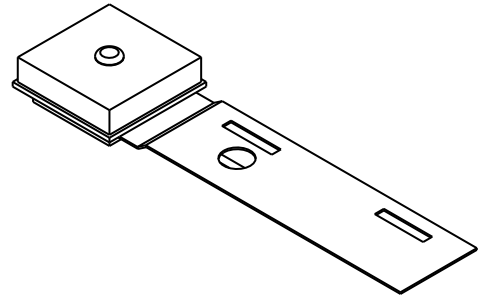


Features

- Ultra high Sensitivity & high gain
- Module Board available for embedded applications
- Ideal for PDA, HPC, PMP and other GPS application
- High Temperature stability



Description

BORNTEK has press #BGA1828A GPS Active Antenna module with compact size & high gain.

To provide more reliability products is using MMIC LNA with stable dielectrically ceramic material for narrow bandwidth.

With comprehensive coverage almost all the way to the horizon side, it performs excellently in wooded or urban canyon environment.

Feature diminutive but substantial enclosure plus unparalleled performance.

#BGA1828A is compatible with almost every GPS receiver model and provide perfect alternative for vast range of GPS application in the field of PND, AVL, Vehicle navigation, aviation and military...etc.

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General Specification (Active Antenna with Pigtail)	
Center Frequency	1575.42 MHz
Gain	28dB
Noise Figure	1.4 typ
Band Width	2 MHz
Axial Ratio	3 dB, Max.
Supply Voltage	2.5 ~ 3.3 Vdc
Current Consumption	5.5mA ~ 8.5mA
VSWR	2.0:1 Max.
Output Impedances	50 ohms
Pigtail cable	OD 1.37mm black / with 35mm length
Connector	IPEX Female
Dimension	74 x 19 x 8.5 mm / LWH
Weight	12g typ
Operating Temperature	-30 ~ +85 deg C
Antenna Element / Specification	
Center Frequency	1575.42 +/- 1.1 MHz
Polarization	RHCP
Band width	7 MHz Min.
VSWR	1.5:1 Max.
Gain / Zenith	1.0 dBi typ
Axial Ratio (0 ~ 90 deg)	3.0 dB Max.
Impedance	50 Ohms
Antenna Substrate material	Dielectric Ceramics
Patch & Grounding base material	Ag Plated

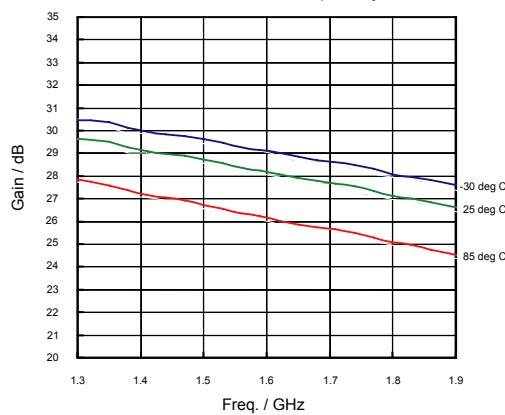
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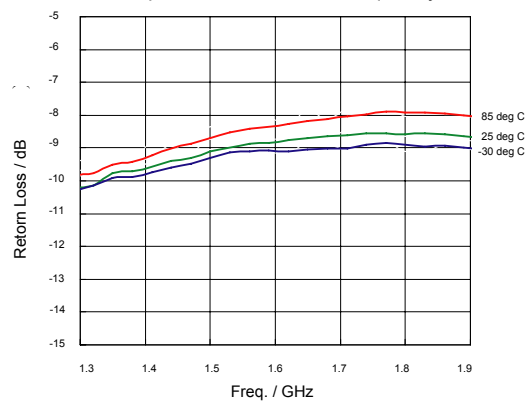
Low Noise Amplifier / Specification

Center Frequency	1575 +/- 1MHz
Gain	28 dB typ
Noise Figure	1.4 dB, Max.
Power consumption	5.5 ~ 8.5 mA @ 2.5 ~ 3.3 Vdc
S22 / Return Loss	2.0:1 Max.

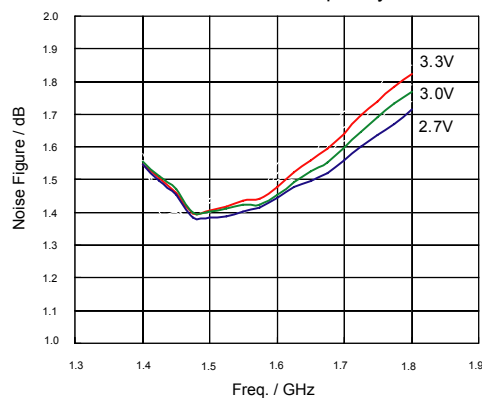
Power Gain vs. Frequency



Output Return Loss vs. Frequency



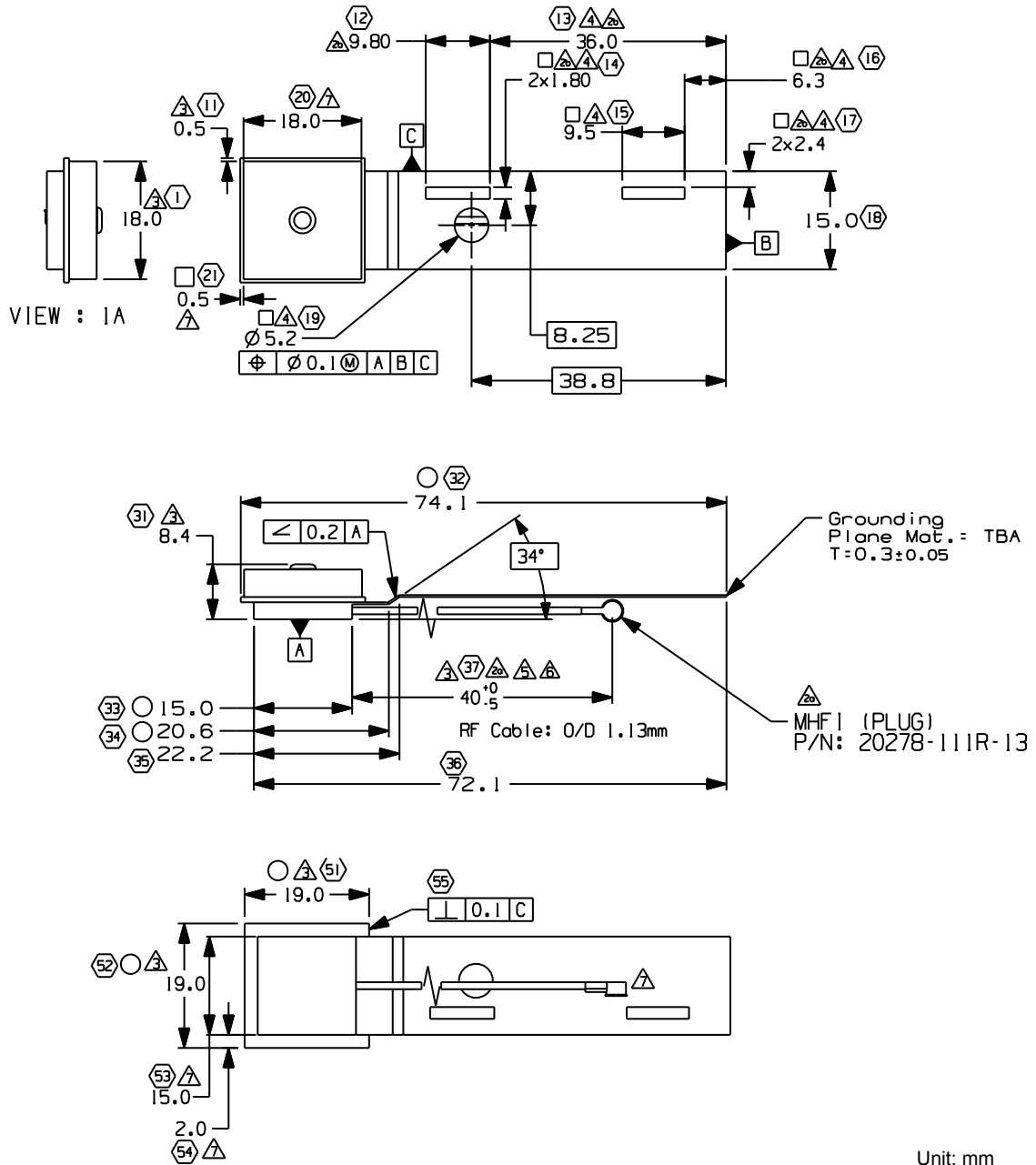
NF vs. Vcc vs. Frequency



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Mechanical Specification



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Package Information:

Quantity	P/N	Dimension
50 pcs per plastic tray	#BGA1828A-PT01	480 x 240 x 12 mm
20 pcs tray / 1000 pcs per CTN	#BGA1828A-PC01	500 x 250 x 260 mm

Note:

#BGA1828A-PT01

Material: PP
Breaking Strength: 3Kg/cm2
Color: TBD

#BGA1828A-PC01

Material: AB wave type / Corrugated Paper
Breaking Strength: 14Kg/cm2
Color: Brown

Contact Information:

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