



1. Description of manufacturer

1.1. Trade mark

:***DENSO***

1.2. Name and address of manufacturer

- Name :DENSO CORPORATION
- Address :1-1 Showa-cho, Kariya-city, Aichi-prefecture,
448-8661, Japan

1.3. Name and address of applicant

- Name : DENSO CORPORATION
- Address : 1-1 Showa-cho, Kariya-city, Aichi- prefecture,
448-8661, Japan



2. Technical description of the system

2.1. Type number

- Transmitter : 12BZE

2.2. Specifications of transmitter

- Nominal frequency : 314.00 MHz
- oscillator frequency : 314.00 MHz SAW resonator
- Radio frequency output power : 75.6dB μ V/m or less at 3m (*)
- Type of modulation : A1D
- Power Supply
 - Nominal supply voltage : 3 VDC
 - Type of Battery : One lithium battery
- Antenna : Built-in type (Fixed)

* Note: Calculation of Voltage Average Level
A transmitter has the one complete pulse train

$$\begin{aligned}\text{Voltage Average Level}(\mu\text{V}) &= (\text{Epeak} \times \text{Tt}) \div \text{T} \\ &= (\text{Epeak} \times 89.6\text{msec}) \div 179.2\text{msec}\end{aligned}$$

Epeak = Voltage peak level

T = One complete pulse train time including blanking interval

Tt = Total pulse of transmitter in one complete pulse train



3. Outline of the system

3.1. Description of the system operation

This system is mainly used for locking or unlocking the doors of the vehicle.

The transmitter send a radio wave signal while the button is pushed.

The receiver becomes active in response to the signal from the transmitter.

3.2. Installation in vehicle

The receiver is installed inside the vehicle.

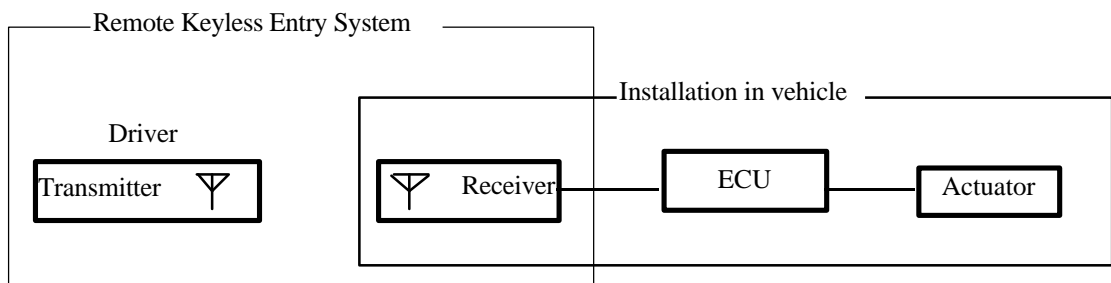


Fig Outline of the System



6. Component listing

Transmitter

Part Name	Description	Number of Units
IC	-	1
SAW Resonator	314.00MHz	1
LED	-	1
Transistor	-	2
Resistor (a)	2.2-4.7k ohm	1
Resistor (b)	2.2-4.7k ohm	1
Resistor (c)	100-330 ohm	1
Capacitor (d)	0.5-5pF	1
Capacitor (e)	0.5-6pF	1
Capacitor (f)	0.5-14pF	1
Capacitor (g)	0.5-2pF	1
Capacitor (h)	0-40pF	1
Capacitor (i)	0-40pF	1
Capacitor (j)	0-40pF	0
Inductor (k)	22-37nH	1
Switch	-	3 or 2
Battery	3V	1