

## WPANT10050

### Dual-band Wi-Fi Embedded Antenna



Note: Prototype shown.

### Application

Dual-band Wi-Fi solution for applications where board real estate is at premium. This vertically mounted antenna occupies very minimal space on the main circuit board.

We can assist your engineers to optimize mounting positions for these antennas in your specific application and can further assist to trouble shoot system integration issues such as TRP/TIS and FCC requirements. We specialize in developing customized Antenna solutions. Please contact [sales@worldproducts.com](mailto:sales@worldproducts.com) with your specific application requirements.

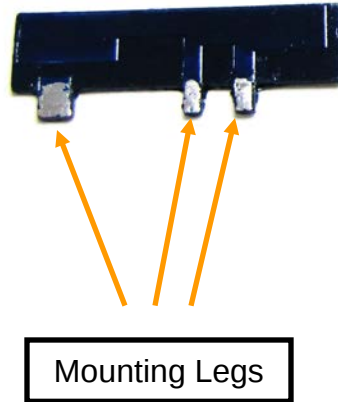
### Electrical Properties

|                                                            |                       |                       |
|------------------------------------------------------------|-----------------------|-----------------------|
| <b>Operating Frequency</b>                                 | 2.4 – 2.5 GHz         | 4.9 – 5.9 GHz         |
| <b>Approximate Antenna Impedance [<math>\Omega</math>]</b> | 50 $\Omega$           | 50 $\Omega$           |
| <b>VSWR (Typical)*</b>                                     | < 2:1                 | < 2:1                 |
| <b>Peak Gain [dBi] (Typical)*</b>                          | 2.5 dBi               | 4.5 dBi               |
| <b>Efficiency [%] (Typical)*</b>                           | 70 %                  | 80 %                  |
| <b>Polarization</b>                                        | Linear                | Linear                |
| <b>Pattern</b>                                             | Near Omni-directional | Near Omni-directional |

### Mechanical / Environmental Properties

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| <b>Antenna Dimensions</b>              | 1.2" x 0.3" x 0.031" (30mm x 7.2mm x 0.8mm) |
| <b>Antenna Color</b>                   | Black                                       |
| <b>Operating / Storage Temperature</b> | -40°C to +125°C                             |
| <b>Environmental</b>                   | Meets standards for UL 94V-0                |
| <b>Hazardous Materials</b>             | RoHS Compliant                              |

## Pictures



**Note:** There is no need for any additional Cables or Connectors. This eliminates the possibility of additional overhead for the clients. Antenna is soldered directly in place on the Circuit board.

Antenna Placement on a Circuit Board (62 mils thick FR4 Standard WPI Evaluation Board)

