GPS/GSM Combined Antenna

(Model: A-GPSAGSMFAKRA-xx)

Specifications

Electrical Specifications - Dielectric Antenna

No.	Item	Specifications	Post Environmental Tolerance
1	Centre Frequency (MHz)	1575.42 MHz	± 3 MHz
2	Bandwidth (MHz)	± 5 MHz	± 1 MHz
3	V.S.W.R (in BW)	1.5 : 1	-
4	Gain (Zenith)	3 dB	± 0.5 dB
5	Polarisation	RHCP	-
6	Impedance	50 ohms	-

Electrical Specifications - GSM Antenna

No.	Item	Specifications	Post Environmental Tolerance
1	Centre Frequency (MHz)	824MHz~894MHz / 1710MHz~1990MHz 880MHz~960MHz / 1710MHz~1990MHz	± 3 MHz
2	V.S.W.R (5m)	2.0 : 1	-
3	Gain (Zenith)	2dB±1dB@900MHz or 1dB±1dB@1800MHz	± 0.5 dB
4	Impedance	50 ohms	-

Electrical Specifications - LNA/Filter

No.	Item	Specifications	Post Environmental Tolerance
1	LNA Gain	28 ± 3 dB	± 25 dB
2	Noise Figure	1.5 dB	-
3	Filter Out Band Attenuation	14dB Min f0+50MHz 18dB Min f0-50Mhz 30dB Min f0+100MHz 42dB Min f0-100MHz	± 1.0 dB
4	DC Voltage	3~5V	
6	Impedance	8~15mA	

Mechanical Specifications

Cable	RG174 3m/5m or others
Connector	SMA/SMB/MCX or others
Plastic Housing	Black
Mounting	Screw/Magnetic/Stick

Specifications (Cont'd)

Reliability

Temperature	40 ± 5°C
Load	DC - 5V ± 0.5V
Quantity	2000 pcs
Sustained Time	480 hr

Environmental Specifications

Post Environmental Tolerance	Refer to Page 1
Temperature Range	25 ± 3°C
Relative Humidity Range	55~75%RH
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-40°C ~ +100°C

Moisture Proof

The device should satisfy the electrical characteristics specified on page 1 after exposed to temperatures of 40±2°C and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal conditions.

Vibration Resist

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

Drop Shock

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

High Temperature Endurance

The device should satisfy the electrical characteristics specified on page 1 after exposed to temperatures of 80±5°C for 24±2 hours and 1~2 hours recovery time under normal temperature.

Low Temperature Endurance

The device should also satisfy the electrical characteristics specified on page 1 after exposed to temperatures of -40°C±5°C for 24±2 hours and to 2 hours recovery time under normal temperature.

Temperature Cycle Test

The device should also satisfy the electrical characteristics specified on page 1 after exposed to low temperatures of -25°C and high temperature +85°C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

Weatherproof

Put the antennas in 1m deep water for 12h, and find 100% waterproof.

Part Number Options

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xx	Length in metres (m)