STANDARD SPECIFICATIONS:

### Antenna

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Units</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency</td>
<td>1575.42±1.02</td>
<td>MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bandwidth</td>
<td>5</td>
<td></td>
<td></td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Gain</td>
<td>1.0</td>
<td></td>
<td></td>
<td>dBi</td>
<td>(Peak gain on 70*70mm Ground Plane facing Zenith.)</td>
</tr>
<tr>
<td>VSWR @ Center Frequency</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polarization Model</td>
<td>RHCP</td>
<td></td>
<td></td>
<td></td>
<td>(Right Hand Circular Polarization)</td>
</tr>
<tr>
<td>Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ω</td>
<td></td>
</tr>
<tr>
<td>Working Temperature</td>
<td>-25</td>
<td>+72</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-45</td>
<td>85</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

### Low Noise Amplifier (LNA)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Units</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency</td>
<td>1575.42±1.02</td>
<td>MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>2.70</td>
<td>3.30</td>
<td></td>
<td>V</td>
<td>(Without cable +25°C± 10°C)</td>
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<tr>
<td>Gain</td>
<td>19</td>
<td></td>
<td></td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Noise Figure</td>
<td>1.3</td>
<td></td>
<td></td>
<td></td>
<td>(+25°C± 10°C)</td>
</tr>
<tr>
<td>DC current</td>
<td>3.5</td>
<td></td>
<td></td>
<td>mA</td>
<td>(At 3.0V)</td>
</tr>
</tbody>
</table>

### SMITH CHART

- Test Condition: 13x13mm Ground

### GPS LNA GAIN PLOT

- Test Condition: 3.0V DC
GPS Active Internal Patch

APAM1348YD13V2.0

RoHS/RoHS II compliant

OUTLINE DIMENSION:

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
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<tbody>
<tr>
<td>Antenna Type</td>
<td>Dielectric Ceramics</td>
</tr>
<tr>
<td>PCB</td>
<td>FR4</td>
</tr>
<tr>
<td>Shielding</td>
<td>Tinplate</td>
</tr>
<tr>
<td>RF Cable</td>
<td>9851SC0032-002, φ0.81±0.1mm, L1=33±3mm, L=37±3mm</td>
</tr>
<tr>
<td>RF Connector</td>
<td>I-PEX</td>
</tr>
<tr>
<td>Thickness</td>
<td>5.6mm Max</td>
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</tbody>
</table>

Tolerance: ±0.2mm

PACKAGING

<table>
<thead>
<tr>
<th>Package Type</th>
<th>Quantity</th>
</tr>
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<tbody>
<tr>
<td>Tray</td>
<td>50 pcs/tray</td>
</tr>
<tr>
<td>Vacuum Bag</td>
<td>200 pcs/box</td>
</tr>
<tr>
<td>Outer Box</td>
<td>1000 pcs/box</td>
</tr>
</tbody>
</table>

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