

深圳市视壮科技有限公司
Videostrong Technology co., Ltd.

承認書
SPECIFICATION FOR APPROVAL

料號 SOREDE P/N	
品名 / 規格 DESCRIPTION	2.4G Built-in Antenna
送樣編號 SOREDE DWG#	
送樣日期 SAMPLE DATE	2022/12/8

Product Number:

Product Name: PCB Antenna

1. Specification

Sample Photo	
A. Electrical Characteristics	
Frequency 频率	2400-2500MHz
S.W.R.驻波比	<= 2.0
Antenna Gain 增益	1.26dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic 塑胶材质	/
Cable Type 线材规格	/
Connector Type 连接器规格	/
Connector Pull Test	/
Connector Torque Test	/
C. Environmental	
Operation Temperature 存储温度	- 40 °C ~ + 80 °C
Storage Temperature 存储温度	- 40 °C ~ + 80°C

2. Characteristics and Reliability Test

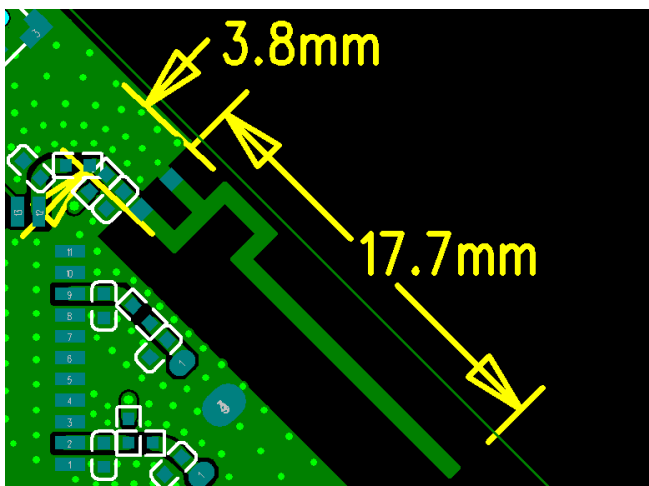
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: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

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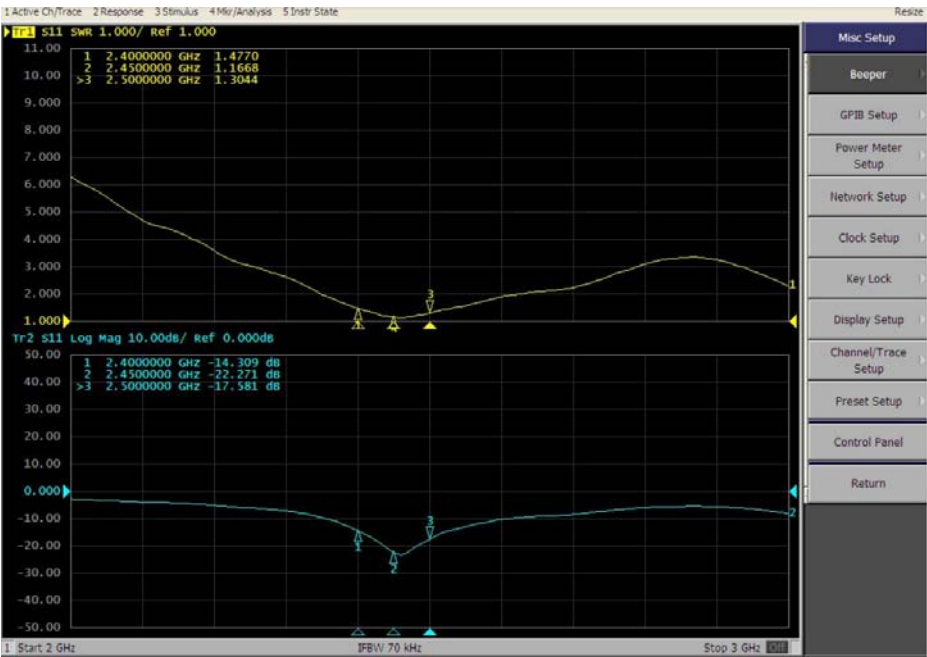
Product Name: PCB Antenna

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: 40°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: 80°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 2020/863/EU

3. Antenna - S Parameter Test Data

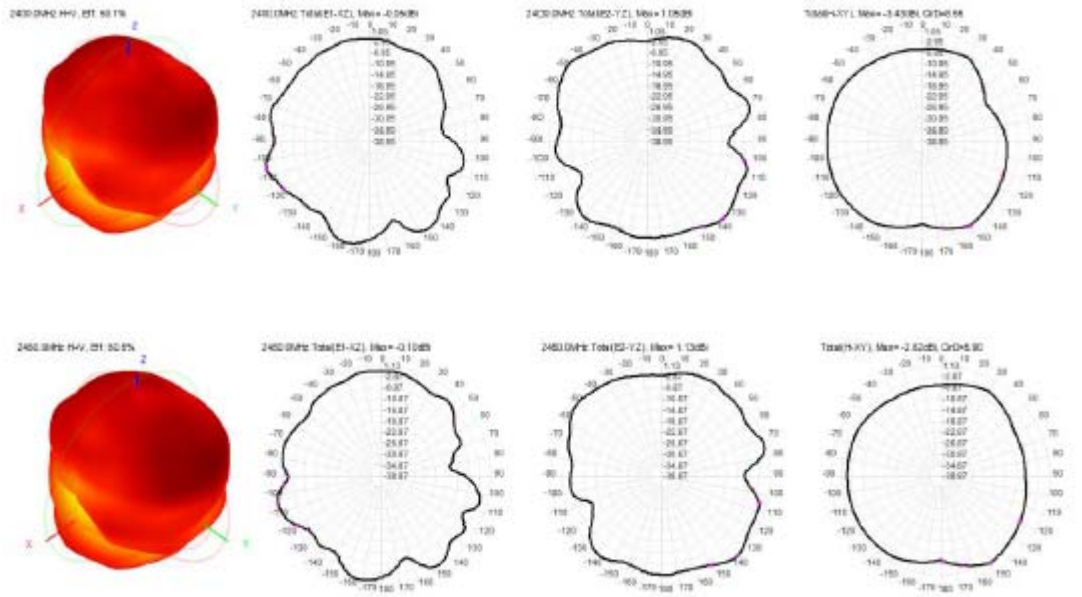


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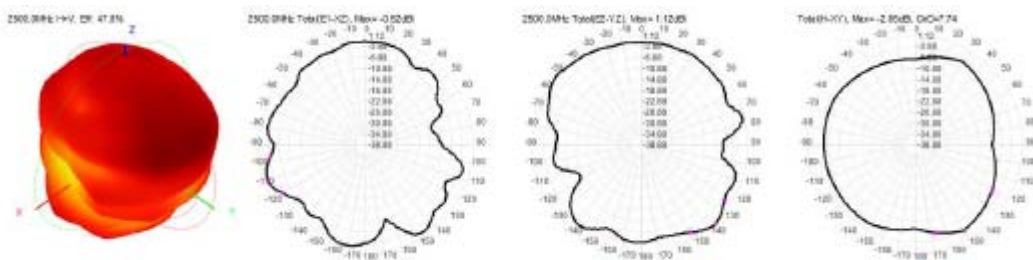


4. Antenna - Radiation Pattern Test Data

Frequency ID	1	6	11
Frequency (MHz)	2400.0	2450.0	2500.0
Gain (dBi)	1.26	1.13	1.12
Efficiency (%)	50.08	50.54	47.83



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5. Mechanical Drawing (See attached files)