New

KGEA-AFULR

Ultra Long Range Flexible Antenna LF for smart entry system

EMITTER ANTENNAS & SWITCHES / LONG RANGE





FEATURES

Ultra-long-range antenna specially designed for CAR2CAR (Platooning) communication in the range of 100kHz.

Most of the vehicles currently manufactured in the world with a KES (keyless entry system) use a number of short antennas. Depending on the quality of the vehicle and the system they use 3, 4, 5 antennas (in the door handles, interior antenna, in the trunk handle...).

The long range flexible antenna have been designed in order to use only one antenna (until 500mm) and to reduced the number of antennas by car to just one with equal or better performance reading distance and H-field around the whole vehicle.

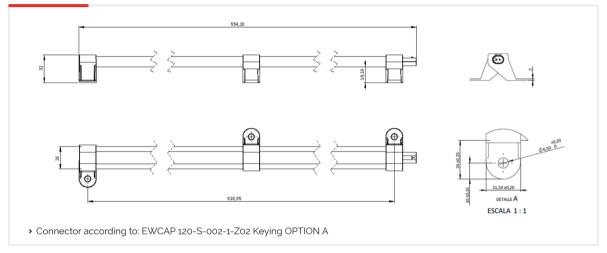
ELECTRICAL PARAMETERS

TECHNICAL AND ECONOMIC ADVANTAGES

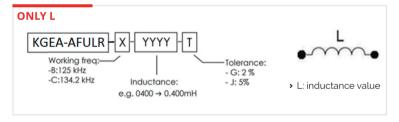
- > Longer antenna (until 500mm).
- > Completely flexible antenna.
- > Deformation in the middle of the antenna.
- > Higher impact absorption and mechanical reduction preventive.
- > IP protection 67.
- > High stability in temperature (-40°C up to +85°C).
- > Resonant frequency adjusting below +/- 2kHz.
- > Custom L-C value (F-Res: KGEA-AF) under demand or only L (KGEA-AFC).
- > Wiring and connectors is reduced by 1/3, \(\frac{1}{4} \) or 1/5 respectively.
- > OEM assembly time is reduced by 1/3, 1/4 or 1/5 respectively.
- > Total energy consumption and battery current leaking, a very important parameter specially in electric vehicles is reduced proportionally.
- > A longer antenna need lower currents to generate equal or more intense magnetic fields thus reducing the again the energy needed and the cross section of the wire to the antennas.

SPECIFICATIONS

DIMENSIONS (mm)



NOMENCLATURE DESCRIPTION AND SCHEMATIC DIAGRAM



ELECTRICAL SPECIFICATIONS

KGEA-AFULR-B-0100

| L (mH) | 0.100 |
|--------------------|------------------------|
| Cres (nF) | |
| Q | >150 |
| I | 2App |
| H-Field | 123 dBuV/m@2App@3meter |
| Sensitivity@125khz | 722mVpp/App/m |

The specification chart is a reference guide for the most common required values at working frequencies of 125 kHz, 20 kHz and 134.2 kHz. Any other inductance value at LF or tighter tolerances can be provided. Please contact our sales department for any inquiry.