


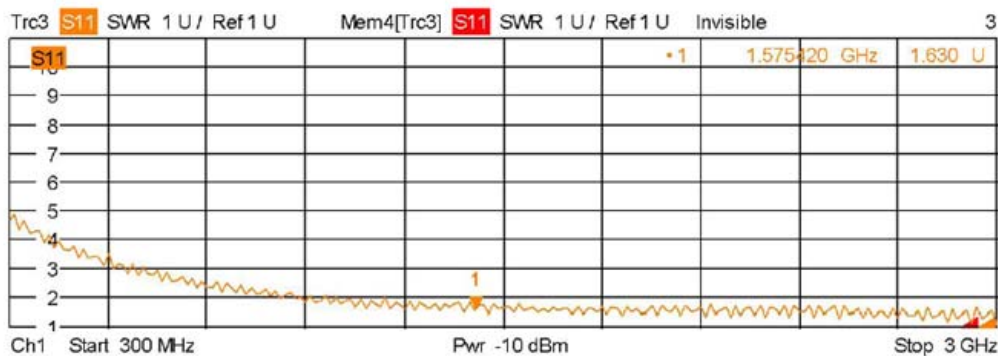
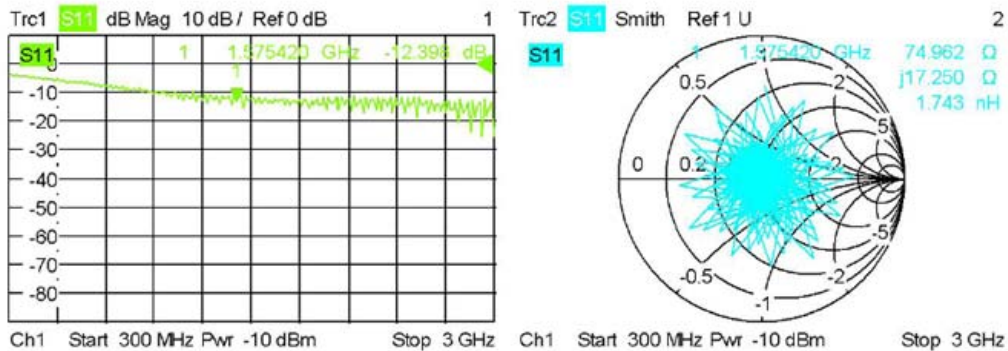
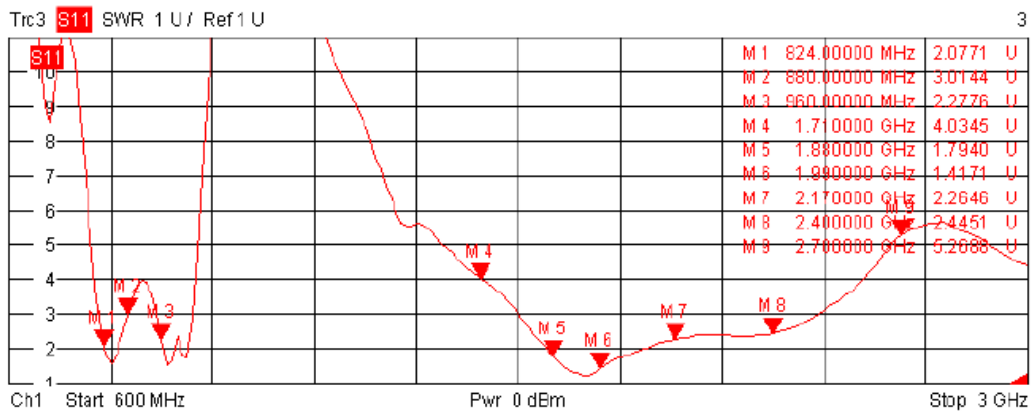
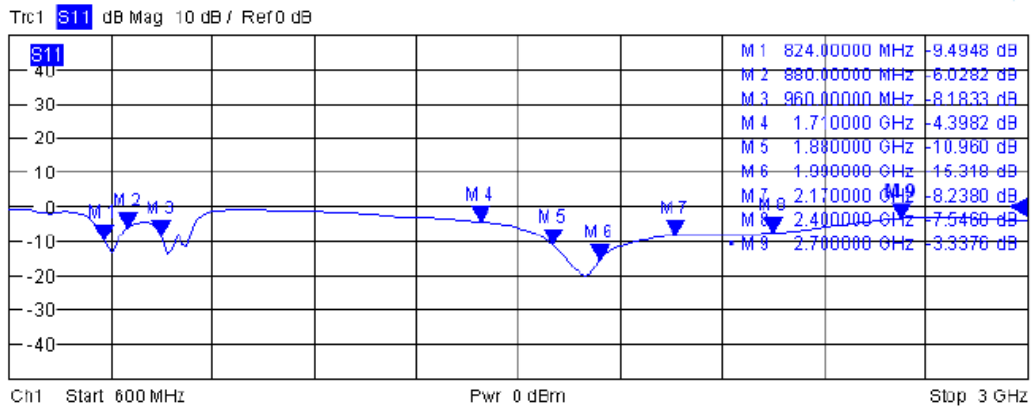
GPS & 4G/LTE External Antennas

Product Number: ATGLTE9030-2.5BM

1. Specification

| | |
|--|---|
| Sample Photo | |
|  | |
| A. Electrical Characteristics | |
| Frequency | 1575.42 MHz; 824-880MHz; 960-1710MHz; 1880-1990MHz; 2100-2700MHz |
| S.W.R. | GPS: <= 2.0 @ 1575.42MHz; LTE: <3.5 @ 824-960MHz; <5.5 @ 1710-2700MHz |
| Antenna Gain | 4 dBi @ 1575.42MHz, 30 dBi @ 1575.42 MHz LNA 0.5 dBi @ 824~960 MHz 2.5 dBi @ 1710~2700 MHz |
| Polarization | Omni-directional |
| Impedance | 50 Ohm |
| B. Material & Mechanical Characteristics | |
| Material of Radiator | PCB |
| Material of Plastic | ABS |
| Cable Type | RG 174 |
| Connector Type | SMA Male |
| Connector Pull Test | >=3.0Kg |
| Connector Torque Test | 100~500 g.cm |
| C. Environmental | |
| Operation Temperature | - 40 °C ~ + 85 °C |
| Storage Temperature | - 40 °C ~ + 85 °C |

2. Antenna - S Parameter Test Data



3. Characteristics and Reliability Test

| Test Items | | Test Condition and Procedure | Requirements |
|------------|----------------------|--|---|
| C1 | S.W.R. | Set DUT on Network Analyzer; make individual calibration to test | Directive DUT specification |
| C2 | Antenna Gain | Set DUT on Antenna Chamber; make individual calibration to test | Directive DUT specification |
| M1 | Vibration | MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction | 1. No Visual Damage 2. Frequency Tol.<= 5% |
| M2 | Random Drop | Height: 1.5 Meter; 3 directions; 1 time for each direction | 1. No parts separated 2. Frequency Tol.<= 5% |
| M3 | Solderability | MIL-STD-202G, 210F, cond. A Solder iron: 350±10°C; Duration: 5 seconds | 1. Mounted on PCB 2. No Visual Damage |
| M4 | Terminal-Pull Test | MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal | 1. Directive DUT specification 2. Frequency Tol.<= 5% |
| M5 | Terminal-Torque Test | MIL-STD-202G, 211A, cond. E Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal | 1. Directive DUT specification 2. Frequency Tol.<= 5% |
| M6 | Dimension | Inspection of dimension, color, material, package, surface process | Directive DUT specification |
| E1 | Salt Spray | MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 48 hours | After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5% |
| E2 | Humidity | MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: >= 95%; Time: 48 hours | After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5% |
| E3 | Thermal Shock | 1 Cycle: - 40°C (30 minutes) to + 85°C (30 minutes) Cycles: 24 | After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5% |
| E4 | Life (High Temp.) | MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 96 hours | After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5% |
| R1 | RoHS | With Reference to IEC 62321:2008 with flow chart | Directive RoHS 2002/95/EC |
| R2 | PFOS | With Reference to USA EPA 3540C:1996 by LC/MS | Directive RoHS 2006/122/EC |
| R3 | PFOA | With Reference to USA EPA 3540C:1996 by LC/MS | Directive RoHS 2006/122/EC |

4. Mechanical Drawing

