

Antenna information

Product: HFASM LF-RF,

Model: HFM2



LF mid range antenna



LF standard antenna

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Antenna Data Sheet : Mid range (1/5)

Part No. : E488428 MR78 non WP fixation
E488529 MR78 WP fixation

Brand : Valeo

Manufacturer : Premo



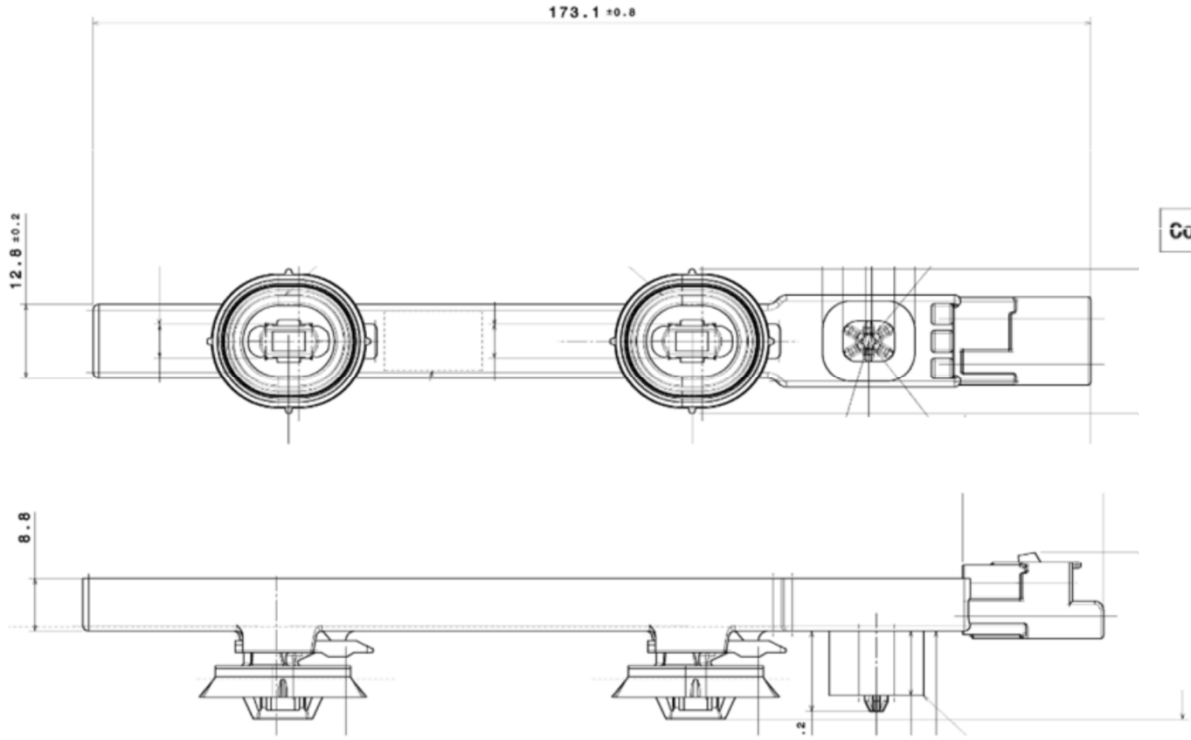
Antenna Data Sheet : Mid range (2/5)

1. Main characteristics

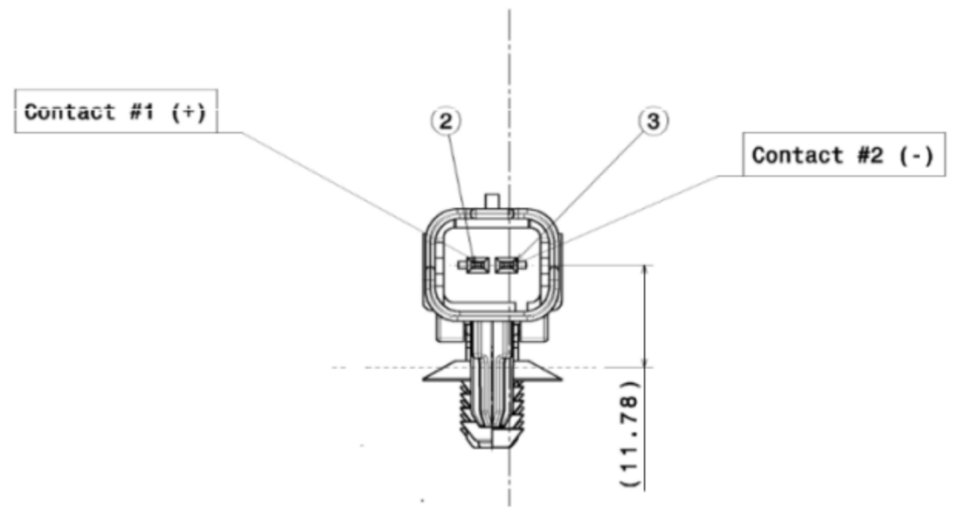
- Resonance frequency : 125 KHz
- Type : internal external LF ferrite antennas
- Dimensions : L x W x H : 173.9 x 13.0 x 8.8 mm max.
- Integrated 2 clips for fixation into vehicle, positioning pin to avoid wrong antenna mounting
- Connector integrated in the enclosure
- Storage and operating temperature range : - 40°C to + 85°C +/- 3°C
- Storage and operating relative humidity : - 40°C to + 95°C
- RoHS compliance
- IP68

Antenna Data Sheet : Mid range (3/5)

2. Mechanical dimensions



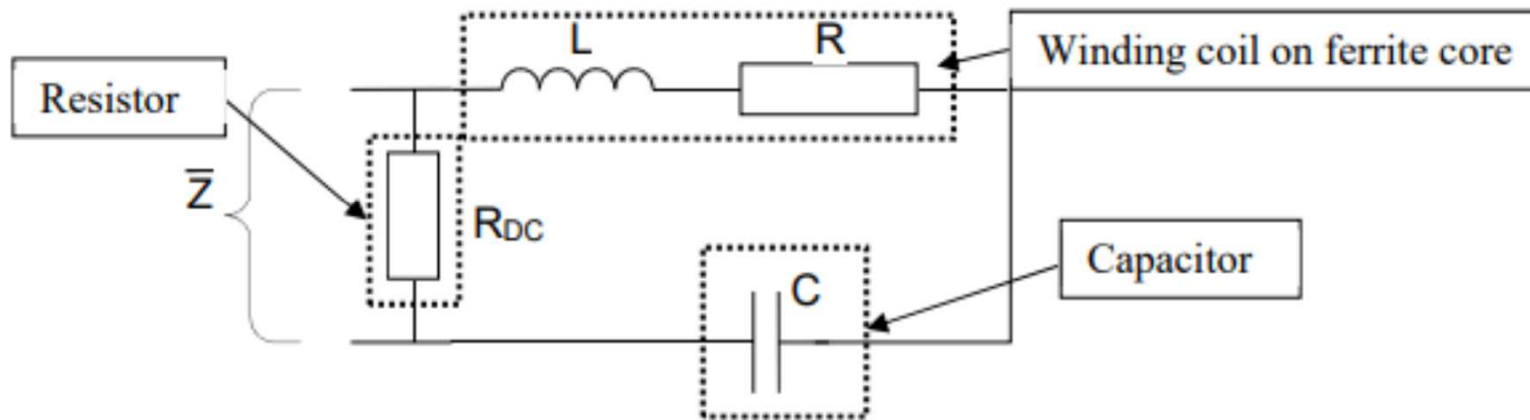
3. Terminal assignment



Antenna Data Sheet : Mid range (4/5)

4. Antenna Electrical diagram

The typical application diagram of the antenna is :



- L : coil inductance and its connection
- R : Copper resistance and connection
- C : Tuning internal capacitor
- Z : External impedance
- R_{DC} : Diagnostic parallel resistor

Antenna Data Sheet : Mid range (5/5)

5. Electrical Specifications

The EUT should be set at a height of 1.5 m above the metal ground. The distance from the side of the EUT to the center of the Loop antenna is 3m. The height from the center of the loop antenna to the metal ground is 1.5 m.

Rated antenna Power : 1000 mAp

Test conditions: 4 LF antennas activated simultaneously as per STLA PEPS's protocols

* The antenna gain is calculated by the difference of the peak electric field strength at 3m and the current probe's peak value of the EUT.

L (μH)	R (Ω)	C (nF)	R _{DC} (k Ω)	S (mV/A/m)	Gain* (dB)
110	1	10	10	245	-39

Antenna Data Sheet : Standard (1/6)

Part No. : E1136485 LF R3

Brand : Valeo

Manufacturer : Premo



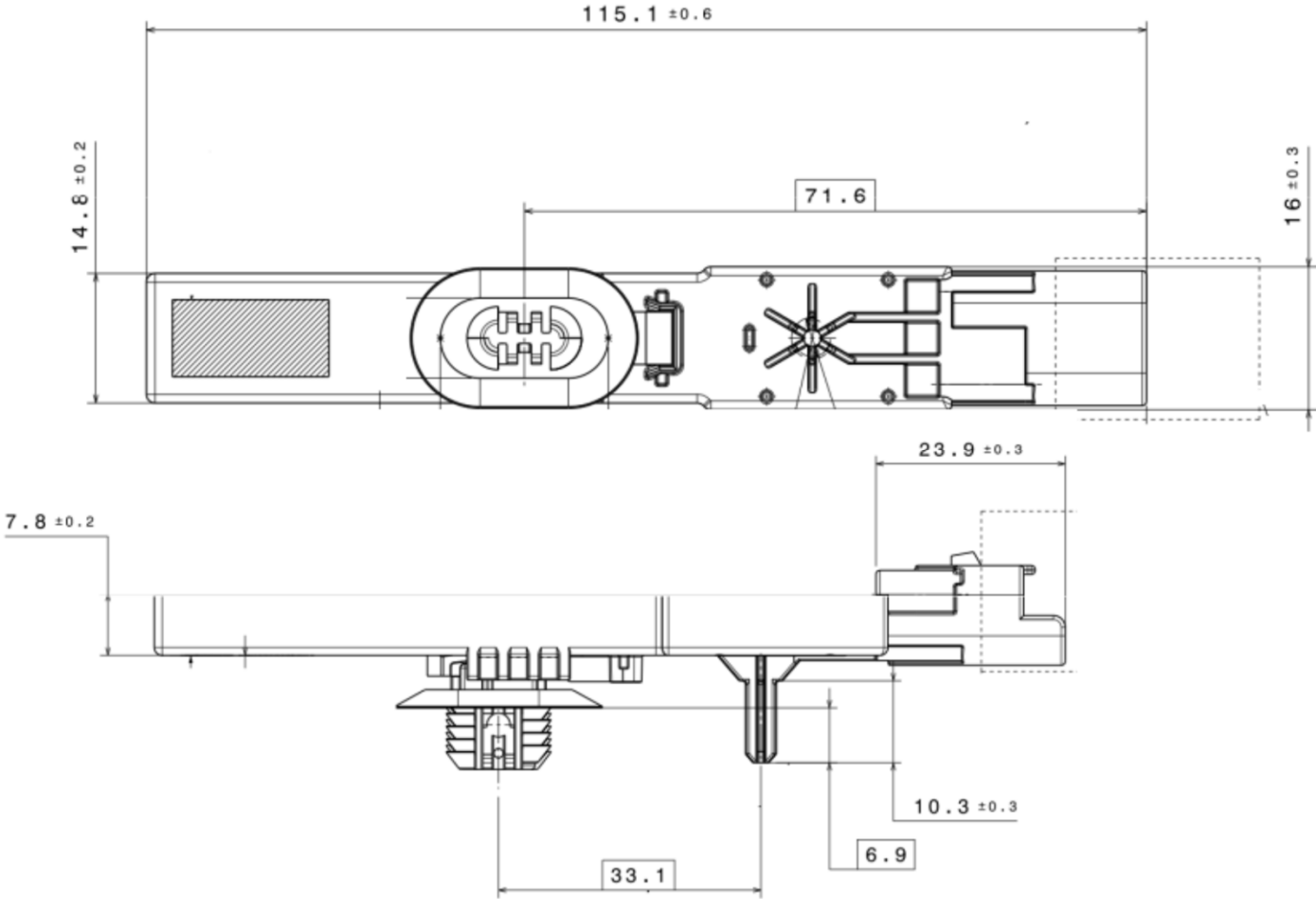
Antenna Data Sheet : Standard (2/6)

1. Main characteristics

- Resonance frequency : 125 KHz
- Type : internal external LF ferrite antennas
- Dimensions : L x W x H : 115.7 x 16.3 x 8.0 mm max.
- Integrated 2 clips for fixation into vehicle, positioning pin to avoid wrong antenna mounting
- Connector integrated in the enclosure
- Storage and operating temperature range : - 40°C to + 85°C +/- 3°C
- Storage and operating relative humidity : - 40°C to + 95°C
- RoHS compliance
- IP68

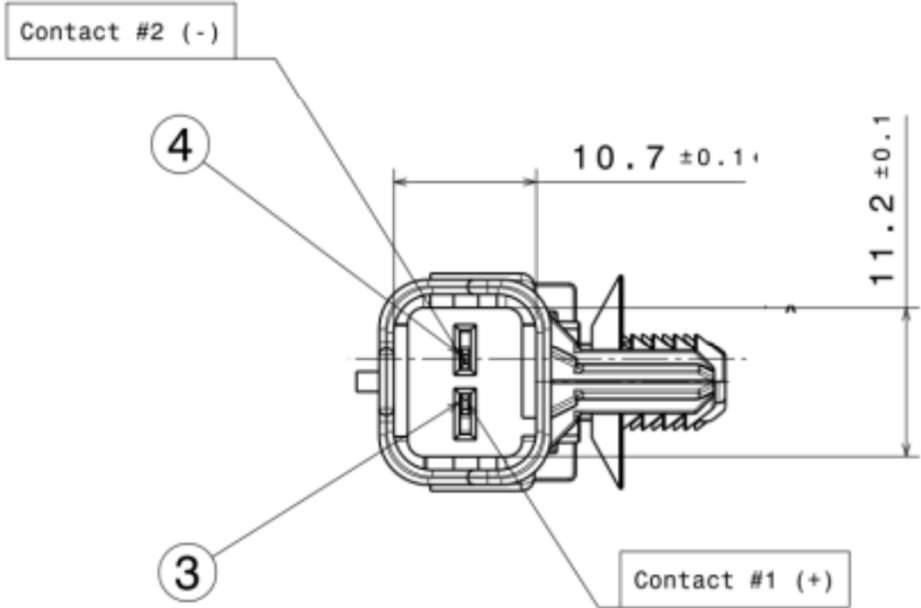
Antenna Data Sheet : Standard (3/6)

2. Mechanical dimensions



Antenna Data Sheet : Standard (4/6)

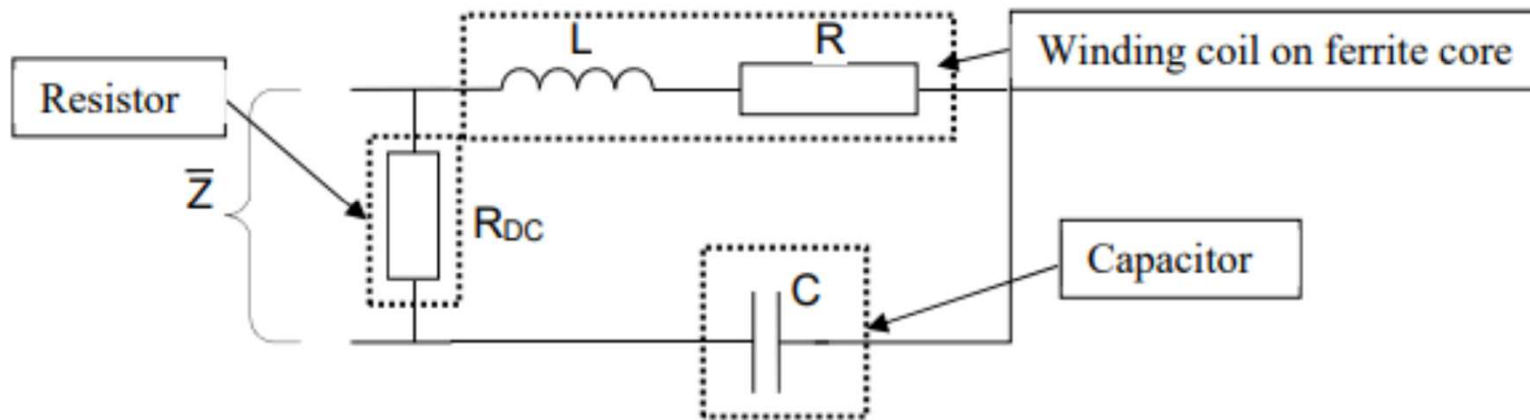
3. Terminal assignment



Antenna Data Sheet : Standard (5/6)

4. Antenna Electrical diagram

The typical application diagram of the antenna is :



- L : coil inductance and its connection
- R : Copper resistance and connection
- C : Tuning internal capacitor
- Z : External impedance
- RDC : Diagnostic parallel resistor

Antenna Data Sheet : Standard (6/6)

5. Electrical Specifications

The EUT should be set at a height of 1.5 m above the metal ground. The distance from the side of the EUT to the center of the Loop antenna is 3m. The height from the center of the loop antenna to the metal ground is 1.5 m.

Rated antenna Power : 500 mAp

Test conditions: 4 LF antennas activated simultaneously as per STLA PEPS's protocols (Mid range ferrite antenna used)

* The antenna gain is calculated by the difference of the peak electric field strength at 3m and the current probe's peak value of the EUT.
(theoretical approach calculation based on mid-range ferrite antenna measurements)

L (μH)	R (Ω)	C (nF)	R _{DC} (k Ω)	S (mV/A/m)	Gain* (dB)
110	0.8	15	10	87	-54