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HOW TSEN INTL. ELECTRONICS METAL CO., LTD.
P.T HOWSANINDO INDUSTRY(INDONESIA)

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TEL : 62-21-8250470 hunting FAX :62-21-8250473

SPECIFICATION FOR APPROVAL

PARTS NAME : **ANTENNA**

TYPE NO : **S-001-1**

CUSTOMER P/N :

DATE : **Dec.04,2008**

CUSTOMER APPROVAL & COMMENT

FULL NAME	POSITION	SIGNATURE	COMPANY STAMP	COMMENT
		DATE :		
RECOGNIZED		ENGINEERING		QC CHECK

HOW TSEN INTL. ELECTRONICS METAL CO., LTD.

ANTENNA SPECIFICATIONS FOR APPROVAL

1 GENERAL DESCRIPTION

1.1 Type No. : S-001-1

1.2 Customer P/N :

2 DESCRIPTION & APPLICATION

This antenna assembly is designed for use in portable.

Communications equipment over a temperature range.

Of -20°C to +70°C in an indoor / outdoor environment.

3 ELECTRICAL CHARACTERISTICS

3.1 Frequency Range : 2.4~2.5 GHz

3.2 V.S.W.R : ≤ 2.0

3.3 Connector : SMA Male

3.4 Impedance : 50 Ω

4 ENVIRONMENTAL CHARACTERISTICS

4.1 Operating temperature range -20°C to +70°C

4.2 Humidity range : 10 % RH to 80 % RH

5 QUALIFICATION TESTING

5.1 Qualification testing, all product shall be able to withstand the following testing.

5.2 Physical dimensions identified within this specification.

5.3 Pull Test : Tube has the capability of load 3 kgf in a vertical position within 30 seconds.

5.4 Torque Test : 3 kgf-cm no damage happened.

6 INSPECTION STANDARD

6.1 Dimension to use the special inspection level of S-4 , AQL 1.0 .

6.2 Appearance to use MIL-STD-105DII AQL1.0 .

6.3 Mechanical Capability : Per lot Sampling, n=5 , Ac 0 , Re 1 .

6.4 Environmental test : Per lot Sampling, n=3 , Ac 0, Re 1 .

7 PACKING STYLE

If customer has no specific request by the customer, all according to our standard

8 OTHERS

Any changes in this specification should be agreed by both parties.

Antenna

For 2.4~2.5 GHz

Type No : S-001-1

Electrical Specification

Frequency range	2.4~2.5 GHz
V.S.W.R	≤ 2.0
Connector	SMA Male
Impedance	50Ω

Environmental & Mechanical Characters

Temperature	-20°C to +70°C
Weight	7.5 g
Dimensions	10.6 x 88.0 mm



HOW TSEN intl. Electronics Metal Co., Ltd.

HOW SANE industries Co., Ltd

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TEST REPORT

1.MODEL: S-001-1

2.QUANTITY: 5 Pcs

3.DATE OF TESTING: Dec.04,2008

4.TESTING ITEM: PULL TEST

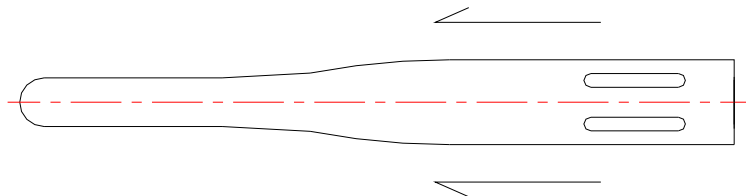
5.TESTING EQUIPMENT: B-016 (PUSH-PULL SCALE FB30K)

6.TESTING CONDITIONS: Antenna must withstand a 3 kgf tensile

Load applied to tube for 30 seconds.

No part of the antenna may be pulled out of

The assembly or from the housing.



7.TESTING RESULT:

SAMPLE	1	2	3	4	5
OK or NG	OK	OK	OK	OK	OK

APPROVED:

TESTER:

HOW TSEN INTL. ELECTRONICS METAL CO.,LTD.

TEST REPORT

1.MODEL: S-001-1

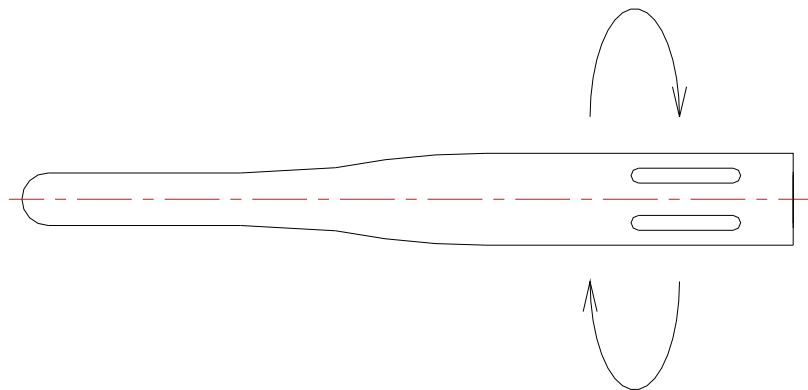
2.QUANTITY: 5 Pcs

3.DATE OF TESTING: Dec.04,2008

4.TESTING ITEM: TORQUE TEST

5.TESTING EQUIPMENT: B-001 (MECHANICAL TORQUE METER 2-TM30)

6.TESTING CONDITIONS: 3 kgf-cm no damage happened.

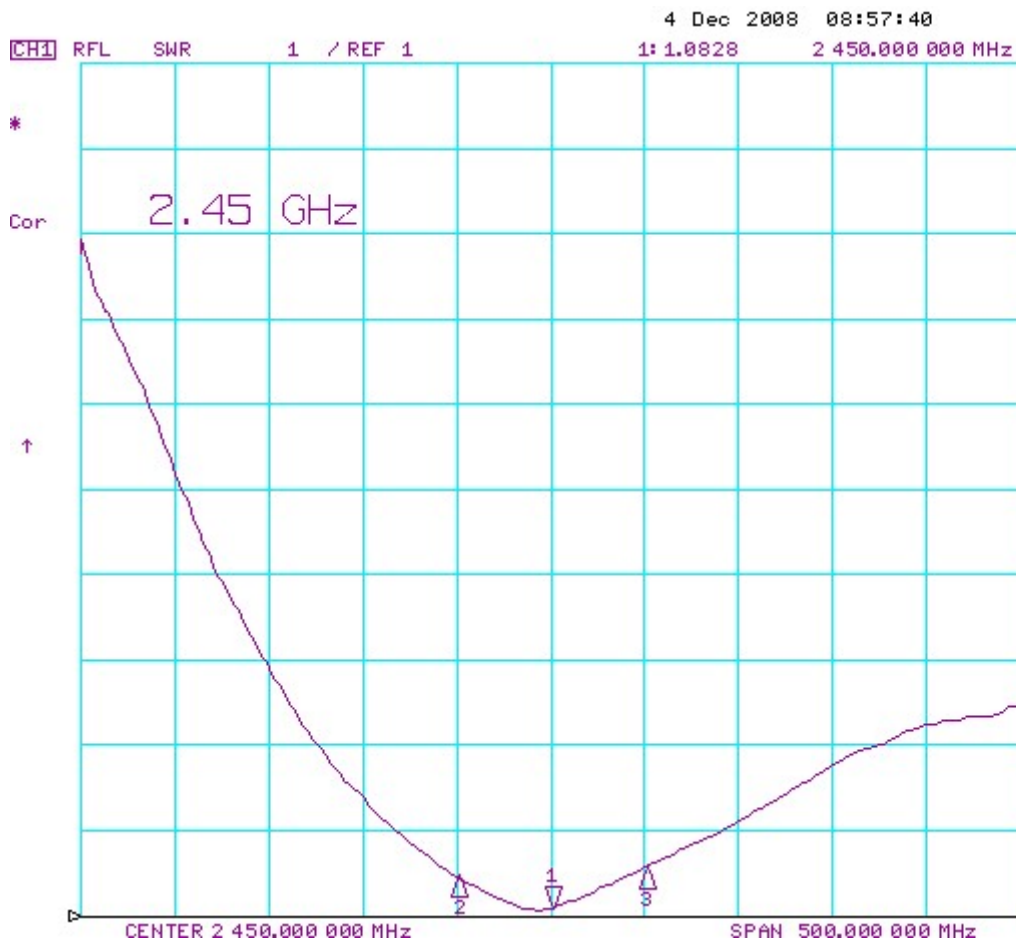


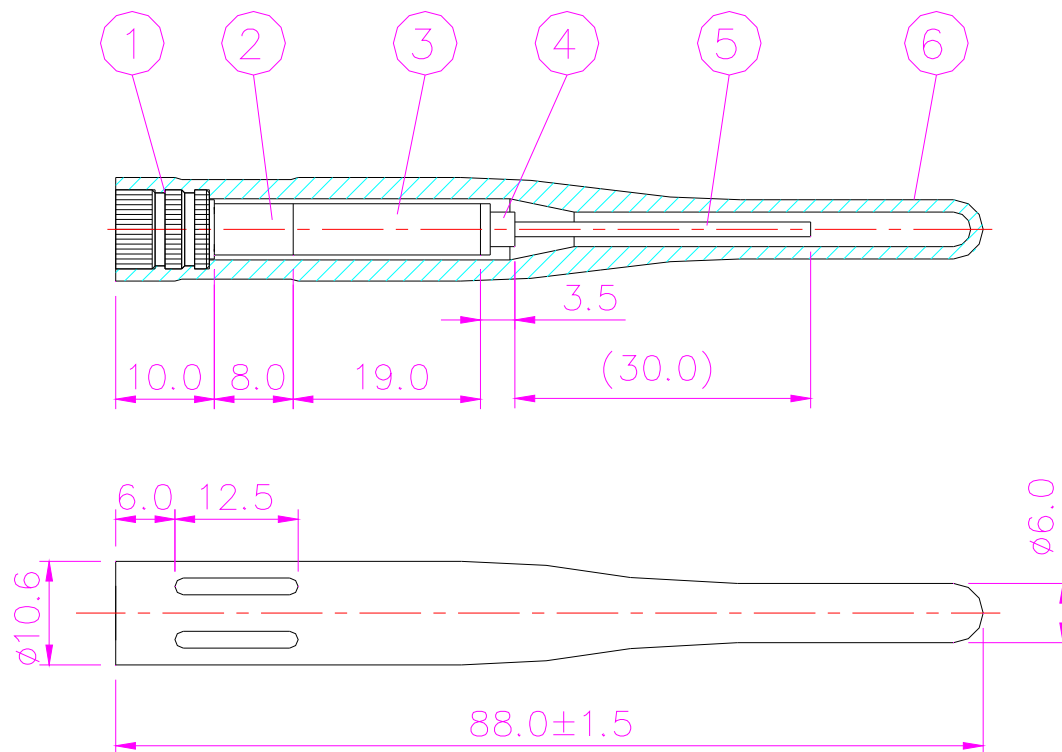
7.TESTING RESULT:

SAMPLE	1	2	3	4	5
OK or NG	OK	OK	OK	OK	OK








APPROVED:

TESTER:





6	TUBE	Pu	1	Black	
5	CABLE	RG-316	1		
4	CONNECTOR	BSBM	1		
3	BRASS TUBE	BST	1		
2	INSULATOR	POM	1	White	
1	SMA Male	BSBM	1	Au	

TOLERANCES					NO	PARTS NAME	MATERIAL		QTY	FINISH	NOTE
~ 6 ±0.20					SCALE 1:1	DESIGNED	CHECKED	APPROVED	MODEL NAME ANTENNA		
7 ~ 30 ±0.30					UNIT : mm	ALEX					
31 ~ 80 ±0.40						DATE Feb.11,2009			MODEL NO. S-001-1		
81 ~ 250 ±0.50						 HOW TSEN ELECTRONICS METAL CO., LTD.					
251 ~ 500 ±0.60	SYMBOL	REVISION DESCRIPTION	ISSUED BY	DATE	THIRD ANGLE						