

## Revision Sheet

## MODEL

K500

(REMARK)



SB TELCOM CO., LTD

Product Specification	Mechanical Engineer	RF Engineer	Check by	Approve by
				
	2008-1-19		2008-1-19	2008-1-19
	PART NAME	INTENNA		
	MODEL	K500		
	CODE	-		

### Attached Documents

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Please approve this product with specifications.

2008. 1. 19

Address : #25-49 Juan5-Dong Nam-Ku, Inchon Korea

Trade Name : SB TELCOM., LTD.

Substitute : President Eung - Soon, Chang



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# Antenna Specifications

MODEL : K500  
(INTENNA)

#25-49 Juan5-Dong, Nam-Ku, Inchon, Korea



(주) 에스비텔콤  
SB TELCOM CO., LTD.

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## 1. Technical Properties

### 1.1 General Properties

MODEL	NSB0694-0000850/1900-TL015BK00
ANTENNA TYPE	INTENNA
APPLICATIONS	GSM850 / PCS1900

### 1.2 Electrical Properties

FREQUENCY RANGE	GSM850	824 ~ 894 MHz
	PCS1900	1850 ~ 1990 MHz
IMPEDANCE(NOMINAL)	50Ω	
V.S.W.R	LESS THAN 2.0 : 1	
RADIATION PATTERN	OMNI-DIRECTIONAL	
POLARIZATION	VERTICAL	
Max Gain	850 Band: 1.1dBi / 1900 Band: 0.8dBi	

### 1.3 Mechanical Properties

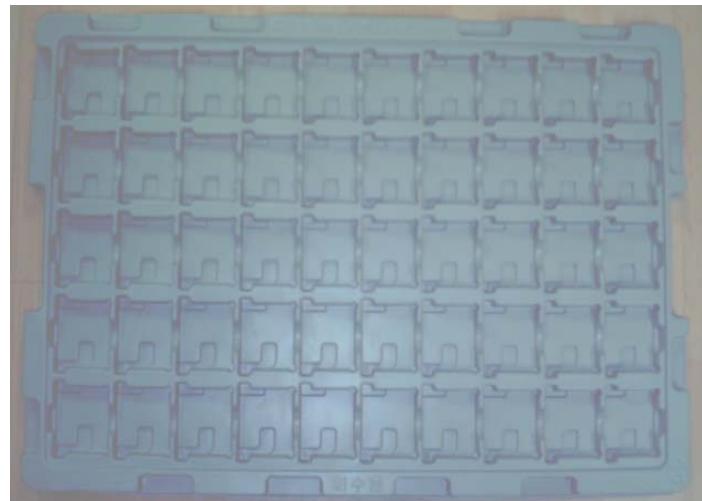
SIZE	33.0mm × 17.8mm × 8.25mm
TEMPERATURE	-40 °C ~ +85°C
CONNECTOR TYPE	PIN CONTACT TYPE

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#### 1.4 Packing

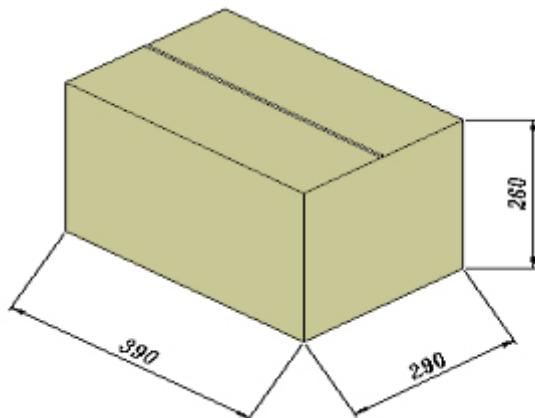
##### 1) Packing Condition

50ea of antennas are placed on a pad (375 x 270 x 17) according to FIG. 1



( FIG. 1 )

A box contains 20 PAD and 1,000 antennas be packing( $20 \times 50 = 1,000$ ) according to FIG. 2



( FIG. 2 )

##### 2) Remarks

A change of packing material shall be executed with mutual approval between buyer and supplier.

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2. Electrical Properties	REV	00	PAGE	5/8

## 2. Electrical Properties

### 2.1 Frequency Range

defined in section 1.2

### 2.2 Impedance

1) Nominal Value : 50  $\Omega$

2) Method

To measure the appropriate impedance with the frequency desired after connecting a handset with the antenna installed to the reflection point from the network analyzer to FIG 3.



( FIG.3 )

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### 3. Mechanical Properties

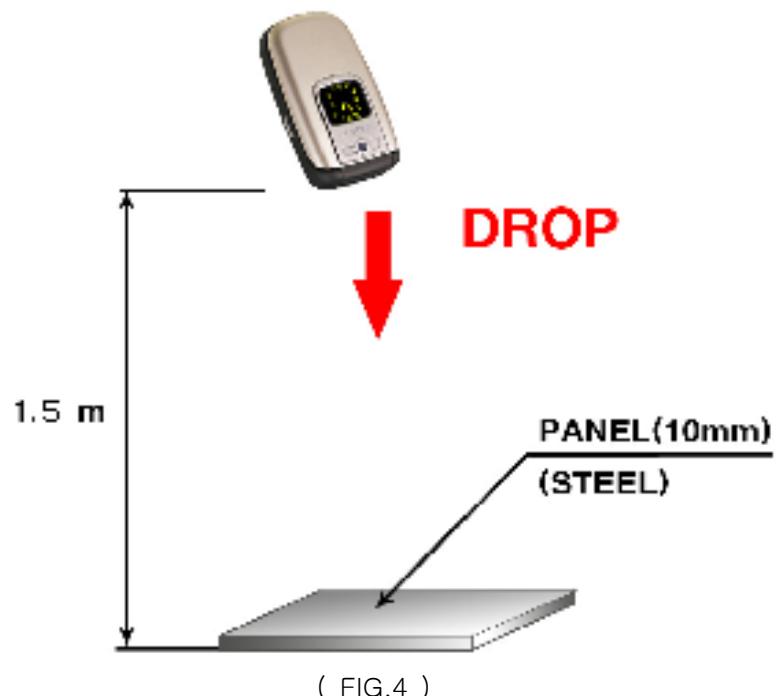
#### 3.1 Dimensions

The device dimensions shall conform to "DRAWINGS"

#### 3.2 Drop Test

The antenna is attached to the handset or an equivalent test fixture.

The handset is dropped with the antenna downward from the height of 1.5m onto a steel panel with thickness of 10mm prepared on the ground.



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#### 4. Environmental Resistance Properties

##### 4.1 Examination Environmental Condition

The antenna is placed at temperature  $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$  and humidity 25%~80% (Under 55% RH) for executing all testes (Electrical, Mechanical and Environmental Tests).

##### 4.2 Humidity

Temperature :  $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Humidity : 85%RH  $\pm 2$

The antenna is placed in a climatic chamber for 120 hours.

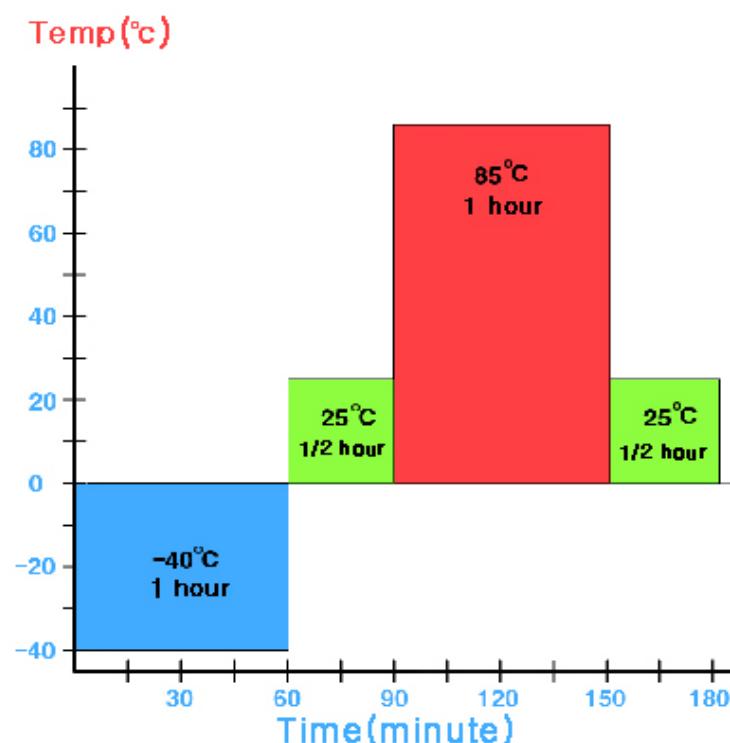
It not must be above in appearance and function.

##### 4.3 Temperature Cycling

The antenna is placed in a climate chamber. The temperature is cycled as follows:

The temperature is kept constant at  $-40^{\circ}\text{C}$  for 1 hour, kept constant at  $+25^{\circ}\text{C}$  for 1/2 hour, kept constant at  $+85^{\circ}\text{C}$  for 1 hour, kept at  $+25^{\circ}\text{C}$  for 1/2 hour.

This procedure is repeated 5 times. The procedures are executed based on KSC-0222.



( FIG.5 )

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4.4 Acid proof examination

Acidity : PH-4.6

Time : 48 Hr Leaving alone

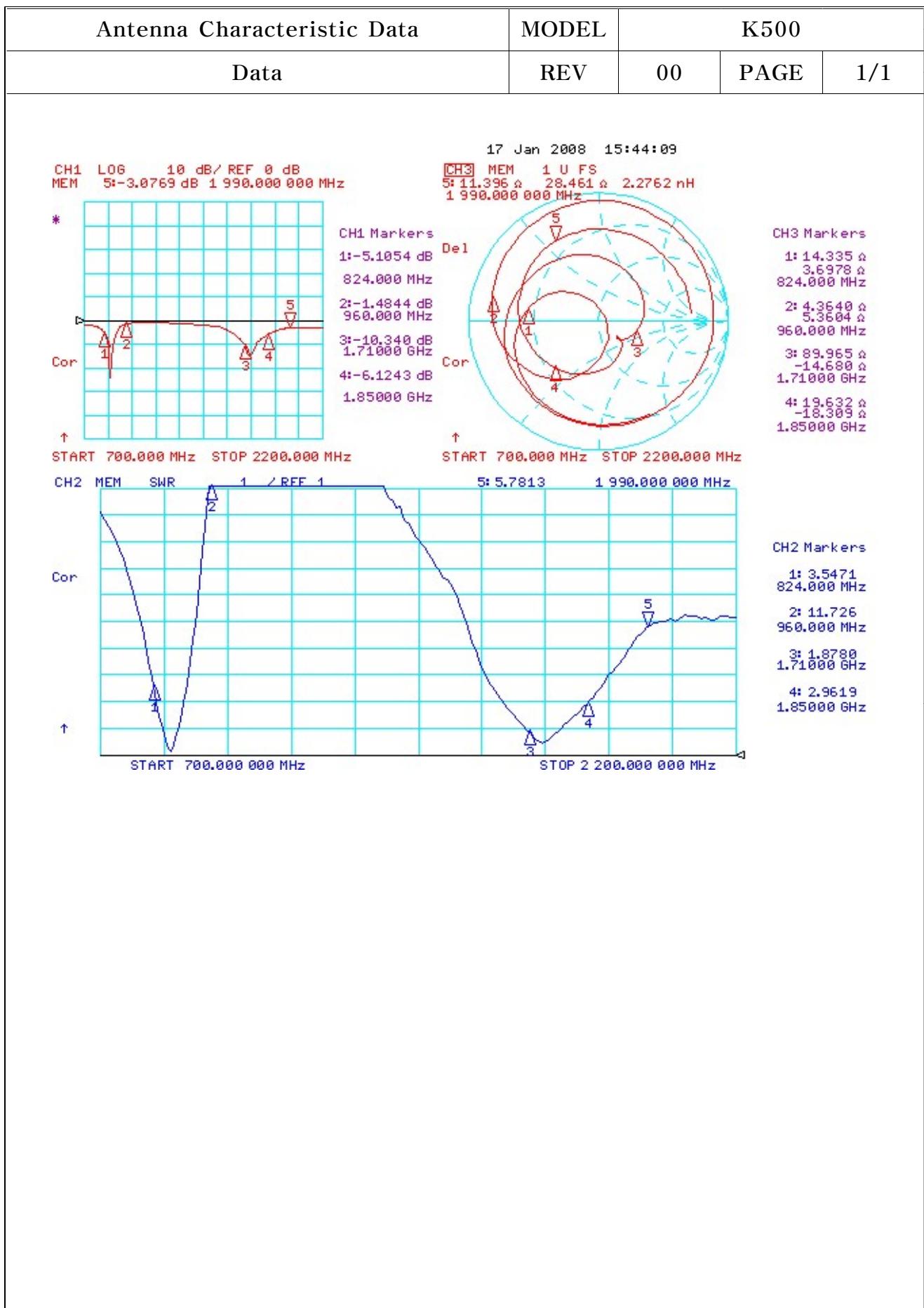
It not must be above in appearance and function.

4.5 Salt spray test

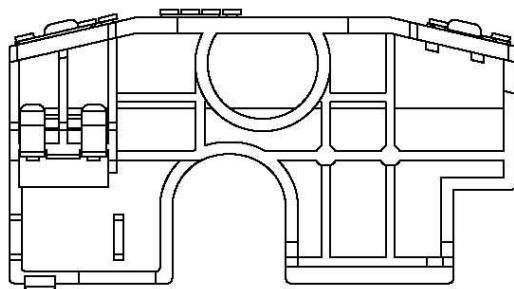
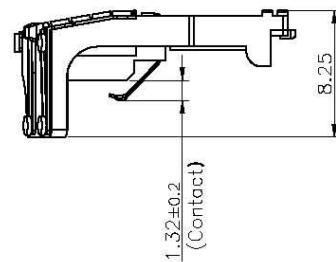
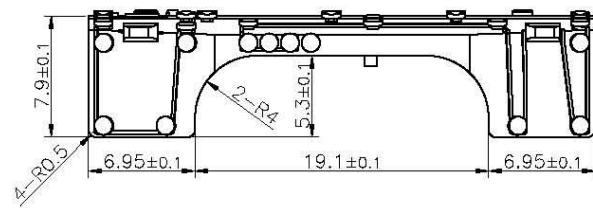
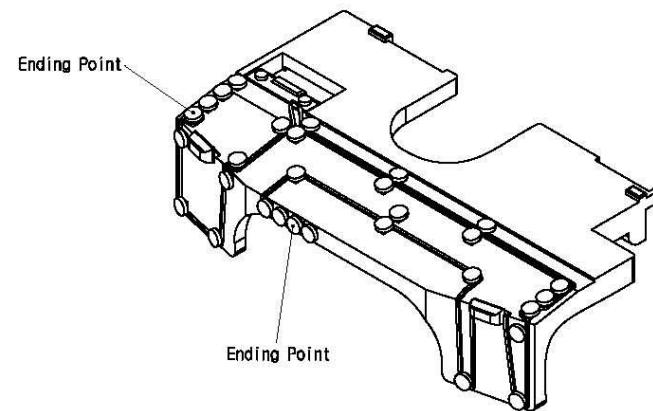
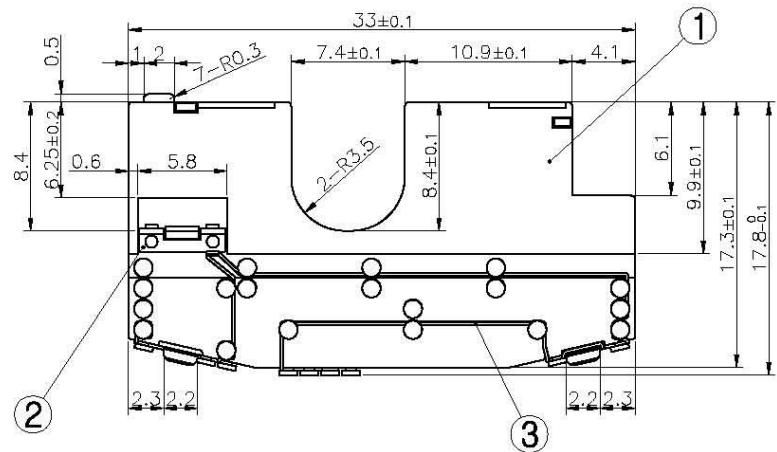
Temperature :  $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Salinity : with 5% 72Hr it examines

It not must be above in appearance and function.



AMEND	MRK.	DATE	REVISION	SIGN



3	COL-0001	RADIATOR	COIL(Φ0.2mm)	1	-
2	PRS-0145	CONTACT PIN	SUS301 1/2H(0.15t)	1	NI PLATED
1	NSB-0694	INTENNA BASE	PC(HF-1023IM)	1	-
NO.	PARTS NO.	NAME	MATERIAL	Q'TY.	REMARKS
DRAW BY	CHECK BY	APPROVE BY	SCALE	UNIT	
BUYER NAME	MEDEL NO.	MODEL NAME	3/1	mm	
TELIAN	NSB0694-0000850/1900-TL015BK00	K500			