Multi-Band Antenna

+2dB 'T' Bar GSM Quad Band

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.

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

Ordering Information

<table>
<thead>
<tr>
<th>ANT-TBAR-SMA</th>
<th>Length</th>
<th>Width</th>
<th>Max Height</th>
<th>Cable Length</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>104mm</td>
<td>10mm</td>
<td>3mm</td>
<td>3m</td>
<td>SMA (M)</td>
<td></td>
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</table>
ANT-TBAR Antenna

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: Trimilenntum 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
ANT-TBAR Antenna

Far-field Power Distribution on X-Z Plane (E-Plane of 1.3 Pol Sense)
Gain = -33.1 dBi; Total Radiating Efficiency: 20.26% @ 94000 MHz

Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain = -33.1 dBi; Co-Pol Efficiency: 100% @ 94000 MHz

Far-field Power Distribution on Y-Z Plane (H-Plane of 1.3 Pol Sense)
Gain = -33.1 dBi; Total Radiating Efficiency: 20.26% @ 94000 MHz

Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain = -33.1 dBi; Co-Pol Efficiency: 100% @ 94000 MHz

Far-field Power Distribution on X-Y Plane
Gain = -33.1 dBi; Total Radiating Efficiency: 20.26% @ 94000 MHz

Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain = -33.1 dBi; Co-Pol Efficiency: 100% @ 94000 MHz
ANT-TBAR Antenna

Far-field Power Distribution on Y-Z Plane (H-Plane of 1.3 Pol Sense)
Gain=26.4 dB; Total Radiating Efficiency: 23.47% @ 8500 MHz

Far-field Pattern @ Phi=0 deg (E-Theta Plane-Cut)
Gain=26.4 dB; Co-Phi Efficiency: 22.03% @ 8500 MHz

Far-field Power Distribution on X-Y Plane
Gain=26.4 dB; Total Radiating Efficiency: 23.47% @ 8500 MHz

Far-field Pattern @ Phi=90 deg (E-Theta Plane-Cut)
Gain=26.4 dB; Co-Phi Efficiency: 22.03% @ 8500 MHz

Far-field Pattern @ Theta=90 deg (E-Phi Plane-Cut)
Gain=26.4 dB; Co-Phi Efficiency: 22.03% @ 8500 MHz
ANT-TBAR Antenna

Far-field Power Distribution on X-Z Plane (E Plane of L3 Pol Sense)
Gain: -1.35 dB, Total Radiating Efficiency: 29.83% @ 8550 MHz

Far-field Power Distribution on Y-Z Plane (H Plane of L3 Pol Sense)
Gain: -1.35 dB, Total Radiating Efficiency: 29.83% @ 8550 MHz

Far-field Pattern @ Phi=0 deg (E-Theta Plane-Cut)
Gain: -1.35 dB, Co-Pol Efficiency: 26.67% @ 8550 MHz

Far-field Pattern @ Phi=90 deg (E-Theta Plane-Cut)
Gain: -1.35 dB, Co-Pol Efficiency: 26.67% @ 8550 MHz

Far-field Power Distribution on X-Y Plane
Gain: -1.35 dB, Total Radiating Efficiency: 29.83% @ 8550 MHz

Far-field Pattern @ Theta=90 deg (E-Phi Plane-Cut)
Gain: -1.35 dB, Co-Pol Efficiency: 26.67% @ 8550 MHz
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Performance Data: VSWR

![Graph showing VSWR performance data with frequency on the x-axis and VSWR on the y-axis.](image)

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Meets the following EC Directives

<table>
<thead>
<tr>
<th>Directive</th>
<th>Year</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>WEEE Directive</td>
<td>2002/96/EC</td>
<td>Waste Electrical &amp; Electronic Equipment. This product must be disposed of through a licensed WEEE collection point.</td>
</tr>
<tr>
<td>Waste Batteries and Accumulators Directive</td>
<td>2006/66/EC</td>
<td>Waste batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.</td>
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