

GPS/ BDS Antenna

MODEL: GA-38B

Small size and ruggedness, demand of vehicle locating and marine navigation GPS/BDS antenna that will sustain harsh environment.



- High performance
- Out-band filtering & rejection
- Fully waterproof IPX8
- Voltage: 2.5 V ~5.5 V DC
- Provides excellent signal amplification
- ESD Design & TVS Design (optional)

GA-38B is the integration of a high performance GPS/BDS patch antenna and a state-of-the-art low noise amplifier into a very low profile/ extremely compact/ fully waterproof enclosure which, when connected to a GPS/BDS receiver with 2.5~5.5V DC antenna power, provides excellent signal amplification and out-band filtering & rejection, provide 3V or 5V input Voltage is available.

FEATURES:

- Compact Construction/ Low Profile/ Fully Waterproof
- Magnet and Screw Mount Base
- Excellent Temperature Stability
- Low Noise Figure
- High Sensitivity

APPLICATIONS:

- Automobile GPS/BDS
- Bluetooth Receiver
- Car Tracking Navigation System
- AVL / Fleet Management Systems
- External Antenna for Handheld GPS
- External Antenna for PDA Navigator

Specifications:

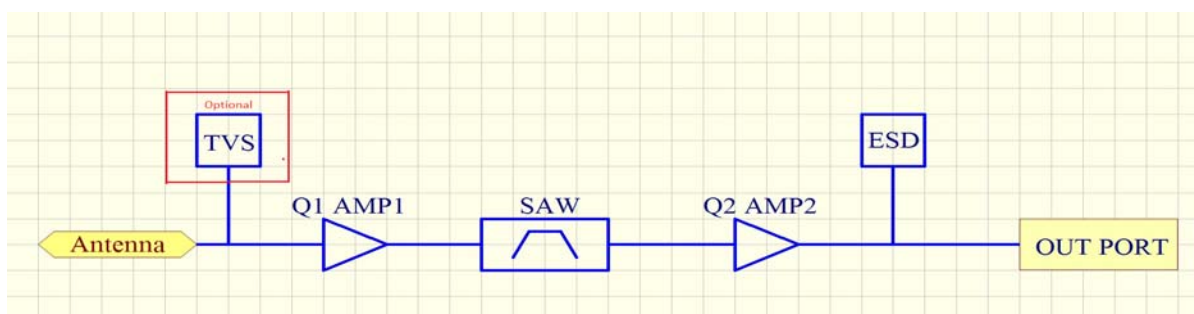
PHYSICAL CONDITION	
Constructions:	ABS PA777D Shell / AB Glue for water seal in between
Dimensions:	40.5mm (L) x 38mm (W) x 12.3mm (H)
Weight:	50 grams (excluding cable & connector)
Color:	Standard in Black,
Mounting:	Magnet mount with two magnets or 3M Double sided tape
Cable & Connector	
RF cable:	5 meter RG174/U (standard) cable, other length available
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector	BNC,TNC,FME,GT5,GT16,GT16F,HFC, MCX,MMCX, SMA, SMB or SMC in straight or right angle
Antenna Element	

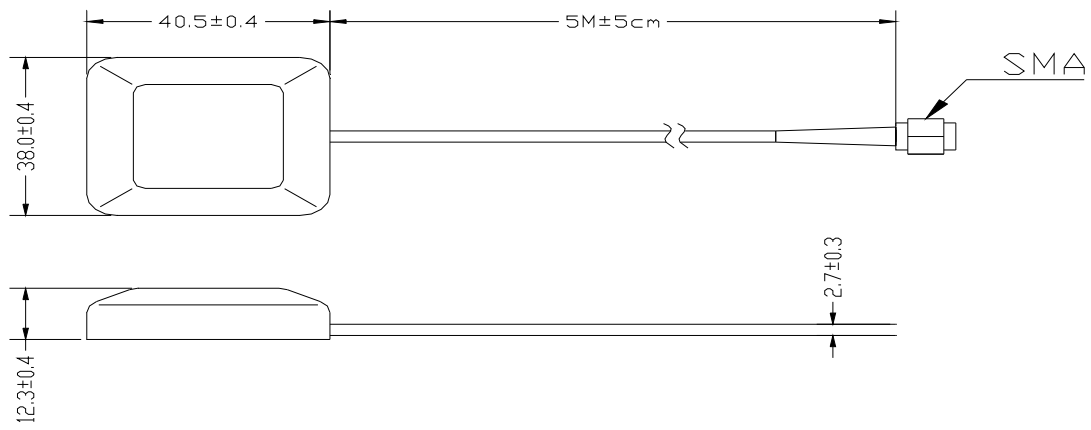
Center Frequency:	1559~1575Mhz MHz
Polarization:	R.H.C.P. (Right Handed Circular Polarization).
Bandwidth	10 MHz min. @S11≤-10 dB, 24MHz typ. @S11<-8dB
Gain @ 10° Elevation:	2 dBi typical.
Axial Ratio:	3 dB max.
Output VSWR:	1.5 max
Output Impedance:	50 ohm
Low Noise Amplifier	
Power Gain:	1559 Mhz : 29db 1575 Mhz : 29db
Bandwidth:	50 MHz min.
Noise Figure:	1.5 typ
Filter	SAW Filter 30 dB min @ fo± 100MHz * fo=1585MHz
Supply Voltages:	2.5~5.5V DC.
Current Consumption:	2.5V : 6.6mA Typ. 3V: 10.6mA Typ. 4V: 14.6mA Typ. 5V: 20.6mA Typ.
Output Impedance:	50 ohm
Overall Performance: (antenna element, LNA & coax cable)	
Center Frequency:	1559 ~1575 Mhz.
Gain:	At 90° vertical to sky 30 ± 4.5dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane
Noise Figure:	2.0 max.
Axial Ratio:	3 dB max.
Bandwidth:	10MHz min.
VSWR:	2.0 max.
Output Impedance:	50 ohm
Environmental	
Operating Temperature:	-40°C~ +85°C.
Storage Temperature:	-40°C~ +85°C.
Relative Humidity:	95% non-condensing.
Water Resistance:	100% waterproof. IPX8

* This specification is subject to change without prior notice

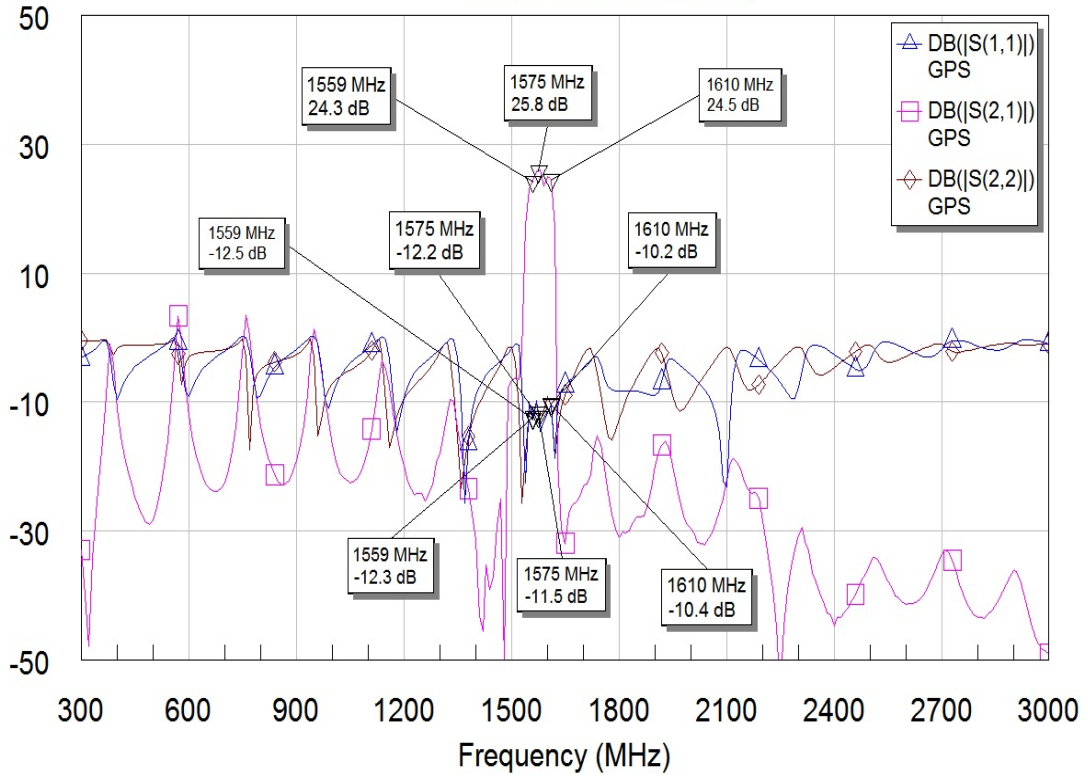
Data Updated: JUN.30, 2016

Note:1:Cable Loss=(-1.2dB/m)

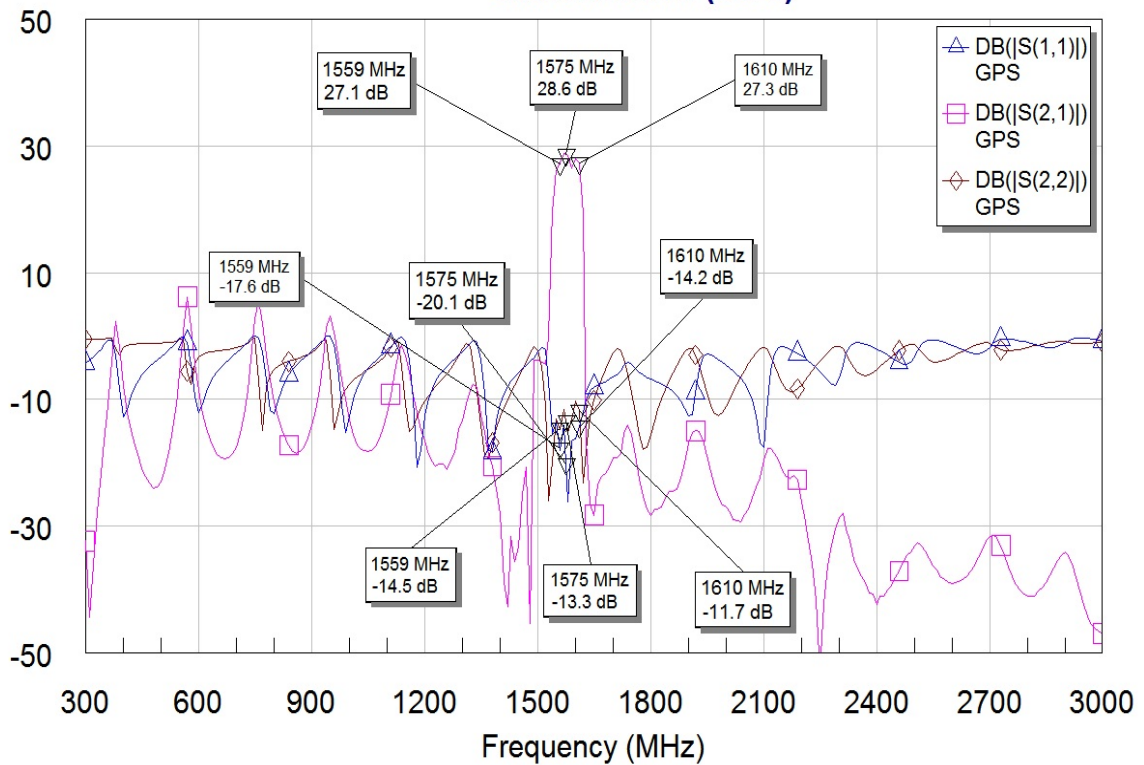




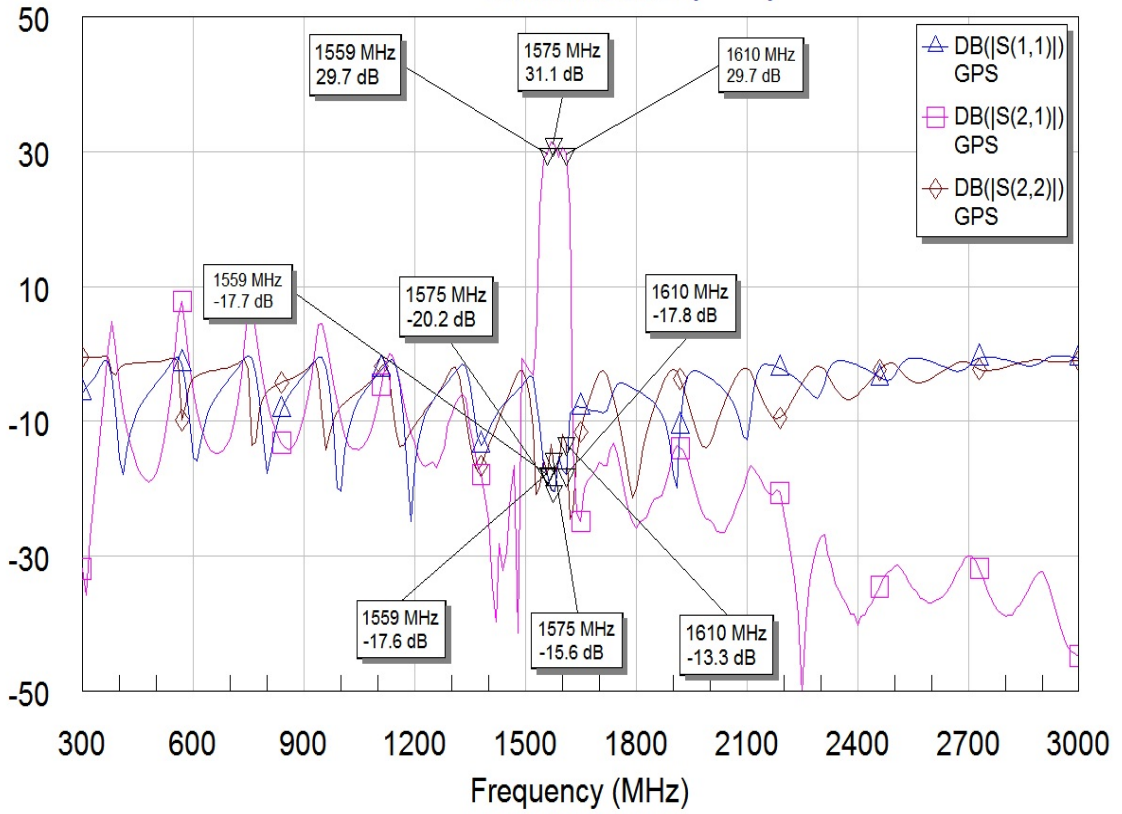
Gain and RL (2.5V)



Gain and RL (3.5V)



Gain and RL (4.5V)



Gain and RL (5.5V)

