

APPROVAL SHEET

PRODUCT NAME	CUSTOMER APPROVED BY
JCA071-DZ9L149586505	
CUSTOMER NAME OR MODEL	APPROVED DATE

SPECIFICATION /规格书



Part Number: JCA071-DZ9L149586505

Product Name: Car BD&GPS Active Antenna

VERSION INFORMATION

VERSION	DATE	REVISION DESCRIPTION	PREPARED	CHECKED	APPROVED
V1.0	2016-06-09	New Issued			

PREPARED BY	CHECKED BY	APPROVED BY
俞超	傅胜明	陈小忠

1. Electrical Characteristics/电气参数

Item		Specifications
Antenna/ 天线	Frequency/频率	1561.098~1575.42MHz
	Band Width/带宽	> 10MHz
	Polarization/极化	RHCP
	Gain/增益	5dBic@70*70mm ground plane
	V.S.W.R/电压驻波比	< 1.5:1
	Impedance/阻抗	50 Ω
	Dimension/尺寸	25*25*4mm

Item		Specifications
LNA/ 低噪放	Frequency/频率	1561.098~1575.42MHz
	Gain/增益	28 ± 2dB
	Noise Figure/噪声系数	≤ 1.5dB
	Work Voltage/工作电压	3~5V DC
	Current Consumption/电流消耗	≤ 20mA
	Out V.S.W.R/输出驻波比	≤ 1.5: 1
	Impedance/阻抗	50 Ω
	ESD/防静电登记	8kV 接触放电/15kV 空气放电

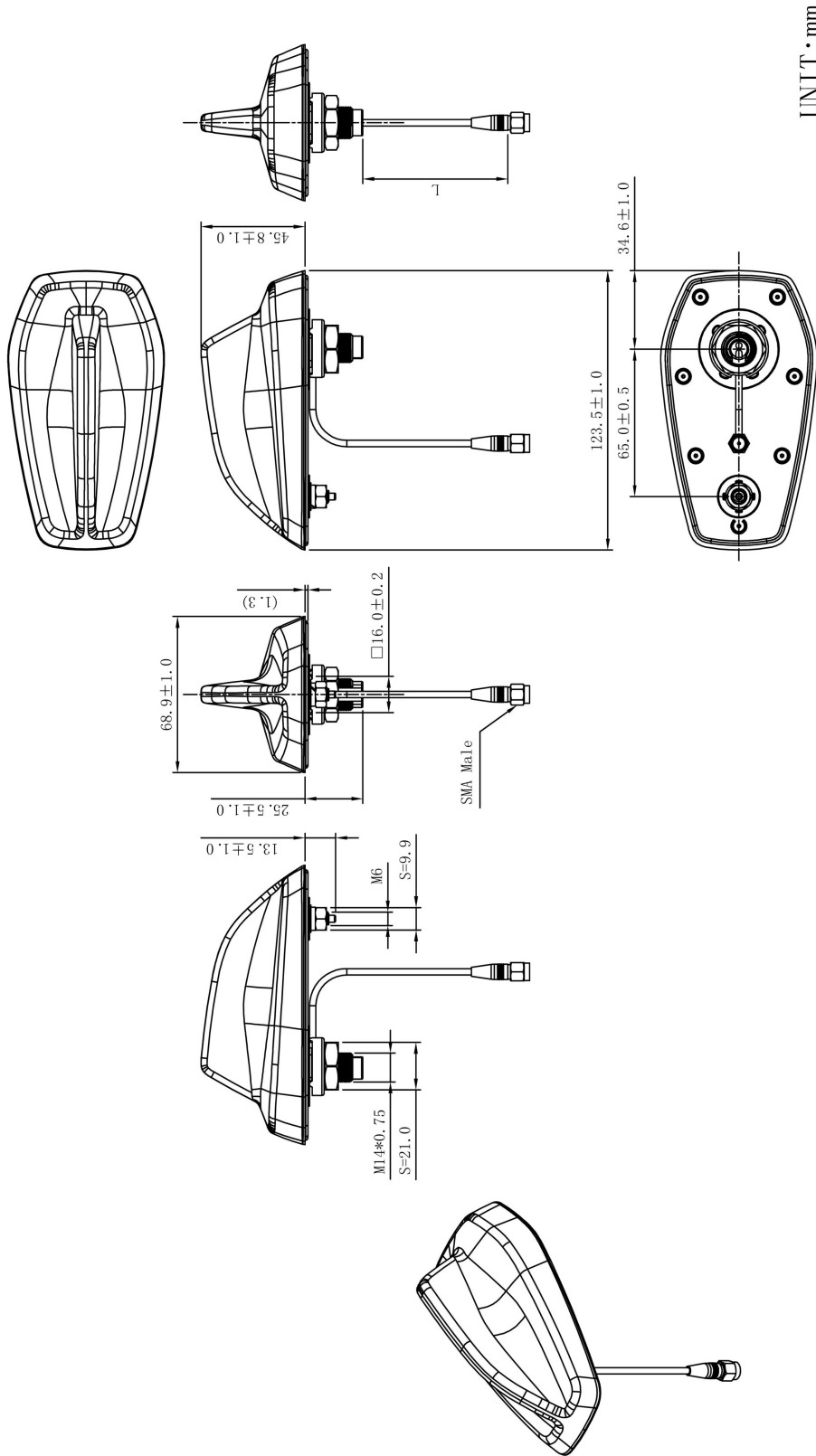
2. Material/材质

Item		Specifications
Material	RF Cable/射频连接线	RG174
	RF Connector/射频连接器	SMA
	Radome Material/天线罩材料	ABS
	Antenna Base /天线底座	Aluminum/铝
	Antenna/天线	Dielectric Ceramics/介质陶瓷

3. Testing Conditions/测试条件

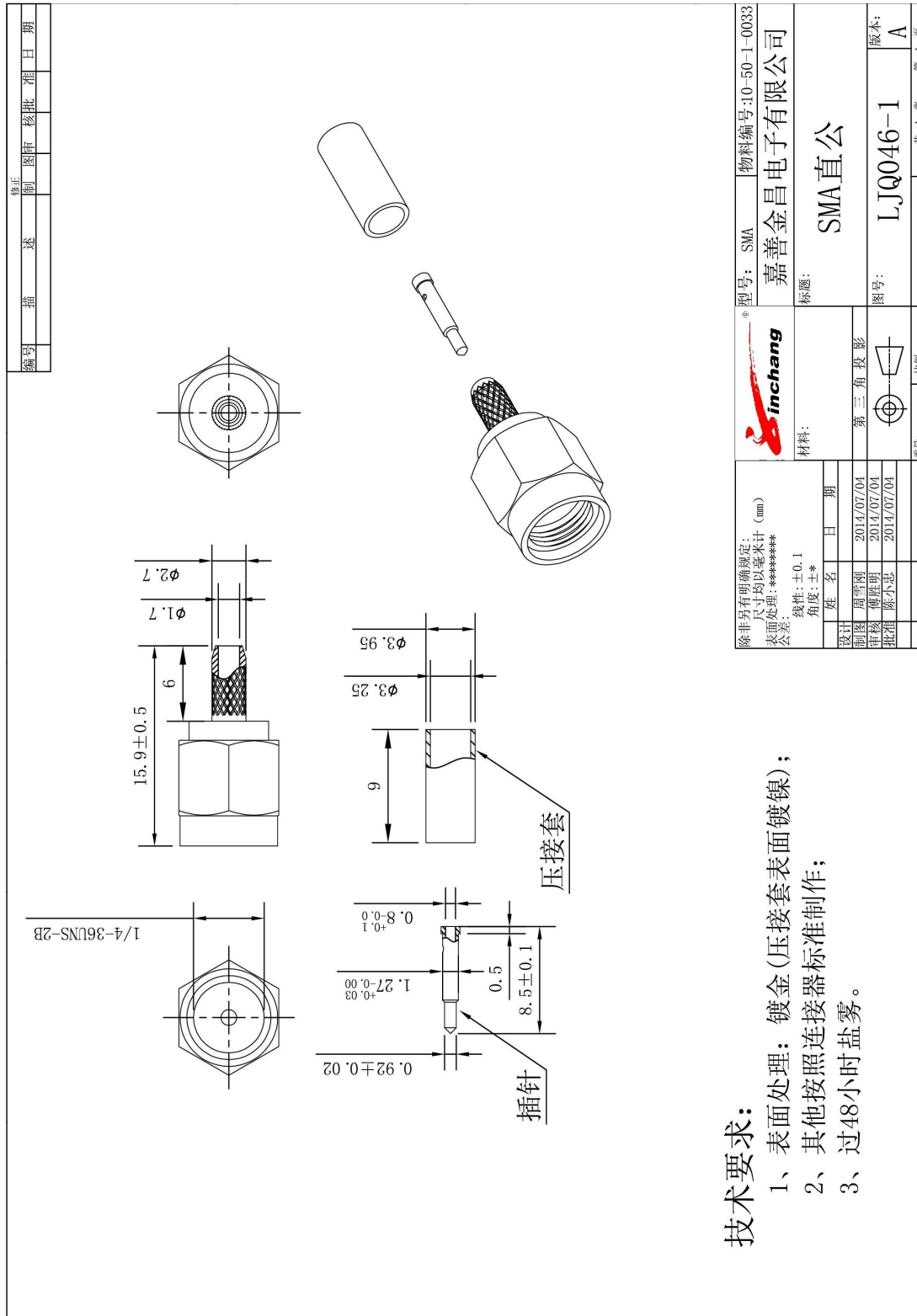
Item		Specifications
Environmental	Operating Temperature/工作温度	-40℃~+85℃
	Storage Temperature/储存温度	-40℃~+90℃
	Ingress Protection/防护等级	IP67
	Relative Humidity/相对湿度	All of the specifications in Item 1 is to be satisfied after antennas exposed to +60℃ ± 5℃ /90%~95%RH for 96H, and then to temperature/humidity of Item 1 for 2H. 天线放于 60℃ ± 5℃ /90%~95%RH 环境中 96 小时, 再在常温、常湿下放置 2 小时, 天线电气性能不变
	Packing Drop Test/包装跌落测试	A single antenna drops with height 1.2M and marble platform, down ten times in accordance with the order of six-sided triangular corner 将单个天线, 跌落高度为 1.2M, 大理石平台, 按照一角三棱六面顺序共跌十次

4. Structure/成品结构图



5.Connector appearance/接头外观 :

修正 制 图 审 核 批 准 日 期							
编 号 描 述							



插针
压接套

1/4-36UN-2B

15.9±0.5

6

φ2.7

φ1.7

φ3.95

φ3.25

9

0.92±0.02

1.27^{+0.03}_{-0.00}

0.8^{+0.1}_{-0.0}

0.5

8.5±0.1

技术要求:

- 1、表面处理: 镀金(压接套表面镀镍);
- 2、其他按照连接器标准制作;
- 3、过48小时盐雾。

除非另有明确规定: 尺寸均以毫米计 (mm) 公差: 表面处理:***** 公差: 线性: ±0.1 角度: ±*	物料编号:10-50-1-0033	SMA	嘉善金昌电子有限公司	物料编号:10-50-1-0033
姓名 日期	材料:	SMA直公	标题:	版本:
设计 周雪刚 2014/07/04	第三角投影	LJQ046-1	图号:	A
制图 褚群明 2014/07/04	比例:	共 1 张	第 1 张	第 1 页
审核 陈小忠 2014/07/04				
批准				

6.Cable:

测试项目 Item	规格 Spec	单位 Unit	备注 Remark
Cable Loss	<1.5	dB/m	1575.42±3MHz

7.Overall Specification:

测试项目 Item	规格 Spec	单位 Unit	备注 Remark
增益 Gain (1m Cable)	28±2	dB	暗室测试
VSWR	<1.5	dB	1575.42±3MHz SMA
CN	至少有 6 颗 卫星 (高度 40)	dB	测试软件 Nemerix Control Toll Lite V0.93 For BT-GPS 测试环境: 测试点周围20 米外 没有遮挡物 open sky date
静电测试 Static Test	8 (Direct Contact) 15 (Air Discharge)	KV	ESD 测试后漏电流变化率 <20mA, Gain 变化<3dB

8.Reliability test:

1	High temperature and high humidity /高温高湿	T=85°C, Humidity=90% RH for 96 hr/温度85度, 湿度 90%, 测试 96 小时
2	Cold and hot shock /冷热冲击	1. Cycle: -40°C, 2Hr←→ (5 minutes)←→ 85°C, 2Hr 2. Run 5 cycles. 3. Stored at standard measurement condition more than 2 hours.
3	Waterproof test /防水测试	1. Distilled water 1M for 24 hour. 2. Waiting at standard condition for 1 hour.
4	High temperature storage /高温存储	1. The specimens store at 85°C for 96 hours 2. Cooling down & Storing at standard measurement condition more than 2 hours.
5	Low temperature storage /低温存储	1. The specimens store at -40°C for 96 hours. 2. Warm up & store at standard measurement condition more than 2 hours.