Annex acc. to FCC Title 47 CFR Part 15
relating to
terra Fernwirktechnik GmbH
FA12 DSS-TX

Annex no. 11
Antenna requirements

Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
Measurement Procedure:
ANSI C63.4-2014
ANSI C63.10-2013

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Antenna description

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KGEA-BFCR

Emitter antenna housing plastic base with resin and outside connector unsealed & sealed

145x26x12mm (33µH - 500µH)

EMITTER ANTENNAS & SWITCHES / **MIDDLE RANGE**

FEATURES

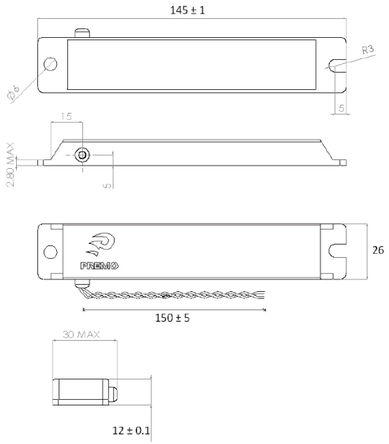
The antenna KGEA-BFCR is designed for emission of a LF field to allow hands free access towards the Customer Device Identification for automotive application. This type antenna is inserted in the vehicle being integrated into the Access and Start Hand Free subsystem for requirements Passive Entry and Remote keyless Go System. Housing plastic base (materials PBT, PA-66 or ABS) assuring extreme conditions of humidity, liquids, substance and extreme environments. The connector (sealed and unsealed) is optional and it can be customized to required features. Designed to allow long emitting-reading distances in the smallest volume.

01 CHARACTERISTICS

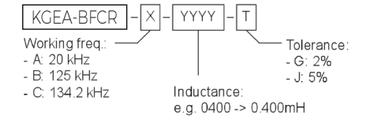
- Ideally used in keyless smart entry system
- Transmitting low frequency LF (20kHz, 125kHz and 134kHz).
- Low tolerances in the resonance frequency LC
- High stability in temperature (-40°C up to +85°C).
- Connector located outside assembly housing plastic base (Optional).
- IP maximum is 4App.
- Strong anchor points which provide an easy assembly and will ensure mechanical robustness.
- Custom LCR value under demand.

02 SPECIFICATIONS

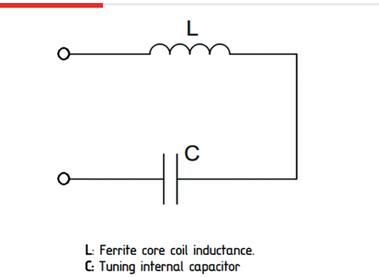
DIMENSIONS AND RECOMMENDED PAD-LAYOUT (mm)



NOMENCLATURE DESCRIPTION



ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

	L (mH)	Cres (nF)	Q	SRF (MHz)	Freq. (kHz)
KGEA-BFCR-B-0500J	0.500	3.3	>125	>3	125@
KGEA-BFCR-C-0426J	0.426	3,3	>125	>3	134,2@
KGEA-BFCR-A-0161J	0.161	330	>60	>1	21,85@
KGEA-BFCR-A-0422J	0.422	150	>70	>1	20@

This chart is a reference guide for the most common required values at working frequency of 125 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 App/m @125 kHz. Contact us for measurement specification.