

DATASHEET

AMC-ANTGPAMPB

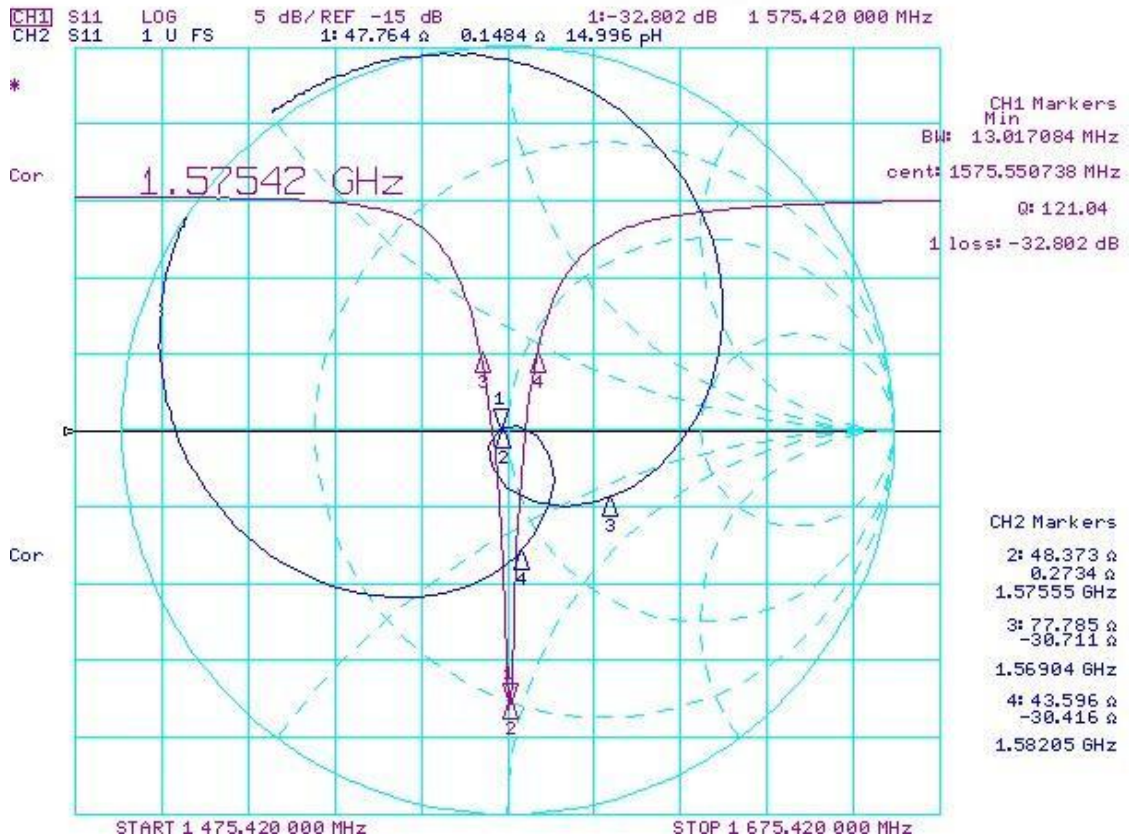
External GPS Antenna,
Adhesive & Magnetic Mounting



| 2 - Electrical Characteristics | | |
|---|---------------------------------------|---|
| 2.1 Antenna | | |
| 1 | Antenna model | AMC-ANTGPAMPB |
| 2 | Frequency Range | 1575.42MHz±1.02 MHz |
| 3 | V.S.W.R | 1.5:1 |
| 4 | Band Width | > 10 MHz |
| 5 | Impedence | 50 Ω |
| 6 | Gain | 5dBic based on 7cm × 7cm ground plane |
| 7 | Polarisation | RHCP |
| 2.2 LNA | | |
| 1 | Frequency Range | 1575.42MHz ± 1.02 MHz |
| 2 | DC Voltage | 3.0 - 5.0V |
| 3 | Gain | 28 ± 3dB |
| 4 | Outband Rejection (Absolute value) | ≥19dB (fo+100MHZ) |
| | | ≥21dB (fo-100MHZ) |
| 5 | Output VSWR | 2.0 |
| 6 | Noise Figure | 1.5dB at 3.0V : 2.0dB at 5.0V |
| 7 | DC current | 7.5 mA at 3.0V ; 17 mA at 5.0V |
| 2.3 Overall (Complete module including RF connector) | | |
| 1 | Frequency Range | 1575.42MHz ± 1.02 MHz |
| 2 | Output VSWR | 2.0 |
| 3 | Gain | 28 ± 3 dBic |
| 4 | Impedence | 50 Ω |
| 5 | ESD Protection | +/- 8 kV (direct discharge) and +/- 15kV (air discharge) |



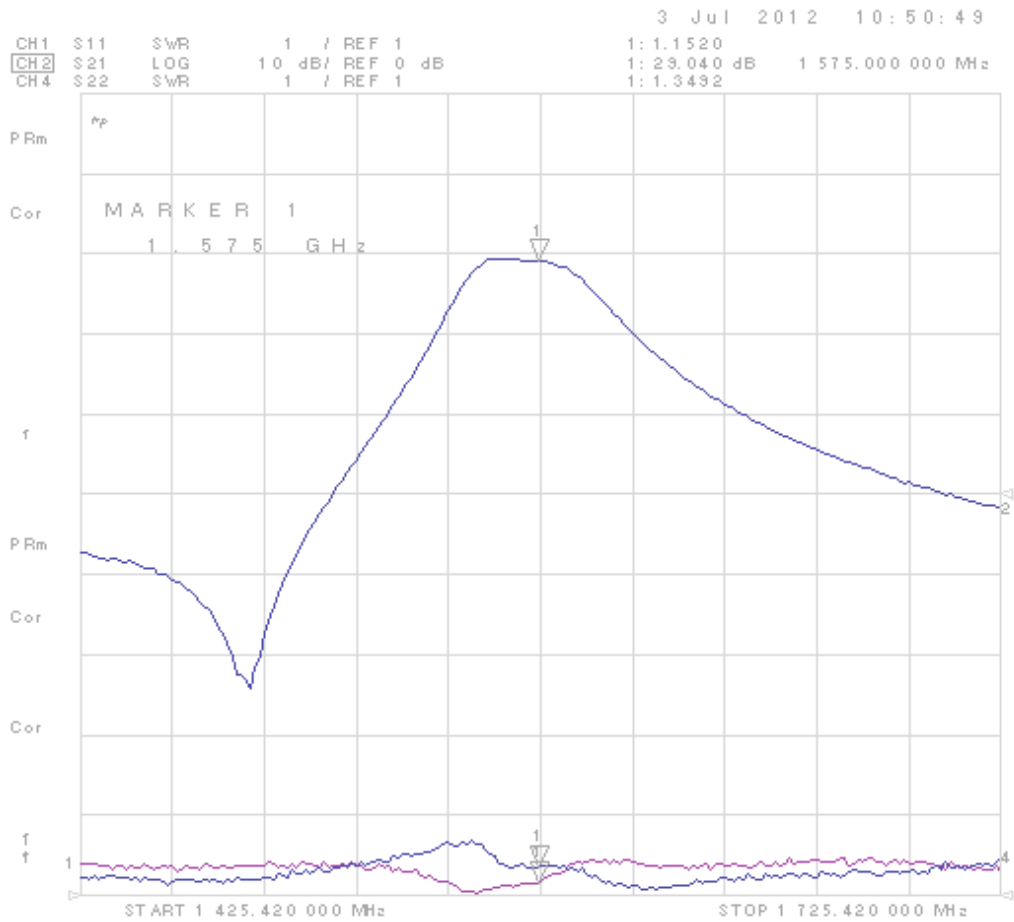
Patch Test Curve



Test condition: 25x25mm ground

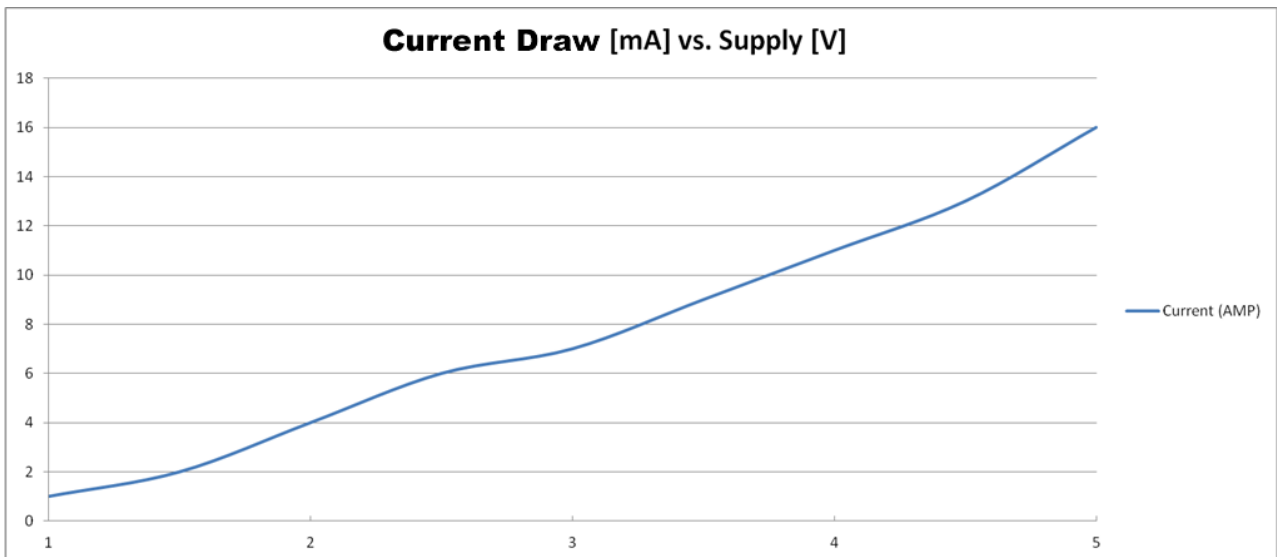
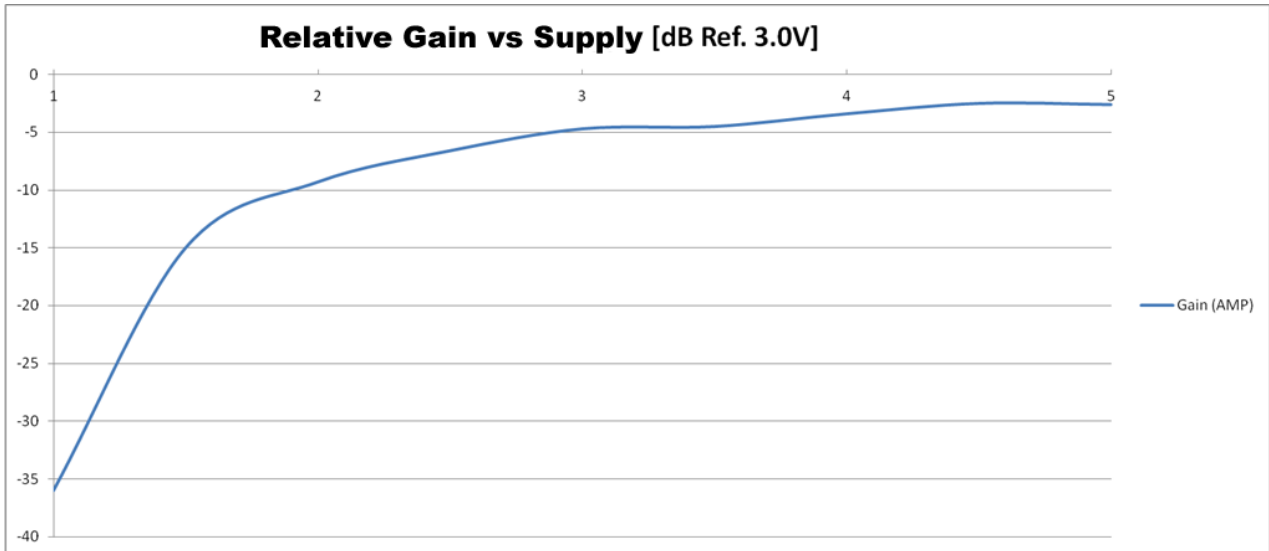


LNA Test curve (Test condition: DC 5.0V)

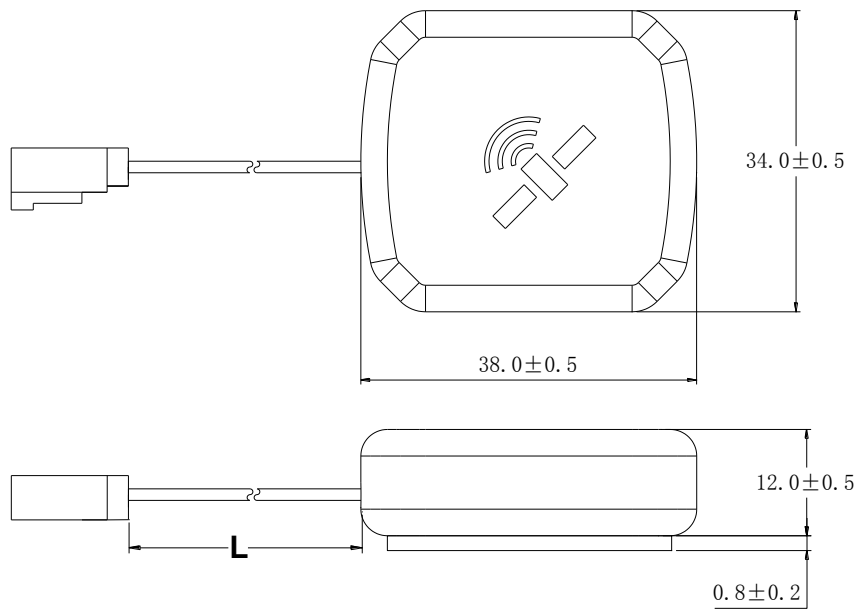


S21=29.04dB





Structure (unit - mm)



L = Customer specified



| Material | | |
|----------------------|---------------------|------------------------------|
| No | Part Name | Spec |
| 1 | Antenna | Dielectric Ceramics |
| 2 | PCB | FR4 |
| 3 | Shielding | Tinplate |
| 4 | RF Cable | RG-174 Attenuation : 1.3dB/m |
| | | L = Customer specified |
| 5 | RF Connector | Customer specified |
| 6 | Thickness | 12.8mm |
| 7 | Mounting | Adhesive + Magnetic |
| Environmental | | |
| 1 | Working Temperature | -40°C ~ +80°C |
| 2 | Storage Temperature | -45°C ~ +85°C |
| 3 | Vibration | Sine sweep 1g (0-p) |
| | | 10~55~10Hz each axis |
| 4 | Housing Protection | IP66 |

| Ordering Information | | |
|-----------------------------|----------------------------|-----------------------|
| Part Number | Cable Length / Type | Connector Type |
| AMC-ANTGPAMPB-A2.5M | 2.5m / RG-174 | SMA (M) |
| AMC-ANTGPAMPB-A300 | 300mm /RG-174 | SMA (M) |
| AMC-ANTGPAMPB-FC2.5M | 2.5m / RG-174 | Fakra C (Blue) |

The standard version is AMC-ANTGPAMPB-FC2.5M, MOQ's may apply for other configurations.

