

# KCA

Keylock cylinder antenna 38x49x21mm (30 uH - 1000 uH)

## Features

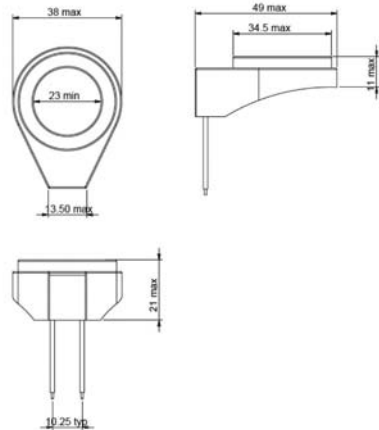
The Keylock Cylinder Antenna is designed to emit a RF signal and identify the customer's key in the ignition system. This antenna is to be placed in the Ignition Switch Lock Cylinder, inside the vehicle. Since it can be exposed to the final customer, the antenna finishing fulfils the highest quality requirements. Overmoulded with PA66 (ABS optional) assuring the IP67 classification. Output wires can be customized to customer's design. Inside the overmoulding, the inductance, resistance and quality factor can be customized to required values.



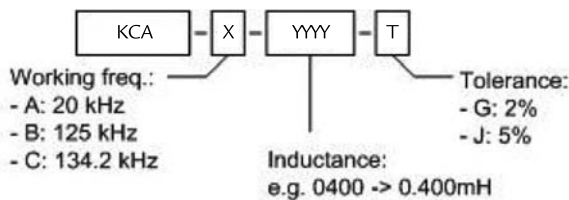
## Characteristics

- High stability in temperature (-40°C up to +85°C)
- LF transponder Emitter/Transmitter antenna.
- Ideally used in the Ignition Switch Key Cylinder.
- Free wire or special connectors can be provided.
- The enclosure will provide mounting features into the vehicle and will ensure the mechanical robustness
- Low tolerances in the resonance frequency LC
- Anchor points for easy assembly can be provided.
- Custom L and R value under demand

## Mechanical dimensions



## Nomenclature description

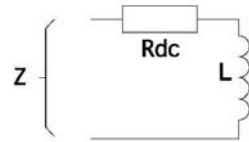


# KCA

Keylock cylinder antenna 37x49x8mm (30  $\mu$ H - 1000  $\mu$ H)

## Electrical diagram

L: Ferrite core coil inductance  
R: Copper resistance and connection  
Z: External impedance



## Electrical specifications

### Operating Frequency @ 20 kHz

P/N	L (mH)	Q	Rdc ( $\Omega$ )	SRF (MHz)
KCA-A-0930J	0.930	>5	7.2	>0.6
KCA-A-1345J	1.345	>5	13.5	>0.5
KCA-A-1920J	1.920	>5	16.2	>0.5
KCA-A-2870J	2.870	>5	25.9	>0.4
KCA-A-4220J	4.220	>5	31.4	>0.4

### Operating Frequency @125kHz

P/N	L (mH)	Q	Rdc ( $\Omega$ )	SRF (MHz)
KCA-B-0035J	0.035	>25	0.65	>3
KCA-B-0345J	0.345	>40	4.4	>0.8
KCA-B-0490J	0.490	>40	5.2	>0.8
KCA-B-0740J	0.740	>50	6.5	>0.6
KCA-B-1080J	1.080	>50	7.8	>0.6

### Operating Frequency @134kHz

P/N	L (mH)	Q	Rdc ( $\Omega$ )	SRF (MHz)
KCA-C-0030J	0.030	>25	0.64	>3
KCA-C-0300J	0.300	>30	4.1	>1
KCA-C-0430J	0.430	>40	4.9	>0.8
KCA-C-0640J	0.640	>50	6	>0.6
KCA-C-0940J	0.940	>50	7.3	>0.6

Add under the chart: This chart is a reference guide for the most common required values at working frequency of 20, 125 and 134 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 Ap/m @125 kHz. Contact Tech. department. for measurement specification.