Product name : SMA-GSM Rubber antenna-L48

### **1**, Products Basic Characteristics :

Model NO : ST-ANGSM-3SS				
DESCRIPTION	VALUE			
Frequency range	824-960/1710-1880MHZ			
Impedance	50 Ω			
V.S.W.R	2.0 Max			
Return loss	-10dB (Max)			
Gain	3dBi			
Radiation	Omni-directional			
Radiating element	1/4 Wave Helical			
Polarization	linear Vertical			
Admitted power	1W			
Connector	SMA Male			
Operating temp	-10°C~+60°C			
Storage temp	-10°C~+70°C			
Weight	About 10g			

# 2, Reliability Test Report

## 1) Environmental tests and requirements

NO	Test Item	Test methods and conditions	Test equipment	Test results
1	Temperature and humidity test	The purpose of this test program is, using detailed standard test methods to evaluate the performance from the aspects of high humidity, heat and material Requirement: Temp:70°C Humidity:90~95%(R.H) Time : 72H	K.SON INS THS- A4L-150	PASSED
2	Low temperature test	Samples should be placed in a value measured by temperature, the temperature is set at -20 °C Requirement: Time : 24H	K.SON INS THS- A4L-150	PASSED
3	High temperature test	Samples should be placed in a value measured by temperature, the temperature is set at 70 °C Requirement: Time : 24H	K.SON INS THS- A4L-150	PASSED
4	Thermal Shock	Samples should be placed in a value measured by temperature, the temperature is set at-20~70°C Requirements: 8H or more. (30 minute/per,12 week period)	K.SON INS THS- A4L-150	PASSED
5	Salt spray test	Samples should be placed in a fixed environment under its requirements: NaCL concentration: 40-60g/1Kg PH: 6.5- 7.2 test: 24H 1. gold-plated products are not allowed to rust and peeling 2. other nickel- plated,tin-plated, zinc products at the same shaft or rust above the surface must not have more than two points.	Salt spray test machine	PASSED

# 2) Mechanical settings and requirements :

NO	Test Item	Test methods and conditions	Test equipment	Test results
1	Vibration test	Test conditions <b>A</b> The purpose of this test program is, used in the standard test methods for detailed product, they exercise or move, affecting the performance of materials evaluation. Requirement : Vibration scope: 10- 55HZ amplitude: 0.35mm acceleration amplitude: 50.0M/S sweep cycles: 30 times	Vibration testing machine	PASSED
2	Drop test	The samples should be stored in a certain height, the height is set to 1M, follow the direction 6 fell 3 freedom.    Requirement : Mechanical characteristics of normal after the drop test.	Drop test fixture	PASSED

### 3、SMA Specification

#### **TECHNICAL SPECIFICATIONS** :

Temp.range :  $-55^{\circ}$ C ~  $+155^{\circ}$ C Impedance :  $50\Omega$ Frequency Range : DC ~ 12.4GHz Working Voltage : 335VmaxWithstand Voltage : 1000V rmsContact resistance : Center Contact  $\leq 3m \Omega$ Outer Contact  $\leq 2m \Omega$ Insulation resistance :  $\geq 5000 m\Omega$ VSWR : Straight  $\leq 1.10$ Durability :  $\geq 500$  cycles

#### MATERIAL AND PLATING :

Shell : Brass , Gold-plated

Contact pin : Brass ,Gold-plated

Socket contact : Bryllium brass , Gold-plated

Insulator : PTFE

Crimping suite : Copper alloy , Gold-plated

