


2.4GHz External Antenna

Product Number:AT2.4G-13191-5.0BTC

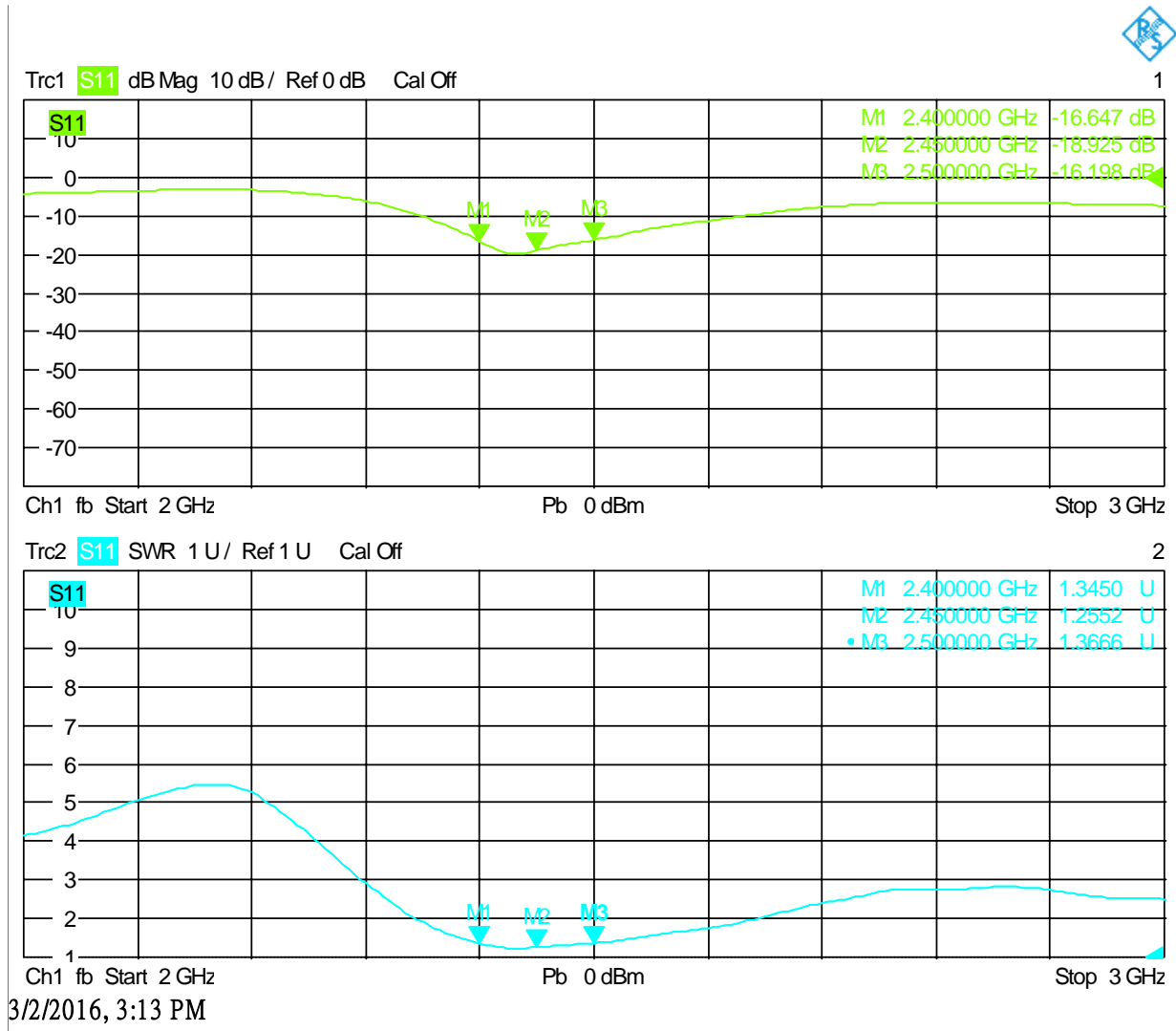
1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<= 2.0
Antenna Gain	5.0dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	
Material of Plastic	Body: TPE Hinge: ABS Holder: PC
Cable Type	RG-113
C. Environmental	
Operation Temperature	- 40 °C ~ + 85 °C
Storage Temperature	- 40 °C ~ + 85 °C

2. Characteristics and Reliability Test

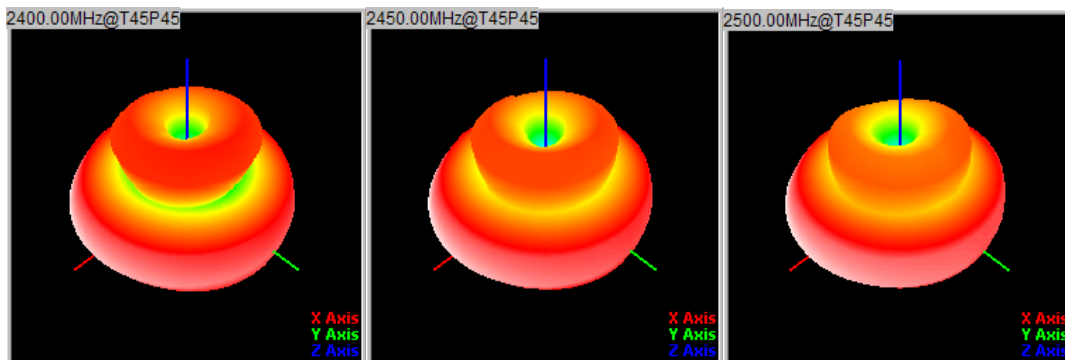
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 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

3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

FETUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-1.27	-1.28	-1.30	-1.33	-1.35	-1.37	-1.39	-1.45	-1.45	-1.40	-1.37
Peak EIRP (dBm)	4.60	4.59	4.64	4.70	4.62	4.67	4.63	4.57	4.46	4.48	4.37
Directivity (dBi)	5.86	5.87	5.94	6.03	5.97	6.03	6.02	6.02	5.91	5.88	5.74
Efficiency (dB)	-1.27	-1.28	-1.30	-1.33	-1.35	-1.37	-1.39	-1.45	-1.45	-1.40	-1.37
Efficiency (%)	74.70	74.50	74.10	73.60	73.20	73.00	72.60	71.60	71.60	72.40	73.00
Gain (dBi)	4.60	4.59	4.64	4.70	4.62	4.67	4.63	4.57	4.46	4.48	4.37



5. Mechanical Drawing

