



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

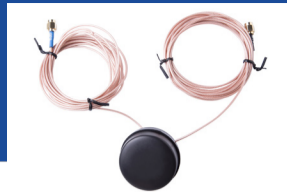
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WiFi + GPS Combinational External Antenna



AEACBK046014-C2WG



ESD Sensitive



RoHS/RoHS II Compliant

Ø46.6 x 14.5 mm

MSL = N/A: NOT APPLICABLE

FEATURES

- IP67 Dust and Waterproof
- 1574.42MHz/2450MHz/5500MHz frequencies
- LNA Gain up to 20dBi+/-2dB
- VSWR ≤ 1.5/2.5 for GPS/WiFi
- RHCP/Linear polarization for GPS/WiFi

APPLICATIONS

- GPS/GLONASS
- WiFi/Bluetooth/Zigbee,
- ISM devices
- Use on outdoor and indoor assets
- M2M
- Telematics
- Commercial vehicles/ Fleet management
- Remote Technology/Monitoring

ELECTRICAL SPECIFICATIONS

| Parameters | Min. | Typ. | Max. | Units | Note |
|-----------------------|------|----------------|------|-------|------------------------------------|
| Frequency | | 1575.42 ± 3MHz | | MHz | |
| Bandwidth | | CF ± 4MHz | | MHz | |
| VSWR | | | 1.5 | | |
| Polarization | | RHCP | | | (Right Hand Circular Polarization) |
| Impedance | | 50 | | Ω | |
| Gain | | 0 | | dBi | (Zenith) |
| Operating Temperature | -40 | | +85 | °C | |
| Input Power | | | 10 | W | |

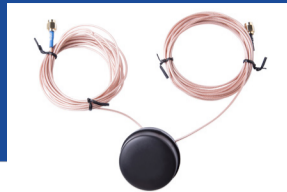
LOW NOISE AMPLIFIER (LNA)

| Parameters | Min. | Typ. | Max. | Units | Note |
|--------------|------|--------|------|-------|------|
| DC Voltage | | 3.3 | | V | |
| Gain | | 20±2dB | | dB | |
| Output VSWR | | | 2.0 | | |
| Noise Figure | | | 1.5 | dB | |
| DC current | | | 10 | mA | |

Wifi ANTENNA

| Parameters | Min. | Typ. | Max. | Units | Note |
|-----------------------|------|-----------------------|------|-------|----------|
| Frequency Range | | 2400~2483.5/4800~5825 | | MHz | |
| VSWR | | | 2.5 | | |
| Polarization Model | | Linear | | | |
| Impedance | | 50 | | Ω | |
| Gain | | 2 | | dBi | (Zenith) |
| Operating Temperature | -40 | | +85 | °C | |
| Input Power | | | 10 | W | |

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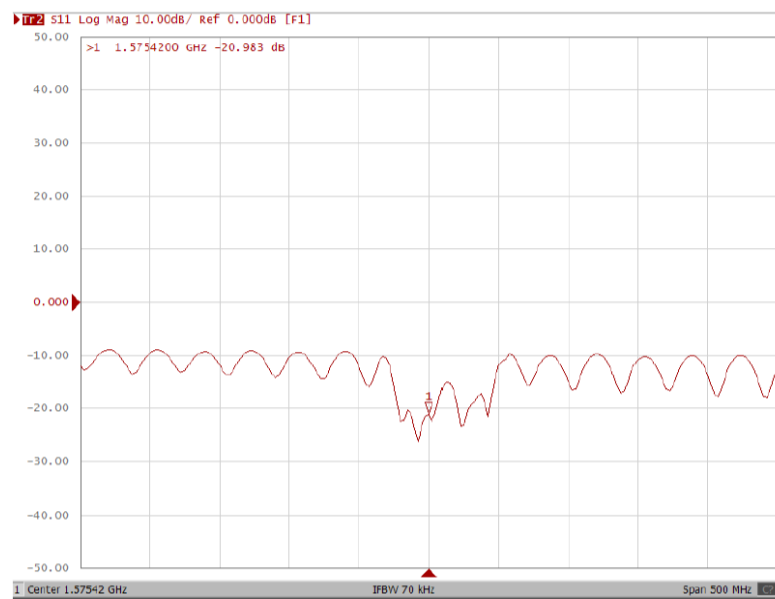


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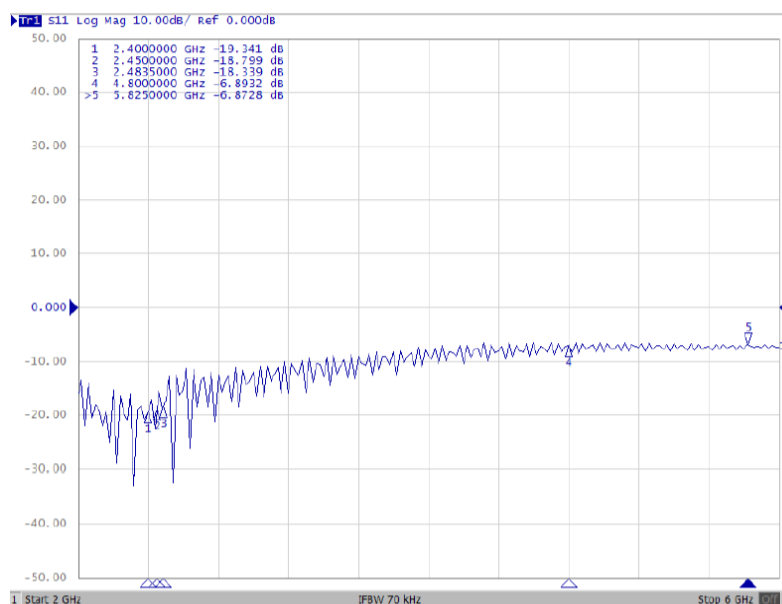
RETURN - LOSS CHARACTERISTICS

GPS S11 Return Loss



RETURN - LOSS CHARACTERISTICS

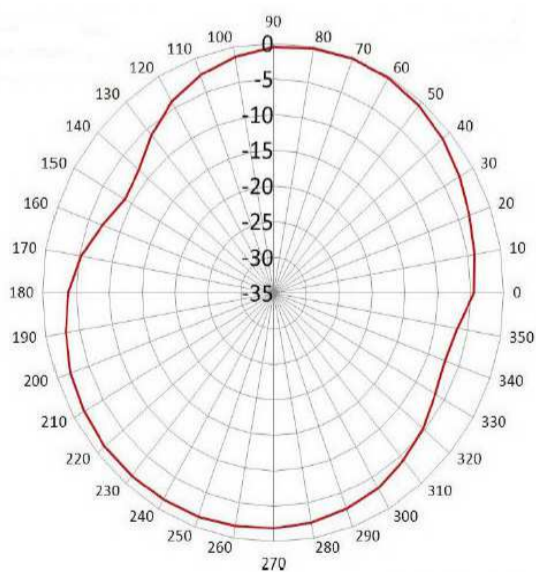
WiFi S11 Return Loss



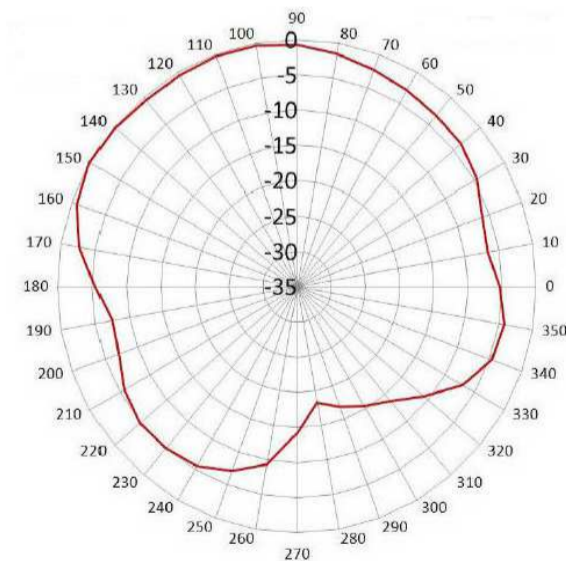
RADIATION PATTERNS

GPS Antenna 2D Patterns

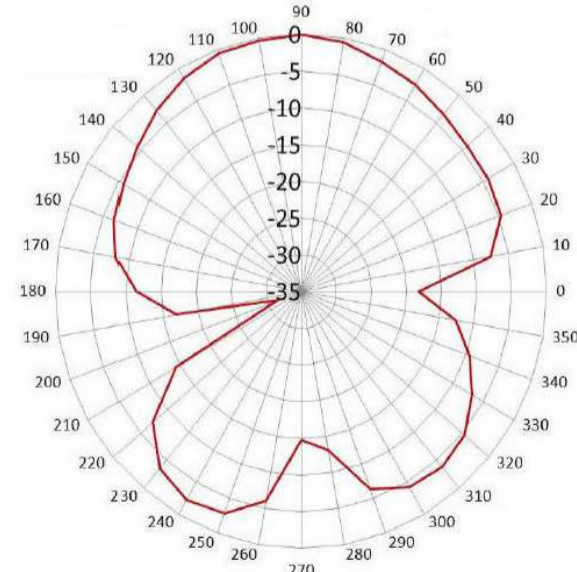
XY Plane



XZ Plane



YZ Plane



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ESD Sensitive



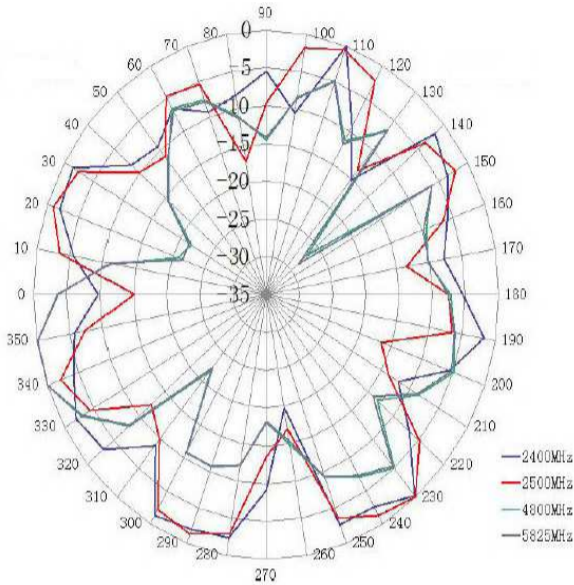
Ø46.6 x 14.5 mm
RoHS/RoHS II Compliant

MSL = N/A: NOT APPLICABLE

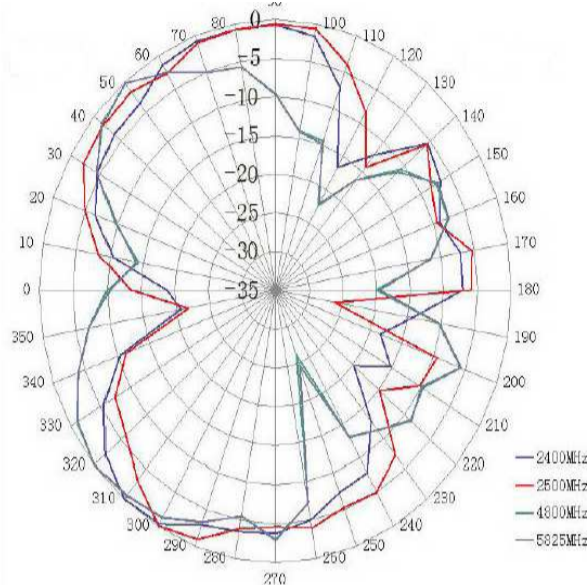
RADIATION PATTERNS

WiFi Antenna 2D Patterns

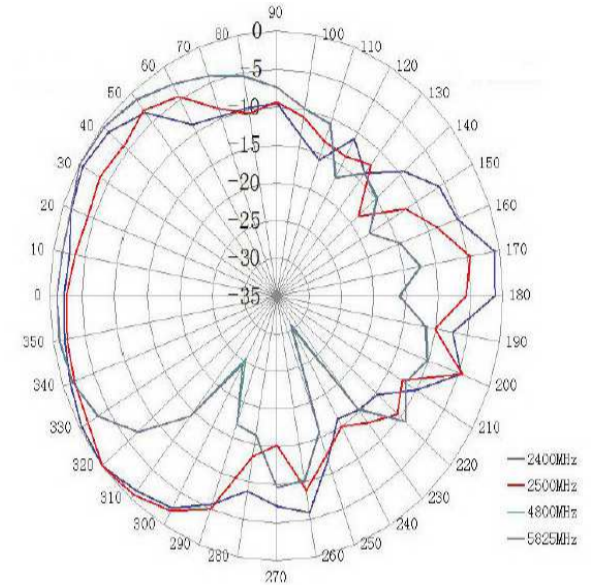
XY Plane



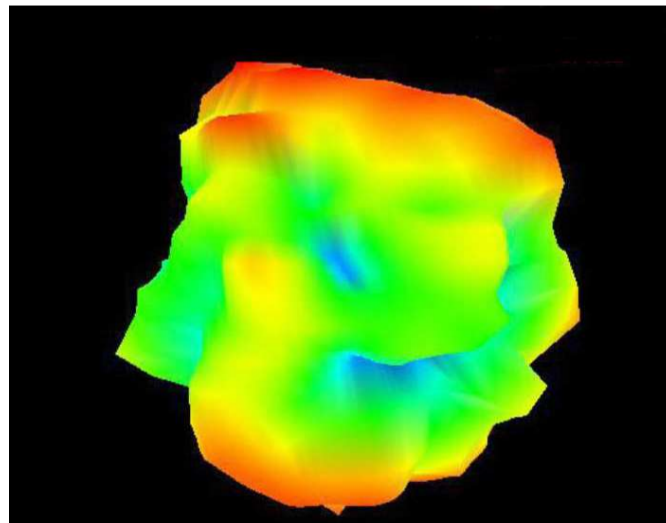
XZ Plane



YZ Plane



WiFi Antenna 3D Pattern



| | | | |
|-----------------|------|-------|-------|
| Frequency (MHz) | 2400 | 2450 | 2483 |
| Peak Gain (dBi) | -4.2 | -4.50 | -4.53 |
| Efficiency (%) | 61 | 61 | 63 |

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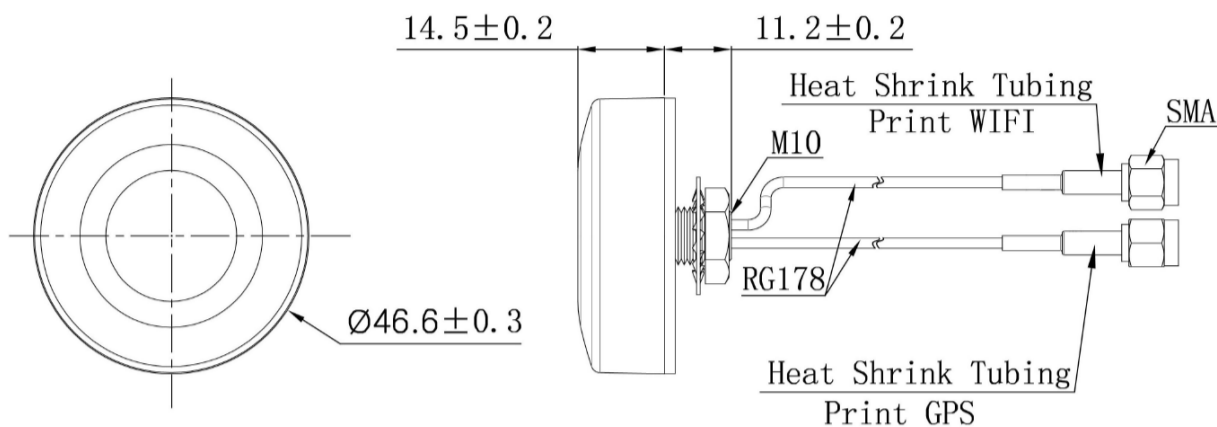
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DIMENSIONS



Unit: mm

| Parameters | Description |
|-----------------|----------------|
| Cable Length | 3.00 m |
| RF Cable | RG178 |
| RF Connector | SMA and others |
| Radome Material | ABS |
| Mounting Type | Screw |



PACKAGING

Each 700 x 320 x 155 mm size carton includes 100 pcs antenna, 8kgs/carton.

Unit: mm

