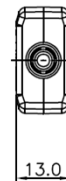
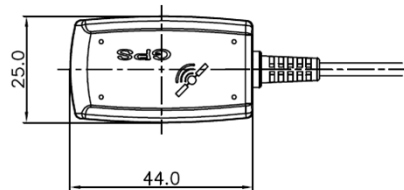
Note :

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Horizontal Position Accuracy (Autonomous)	• under 2.5m CEP @-130dBm
UART port	• default 9600bps , 4800bps to 115200 bps
	• UART port is used for NMEA output, MTK proprietary commands input
Storage temperature	• - 45°C ~ +125°C
Operating Temperature	• - 40 [°C] ~ + 85 [°C]
Connector and Cable	• Optional
Power Supply	• Supply Voltage : 3.3[V] ~ 6.0[V]
	• Typical Supply Volage : 5.0[V]
Size	• 44.0 x 25.0 x 13.0 mm
Cable	• 1.5 meter

3. Mechanical Viewing



Black : GND

Yello : Tx

White : Rx

Red : VDD



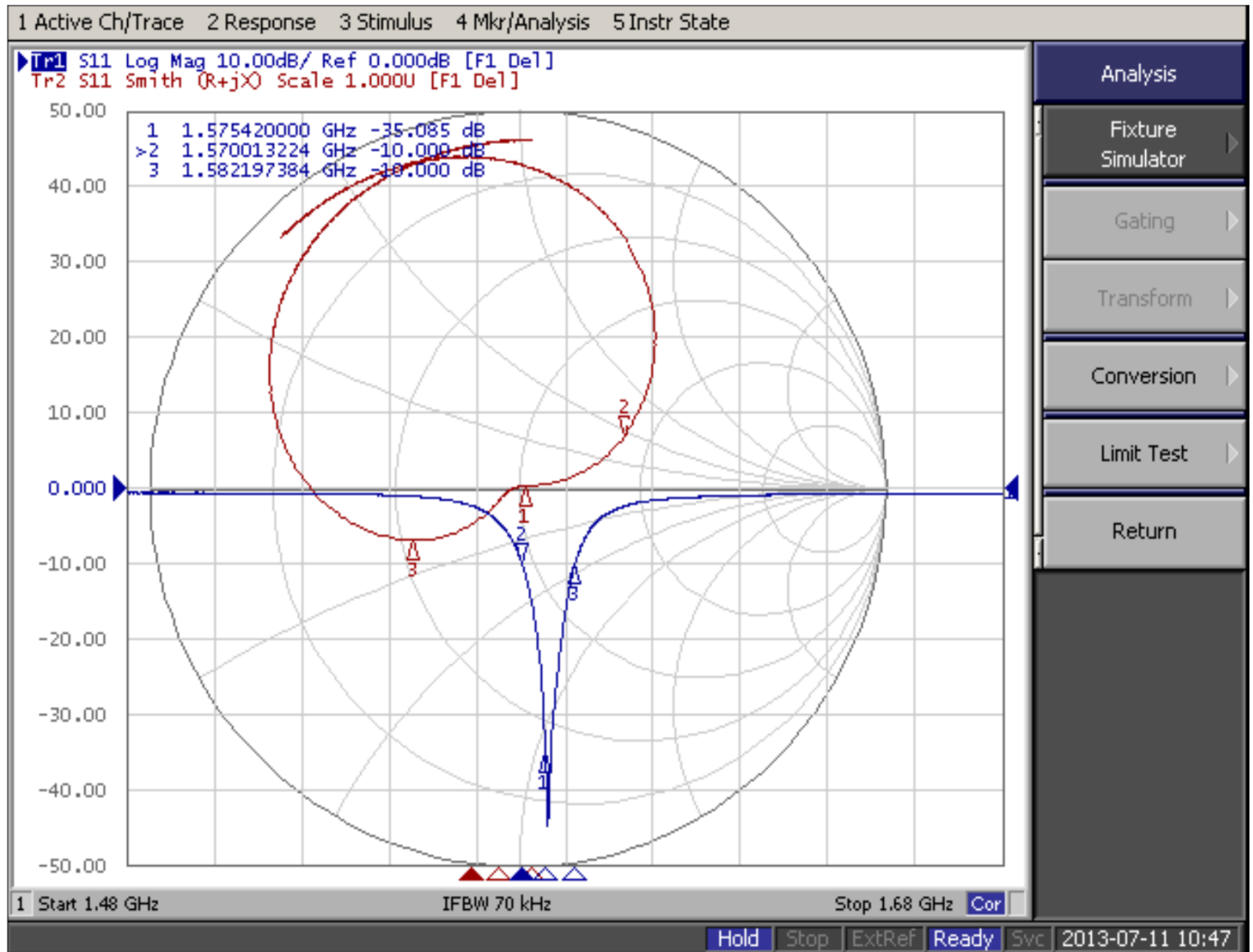
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4. Patch Antenna Test Result

Ground Plane 100mm × 60mm



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