

C2R Module 13.56 MHz External Antennas Specification

V1.3
2026-04-15

Description

Antenna type	PCB track loop
Manufacturer	Eccel Technology Limited 16B Fir Tree Lane, Groby, LE6 0FH Leicester, Great Britain
Gain	N/A
Frequency of operation	13.553 - 13.567MHz 13.56MHz center frequency
Type of modulation	100% ASK
Channels, Bandwidth, Spacing	N/A

The antenna is made from FR4 material.

The connector is a standard u.FL, I-PEX connector attached to the 1.13mm thick coaxial cable. This connector mates with receptacles from various manufacturers, for example Molex 734120114.

PCB antenna products can be customized as per application requirements. Parameters such as the dimensions or shape of the coil or its inductance can be altered.

The antenna parameters, despite different dimensions and cable lengths, ensure compliance with standards by matching the coil inductance and cable length.

The RFID antenna was designed by Eccel Technology Limited. The antenna is an integrated part of the main electronics board and it's made from the PCB tracks. This communication feature is implemented by magnetic induction in a very near field environment.

We declare that All measurements were performed radiated and therefore additional antenna gain documentation is not required.

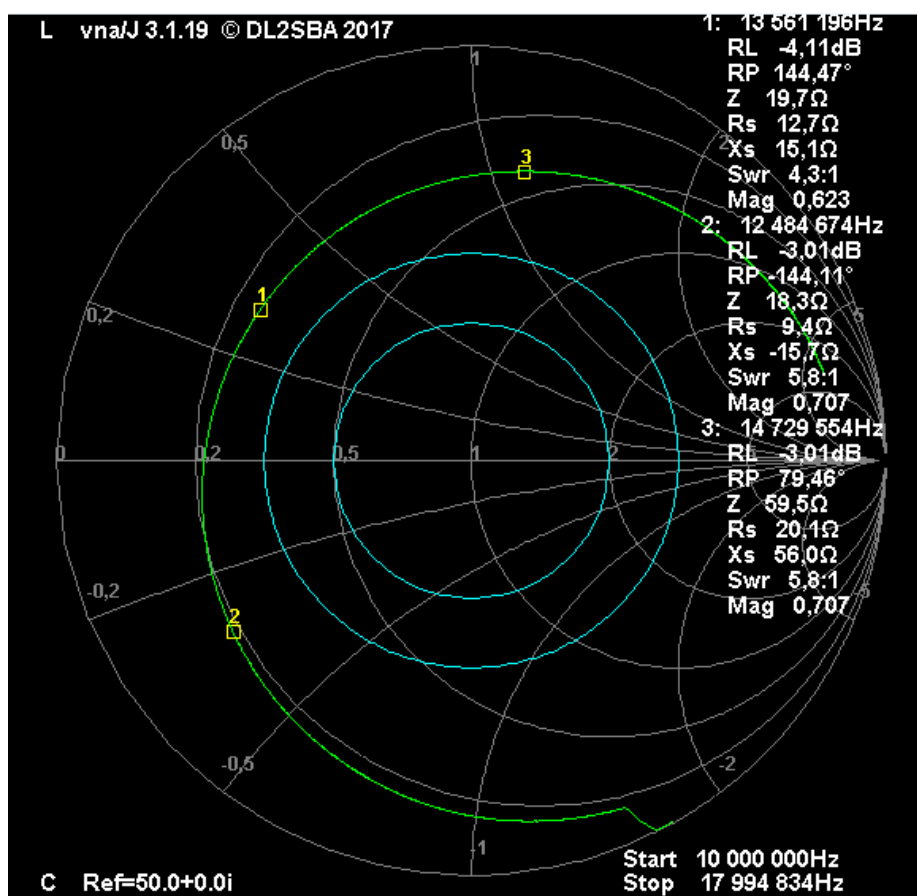
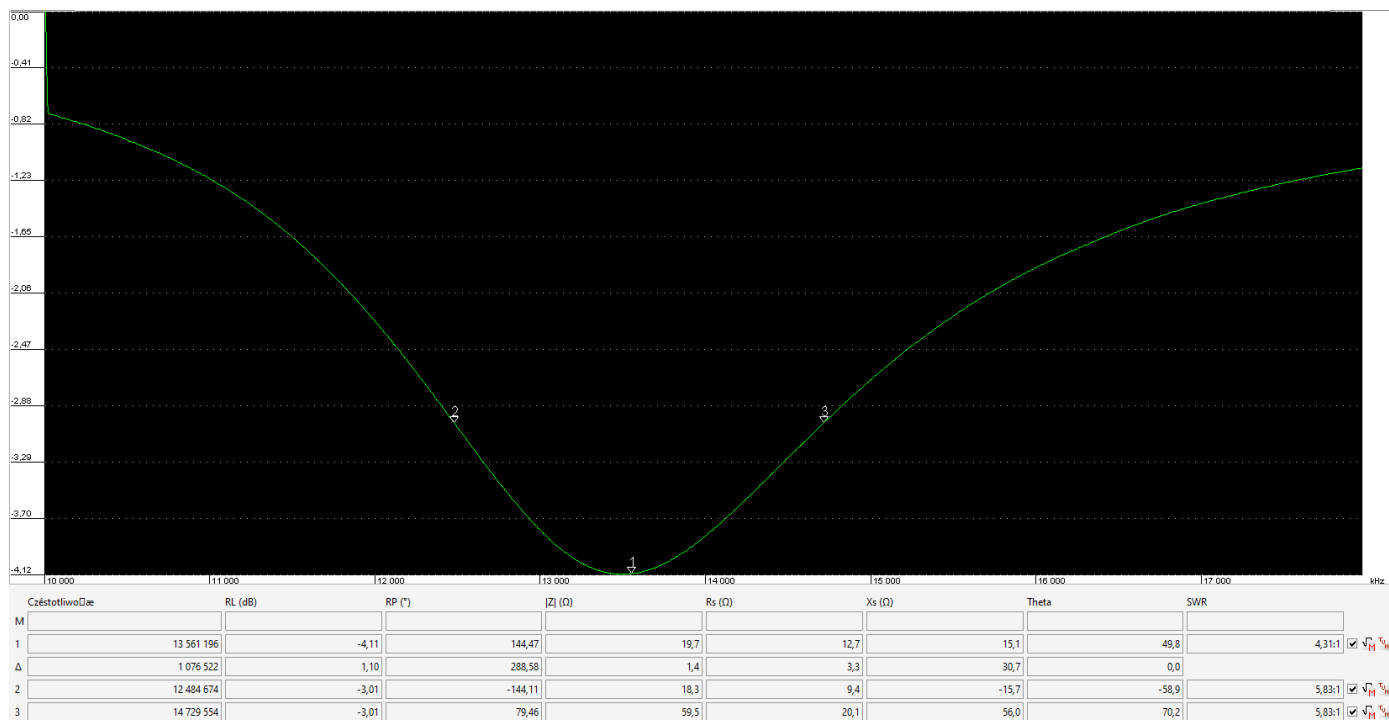
C2-RFID-ANT1356-70x70-200 v1.0



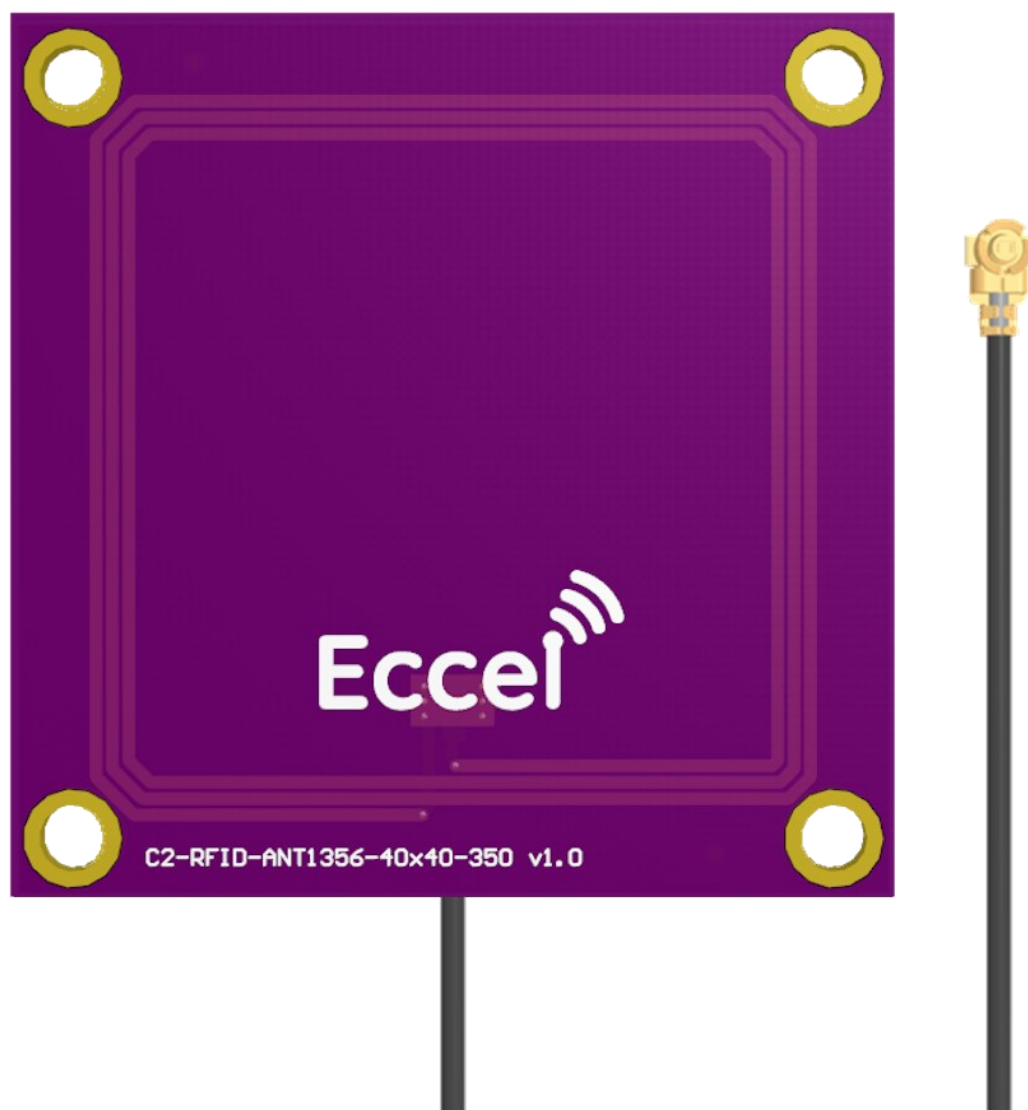
Standard specifications:

Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C
Operating frequency [MHz]	13.56
Dimensions	70x70mm
Cable length	200mm

Return Loss, SWR, Smith Chart



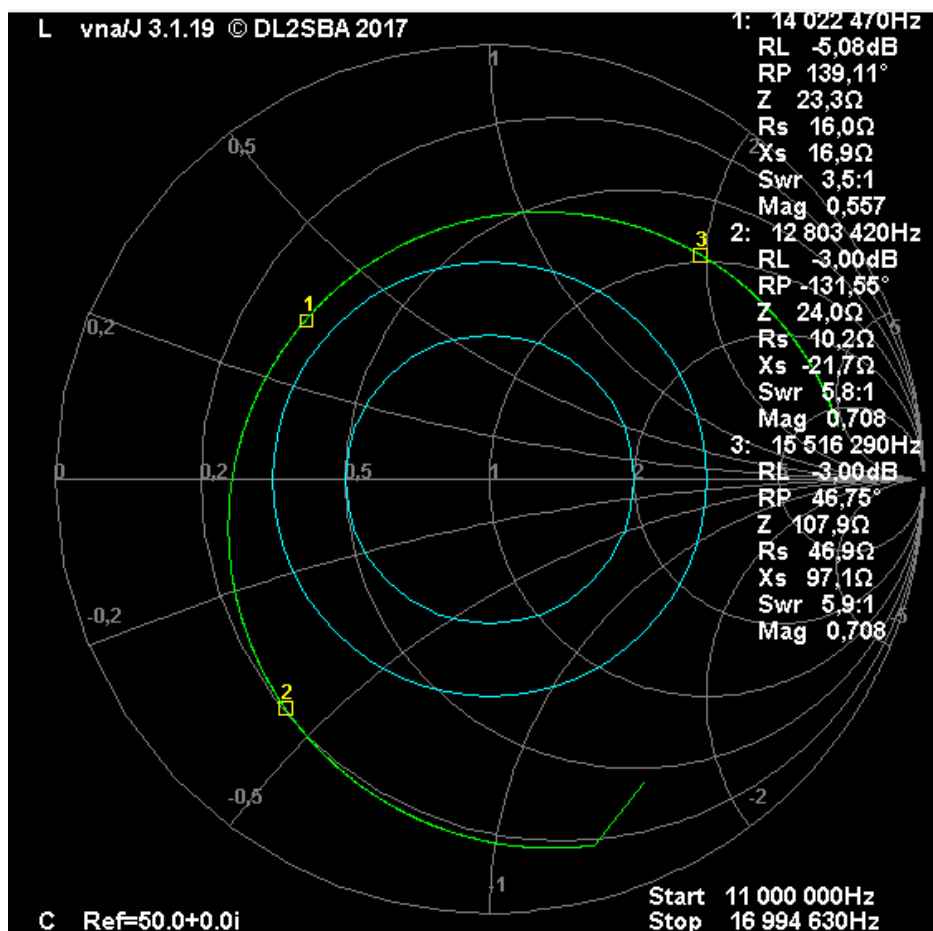
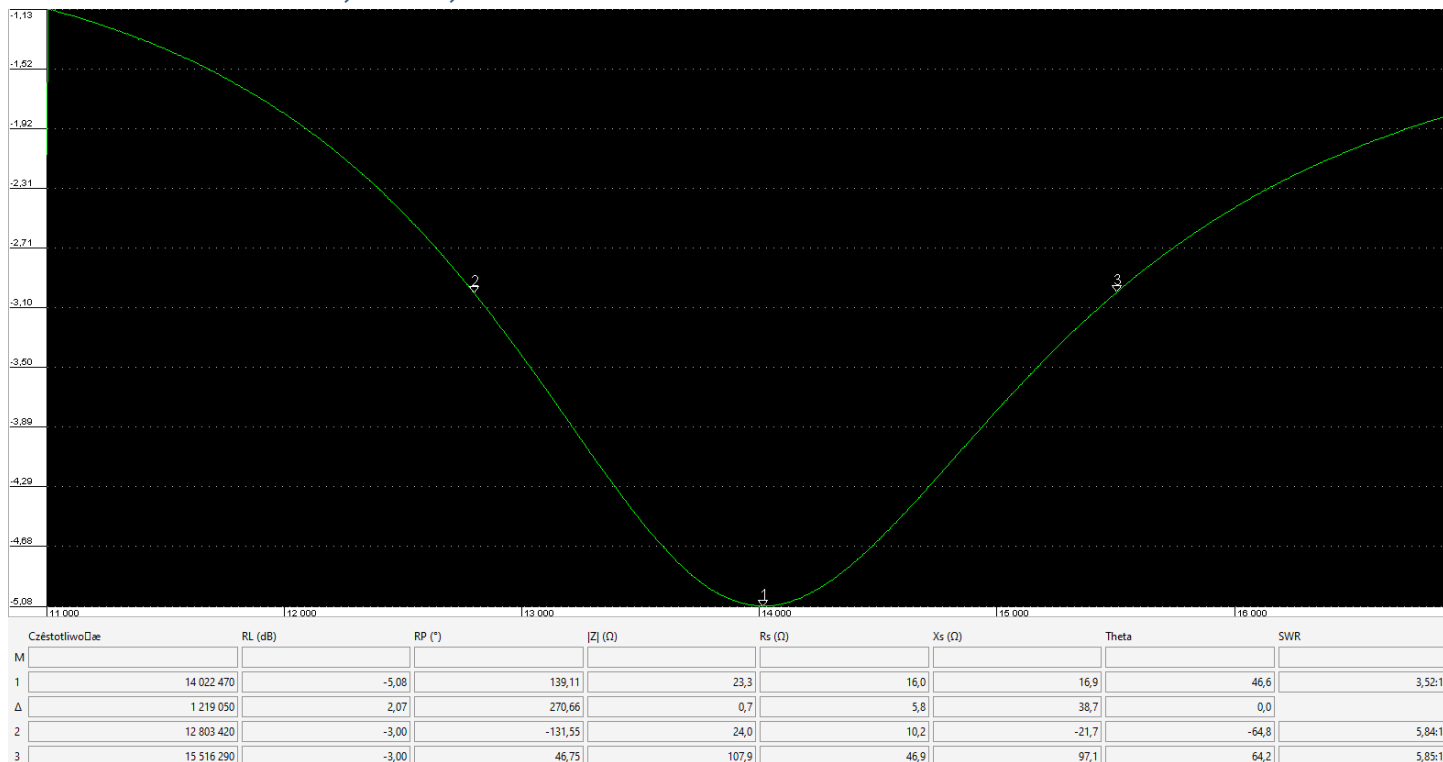
C2-RFID-ANT1356-40x40-350 v1.0



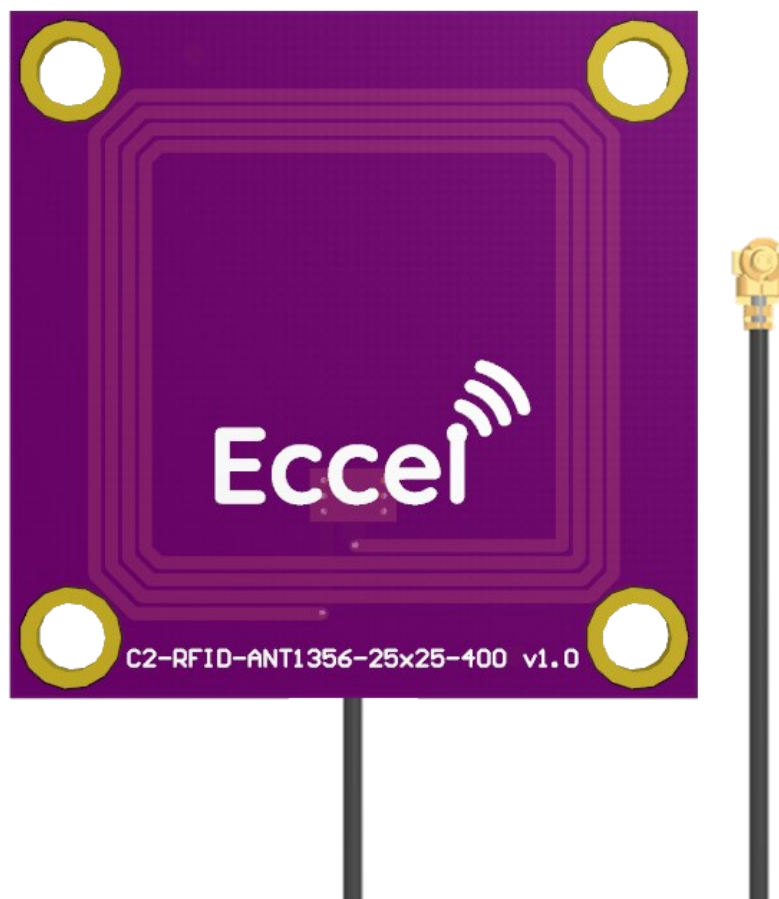
Standard specifications:

Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C
Operating frequency [MHz]	13.56
Dimensions	40x40mm
Cable length	350mm

Return Loss, SWR, Smith Chart



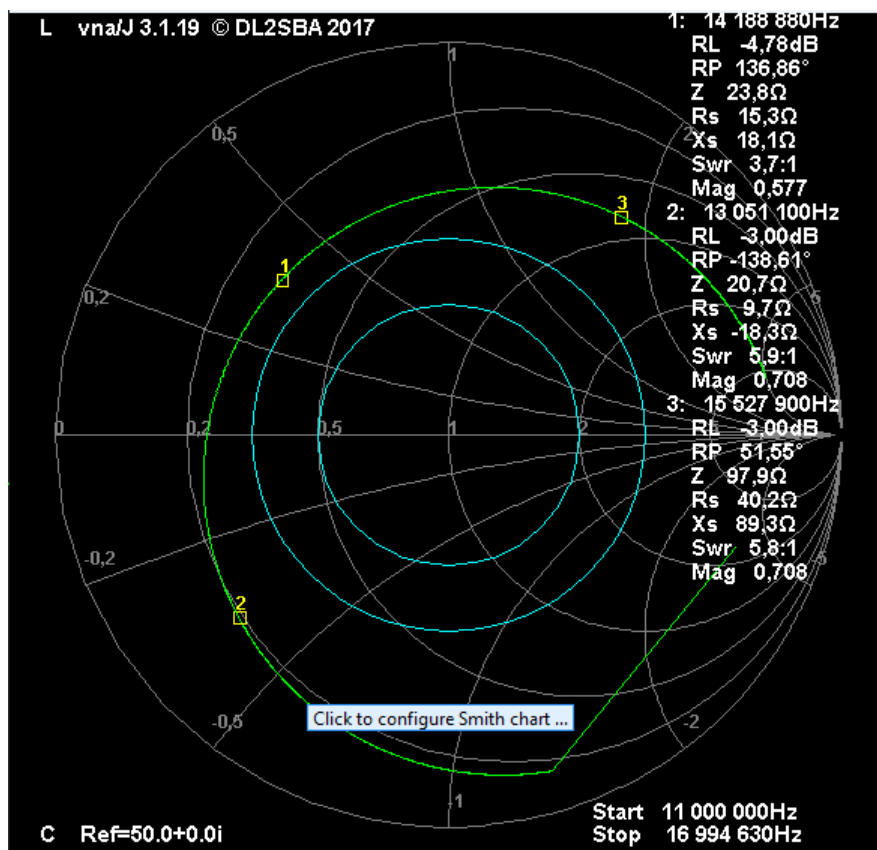
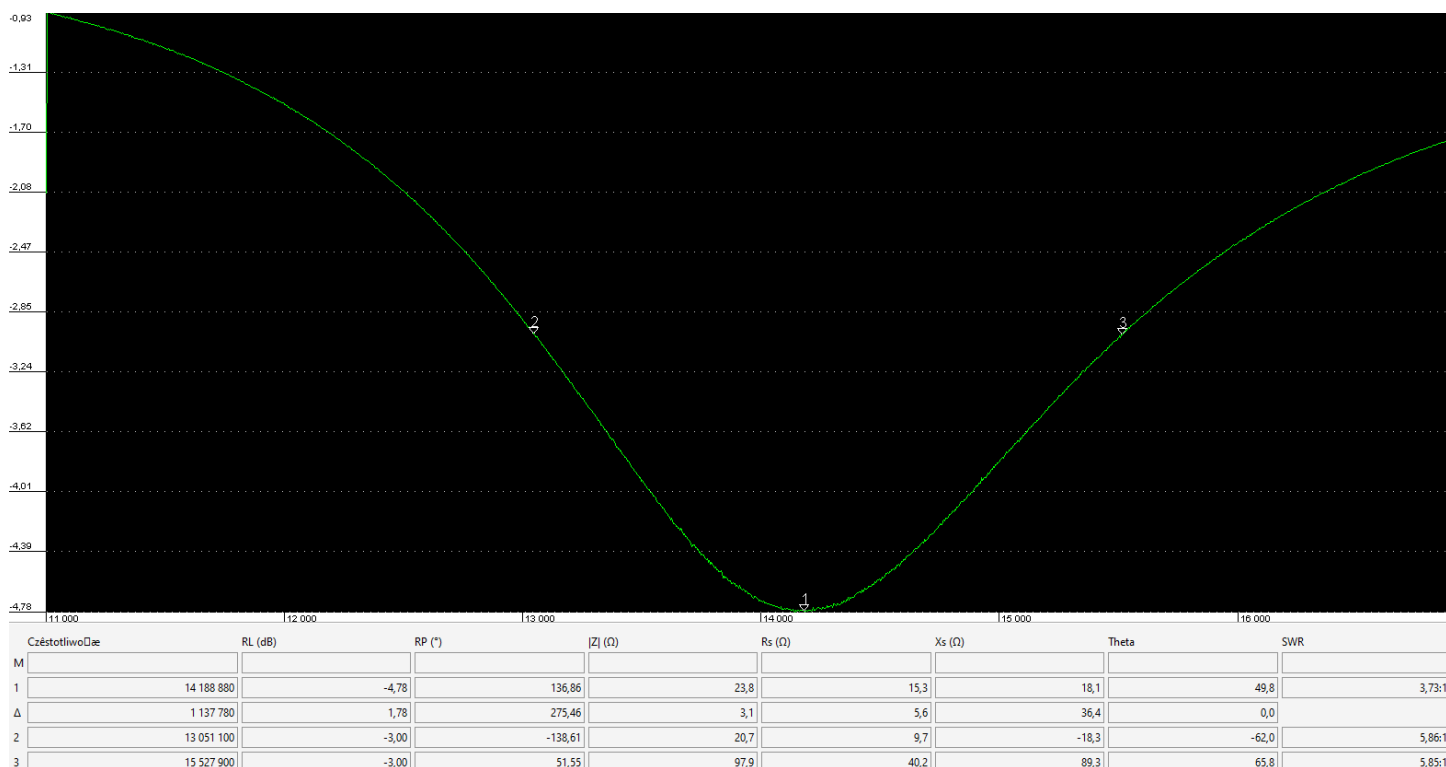
C2-RFID-ANT1356-25x25-400 v1.0



Standard specifications:

Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C
Operating frequency [MHz]	13.56
Dimensions	25x25mm
Cable length	400mm

Return Loss, SWR, Smith Chart



C2-RFID-ANT1356-10x50-500 v1.0



Standard specifications:

Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C
Operating frequency [MHz]	13.56
Dimensions	10x50mm
Cable length	500mm

Return Loss, SWR, Smith Chart

