# HF3631/12

# **AUTOMOTIVE SOLID STATE RELAY**



## **Typical Applications**

Suitable for controlling all types of resistive, inductive and capacitive loads, such as headlight switch.

#### **Features**

- No noise
- High electrical endurance
- Ambient temp.: range up to 110°C
- Low quiescent current (max.20µA)
- Pulse width modulation (PWM)
- Ingress protection: IP50
- RoHS & ELV compliant

### **CHARACTERISTICS**

Туре	Solid State Relay
Shell material	Plastic
Nominal voltage	12VDC
Operating voltage range	6VDC ~ 18VDC
Load capacity	≤1.5A (Resistive, 13.5VDC, 85°C)
	≤2A (Resistive, 13.5VDC, 23°C)
Turn-on voltage	≤8.5VDC(23°C)
Turn-off voltage	≥1.2VDC(23°C)
Quiescent current <sup>(1)</sup>	≤20µA(23°C)
Electrical endurance <sup>(2)</sup>	3×10⁵ OPS
Voltage drop	≤250mV(1A, 23°C)
Initial insulation resistance <sup>(3)</sup>	10ΜΩ
Ambient temperature	-40°C ~110°C

Vibration resistance	Sine	10Hz ~ 200Hz 49m/s <sup>2</sup>	
	Random	10Hz ~ 1000Hz 19.6m/s <sup>2</sup>	
Shock resistance	196m/s <sup>2</sup>		
Ingress protection		IP50	
Mechanical data	Cover retention: 160N min.		
	Terminal retention: 120N min.		
Unit weight	Approx.7.5g		

Notes: (1) Test voltage: 12.8VDC;

(2) Ambient temperature:85°C; Supply voltage:16VDC;

Load current:1.5A;

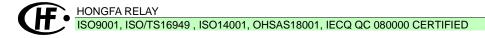
Switch sequence:2s ON,2s OFF;

(3) Test voltage: 500VDC, Duration: 60s.

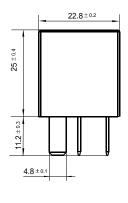
#### ORDERING INFORMATION

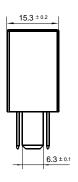
12 -H 1.5 HF3631/ **Type Nominal voltage** 12: 12VDC **Contact arrangement** H: 1 Form A Trigger level G: High level start-up L: Low level start-up **Electrical current specification 1.5**:1.5A 12:12A XXX: Customer special requirement Nil: Standard Special code1)

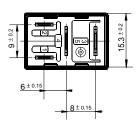
Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

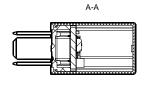


### **Outline Dimensions**

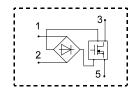




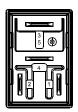




### Wiring Diagram



#### **Terminal Function Definition**



Terminal	Terminal dimension (mm)	Function
1	4.8	Input signal +/-
2	4.8	Input signal -/+
3	6.3	Power supply
5	6.3	Load output

#### Disclaime

The specification is for reference only. See to 'Terminology and Guidelines' for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.