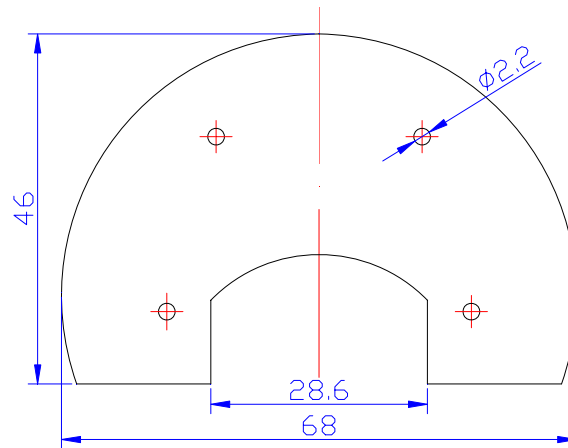


# GSM Internal Antenna

Part Number: VTGSMIA-3



## 1 Dimension (Unit: mm)



## 2 Electrical Characteristics

Form 1

No.	Item	Specifications	Post Environmental Tolerance
1	Frequency (MHz)	824~896MHz/1710~1990 MHz	±3 MHz
2	V.S.W.R (in BW )	≤2.0 : 1	—
3	Gain (Zenith)	3.5 dB	±0.5 dB
4	Impedance	50 Ω	—

## 4 Reliability

Condition: Temperature: 40±5°C

Load: DC=5V±0.5 V

Quantity: 2000pcs

Sustained Time: 480h

## 5 Environmental Specifications

Condition:

Post Environmental Tolerance (Refer to the form 1)

Temperature range 25±3°C

Relative Humidity range 55~75%RH

Operating Temperature range  $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$

Storage Temperature range  $-40^{\circ}\text{C}\sim+100^{\circ}\text{C}$

#### 5.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form 1 after exposed to the temperature  $40\pm 2^{\circ}\text{C}$  and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

#### 5.2 Vibration Resist

The device should satisfy the electrical characteristics specified in form 1 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

#### 5.3 Drop Shock

The device should satisfy the electrical characteristics specified in form 1 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

#### 5.4 High Temperature Endurance

The device should satisfy the electrical characteristics specified in form 1 after exposed to temperature  $80\pm 5^{\circ}\text{C}$  for  $24\pm 2$  hours and 1~2 hours recovery time under normal temperature.

#### 5.5 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in form 1 after exposed to the temperature  $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$  for  $24\pm 2$  hours and to 2 hours recovery time under normal temperature.

#### 5.6 Temperature Cycle Test

The device should also satisfy the electrical characteristics specified in form 1 after exposed to the low temperature  $-25^{\circ}\text{C}$  and high temperature  $+85^{\circ}\text{C}$  for  $30\pm 2$  min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.