AN250201-01H

Rev. 001



868 MHz / 915 MHz / 2.45 GHz / 5.5 GHz PCB Antenna (ISM, IoT, RFID, Bluetooth, WLAN)



General information

This antenna is intended to be used within a plastic housing of a mobile device or a gateway. The antenna geometry can be optimized for customer's housing design and material properties.

Typical applications

ISM, RFID, IoT (Sigfox, LoRa), LP-WAN, Smart meters, Bluetooth, WLAN

| Electrical data | |
|-------------------------|--------------------------------------|
| Antenna type | Embedded PCB antenna |
| Frequency range | 860925MHz / 2.412.5GHz / 5.155.85GHz |
| Nominal input impedance | 50 Ohm |
| Return loss | -7 dB / -10 dB / -10 dB |
| Maximum gain | 0.6 dBi / 3.2 dBi / 3.4 dBi |
| Radiation efficiency | 60 % / 64 % / 71 % |
| Polarization | linear |
| Radiation pattern | omnidirectional |
| Maximum input power | 10 W |

| Mechanical data | |
|--|--------------------------------------|
| Antenna dimensions (without SMT connector) | 38 mm x 17 mm x 1 mm |
| Connector type * | IPEX MHF1 / U.FL (UMCC) compatible * |
| Recommended cable type and thickness ** | microcoax 1.13 mm ** |
| Recommended cable length *** | 200 mm *** |
| PCB material | FR4 |
| PCB colour | green |

| Environmental data | | |
|-------------------------------|----------------|--|
| Ambient operating temperature | -40°C to +85°C | |
| Storage temperature | -40°C to +85°C | |
| Ambient relative humidity | 40% to 95% | |
| RoHS compliant | Yes | |

Additional information

- * Other connector or cable connection types can be offered on request.
- ** Following thicknesses can be used with IPEX connector: 0.81mm, 1.13mm, 1.32mm, 1.37mm.
- *** Other cable types and lengths can be used. Cable is not included.

Other mechanical or material changes or frequency bands are possible on request.

The antenna can be additionally equipped with adhesive tape and mounting holes.

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