# HF3505/HF3505A FOG-LAMP CONTROLLER

## Features

- Use MCU control circuit to ensure stable performance
- Surface mounting technology, advanced craftwork
- Solid base design, stable structure
- Ingress protection: IP50

## Typical Applications

Rear Fog Lamp control

## TYPE

| Type | Product series name | Dimensions | Main characteristics |
|---|---|---|---|
| HF3505 | Fog-lamp controller | (30 × 30 × 30)mm | 2 channels enabling signal |
| HF3505A | Fog-lamp controller | (30 × 30 × 30)mm | 3 channels enabling signal with reset (negative edge) function |

## CHARACTERISTICS

| | | |
|---|---|---|
| Nominal Voltage | | 12VDC |
| Operating voltage rannge | | 9VDC to 16VDC |
| Nominal load | Lamp load | 5A 13.5VDC |
| Contact voltage drop | | 150mV 5A |
| Electrical endurance | | $5\times10^4$ OPS (at rated load) |
| Ambient temperature | | -40˚C to 85˚C |
| Vibration resistance | | 10Hz to 200Hz 49m/s$^2$ |
| Shock resistance | | 196m/s$^2$ |
| Unit weight | | Approx.30g |
| Mechanical data | Cover retention | 160N min. |
| | Terminal retention | 100N min. |

## ORDERING INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| | HF3505 / HF3505A/ | 12 | -G | -B | (XXX) |
| **Type** | Suffix(A-Z) is for specific extending application | | | | |
| **Nominal voltage** | **12**: 12VDC | | | | |
| **Trigger level** | **G**: High level start up<br>**L**: Low level start up | | | | |
| **Mounting mode** | **B**: With bracket **Nil**: Without bracket | | | | |
| **Special code**[1)] | **XXX:** Customer special requirement **Nil:** Standard | | | | |

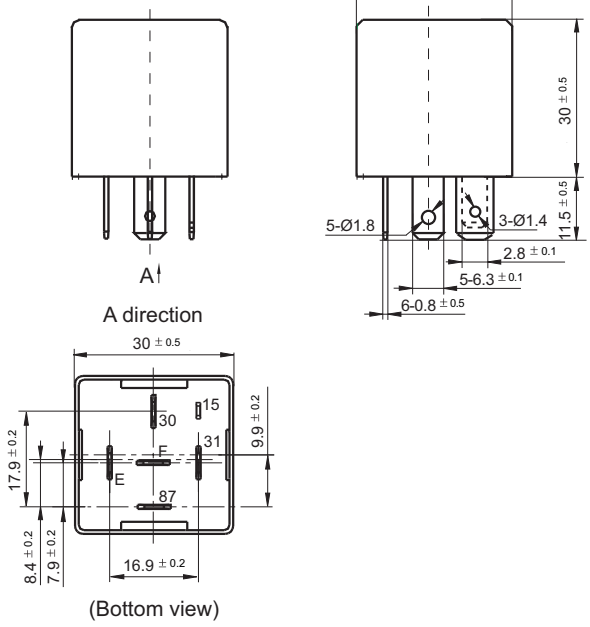
**Notes:** 1) The customer special requirement express as special code after evaluating by Hongfa.

## OUTLINE DIMENSIONS, WIRING DIAGRAM, LOGIC DIAGRAM

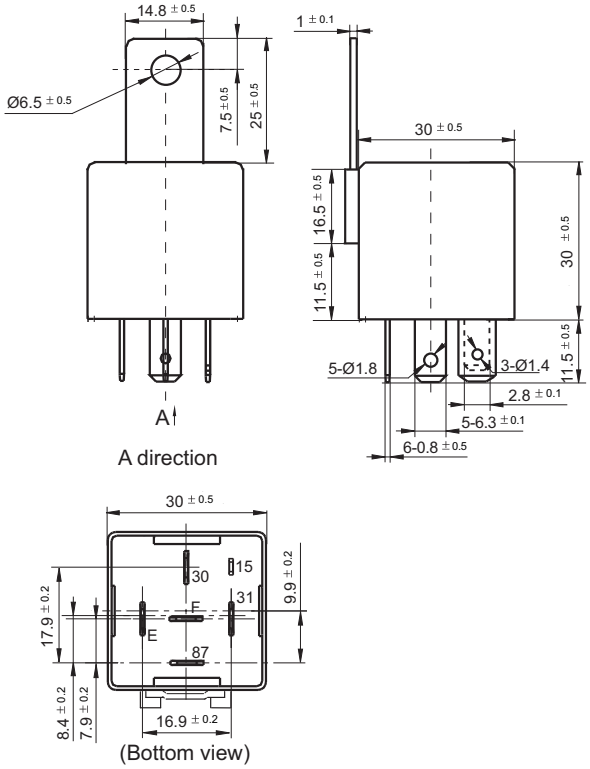
Unit: mm

### Outline Dimensions

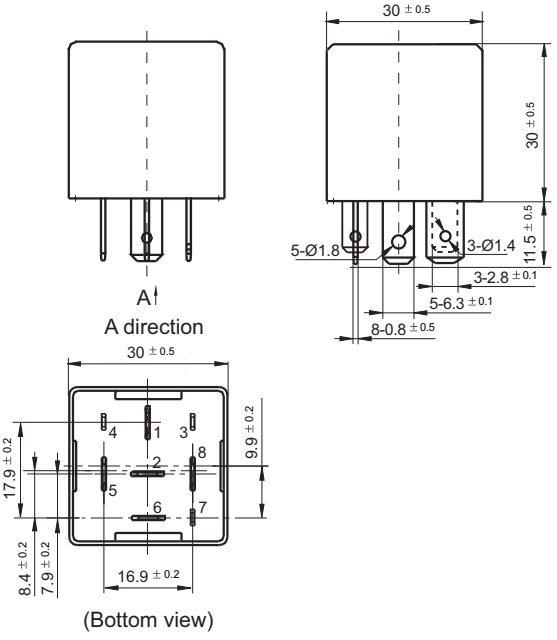
HF3505/12-□(XXX)



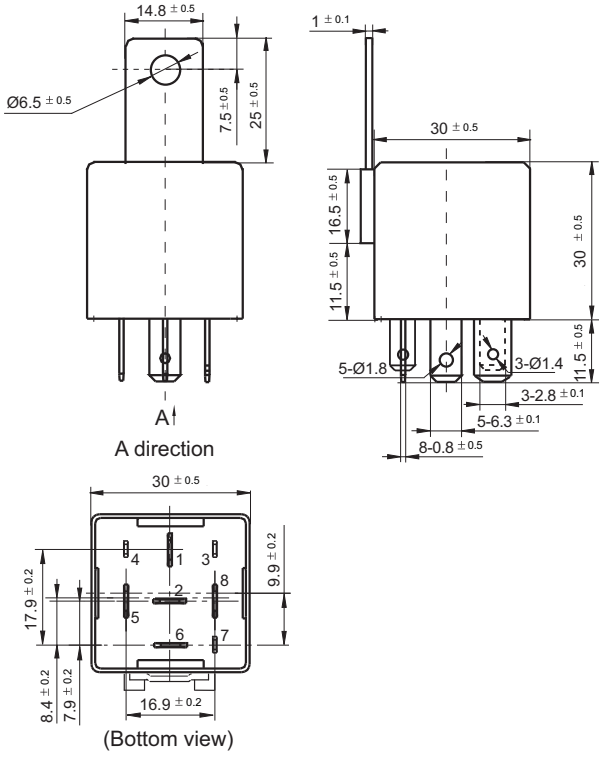

HF3505/12-□-B(XXX)




HF3505A/12-□(XXX)




HF3505A/12-□-B(XXX)

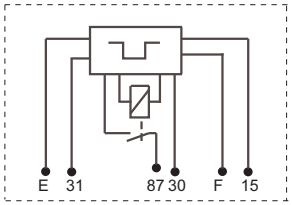


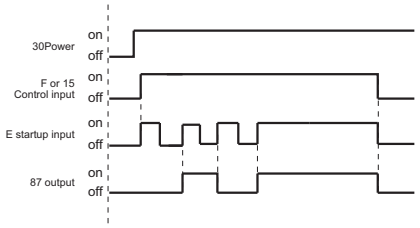
## OUTLINE DIMENSIONS, WIRING DIAGRAM, LOGIC DIAGRAM

Wiring Diagram

Logic Diagram

HF3505

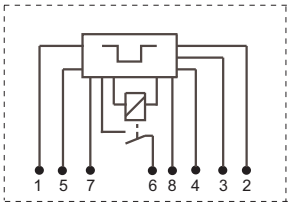


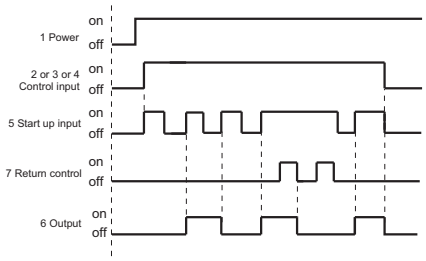




1) As shown in left diagram, for HF3505, the terminal 30 is connected with positive electrode of power supply, the terminal 31 is connected with negative electrode of power supply, the terminal F or terminal 15 is connected with switch, terminal 87 is connected with load.

2) Fog lamp energized control: When terminal 15 or F is at position of ready to connect (high voltage 9VDC to 16VDC), switch signal terminal E will change the connection of lamp load from off to on or from on to off when receive a signal. And the control will be changed along with the change of signal. The detail is as shown on left logic control diagram.

HF3505A




1) The terminal 1 is connected with positive electrode of power supply, the terminal 8 is connected with negative electrode of power supply, the terminal 2, 3, 4 is the signal input terminal, terminal 5 is the input terminal to start up or shut down signal, terminal 6 is the connection terminal for load. Terminal 7 is the input for reposition signal.

2) Fog lamp energized control: When any one of terminals 2, 3, 4 receive the function signal (high voltage 9VDC to 16VDC), and the terminal 5 receive the start-up terminal (effective for comes-up), then the lamp load will change from off to on, on the contrary the lamp load will change from on to off. The lamp condition will be changed along with the change of signal. The detail is as shown on logic control diagram.