Multi-Band Antenna

+2dB 'T' Bar GSM Quad Band

Features

- Quad Band Patch Antenna;
 - 824-960MHz
 - 1710-1990 MHz
 - 1900 -2200 MHz
- Active gain: +3dBi
- VSWR <2.0
- 3m RG174 Connecting Lead
- 3M adhesive sticker on Rear
- Ground plane Independent
- Alternative Connectors: FME / TNC / SMA / MMCX



Applications

- Embedded GSM
- Space Saving Applications
- Car Window

Description

A compact PCB Antenna for GSM Cellular applications where high performance is required from a small size. Using the ANT-GSMQB will give optimum range and reliability to your application.

Ordering Information

Part Number	Length	Width	Max Height	Cable Length	Connector
ANT-TBARQB-SMA	104mm	10mm	3mm	3m	SMA (M)

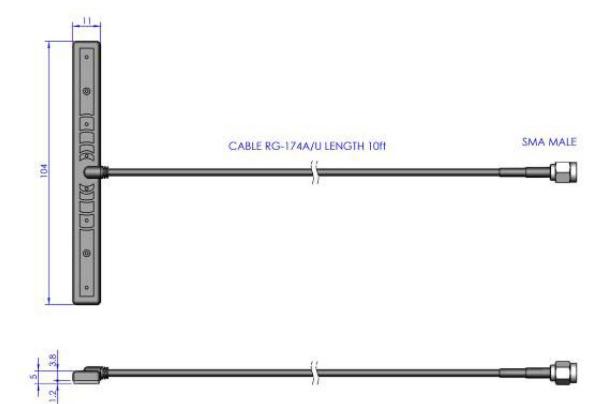
ANT-TBAR-4



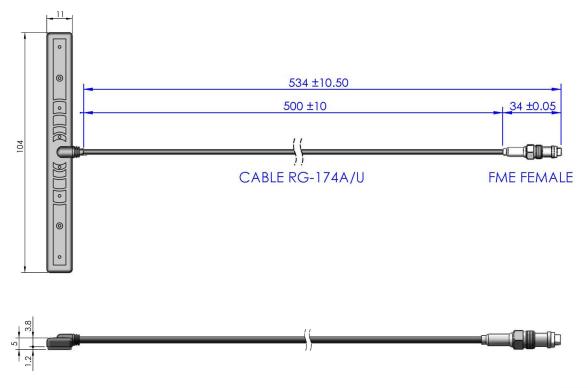




Mechanical Data SMA Version

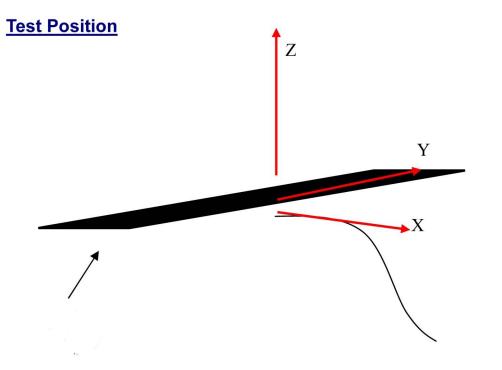


Mechanical Data FME Version



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Test Performance Data



Measurement Equipment

Vector Network Analyzer: Rohdes Schwarz ZVM

Double Ridged Horn Ant: Trimillenntum Corporation DRH0018-C900

Standard Horn Antenna: Wavepro SG284 Wavepro SG187 Wavepro SG430

Spherical Antenna Measurement System:

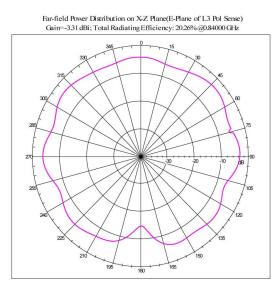
Wavepro NSI-700S-90

Measurement Uncertainty

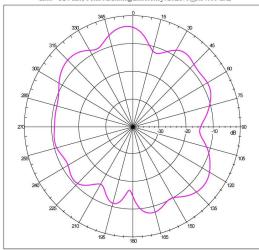
The measurement uncertainty is evaluated as 1.412dBi



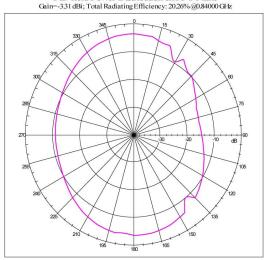


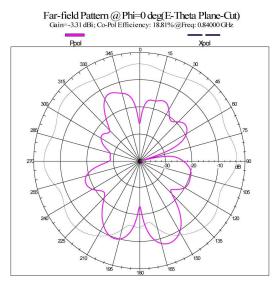


Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense) Gain=-3.31 dBi; Total Radiating Efficiency: 2026%@0.84000 GHz

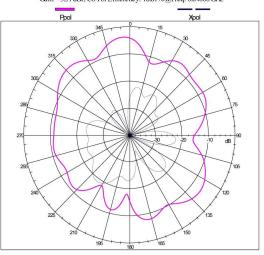


Far-field Power Distribution on X-Y Plane

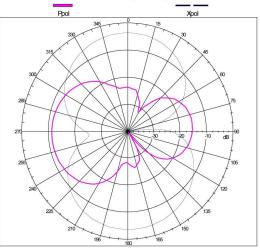




Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut) Cain=-331 dBi; Co-Pol Efficiency: 1881%@Freq: 0.84000 GHz



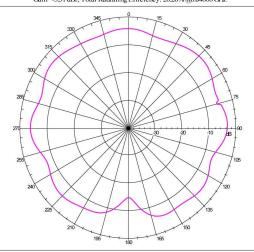
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut) Cain=-331 dBi; Co-Pol Efficiency: 18.81%@Freq: 0.84000 GHz



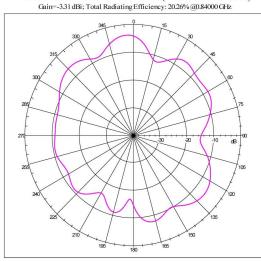




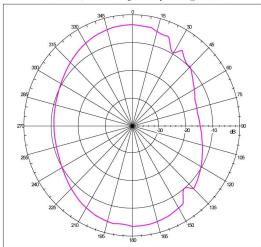
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense) Gain=-3.31 dBi; Total Radiating Efficiency: 20.26%@0.84000 GHz



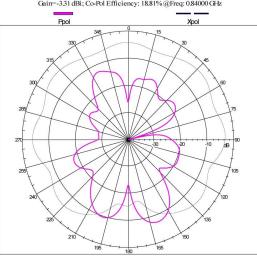
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)



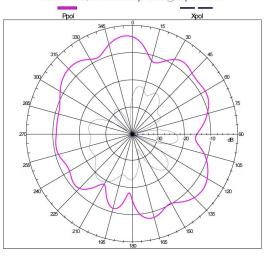
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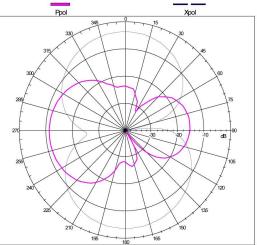
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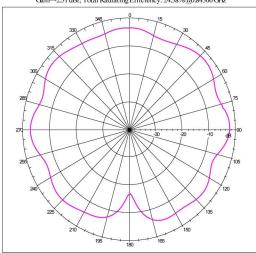
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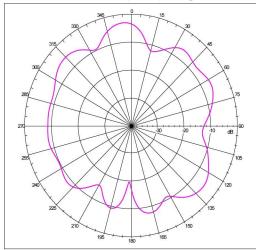




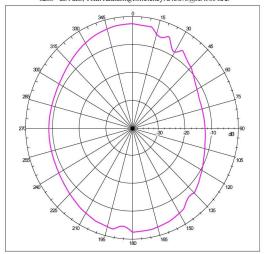
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense) Gain=-2.51 dBi; Total Radiating Efficiency: 24.58%@0.84500 GHz



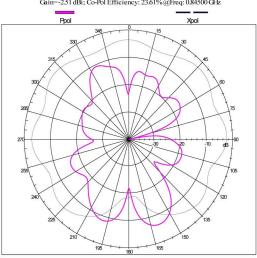
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense) Gain=-2.51 dBi; Total Radiating Efficiency: 24.58% @0.84500 GHz



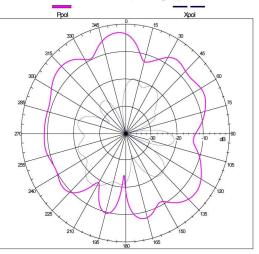
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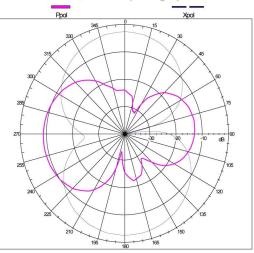
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut) Cain=-2.51 dBi; Co-Pol Efficiency: 23.61%@Freq: 0.84500 GHz



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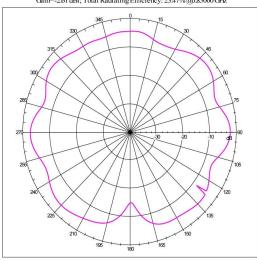
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut) Gain=-2.51 dBi; Co-Pol Efficiency: 23.61%@Freq: 0.84500 GHz



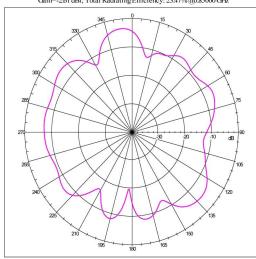




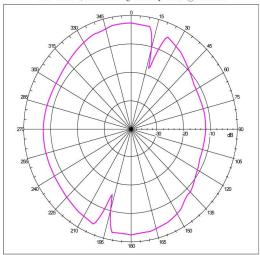
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense) Gain=-2.61 dBi; Total Radiating Efficiency: 23.47% @0.85000 GHz



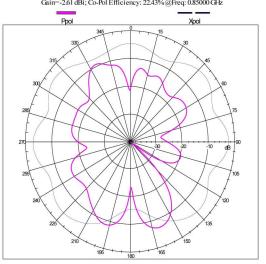
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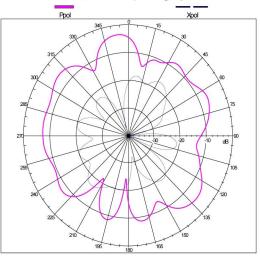
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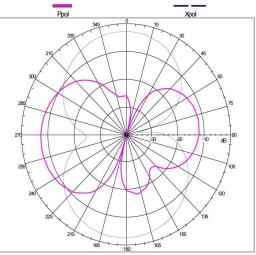
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut) Gain=-2.61 dBi; Co-Pol Efficiency: 22.43%@Freq: 0.85000 GHz



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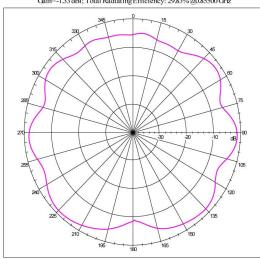


Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut) Cain=-2.61 dBi; Co-Pol Efficiency: 22.43%@Freq: 0.85000 GHz

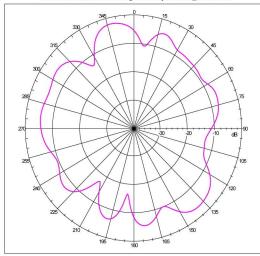




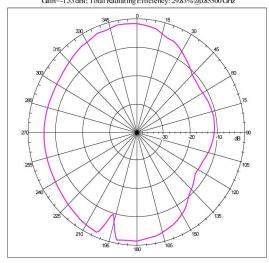
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense) Gain=-1.33 dBi; Total Radiating Efficiency: 29.83% @0.85500 GHz



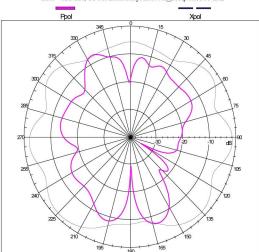
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense) Gain=-1.33 dBi; Total Radiating Efficiency: 29.83%@0.85500 GHz



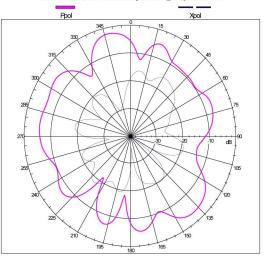
Far-field Power Distribution on X-Y Plane Gain=-133 dBi; Total Radiating Efficiency: 29.83% @0.85500 GHz



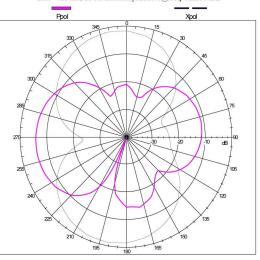
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut) Cain=-1.33 dBi; Co-Pol Efficiency: 26.67%@Freq: 0.85500 GHz



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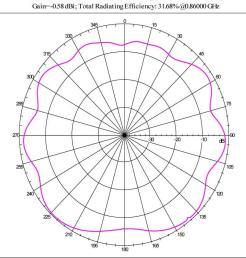
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut) Gain=-1.33 dBi; Co-Pol Efficiency: 26.67%@Freq: 0.85500 GHz



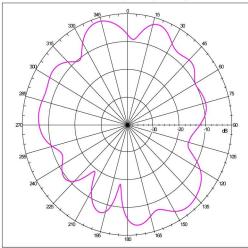




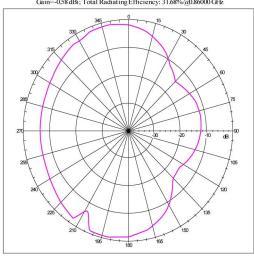
Far-field Power Distribution on X-Z Plane (E-Plane of L3 Pol Sense)

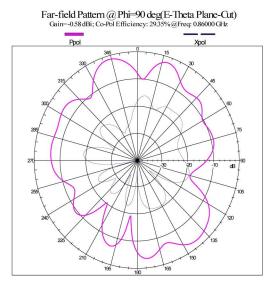


Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense) Gain=-0.58 dBi; Total Radiating Efficiency: 31.68%@0.86000 GHz

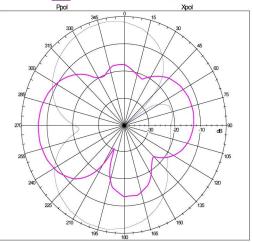


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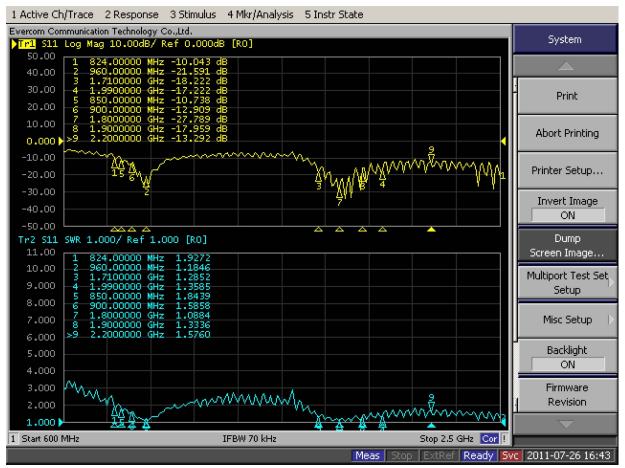
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut) Gain=-0.58 dBi; Co-Pol Efficiency: 29.35%@Freq: 0.86000 GHz







Performance Data : VSWR



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Meets the following EC Directives:

DO NOT

Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfils its WEEE obligations by membership of an approved compliance scheme.

Waste Batteries and Accumulators

Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

Environment Agency producer registration number: WEE/JB0104WV.

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