Rev. 001



750 MHz / 960 MHz / 2.45 GHz PCB Antenna (ISM, IoT, Bluetooth, Wi-Fi 2.4 GHz, 5G, LTE)



## **General information**

This small antenna is intended to be used within a plastic housing of a mobile device, a terminal or a router. On request, the antenna geometry can be optimized for customer's housing design or other requirements.

## **Typical applications**

ISM, RFID, IoT (Sigfox, LoRa, NB-IoT), LP-WAN, Smart meters, Bluetooth, Wi-Fi 2.4 GHz, 5G NR, LTE

Electrical data		
Antenna type	Embedded / internal PCB antenna	
5G bands	5, 13, 14, 18, 20, 26, 53, 81, 82, 89	
4G bands	5, 6, 8, 13, 14, 18 - 20, 26, 27, 53	
Other frequency bands	SRD860 (EU), ISM915 (US), ISM2400	
Frequency range [MHz]	750960	24102485
Return loss [dB]	-8	-11
Peak gain [dBi]	0.6	2.4
Radiation efficiency [%]	62	73
Nominal input impedance [Ohm]	50	
Polarization	linear	
Radiation pattern	omnidirectional	
Maximum input power [W]	10	

Mechanical data		
Antenna PCB dimensions [mm]	42 x 20 x 1	
Connector type 1)	IPEX MHF1 / Hirose U.FL (UMCC) compatible 1)	
Cable type and thickness 2) [mm]	micro coax 1.13 <sup>2)</sup>	
Cable length <sup>3)</sup> [mm]	200 <sup>3)</sup>	
PCB material	FR4	

Environmental data		
Operating temperature [°C]	-40+85	
Storage temperature [°C]	-40+85	
Ambient relative humidity [%]	095	
RoHS / REACH compliant	yes / yes	

## **Additional information**

- 1) Other connector types can be offered on request.
- <sup>2)</sup> Following cable thicknesses can be used with MHF1 connector: 0.81 mm, 1.13 mm, 1.32 mm, 1.37 mm.
- <sup>3)</sup> Recommended length. Cable is not included, but can be customized and provided separately.

Antenna performance was measured using the recommended cable length in free space.

Further customization, electromagnetic simulations and measurements can be offered on request.

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

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Tel.: +49 89 38-90-7229

Fax: +49 89 38-90-7230

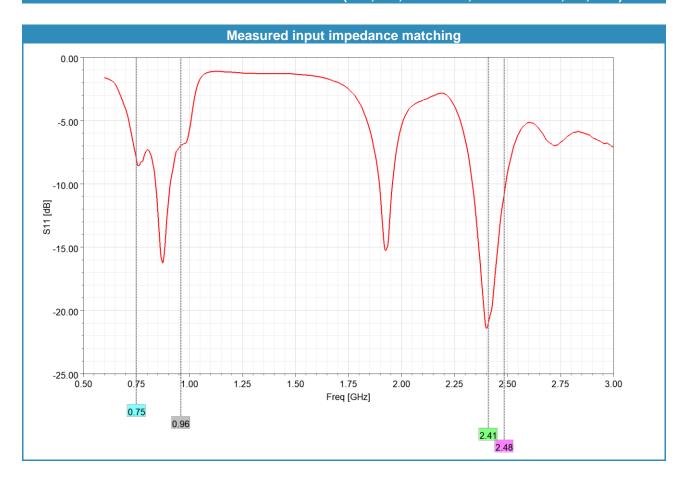
E-Mail: sergey@sevskiy.de

Internet: www.sevskiy.com

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