Overview

Transmitters allow you to manage 1 group or 6 group of automation, with or without control of climate sensor. Every group is formed by three different channel. By channel we mean a different code and not different frequency bands.
All models have exactly the same circuit while the number of push buttons.
They are powered by two 1.5V-alkaline battery AAA (included).

Description of the product

All the transmitters

The circuit consists of:

- The Q3 transistor that works like an oscillator; the signal taken from its collector passes through the C15-L2–C18 filter and reaches the Loop type aerial, engraved on a printed circuit, providing a guarantee of stability as regards its characteristics and, consequently, the complete lack of calibrations. The SAW1 Resonator guarantees the exact oscillation frequency.
- The code is generated by the integrated circuit IC1 and consists of a train of 74 pulses lasting 114 ms followed by a pause of another 18 ms; as the code is the "Rolling Code" type, it changes each time the push button on the remote control is pressed.

Technical specifications

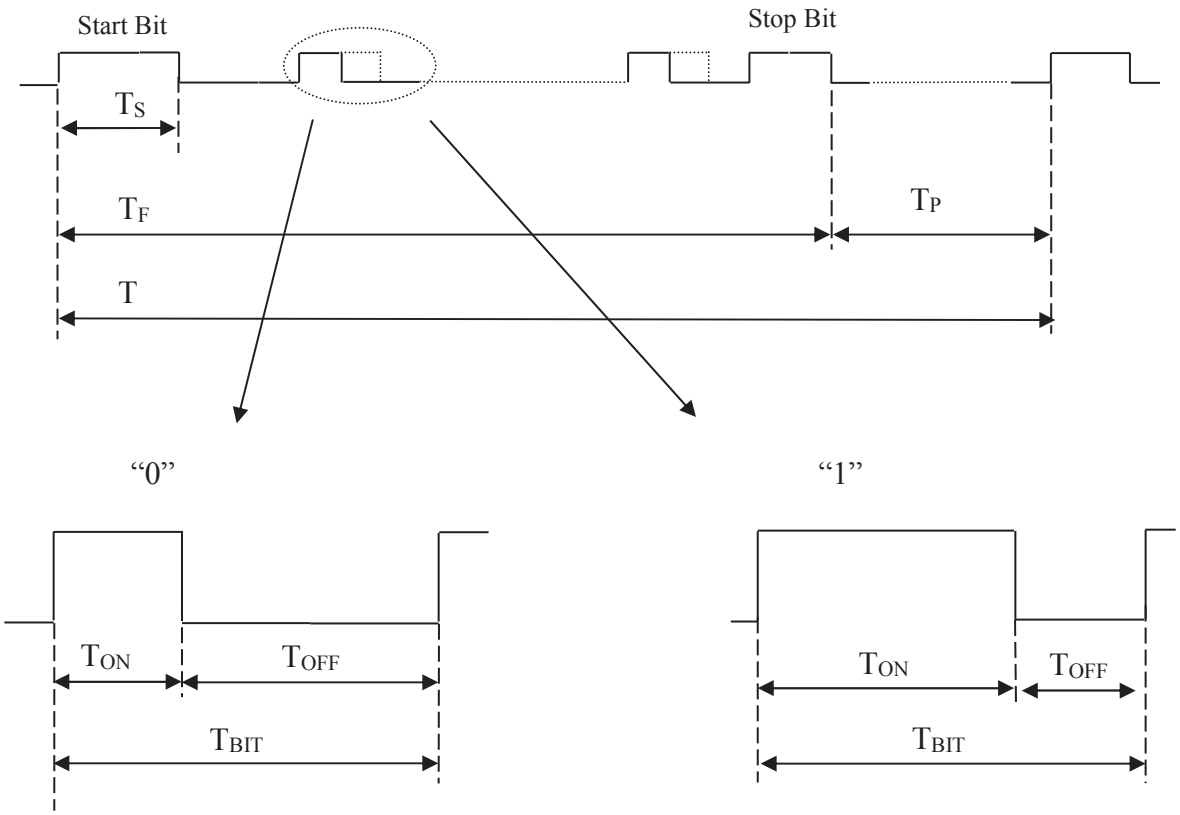
Transmitters

Working temperature: from -10°C to +55°C

Center frequency: 433.92 MHz ± 100KHz

Modulation: AM-OOK wide band

Duty Cycle in 100 ms calculation (worst case):
Code: A train of 74 pulses lasting 114 ms followed by a pause of 18ms.



TOTAL PERIOD	:	T	= 132 ms
FRAME PERIOD	:	T_F	= 114 ms
PAUSE	:	T_P	= 18ms
START BIT	:	T_S	= 1.5 ms
SINGLE BIT	:	T_{BIT}	= 1.5ms
IMPULSE TYPE "0"	:	T_{ON}	= 0.5 ms, T_{OFF} = 1.0 ms
IMPULSE TYPE "1"	:	T_{ON}	= 1.0 ms, T_{OFF} = 0.5 ms
STOP BIT	:	TFs	= 1.5 ms

Then the 100 ms worst case (WC) is

DC = ON $TIME_{WC}$/ 100 ms = ((1.5 + 1* 65)/100) = 0.665

20 LOG(DC) = - 3.5 dB (correction factor)