

*Application note*

## GPS/WLAN&GSM900/ 1800 Antenna

*Covered frequency range:  
1.5G/2.4GHz & 5GHz &  
900MHz/1800MHz*

*Pulse Part Number: SW0159W*

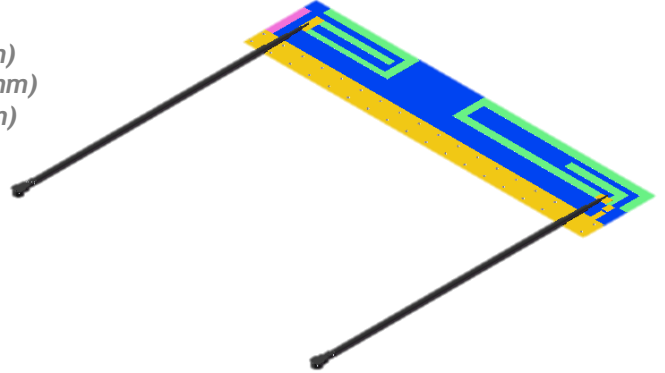
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# GPS/WLAN&GSM900/1800 Antenna

## Features

- Coaxial Feed
- Dual Feed Points
- Total size W x L x H (70mm x 15mm x 1mm)  
Antenna size W x L x H (70mm x 10mm x 1mm)  
Ground size W x L x H (70mm x 5mm x 1mm)  
Not include cable
- Lead Free Materials
- Lead Free Soldering Compatible
- RoHS Compliant
- Coaxial Cable Connector:  
- I.PEX Connector MHF- Series Compatible



## Applications

GPS/WLAN&GSM900/1800

### Electrical specifications @ +25 °C- WLAN/GPS

Note: Antenna’s electrical characteristics depend on test board ground plane (GP) size, antenna positioning in relative to GP, antenna distance to test board and antenna surrounding mechanics.\

<b>Frequency</b>	Freq 1	2400-2500 MHz
	Freq 2	4900-5900 MHz
	Freq 3	1500-1650MHz
<b>Nominal Impedance Ω</b>		50
<b>VSWR</b>		3:1
<b>Gain (dBi) Max</b>	Freq 1	3.4 Max
	Freq 2	3.9 Max
	Freq 3	3.9 Max
<b>Gain (dBi) Average</b>	Freq 1	2.9
	Freq 2	2.7
	Freq3	1.0
<b>Efficiency (%) Average</b>	Freq 1	67
	Freq 2	58
	Freq 3	43
<b>Power Rating , Watts</b>		2, max

### Electrical specifications @ +25 °C- GSM900/1800

Note: Antenna’s electrical characteristics depend on test board ground plane (GP) size, antenna positioning in relative to GP, antenna distance to test board and antenna surrounding mechanics.\

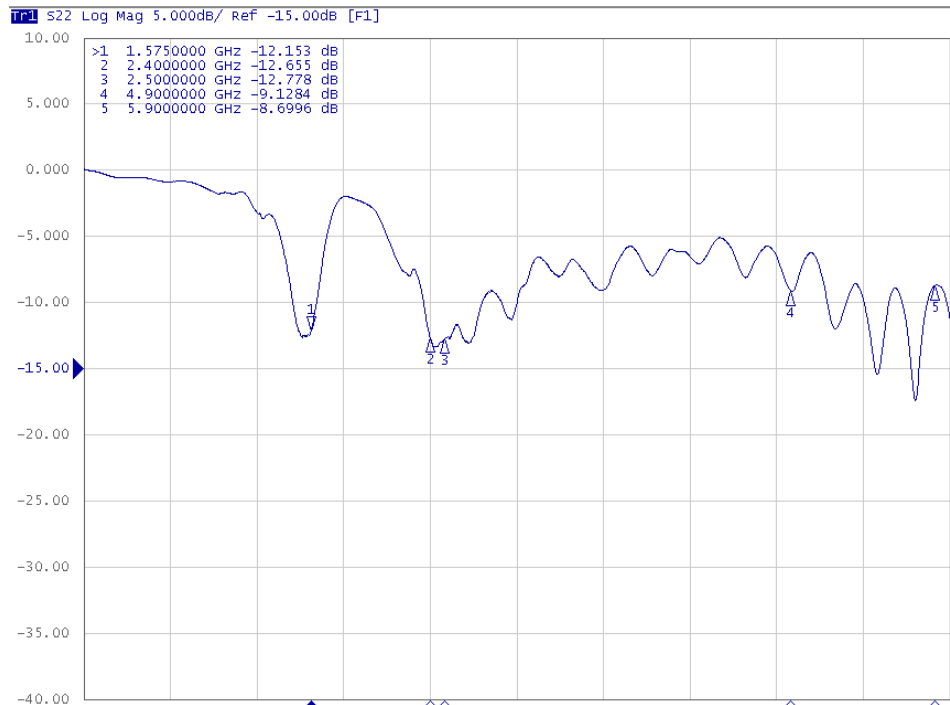
<b>Frequency</b>	Freq 1	880-960 MHz
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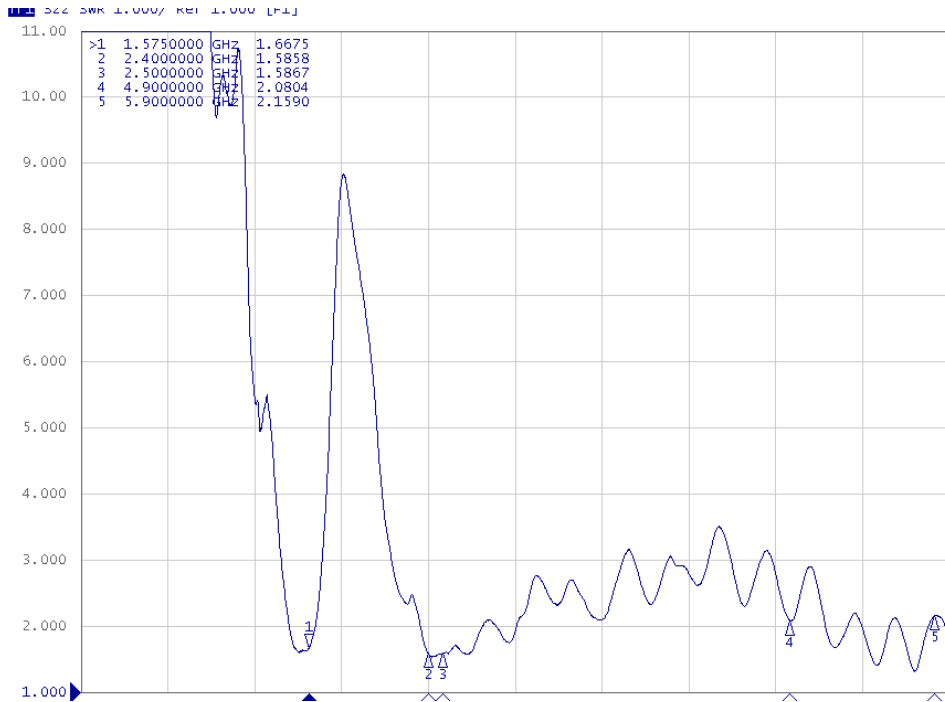
	Freq 2	1710-1880 MHz
<b>Nominal Impedance <math>\Omega</math></b>		50
<b>VSWR</b>		2:1
<b>Gain (dBi) Max</b>	Freq 1	1.3 Max
	Freq 2	1.9 Max
<b>Gain (dBi) Average</b>	Freq 1	1.0
	Freq 2	1.6
<b>Efficiency (%) Average</b>	Freq 1	60
	Freq 2	60
<b>Power Rating , Watts</b>		2, max

**Environmental Specifications**

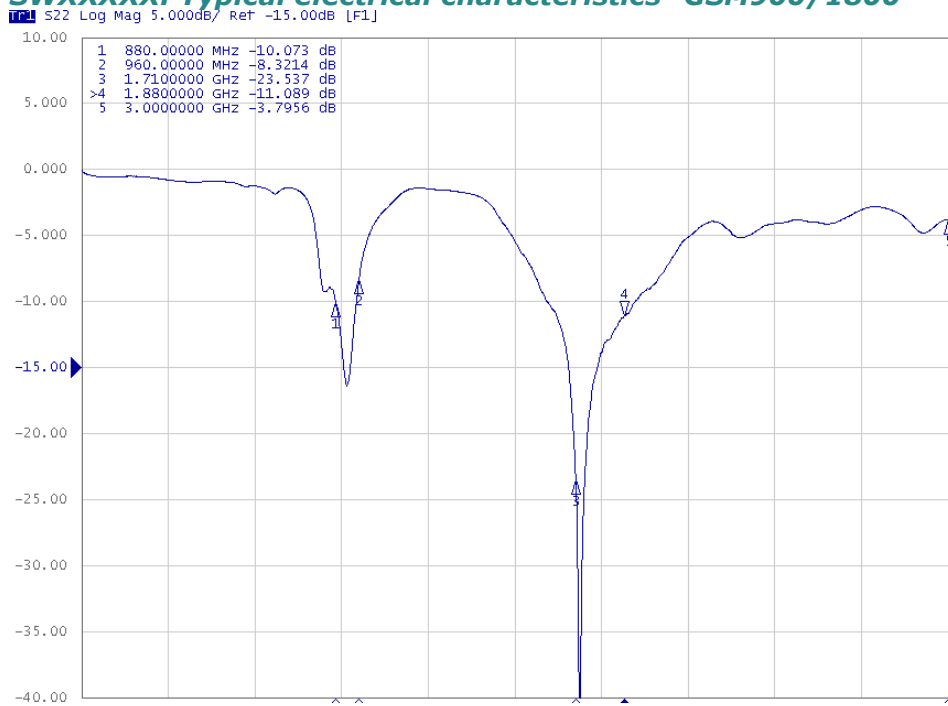
<b>Operating Temperature (°C)</b>	-40 / +85
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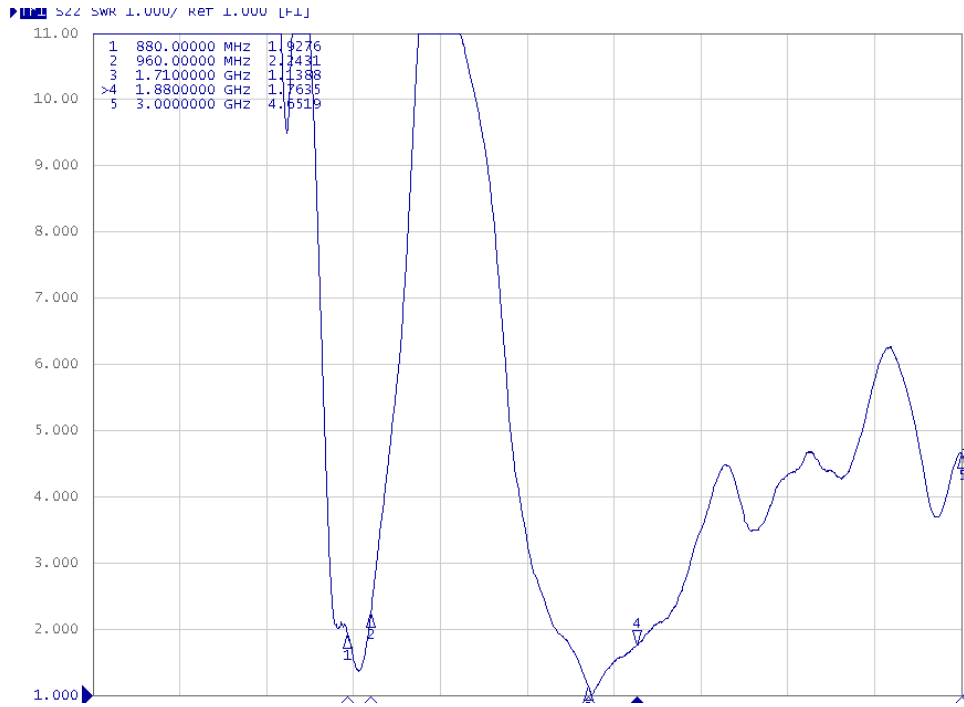
**SWXXXXX: Typical electrical characteristics- WLAN/ GPS**



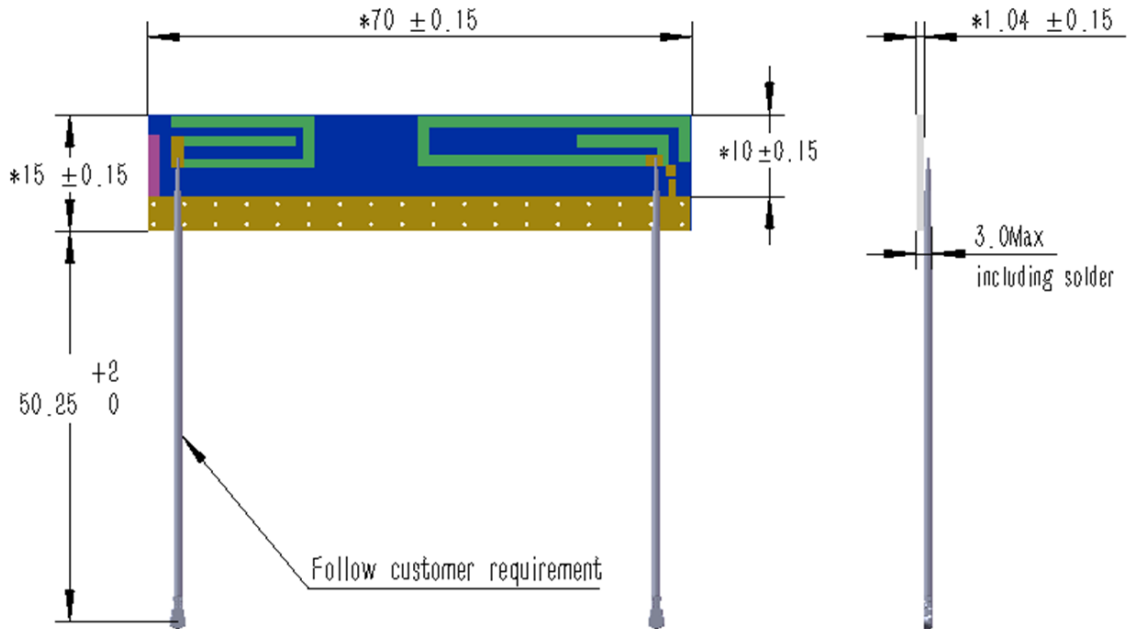


**SWXXXXX: Typical electrical characteristics- GSM900/1800**





### Antenna Dimensions and Coaxial Feed Cable



Cable length (to FPC edge)	Connector type
60mm	I-PEX MHF-4L

For More Information, please contact:

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 Jiangsu Province, Suzhou P.R. China

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