

## ANT161575ST-1202A1

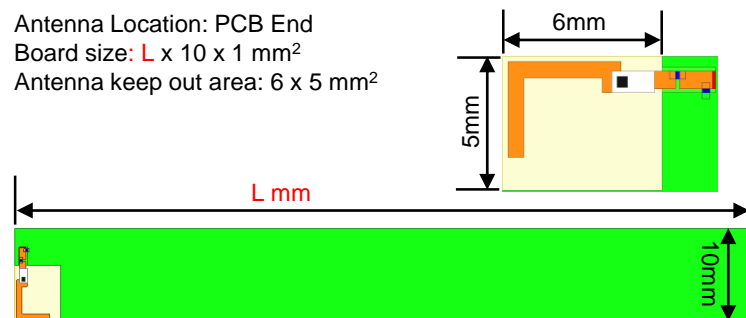


Dimensions (mm)

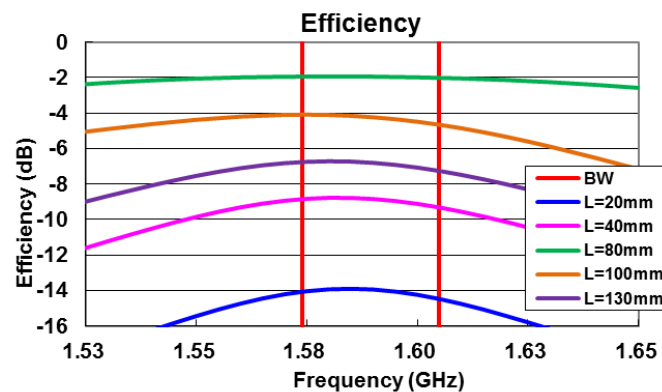
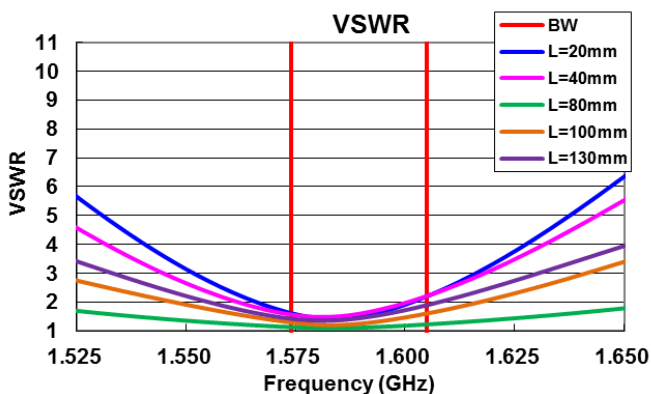
L	W	T
1.60	0.80	0.40
±0.10	±0.10	Max.

## EVALUATION BOARD

Antenna Location: PCB End  
Board size: L x 10 x 1 mm<sup>2</sup>  
Antenna keep out area: 6 x 5 mm<sup>2</sup>

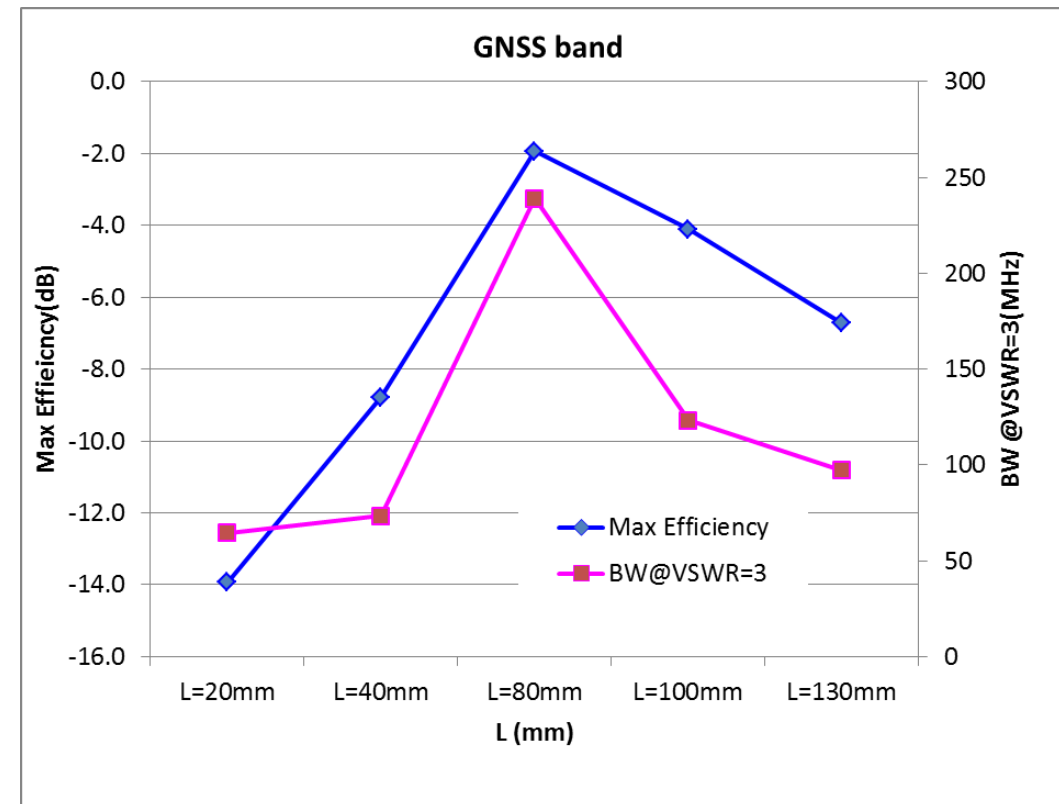


## VSWR & EFFICIENCY (SIMULATION RESULTS)



Frequency(GHz)	VSWR			Efficiency(dB)		
	1.574	1.590	1.605	1.574	1.590	1.605
L=20mm	1.6	1.5	2.2	-14.1	-13.9	-14.5
L=40mm	1.6	1.6	2.2	-8.9	-8.8	-9.3
L=80mm	1.1	1.1	1.2	-1.9	-1.9	-2.0
L=100mm	1.3	1.3	1.6	-4.1	-4.2	-4.7
L=130mm	1.4	1.4	1.9	-6.8	-6.8	-7.3

## MAX EFFICIENCY & BANDWIDTH (SIMULATION RESULTS)



		L=20mm	L=40mm	L=80mm	L=100mm	L=130mm
GNSS band	Max Efficiency(dB)	-13.9	-8.8	-1.9	-4.1	-6.7
	BW@VSWR=3(MHz)	64	73	239	123	97

## ANT161575ST-1202A1

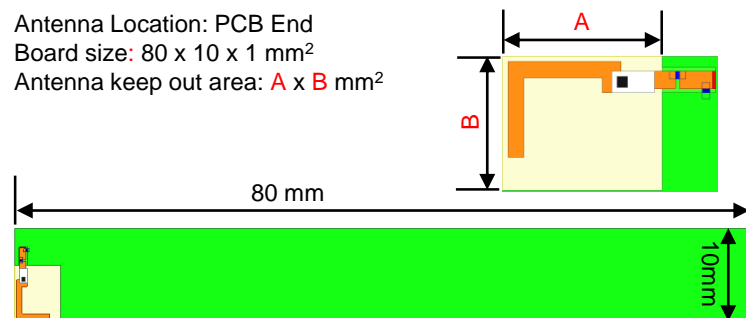


### Dimensions (mm)

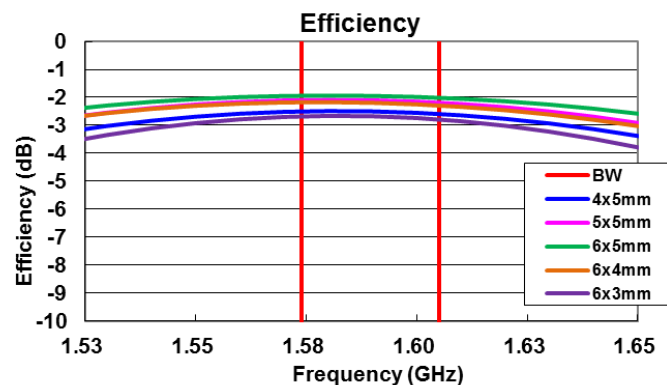
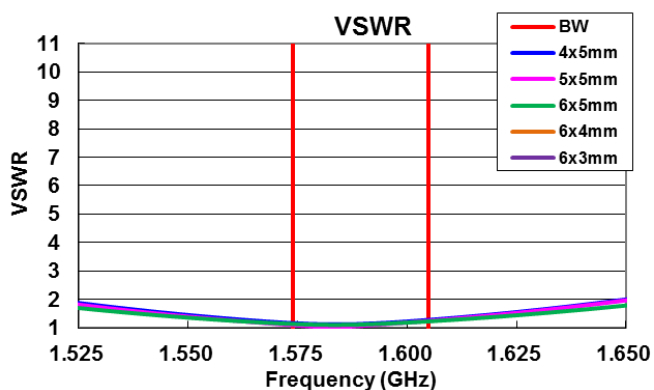
L	W	T
1.60	0.80	0.40
±0.10	±0.10	Max.

## EVALUATION BOARD

Antenna Location: PCB End  
 Board size: 80 x 10 x 1 mm<sup>2</sup>  
 Antenna keep out area: A x B mm<sup>2</sup>

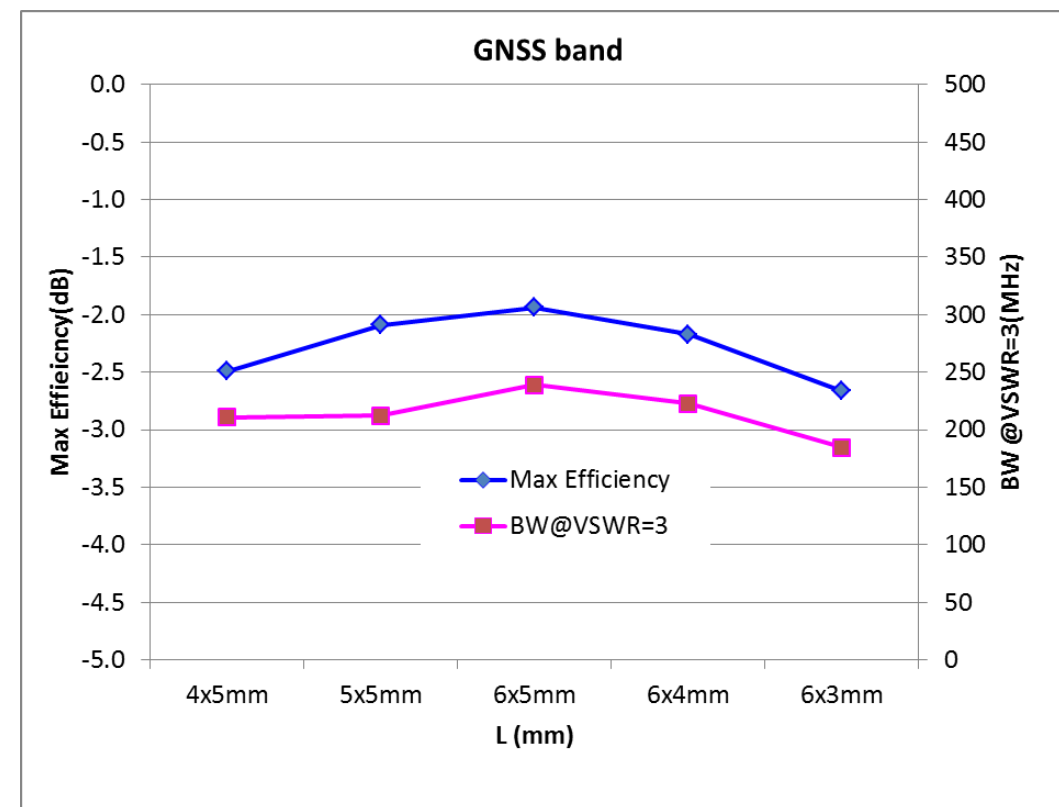


## VSWR & EFFICIENCY (SIMULATION RESULTS)



Frequency(GHz)	VSWR			Efficiency(dB)		
	1.574	1.590	1.605	1.574	1.590	1.605
4x5mm	1.2	1.1	1.3	-2.5	-2.5	-2.6
5x5mm	1.1	1.1	1.2	-2.1	-2.1	-2.2
6x5mm	1.1	1.1	1.2	-1.9	-1.9	-2.0
6x4mm	1.1	1.1	1.3	-2.2	-2.2	-2.3
6x3mm	1.1	1.1	1.3	-2.7	-2.7	-2.8

## MAX EFFICIENCY & BANDWIDTH (SIMULATION RESULTS)



	4x5mm	5x5mm	6x5mm	6x4mm	6x3mm
Max Efficiency(dB)	-2.5	-2.1	-1.9	-2.2	-2.7
BW@VSWR=3(MHz)	211	212	239	223	184

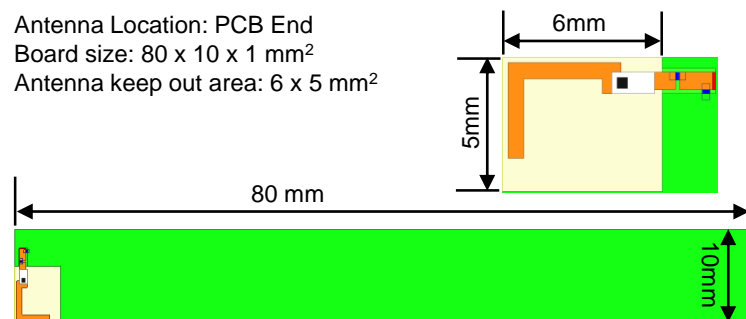
## ANT161575ST-1202A1



Dimensions (mm)		
L	W	T
1.60	0.80	0.40
±0.10	±0.10	Max.

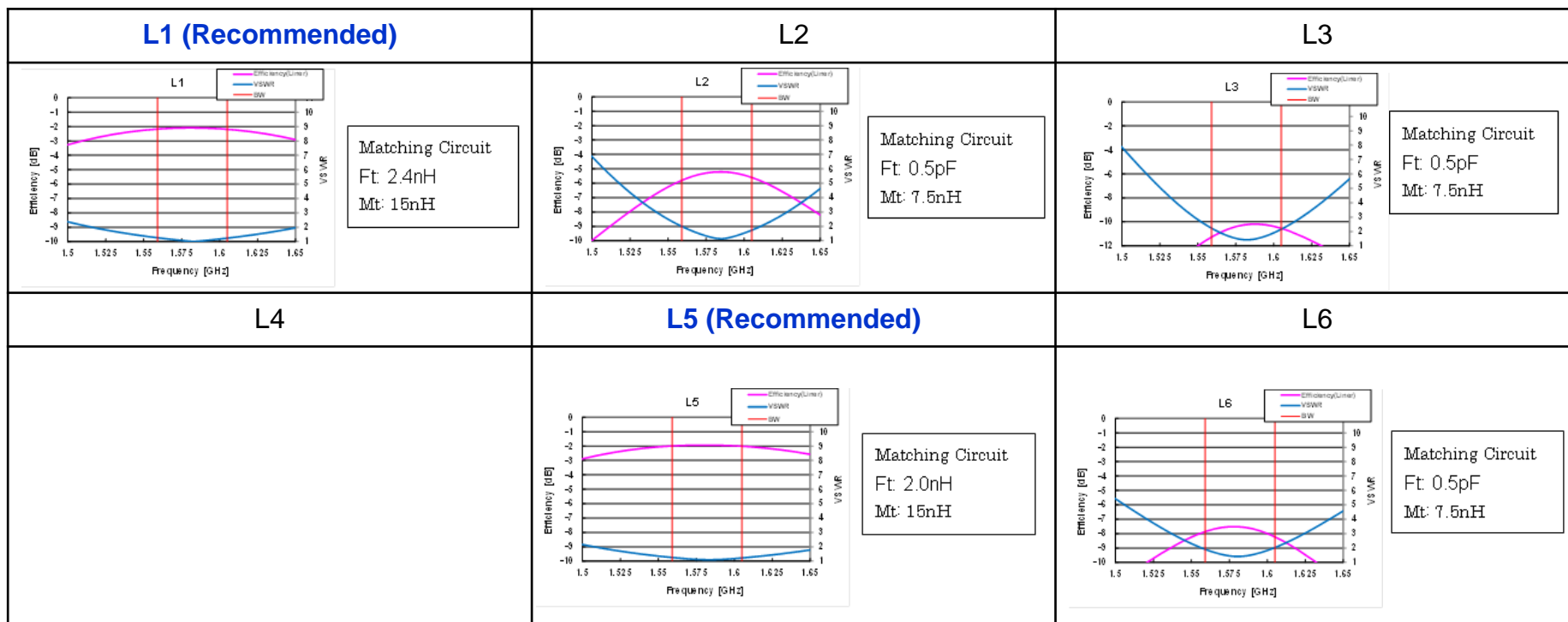
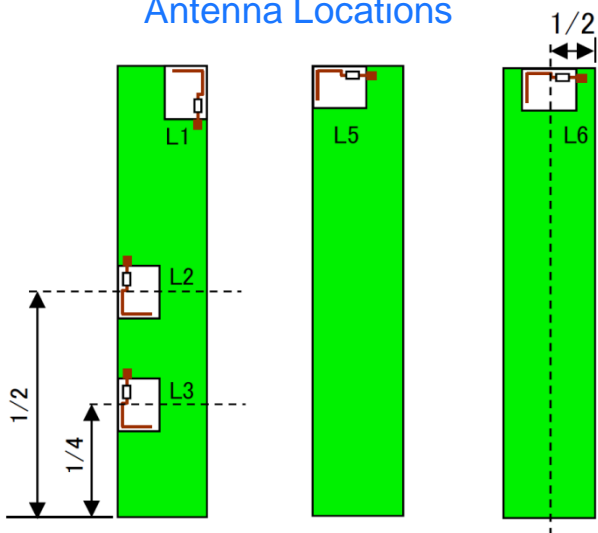
## EVALUATION BOARD

Antenna Location: PCB End  
 Board size: 80 x 10 x 1 mm<sup>2</sup>  
 Antenna keep out area: 6 x 5 mm<sup>2</sup>



## SIMULATION RESULTS

### Antenna Locations



## ANT161575ST-1202A1

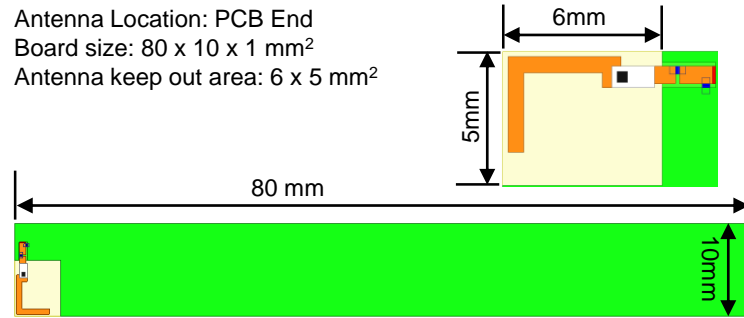


### Dimensions (mm)

L	W	T
1.60	0.80	0.40
±0.10	±0.10	Max.

## EVALUATION BOARD

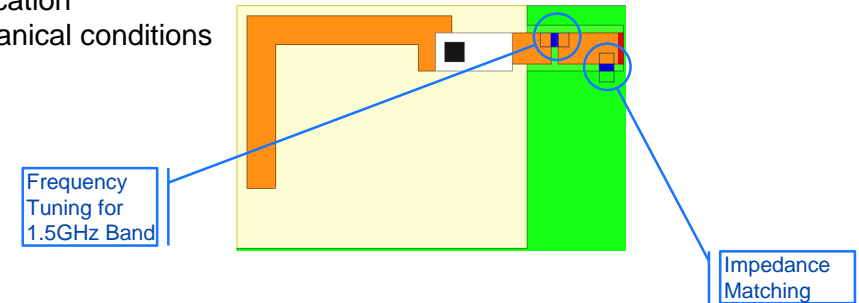
Antenna Location: PCB End  
 Board size: 80 x 10 x 1 mm<sup>2</sup>  
 Antenna keep out area: 6 x 5 mm<sup>2</sup>



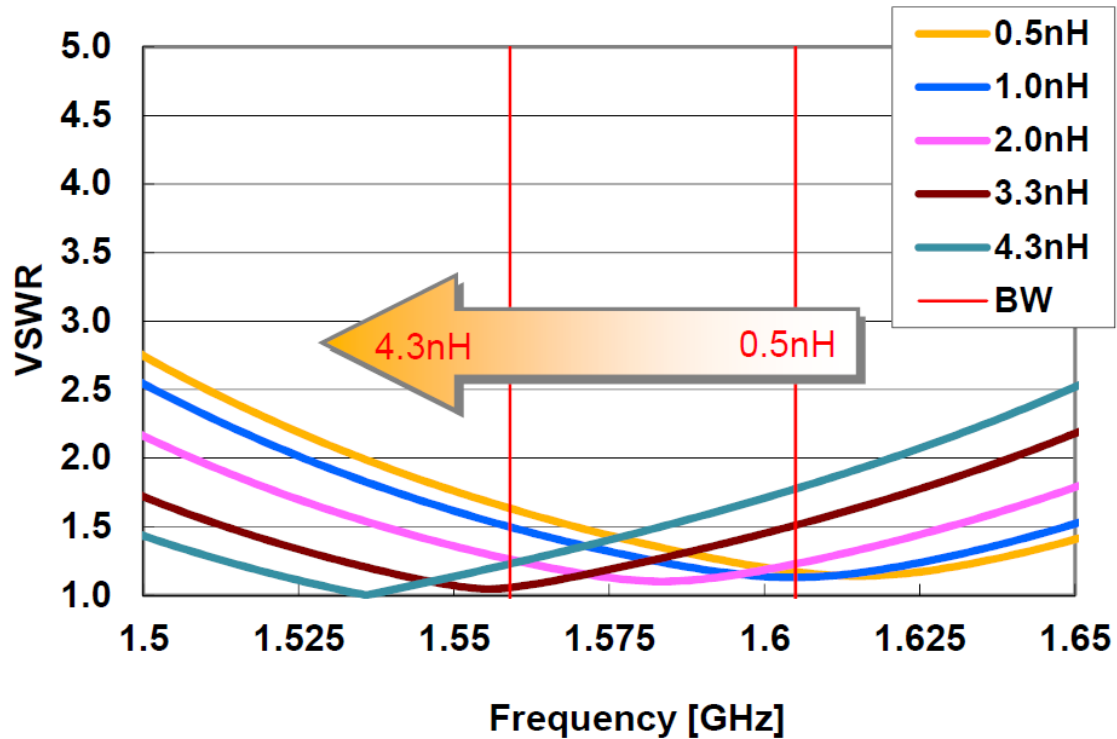
## TECHNICAL REMARKS

Value of tuning components depend on:

- PCB Size
- Antenna Location
- Other mechanical conditions



## FREQUENCY TUNING (SIMULATION RESULTS)



## IMPEDANCE MATCHING (SIMULATION RESULTS)

