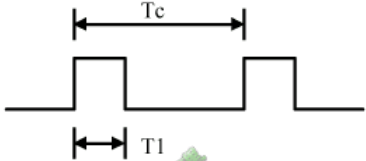


1) uPD6121G with simple repeat code

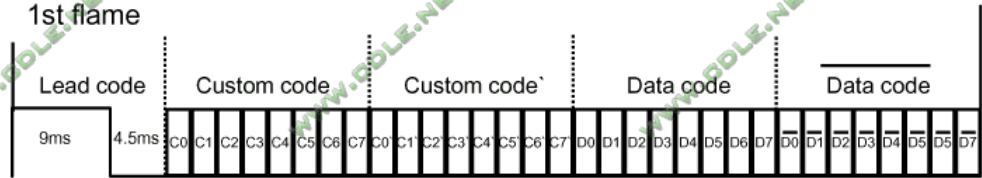
A single pulse, modulated with 37.91KHz signal at 455KHz



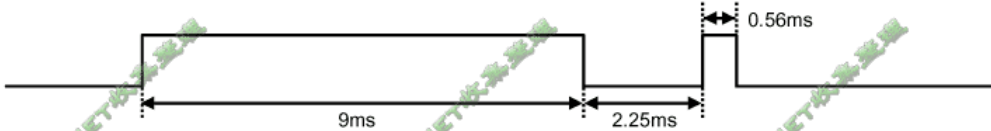
Carrier frequency
 $f_{CAR} = 1/T_c = f_{OSC}/12$
 Duty ratio = $T_1/T_c = 1/3$

- Configuration of Flame

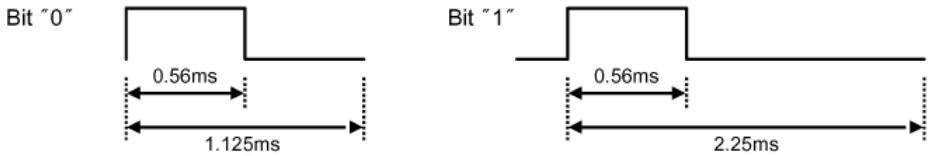
1st flame



- Repeat code

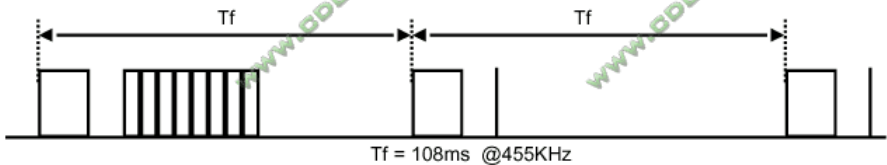


Bit Description



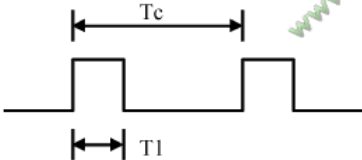
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



2) uPD6121G with full repeat code

A single pulse, modulated with 37.91KHz signal at 455KHz

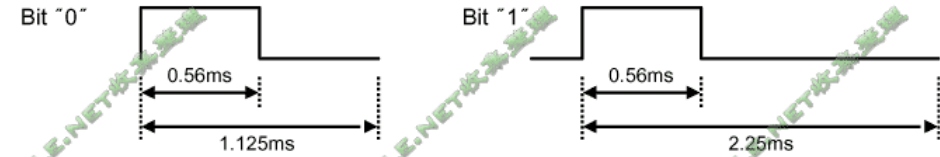


Carrier frequency
 $f_{CAR} = 1/Tc = f_{OSC}/12$
 Duty ratio = $T1/Tc = 1/3$

- Configuration of Flame
 1st flame

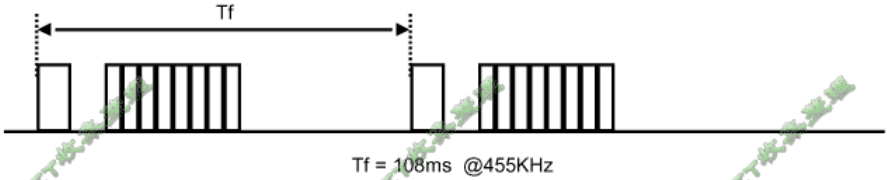


- Bit Description



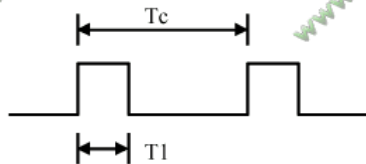
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



3) TC9012F/9243

A single pulse, modulated with 37.91KHz signal at 455KHz



Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

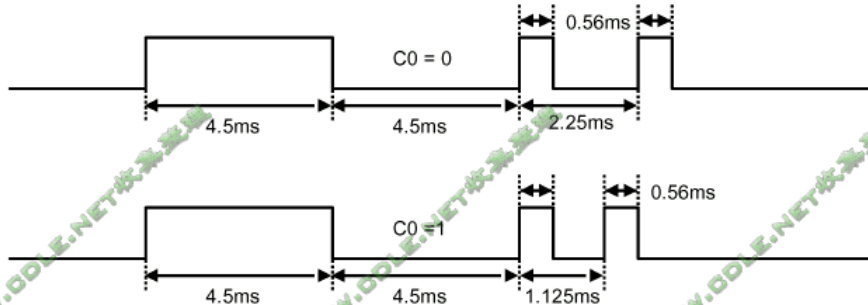
$$\text{Duty ratio} = T_1/T_c = 1/3$$

- Configuration of Flame

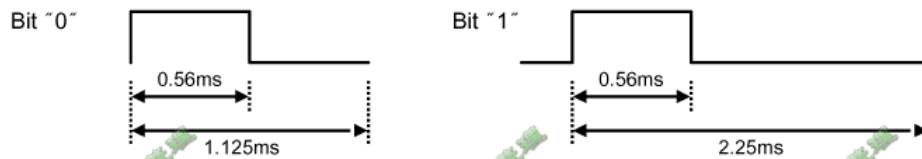
1st flame



- Repeat code

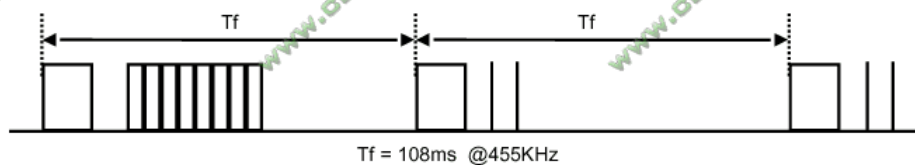


- Bit Description



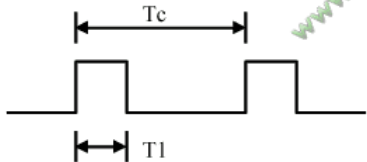
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



4) M50560-001P

A single pulse, modulated with 37.91KHz signal at 455KHz



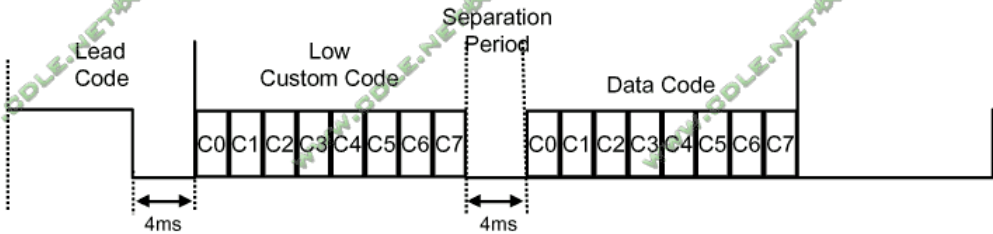
Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

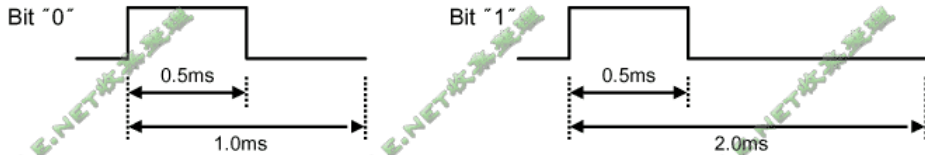
$$\text{Duty ratio} = T_1/T_c = 1/3$$

- Configuration of Flame

1st flame

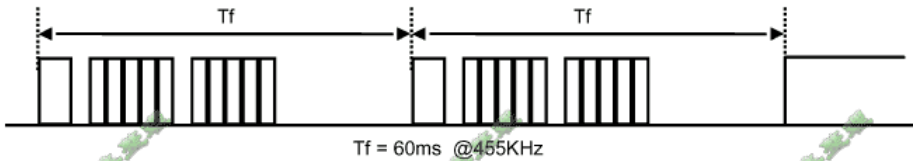


- Bit Description



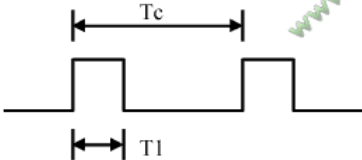
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



5) LC7461M-C13 with simple repeat code

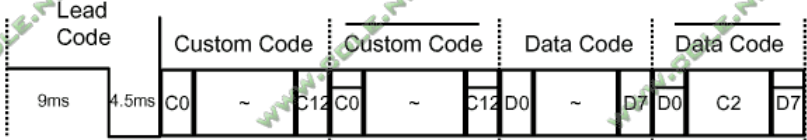
A single pulse, modulated with 37.91KHz signal at 455KHz



Carrier frequency
 $f_{CAR} = 1/T_c = f_{OSC}/12$
 Duty ratio = $T_1/T_c = 1/3$

- Configuration of Flame

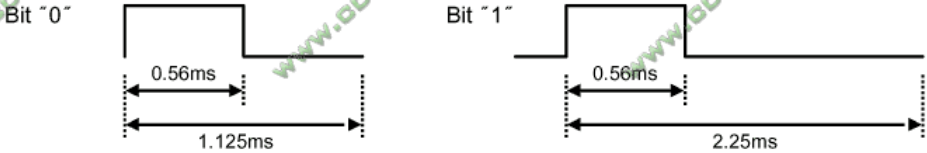
1st flame



- Repeat code

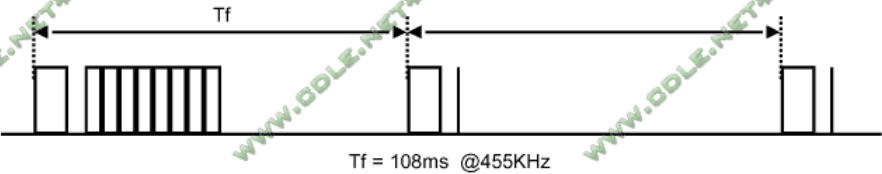


- Bit Description



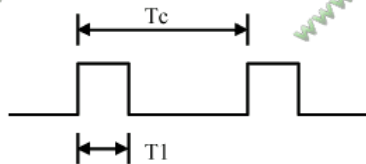
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



6) LC7461M-C13 with full repeat code

A single pulse, modulated with 37.91KHz signal at 455KHz



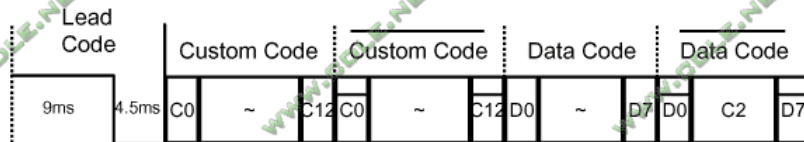
Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

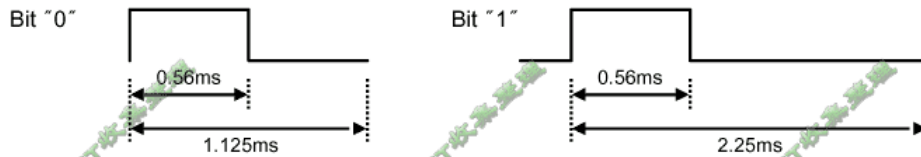
$$\text{Duty ratio} = T_1/T_c = 1/3$$

- Configuration of Flame

1st flame

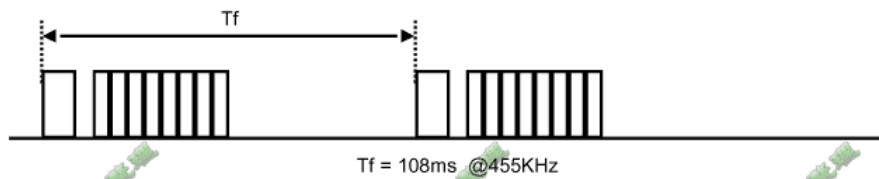


- Bit Description



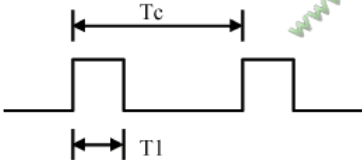
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



7) M3004 LAB1-Carrier

A single pulse, modulated with 37.91KHz signal at 455KHz



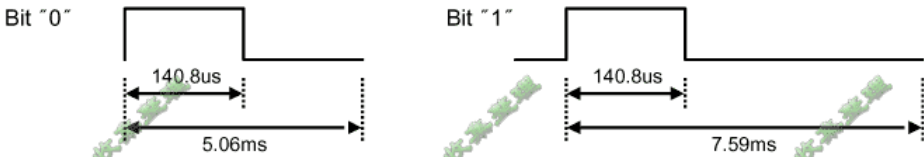
Carrier frequency
 $f_{CAR} = 1/Tc = f_{OSC}/12$
 Duty ratio = $T1/Tc = 1/3$

- Configuration of Flame

1st flame

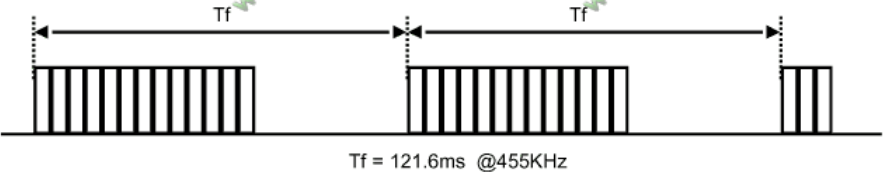


- Bit Description



- Flame Interval : Tf

The transmitted waveform as long as a key is depressed

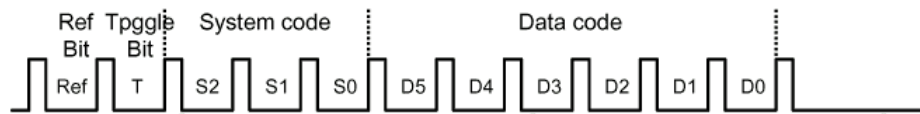


8) M3004 LAB1 - Flash

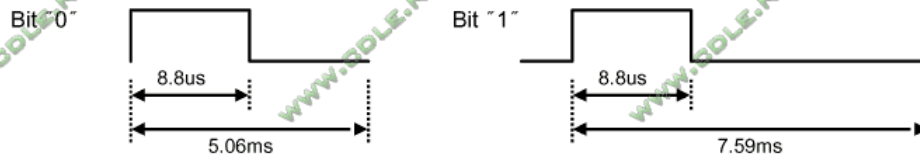
A single pulse at 455KHz

- Configuration of Flame

1st flame

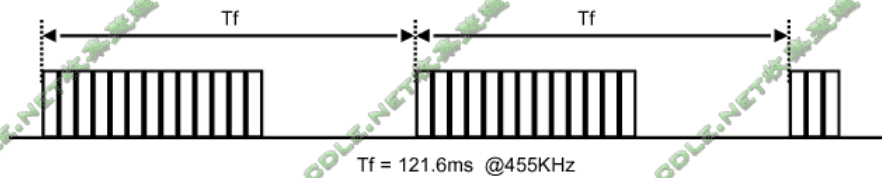


- Bit Description



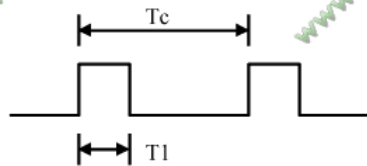
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



9) SAA3010(RC-5)

A single pulse, modulated with 37.917KHz signal at 455KHz



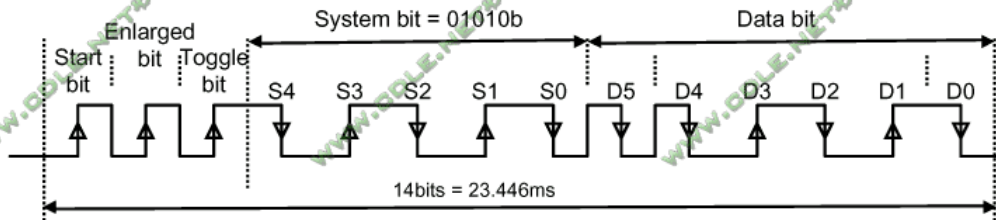
Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

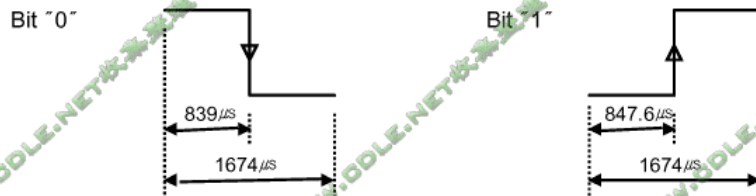
$$\text{Duty ratio} = T_1/T_c = 1/3$$

- Configuration of Flame

1st flame

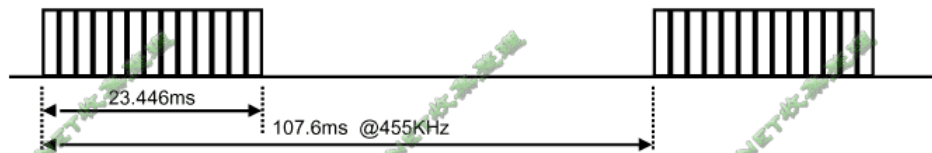


- Bit Description



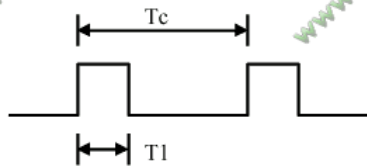
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



10) uPD1986C

A single pulse, modulated with 37.917KHz signal at 455KHz



Carrier frequency

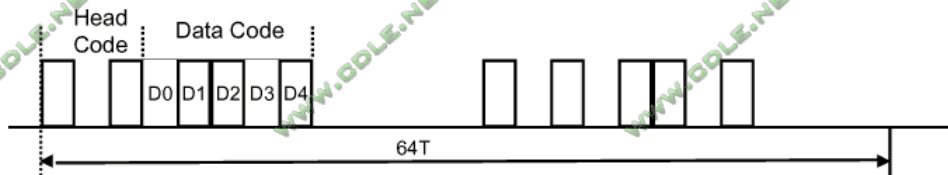
$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

$$\text{Time Unit} = T = 43T_c$$

- Configuration of Flame

1st flame



- Bit Description

Bit "0"

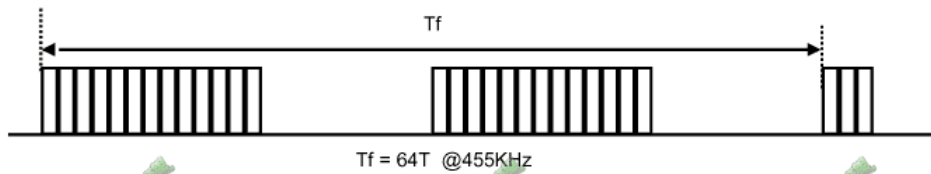


Bit "1"



Flame Interval : T_f

The transmitted waveform as long as a key is depressed

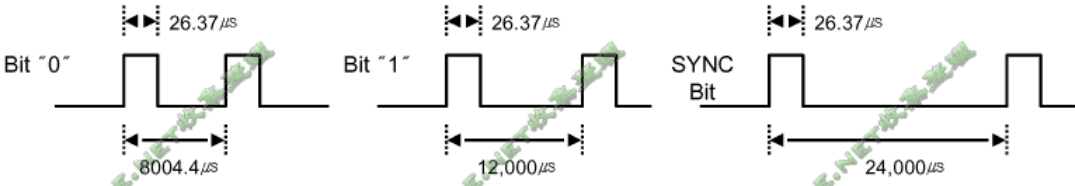


11) MV500 (4ms)

A single pulse at 455KHz

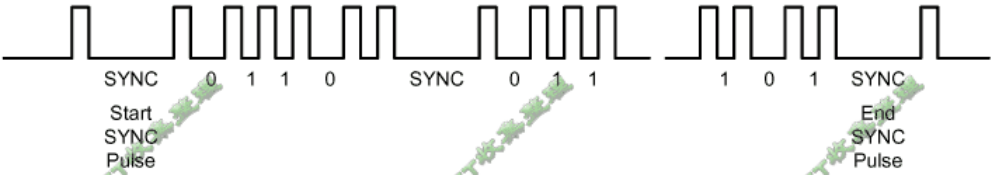


- Bit Description



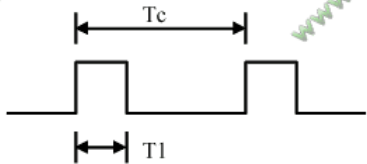
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



12) Zenith CG1

A single pulse, modulated with 40KHz signal at 480KHz

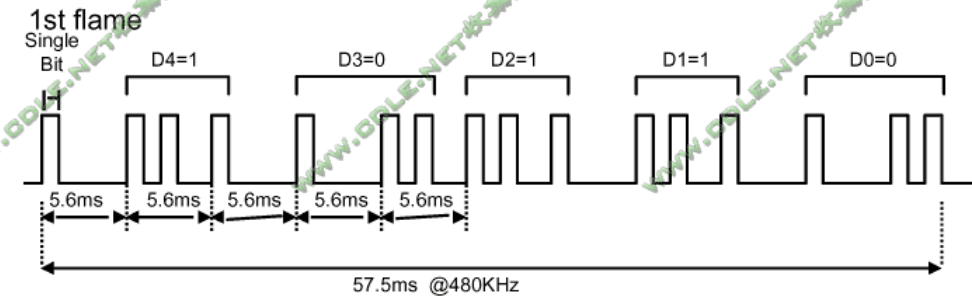


Carrier frequency

$$f_{CAR} = 1/Tc = f_{OSC}/12$$

$$\text{Duty ratio} = T1/Tc = 1/3$$

- Configuration of Flame

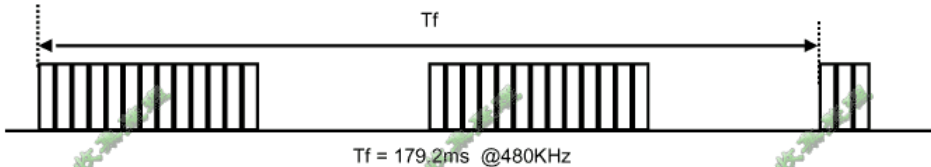


- Bit Description



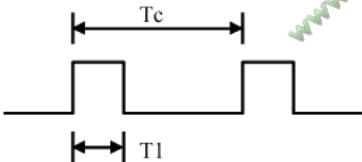
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



13) Zenith CG2

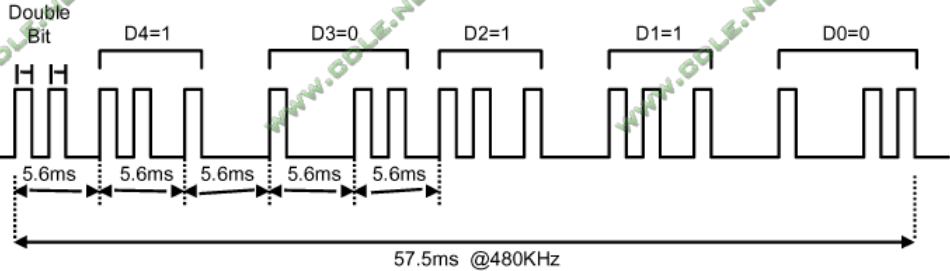
A single pulse, modulated with 40KHz signal at 480KHz



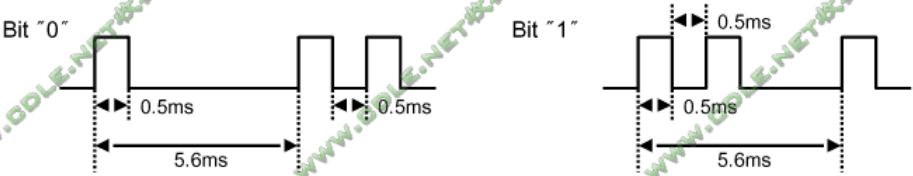
Carrier frequency
 $f_{CAR} = 1/T_c = f_{OSC}/12$
 Duty ratio = $T_1/T_c = 1/3$

- Configuration of Flame

1st flame

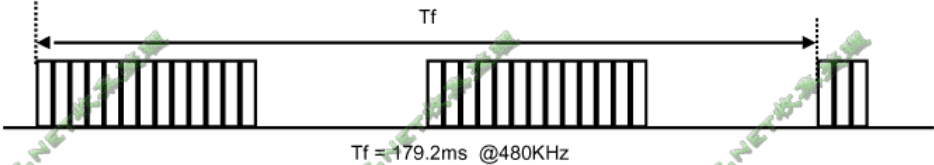


- Bit Description



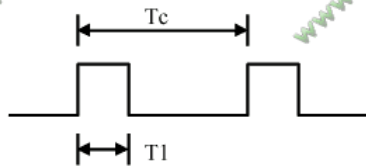
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



14) LR3715M

A single pulse, modulated with 37.917KHz signal at 455KHz



Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

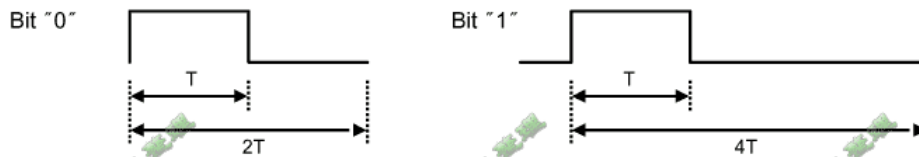
$$\text{Time Unit} = T = 10T_c$$

- Configuration of Flame

1st flame

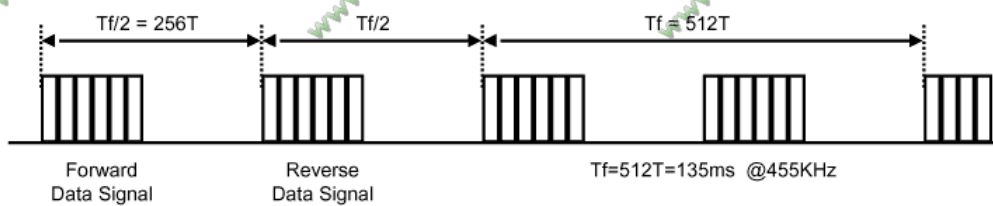


- Bit Description



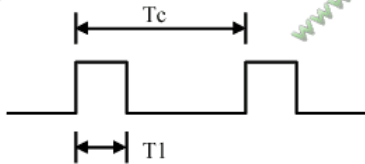
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



15) SONY - D7C6

A single pulse, modulated with 40KHz signal at 480KHz



Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

$$\text{Time Unit} = T = 24T_c = T$$

- Configuration of Flame

1st flame

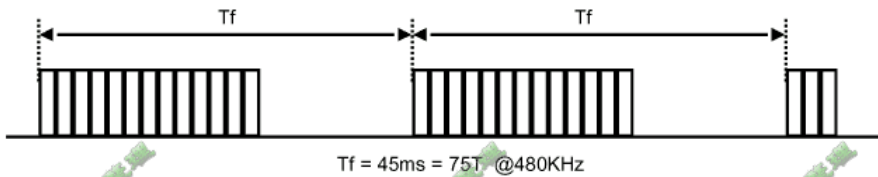


- Bit Description



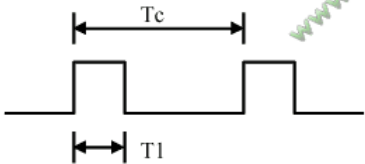
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



16) SONY - D7C8

A single pulse, modulated with 40KHz signal at 480KHz



Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

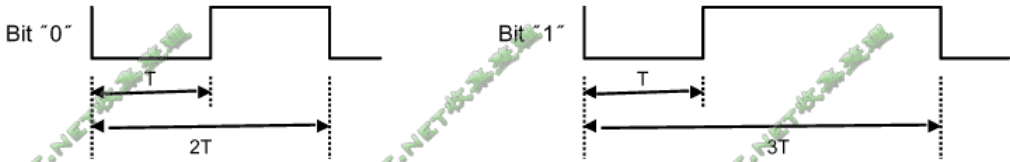
$$\text{Time Unit} = T = 24T_c$$

- Configuration of Flame

1st flame

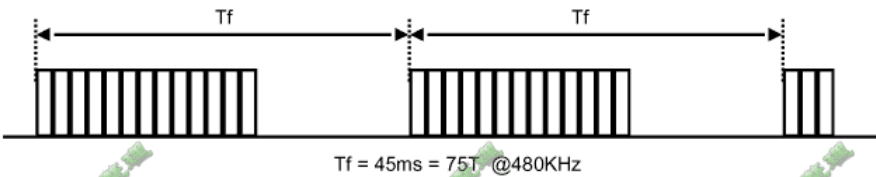


- Bit Description



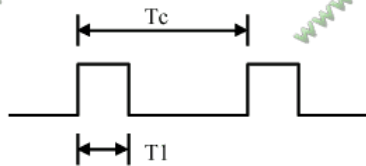
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



17) MN6014-C5D6

A single pulse, modulated with 56.875KHz signal at 455KHz



Carrier frequency

$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

$$\text{Time Unit} = 32T_c = T$$

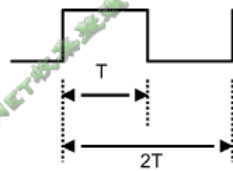
- Configuration of Flame

1st flame

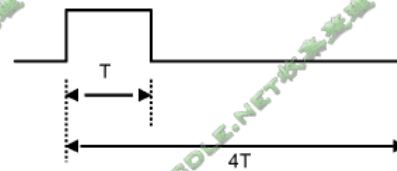


- Bit Description

Bit "0"

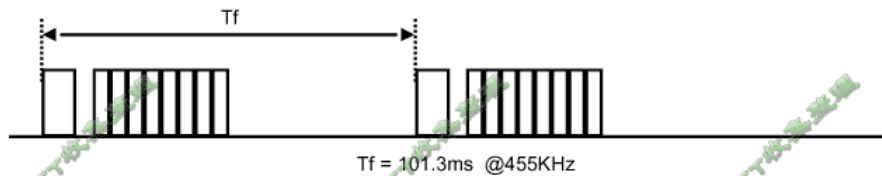


Bit "1"



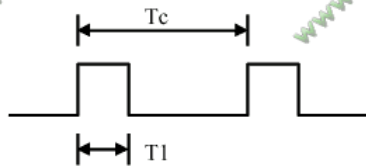
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



18) MN6014-C6D6

A single pulse, modulated with 36.6KHz signal at 440KHz



Carrier frequency

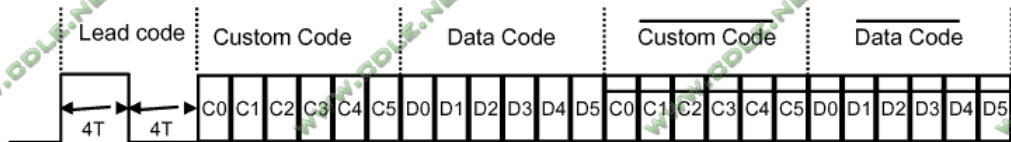
$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

$$\text{Time Unit} = 32T_c$$

- Configuration of Flame

1st flame

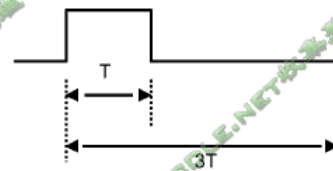


- Bit Description

Bit "0"

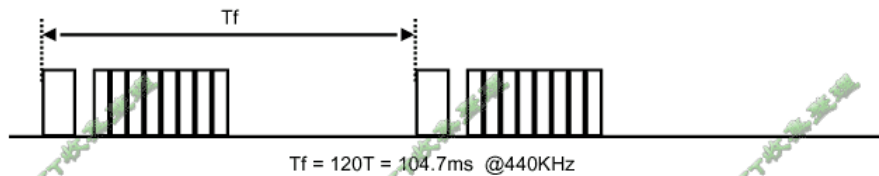


Bit "1"



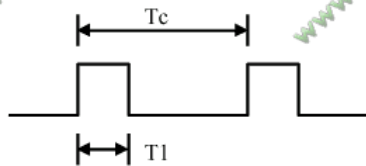
- Flame Interval : Tf

The transmitted waveform as long as a key is depressed



19) AEHA

A single pulse, modulated with 37.917KHz signal at 455KHz



Carrier frequency

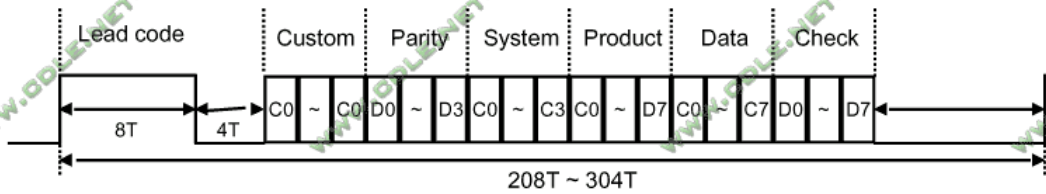
$$f_{CAR} = 1/T_c = f_{OSC}/12$$

$$\text{Duty ratio} = T_1/T_c = 1/3$$

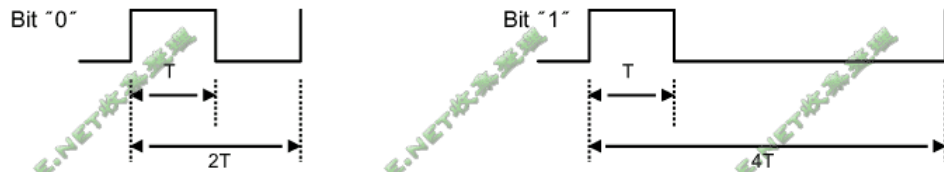
$$\text{Time Unit} = 16T_c = T$$

- Configuration of Flame

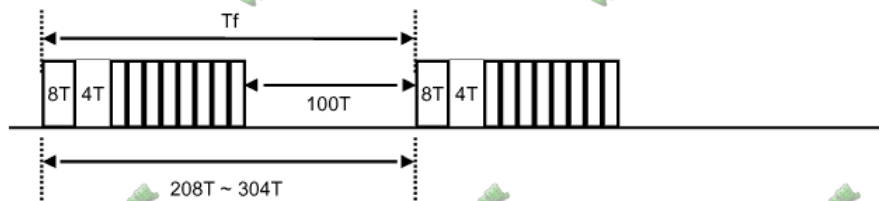
1st flame



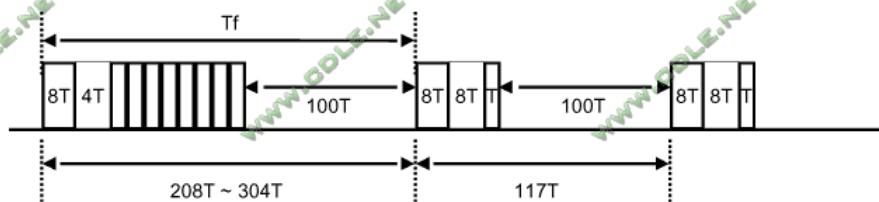
- Bit Description



- Normal Repeat



- Abbreviated Repeat

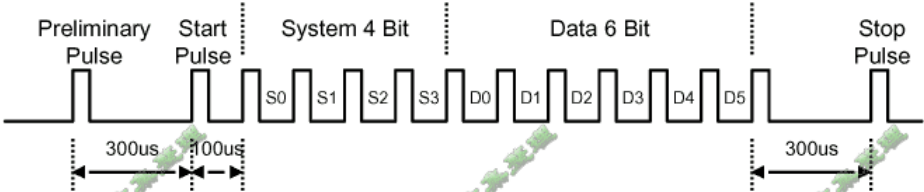


20) IRT1250

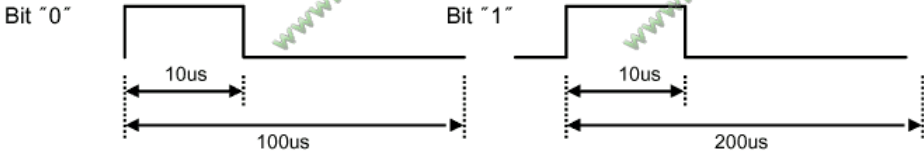
A single pulse at 600KHz

- Configuration of Flame

1st flame

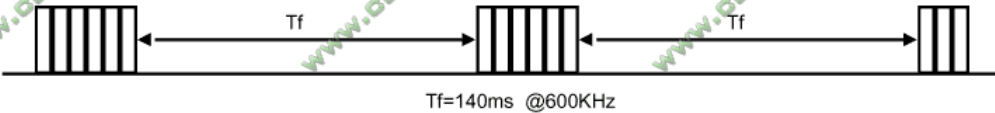


- Bit Description



- Flame Interval : Tf

The transmitted waveform as long as a key is depressed

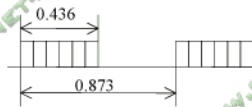


[MAT NEW] (MATSUSHITA FORMAT)

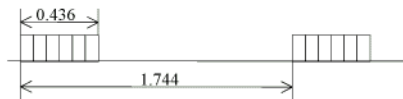
CARRIER (μsec)



BIT '0' (msec)



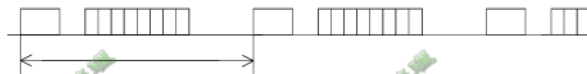
BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

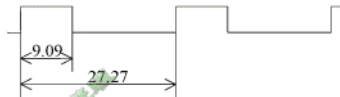


REPEAT FORMAT (msec)

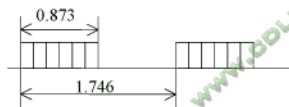


[MN6030] (MATSUSHITA FORMAT)

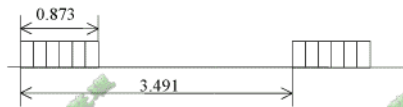
CARRIER (usec)



BIT '0' (msec)



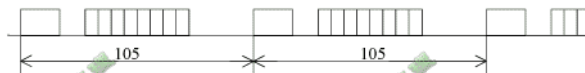
BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

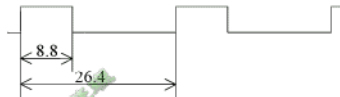


REPEAT FORMAT (msec)

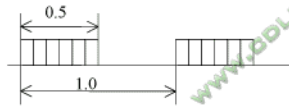


[M50560] (MITSUBISHI FORMAT)

CARRIER (usec)



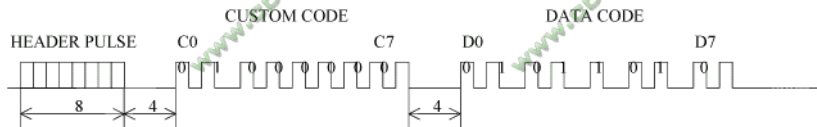
BIT '0' (msec)



BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

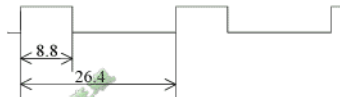


REPEAT FORMAT (msec)

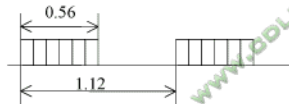


[D6121],[BU5777],[D1913]

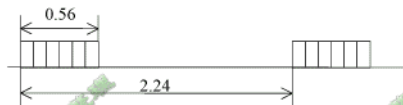
CARRIER (usec)



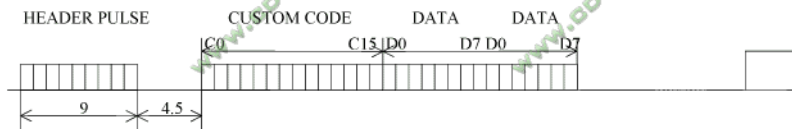
BIT '0' (msec)



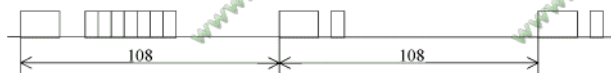
BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

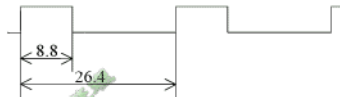


REPEAT FORMAT (msec)

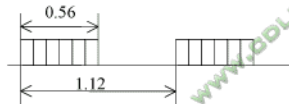


[TC9012]

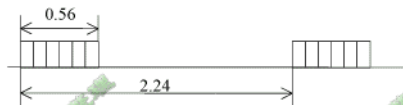
CARRIER (usec)



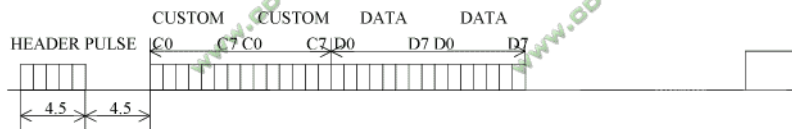
BIT '0' (msec)



BIT '1' (msec)



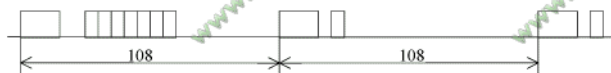
SINGLE-WORD FORMAT (msec)



REPEAT PULSE

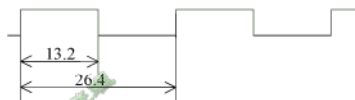


REPEAT FORMAT (msec)

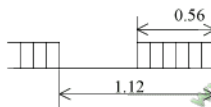


[SONY]

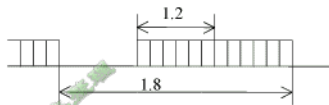
CARRIER (usec)



BIT '0' (msec)



BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

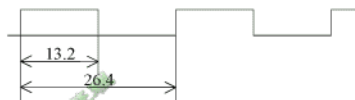


REPEAT FORMAT (msec)

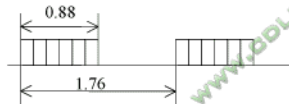


[PANASONIC]

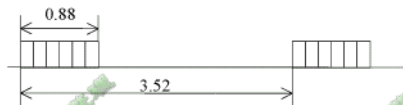
CARRIER (usec)



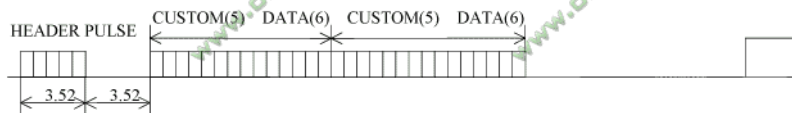
BIT '0' (msec)



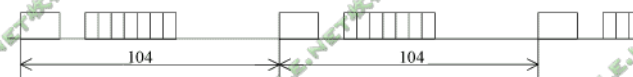
BIT '1' (msec)



SINGLE-WORD FORMAT (msec)

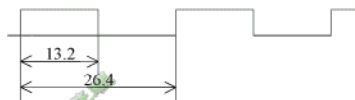


REPEAT FORMAT (msec)



[PHILIPS(RC-5)]

CARRIER (usec)



BIT '0' (msec)

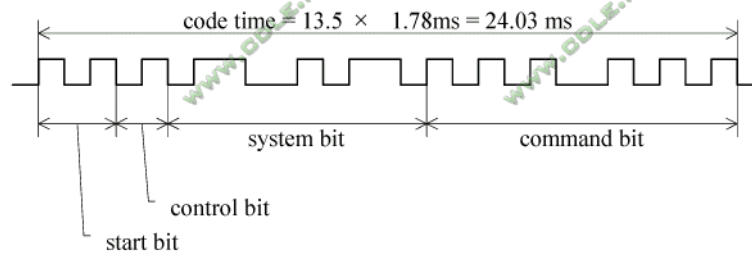


BIT '1' (msec)



- 1.5 start bits : allowing synchronizing by the micom.
- 1 control bit : this bit changes of value every time a key-out to key-in transition occurs.
- 5 system bits : make it possible to select 32 different systems
- 6 command bits : give a total of 64 possible commands.

SINGLE-WORD FORMAT (msec)



REPEAT FORMAT (msec)

