

## 2. Technical description of the system

### 2.1 Type number

-Transmitter : 12BBT

### 2.2 Specifications of transmitter

-Nominal frequency : 314.35MHz  
-Local oscillator frequency : 314.35MHz SAW resonator  
-Radio frequency output power : 75.6dB $\mu$ V/m or less at 3m (\*)  
-Type of modulation : A1D  
-Power Supply  
    - Nominal supply voltage : 3VDC  
    - 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

$$\begin{aligned}\text{Voltage Average Level}(\mu\text{V}) &= (\text{Epeak} * \text{Tt}) / \text{T} \\ &= (\text{Epeak} * 75\text{msec}) / 150\text{msec}\end{aligned}$$

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 sends a radio wave signal while the button is pushed.

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

#### 3.2 Transmitter

The transmitter sends a signal using radio frequency. The transmitter emits the radio frequency while the button is depressed. If the button is depressed continuously, then the transmitter will only send a signal for a predetermined constant time(For example 20 seconds. This is an auto-power-off feature)