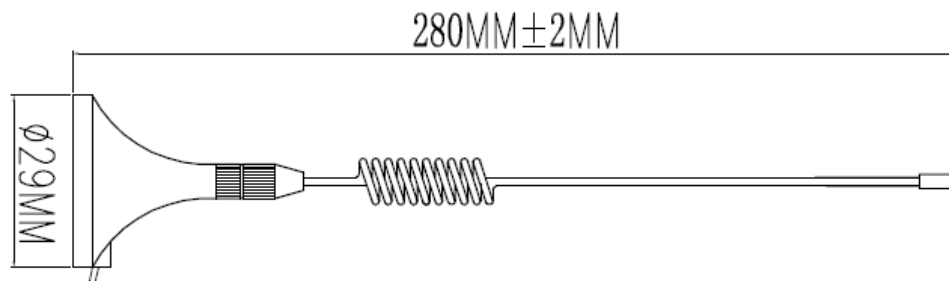


# GSM Antenna

**Model: VTGSMA-10**



## 1 Dimension (Unit: mm)



## 2 Electrical Characteristics

### 2.1 GSM Antenna

Form 1

No.	Item	Specifications	Post Environmental Tolerance
1	Frequency (MHz)	824~896MHz/1710~1990 MHz 880~960MHz/1710~1990 MHz	±3 MHz
2	V.S.W.R (in BW )	≤2.0 : 1	—
3	Gain (Zenith)	5 dB	±0.5 dB
4	Polarization	Vertical	—
5	Impedance	50 Ω	—

### 2.2 Mechanical

Form 2

No.	Item	Specification
1	Cable	RG174 3m/5m or others
2	Connector	SMA/MMCX or others
3	Plastic Housing	Black
4	Size	Φ29×280mm

### 3 Reliability

Condition: Temperature:  $40 \pm 5^{\circ}\text{C}$

Load:  $\text{DC}=5\text{V} \pm 0.5\text{ V}$

Quantity: 2000pcs

Sustained Time: 480h

### 4 Environmental Specifications

Condition:

Post Environmental Tolerance (Refer to the form 1)

Temperature range  $25 \pm 3^{\circ}\text{C}$

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.