

# KGEA-BFCAM

85x16.8x7 mm ( 33  $\mu$ H – 500  $\mu$ H)

## Keyless Go Emitter Antenna Low Profile Potted Unsealed & Sealed Connector

### Characteristics

This is a new low profile antenna specially designed to assembly in the aftermarket operation.

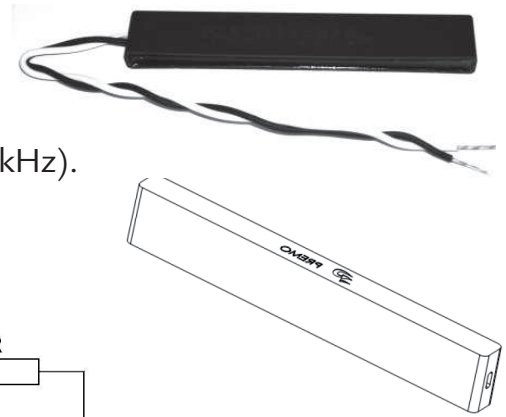
Antenna concept is similar to those KGEA-BFC series, but smaller in size (ferrite + capacitor in a box potted) and easy to joint to anywhere by a simple adhesive tape.

These kind of antennas provide a cable with a customized length without connector in its standard version (connector can be assembly under demand).

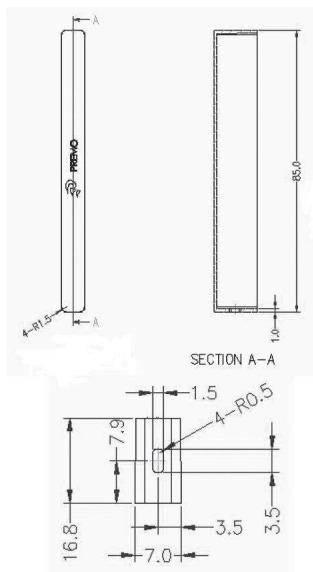
Several combinations of inductance and capacitor values are offered as standard versions. Any other combination can be provided, together with the possibility of fully customized design, depending mainly of capacitor size available.

Ideally used access and start Hand Free subsystem for Passive Entry keyless Go System Requirements for automotive application.

- Low profile size.
- Low tolerances in the resonance frequency LC
- High stability in temperature (-40°C up to +85°C).
- Transmitting low frequency LF (20kHz, 125kHz and 134kHz).
- Long reading distances and average current 2-4App.
- Custom LCR value under demand.

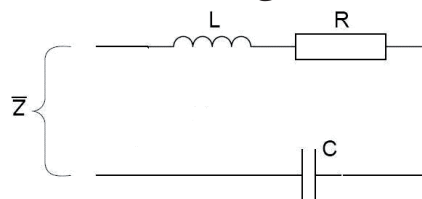


### Mechanical dimensions



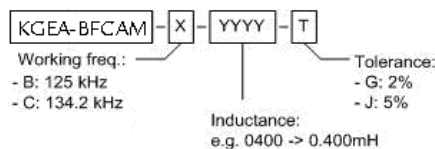
- L > 20mm tolerance  $\pm$  0.5mm  
 10 < L  $\leq$  20mm tolerance  $\pm$  0.2mm  
 L  $\leq$  10mm tolerance  $\pm$  0.1mm

### Schematic Diagram



- L: Ferrite core coil inductance  
 R: Copper resistance and connection  
 C: Tuning internal capacitor NPO  
 Z: External impedance

### Nomenclature description



### Electrical specifications

P/N	L (mH)	Cres (nF)	Q	SRF (MHz)	Freq. (kHz)
KGEA-BFCAM-B-0345J	0.345	4.7	>115	>3	125@
KGEA-BFCAM-B-0500J	0.500	3.34.7	>115	>3	125@
KGEA-BFCAM-C-0207J	0.207	6.8	>100	>3	134,2@
KGEA-BFCAM-C-0426J	0.426	3.3	>100	>3	134,2@

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.