

# KGEA-HB

## LF interior antenna shape h bridge

153x45x27mm (33 uH - 500 uH)

### Features

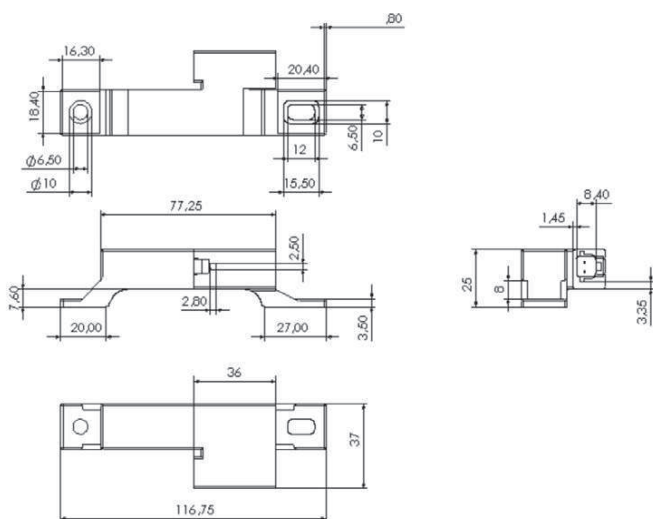
- Transmitting low frequency.
- LF emitter antenna assembly by method Ultrasonic Welding.
- The connector integrated in the external housing plastic (waterproof connector).
- Shape H bridge (best performance electrical on metal surfaces).
- Strong anchor points which provide an easy assembly and will ensure mechanical robustness



### Electrical Parameters

- Resonant frequency LF (L+C in serial). Custom LC value under demand
- Capacitor type SMD NPO 400VDC/250VAC .
- Fine adjust the tank resonant frequency L+C. Max tolerance Vs fres:  $\pm 2\text{kHz}$  @  $[-40^\circ\text{C}$  to  $85^\circ\text{C}]$ .
- Ipp max= 4 App
- High stability in temperature ( $-40^\circ\text{C}$  up to  $+85^\circ\text{C}$ ).
- Reliability test: This part is according to AEC-Q200 Revision C.

### Mechanical dimensions All dimensions are in mm



### Electrical diagram



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

### Electrical specifications

Part Number	L Inductance $\pm 5\%$	C Capacitor $\pm 5\%$	Freq. (kHz)	Ipp(A)	Zimp@fo ( $\Omega$ )
KGEA-HB-B-0195J	195 $\mu\text{H}$	8,2nF	125,0	2-4	<2,5
KGEA-HB-B-0500J	500 $\mu\text{H}$	3,3nF	125,0	2-4	<3,5
KGEA-HB-C-0426J	426 $\mu\text{H}$	3,3nF	134,2	2-4	<3,5

#### Mechanical notes

1. All dimensions are in mm.
2. The external housing and cover is closed-sealed by ultrasonic welding.
3. Plastic Material PBT-GF30%.