

# KGEA-IA

Keyless go emitter interior antenna 75x58x12.6mm (33 uH - 500 uH)

## Characteristics

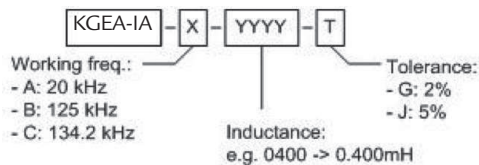
The LF Interior antenna is designed for emission of a LF field to allow hands free access towards the Customer Device Identification for automotive application. Ideally used in keyless smart entry system.

The LF Interior antenna inserted inside the vehicle and being integrated into the Access and Start Hand Free subsystem for Passive Entry keyless Go System Requirements. Overmoulded with PA66 or PBT-GF 30% assuring the IP67 classification. Inside the overmoulding the serial inductance and capacitance customized to required values. Designed to allow long emitting-reading distances in the smallest volume (low profile).

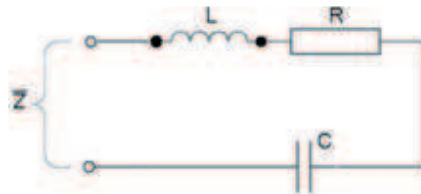


- LF transponder Transmitter antenna LF Low Profile.
- High stability in temperature (-40°C up to +85°C).
- Low tolerances in the resonance frequency LC.
- Connector integrated in the enclosure located laterally.
- The enclosure will provide mounting features into the vehicle and will ensure the mechanical robustness.
- Long reading distances and average current 2-4App.
- Strong anchor points which provide an easy assembly.
- Custom LC value under demand.

## Nomenclature description

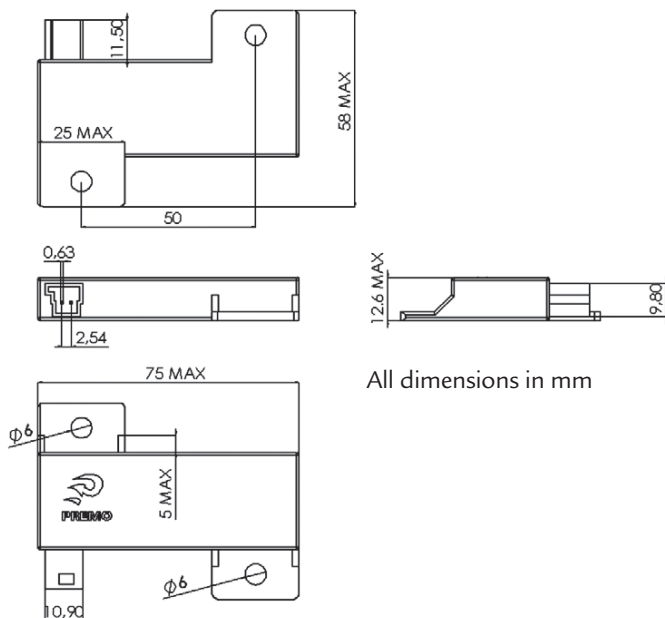


## Electrical diagram



- L: Ferrite core coil inductance
- R: Copper resistance and connection
- C: Tuning internal capacitor NPO
- Rdc: Diagnostic parallel resistor (typical 10 kΩ)
- Z: External impedance

## Mechanical dimensions



## Electrical specifications

P/N	L (mH)	Cres (nF)	Q	SRF (MHz)	Freq. (kHz)
KGEA-IA-B-0500J	0.500	3.3	>100	>3	125@
KGEA-IA-C-0426	0.426	3.3	>125	>3	20@
KGEA-IA-A-0161J	0.161	330	>50	>1	134,2@

This chart is a reference guide for the most common required values at working frequency of 20 kHz, 125 kHz or 134.2 kHz Any other inductance value at LF or tighter tolerances can be provided. Please contact our sales department for any inquiry. Sensitivity measured with Helmholtz coils  $H=8.36 \text{ App/m}$  @ 125 kHz. Contact us for measurement specification.