

## 电连技术股份有限公司

## APPROVAL SHEET

# 承 認 書

CUSTOMER NAME	Presonus
1	Audio
	Electronics
(客户名称)	21000101105
CUSTOMER P/N	
(客户料号)	
PART NAME	크다 KS 스타 TV T VA
(品 名)	双频剑形天线
,	
ECT P/N	81800T183
(料 号)	010001103
APPROVAL REV.	
版次	X2
//// //	
DELIVERY DATE	2016 5 17
送样日期	2016.5.17
PREPARED BY	章贝贝
(承 办)	1 2,72
CHECKED BY	All Library
(审 核)	熊志辉
APPROVED BY	西收
(核 准)	贾峰
( , , , , , , , , , , , , , , , , , , ,	

#### Customer Approved(客户承认)

Approved By	Checked By	Prepared By
(核 准)	(审核)	(承 办)



P/N:

DOC.No.: 651-T183-01

## 产品规格书

## Product Specification

#### Content

#### 目录

1.	Product Application/产品应用:	3
	The test environment, equipment/测试环境、设备	
3.	Technology Parameters/技术参数	5
4	The gain and efficiency test/增益和效率测试	8
	Usage Precaution/使用禁忌或注意事项	
	Picture/实物图片	
	录: 工程图、包规图、尺寸报告、Rohs 清单	



P/N:

DOC.No.: 651-T183-01 Rev.: X2

Page:

#### Product Application/产品应用: 1.

Terminal of the antenna products can only be used for antenna./该天线产品只能用于天线的终端。

#### The test environment, equipment/测试环境、设备 2.

Item 项目	Description 项目描述	Test Condition/测试条件	Requirement /规格要求
		The VSWR measurement devices are connected in sequence: Agilent5071C Network Analyzer →measurementCable → Customer-providing Devices. (VSWR 测量 装置依次连接: 网络分析仪测量电缆 agilent5071c→→客户提供终端。)	
2.1	Passivetestin g /无源测试	Test equipment/测试设备	SWR: 2.4GHz≤2.5 2.45GHz≤2.5 2.5GHz≤2.5 5.15GHz≤2.5 5.85GHz≤2.5



P/N:

81800T183

DOC.No.: 651-T183-01 Rev.:

Page:

Test equipment/测试设备

Microwave 2.2 Anechoic 微波暗室





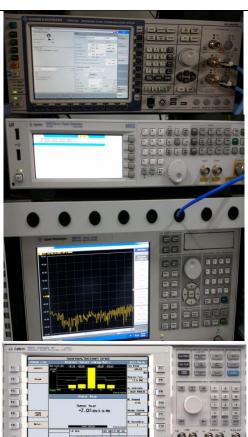
CMW500

2.3

AgilentNB18 28

Agilent5071

Agilent8960





P/N:

700Mhz-6GHz

DOC.No.: 651-T183-01 Rev.:

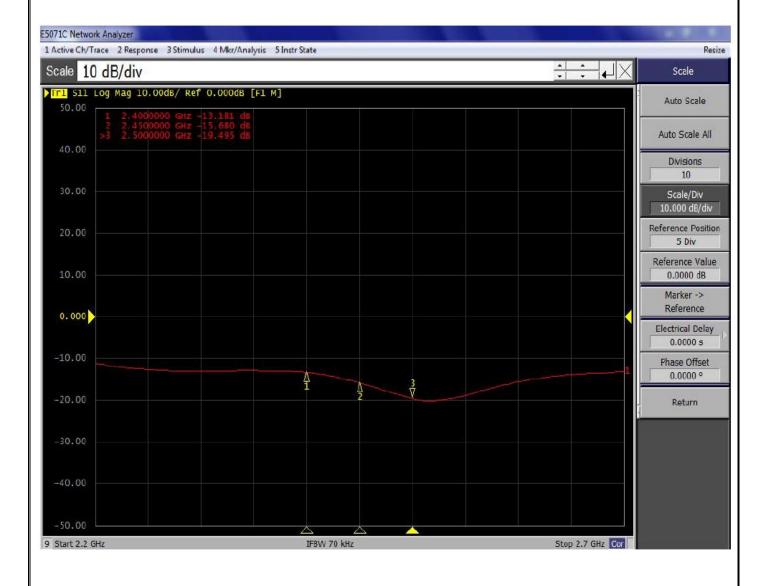
Page: 5/9

Technology Parameters/技术参数

Frequency Range/频率范围: Operating Humidity/工作湿度: Temperature Rating/温度范围:

95%R.H.MAX -40℃~+70℃

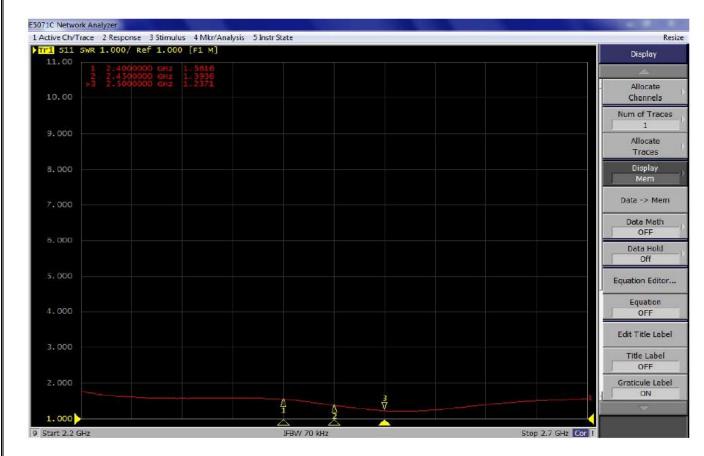
Log mag/回波损耗、SWR/驻波比:

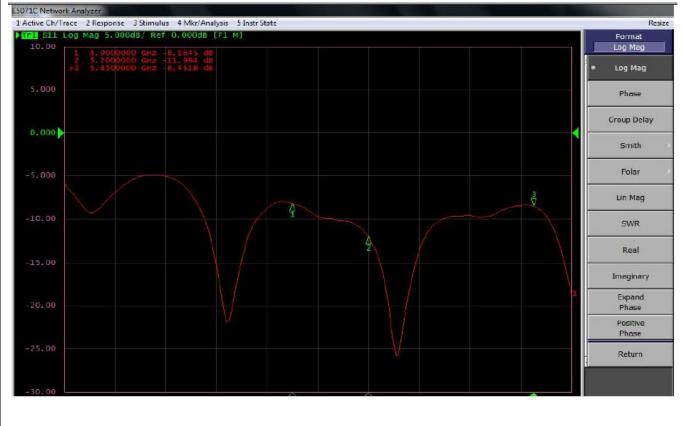




N: DOC.I

**DOC.No.**: 651-T183-01 Rev.: X2 **Page:** 6/9

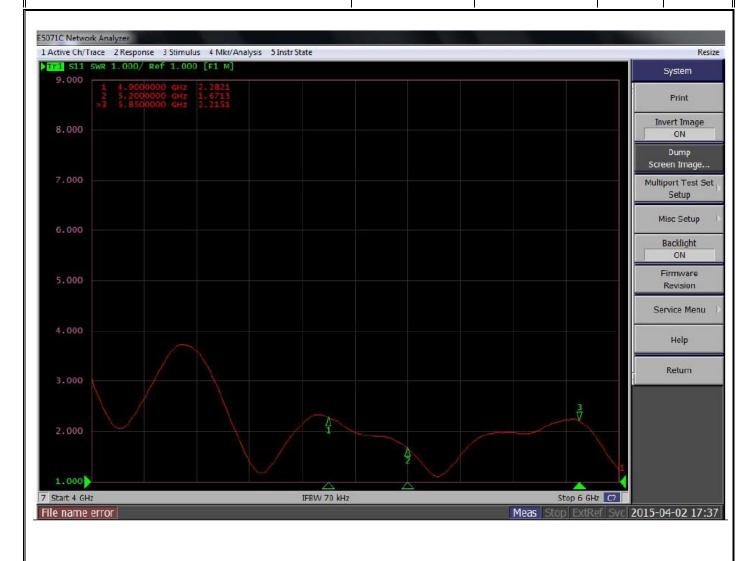






DOC.No.: 651-T183-01 Rev.:

Page:





Produ	uct S	pecifi	cation
	- U U	P	

P/N:

81800T183

**DOC.No.:** 651-T183-01

Rev.: X2 Page:

#### 4. gain and efficiency test/增益和效率测试

Frequency	Efficiency ( )	Peak Gain(dBi)
2400MHz	80.36%	3.57
2410MHz	83.76%	3.82
2420MHz	82.97%	3.80
2430MHz	80.06%	2.65
2440MHz	82.30%	3.82
2450MHz	83.21%	3.87
2460MHz	81.17%	3.76
2470MHz	80.84%	3.76
2480MHz	79.79%	3.73
2490MHz	80.48%	3.81
2500MHz	75.97%	3.68

Frequency	Efficiency ( )	Peak Gain(dBi)
5700MHz	46.63%	2.12
5720MHz	44.88%	2.03
5740MHz	46.46%	2.20
5760MHz	45.51%	2.00
5780MHz	49.30%	2.57
5800MHz	52.36%	2.61
5820MHz	51.45%	2.59
5840MHz	50.41%	2.57
5860MHz	49.53%	2.55



DOC.No.: 651-T183-01 Rev.:

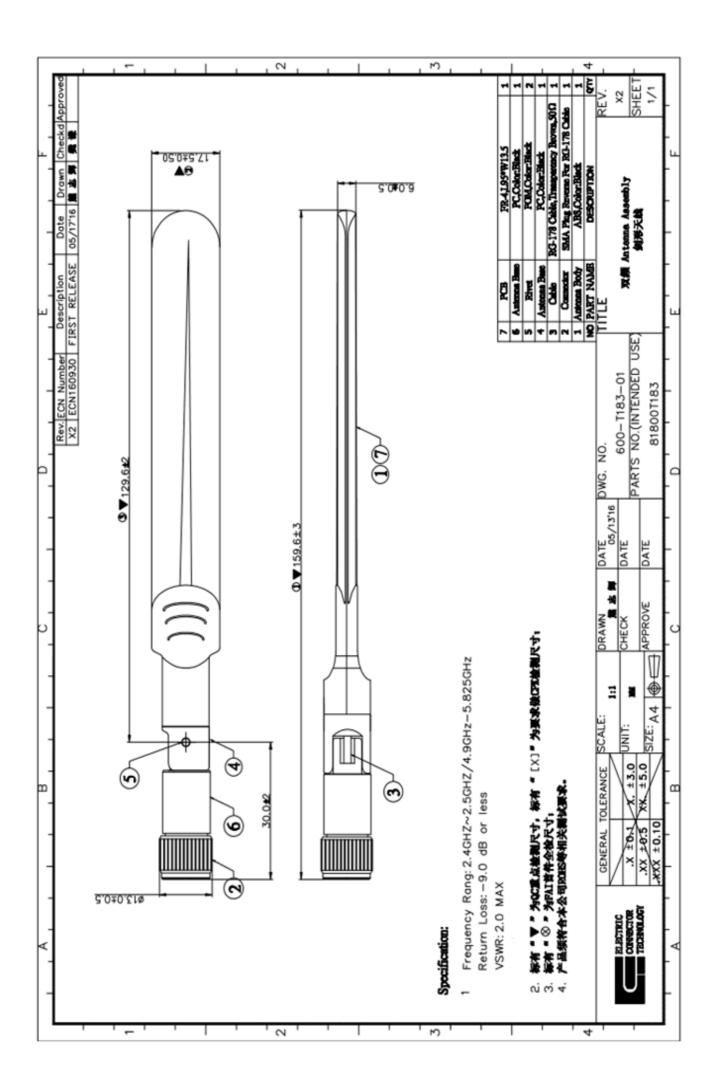
Page:

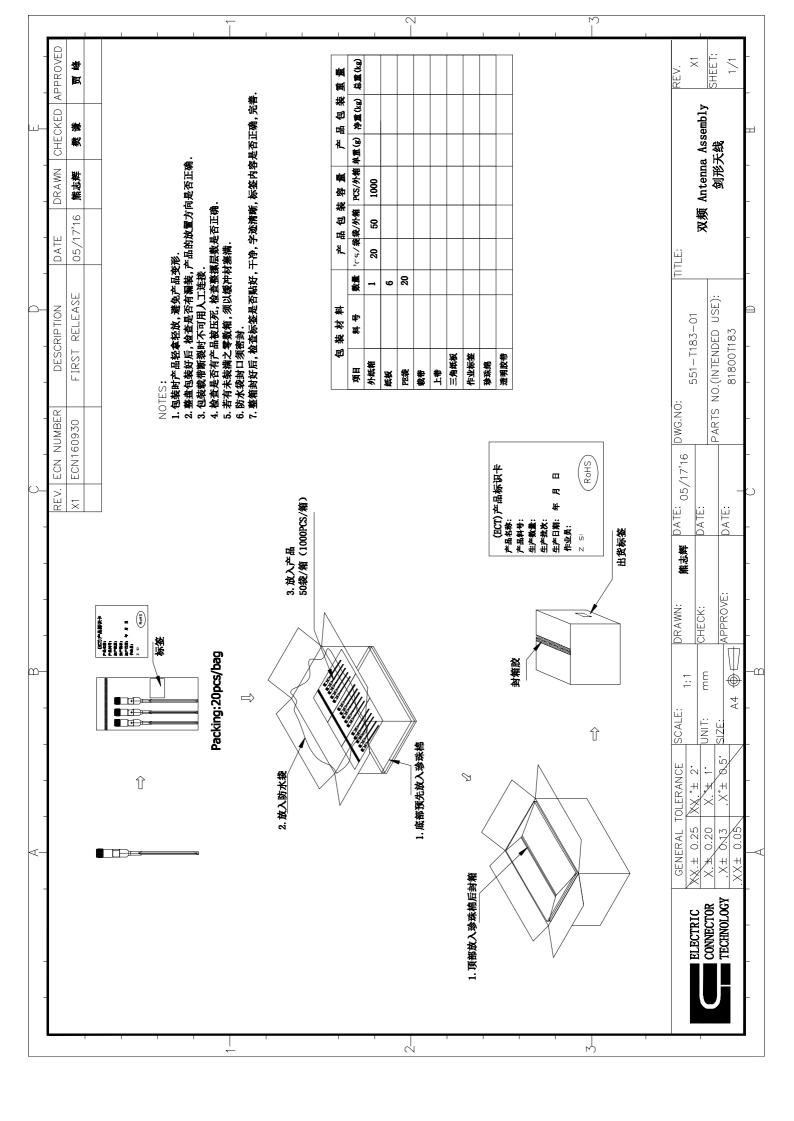
#### 5. Usage Precaution/使用禁忌或注意事项

No	Items 项目	Matter 事项
5.1	Precautions 禁忌	Do not disassemble/请勿拆卸 Do not bend strength/不可强力折弯
No	Items 项目	Matter 事项
5.2	Stockpile condition 存储条件	Use this product within 6 months after receipt Condition: Temp: -10~+40℃ Humidity:15~85% 有效期: 请在产品接收后的 6 个月内使用存储环境: 温度:-10~+40℃; 湿度:15%~85%

#### 6. Picture/实物图片







#### **DIMENSION MEASUREMENT REPORT**

DWG NAME 双频剑形天线 REV: X2 Production equipment code: WORK NO.:
DWG P/N.: 81800T183 Cav No.: Sample Q'ty: 5 PCS Test Reason:

Measuring Tool: A:Vernier caliper B:Optical image measuring machine C:Microscope D:Ruler E:Jig F:Height gaugeTEST DATE: 2016.05.13

Drawing Specification					Mea	surement	results (ui	% Tol	erance	STATUS				
DRAW ING		+Tol	-Tol	1	2	3	4	5	Measuring Tool	Upper	Lower	High	Low	Remark
1	159.6	3.0	3.0	158.0	158.0	158.0	158.0	158.0	А	0%	53%		50%+	OK
2	17.5	0.50	0.50	17.65	17.63	17.65	17.65	17.63	А	30%	0%			OK
3	6.0	0.10	0.10	6.03	6.04	6.03	6.03	6.03	Α	40%	0%			OK
4	129.6	2.00	2.00	128.00	127.90	128.00	128.40	128.00	Α	0%	85%		75%+	OK
5	30.0	2.00	2.00	30.50	30.20	30.20	30.34	30.20	Α	25%	0%			OK
6	13.0	0.50	0.50	12.52	12.53	12.53	12.51	12.53	Α	0%	98%		75%+	OK
	. T Cl				Charle 1	h 77 h T *					T4-13	. W O'		<u> </u>
	1 2 3 4 5 6 6	DRAW ING ZONE         Dimension           1         159.6           2         17.5           3         6.0           4         129.6           5         30.0	DRAW ING ZONE         Dimension         +Tol           1         159.6         3.0           2         17.5         0.50           3         6.0         0.10           4         129.6         2.00           5         30.0         2.00           6         13.0         0.50	DRAW ING ZONE         Dimension         +Tol         -Tol           1         159.6         3.0         3.0           2         17.5         0.50         0.50           3         6.0         0.10         0.10           4         129.6         2.00         2.00           5         30.0         2.00         2.00           6         13.0         0.50         0.50	DRAW ING ZONE         Dimension         +Tol         -Tol         1           1         159.6         3.0         3.0         158.0           2         17.5         0.50         0.50         17.65           3         6.0         0.10         0.10         6.03           4         129.6         2.00         2.00         128.00           5         30.0         2.00         2.00         30.50           6         13.0         0.50         0.50         12.52	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2           1         159.6         3.0         3.0         158.0         158.0           2         17.5         0.50         0.50         17.65         17.63           3         6.0         0.10         0.10         6.03         6.04           4         129.6         2.00         2.00         128.00         127.90           5         30.0         2.00         2.00         30.50         30.20           6         13.0         0.50         0.50         12.52         12.53	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3           1         159.6         3.0         3.0         158.0         158.0         158.0           2         17.5         0.50         0.50         17.65         17.63         17.65           3         6.0         0.10         0.10         6.03         6.04         6.03           4         129.6         2.00         2.00         128.00         127.90         128.00           5         30.0         2.00         2.00         30.50         30.20         30.20           6         13.0         0.50         0.50         12.52         12.53         12.53           1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0           2         17.5         0.50         0.50         17.65         17.63         17.65         17.65           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03           4         129.6         2.00         2.00         128.00         127.90         128.00         128.40           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34           6         13.0         0.50         0.50         12.52         12.53         12.53         12.51           1         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4         5           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         158.0         163.0         6.03         6.03         6.03         6.03         6.03         6.03         6.03         6.03         6.03         6.03         6.03         6.03         128.00         128.00         128.00         128.00         128.00         128.00         128.00         128.00         128.00         128.00         128.00         12.53         12.53         12.51         12.53         12.51         12.53         12.53         12.53         12.51 <td< td=""><td>DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4         5         Measuring Tool           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A           2         17.5         0.50         0.50         17.65         17.65         17.65         17.63         A           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A           4         129.6         2.00         2.00         128.00         127.90         128.00         128.40         128.00         A           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A           6         13.0         0.50         0.50         12.52         12.53         12.53         12.51         12.53         A</td><td>DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4         5         Measuring Tool         Upper           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         168.0         A         0%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         12.80         12.80         128.00         128.00         128.40         128.00         A         25%           6         13.0         0.50</td><td>DRAW ING SONE         Lower         -Tol         -Tol         1         2         3         4         5         Measuring Tool         Upper         Lower           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A         0%         53%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.63         A         30%         0%           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A         40%         0%           4         129.6         2.00         2.00         128.00         127.90         128.00         128.40         128.00         A         0%         85%           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A         25%         0%           6         13.0         0.50         12.52         12.53         12.53         12.51         12.53         A         0%         98%           1         13.0         13.0         13.0         13.0</td><td>DRAW ING ZONE         LATION         -Tol         1         2         3         4         5         Measuring Tool         Upper         Lower         High           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A         0%         53%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.65         17.63         A         30%         0%           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A         40%         0%         1%           4         129.6         2.00         2.00         128.00         128.00         128.00         A         0%         85%         1           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A         25%         0%           6         13.0         0.50         15.52         12.53         12.53         12.51         12.53         A         0%         98%           1         1         1         1         1</td><td>DRAM NOG NOR SOME SOME SOME SOME SOME SOME SOME SOME</td></td<>	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4         5         Measuring Tool           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A           2         17.5         0.50         0.50         17.65         17.65         17.65         17.63         A           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A           4         129.6         2.00         2.00         128.00         127.90         128.00         128.40         128.00         A           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A           6         13.0         0.50         0.50         12.52         12.53         12.53         12.51         12.53         A	DRAW ING ZONE         Dimension         +Tol         -Tol         1         2         3         4         5         Measuring Tool         Upper           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         168.0         A         0%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         17.65         12.80         12.80         128.00         128.00         128.40         128.00         A         25%           6         13.0         0.50	DRAW ING SONE         Lower         -Tol         -Tol         1         2         3         4         5         Measuring Tool         Upper         Lower           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A         0%         53%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.63         A         30%         0%           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A         40%         0%           4         129.6         2.00         2.00         128.00         127.90         128.00         128.40         128.00         A         0%         85%           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A         25%         0%           6         13.0         0.50         12.52         12.53         12.53         12.51         12.53         A         0%         98%           1         13.0         13.0         13.0         13.0	DRAW ING ZONE         LATION         -Tol         1         2         3         4         5         Measuring Tool         Upper         Lower         High           1         159.6         3.0         3.0         158.0         158.0         158.0         158.0         158.0         A         0%         53%           2         17.5         0.50         0.50         17.65         17.63         17.65         17.65         17.63         A         30%         0%           3         6.0         0.10         0.10         6.03         6.04         6.03         6.03         6.03         A         40%         0%         1%           4         129.6         2.00         2.00         128.00         128.00         128.00         A         0%         85%         1           5         30.0         2.00         2.00         30.50         30.20         30.20         30.34         30.20         A         25%         0%           6         13.0         0.50         15.52         12.53         12.53         12.51         12.53         A         0%         98%           1         1         1         1         1	DRAM NOG NOR SOME SOME SOME SOME SOME SOME SOME SOME

#### ROHS限用物质成分调查表

#### Vender(中文名/英文名):

								SAL	EABLE	PART						
华	勿料料号	物料名	称/型号		供	应商料	号	制造商名称				供应商绿色物料标识方法				
81	800T183	双频剑	形天线						EC	CT						
	,							;	SUB-PA	RT						
	名称(中文/ 英文)	料号	单件产		检测报 告		ßĘ	艮用物质	含量PPI	М			SGS Rep	oort		备注
序号	单体	(单体/单体中的物质成分料号或牌号)	品 使用量 <b>(g)</b>	供应商	有/无	铅	镉	汞	六价铬	PBB	PBDE	编号	出报告日期即生效日期		查询网址	(项目名称,组 件P/N及其 它)
1	上下盖	300- 1000356/358- A	mg/kg	XYC	有	ND	ND	ND	ND	ND	ND	POLYLACPA-757	2015.12.1 4	2016.12.1 4	WWW.SGSGROUP.COM.CI	
2	上固	300-1000384-A	mg/kg	XYC	有	ND	ND	ND	ND	ND	ND	CANML150446530 5	2015.8.4	2016.8.4	WWW.SGSGROUP.COM.CI	
3	线材	100-3000139-A	mg/kg	成佳	有	ND	ND	ND	//	//	//	SHAEC160274100 6	2016.3.4	2017.3.4	www.sgsg	ROUP.COM.CN
4	下固	300-1000017-A	mg/kg	XYC	有	ND	ND	ND	ND	ND	ND	CANML150446530 5	2015.8.4	2016.8.4	www.sgsg	ROUP.COM.CN
5	PE袋	400-1000023-A	mg/kg	永升	有	ND	ND	ND	ND	ND	ND	RHS01G00742300 3C	2015.06.2 1	2016.06.2 1	www.sgsg	ROUP.COM.CN
6	锡条	500-4000016-A	mg/kg	BAOTAI	有	ND	ND	ND	ND	ND	ND	CANEC151471010 2	2015.08.2 6	2016.08.2 6	www.sgsg	ROUP.COM.CN

填写人: 康槐清

填写人部门/职务: 品质主管

填写日期: 2016.5.16