

GPS & 3G External Antennas

Product Number : ATG3G-35095-2.5BA

1. Picture

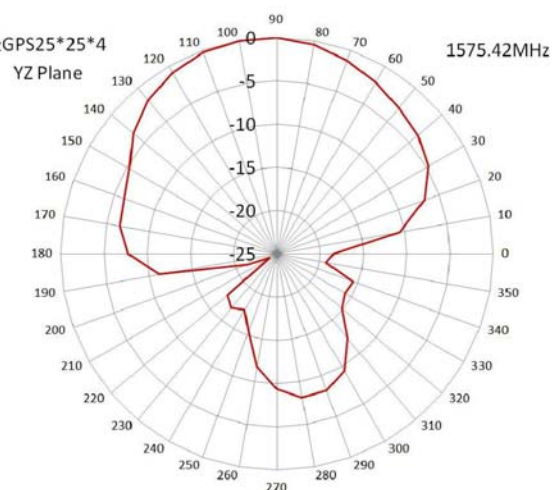
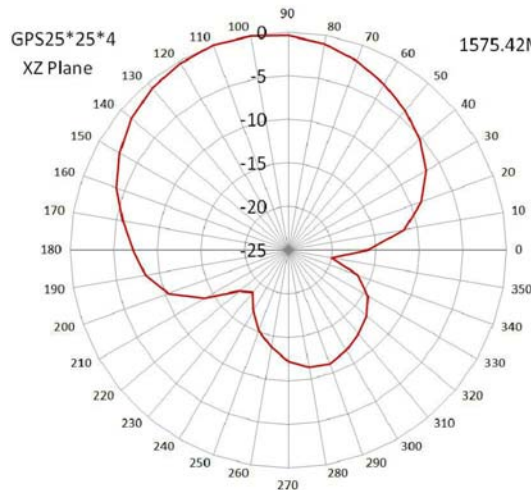
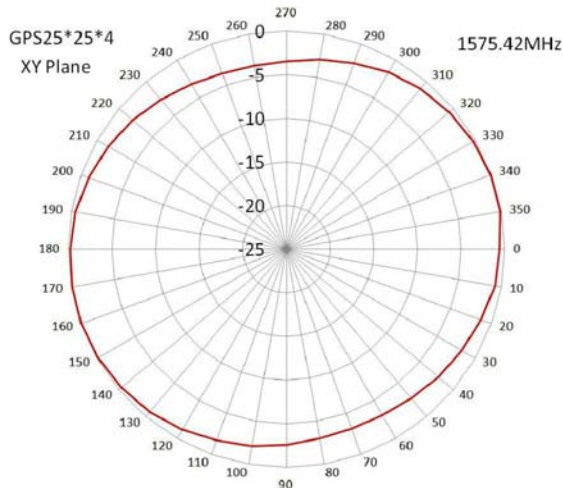


2. Electrical Characteristics

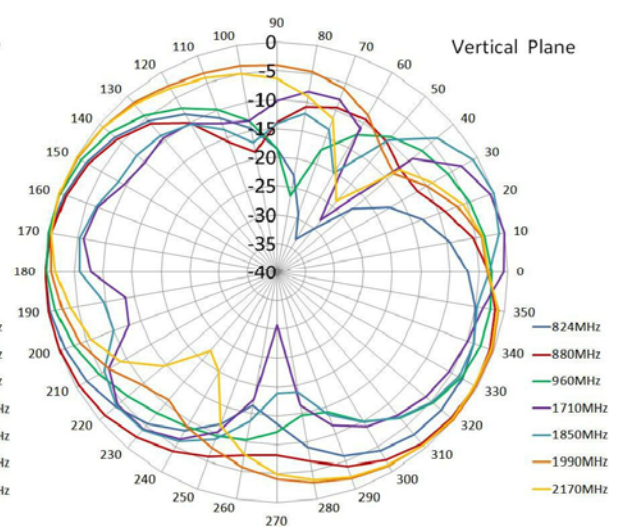
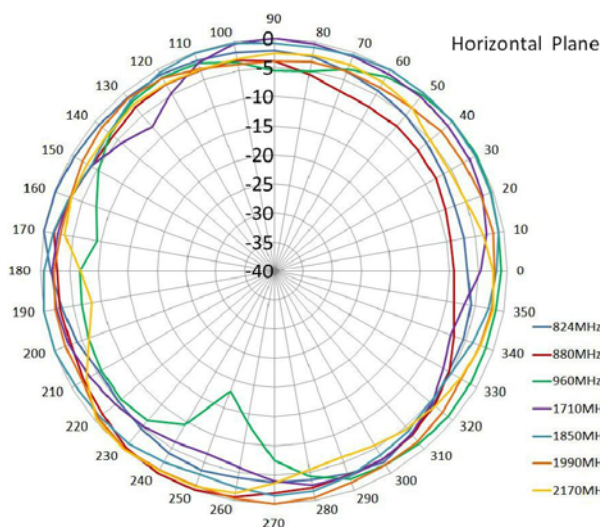
Item		Specifications	
GPS Antenna	Dielectric Antenna	Center Frequency	1575.42±3MHz
		Band Width	CF±5MHz
		Polarization	RHCP
		Gain	2dBic (Zenith)
		V.S.W.R	<1.5
		Impedance	50Ω
	LNA	Axial Ratio	3dB (max)
		Gain	28±2dB
		Noise Figure	<1.5dB
		V.S.W.R	<2.0
3G/GSM Antenna	Supply Voltage	2.2~5V DC	
	Current Consumption	<15mA	
	Frequency Range	806~960MHz/1710~2170MHz	
	V.S.W.R	<2.0	
	Polarization	Linear	
Mechanical	Gain	2.5dBi	
	Impedance	50Ω	
	Cable	RG174	
	Connector	SMA/MCX/FAKRA or others	
Environmental	Radome Material	ABS	
	Mounting Method	Adhesive	
	Operating Temperature	-40℃~+85℃	
	Relative Humidity	Up to 95%	
	Vibration	10 to 55Hz with 1.5mm amplitude 2hours	
	Environmentally Friendly	ROHS Compliant	

3. Radiation Pattern

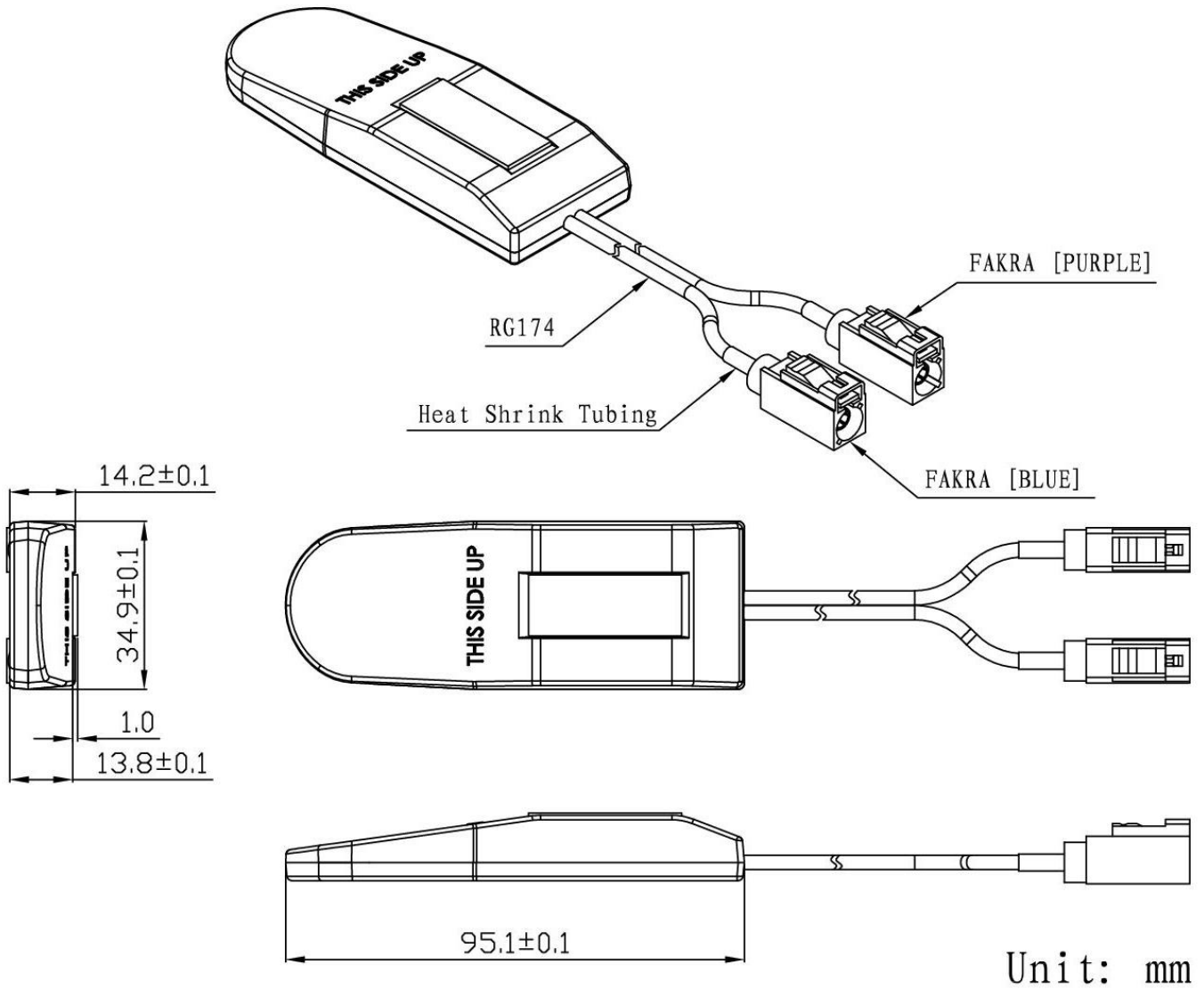
GPS Antenna



3G/GSM Antenna



4. Drawing



5. 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 + 80°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

6. Note

6.1 This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.

6.2 The product will get free warranty for one year since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.

6.3 Electrostatic sensitive device.Observe precautions for handling.