

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
- The operating temperature is as high as 110°C
- Low quiescent current
- Pulse width modulation (PWM)
- Ingress protection: IP50
- RoHS & ELV compliant

CHARACTERISTICS

Type	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 ⁽¹⁾	≤ 20μA (23°C)
Electrical endurance ⁽²⁾	3 × 10 ⁵ OPS
Voltage drop	≤ 250mV (1A, 23°C)
Initial insulation resistance ⁽³⁾	10MΩ
Ambient temperature	-40°C ~ 110°C

Vibration resistance	Sine	10Hz ~ 200Hz 49m/s ²
	Random	10Hz ~ 1000Hz 19.6m/s ²
Shock resistance	196m/s ²	
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

	HF3631/	12	-H	L	1.5	(XXX)
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			
Special code¹⁾	XXX: Customer special requirement			Nil: Standard		

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa. e.g. (170) stands for flasher load. The performance parameters of products with characteristic numbers shall be subject to the specific specifications provided by Hongfa.

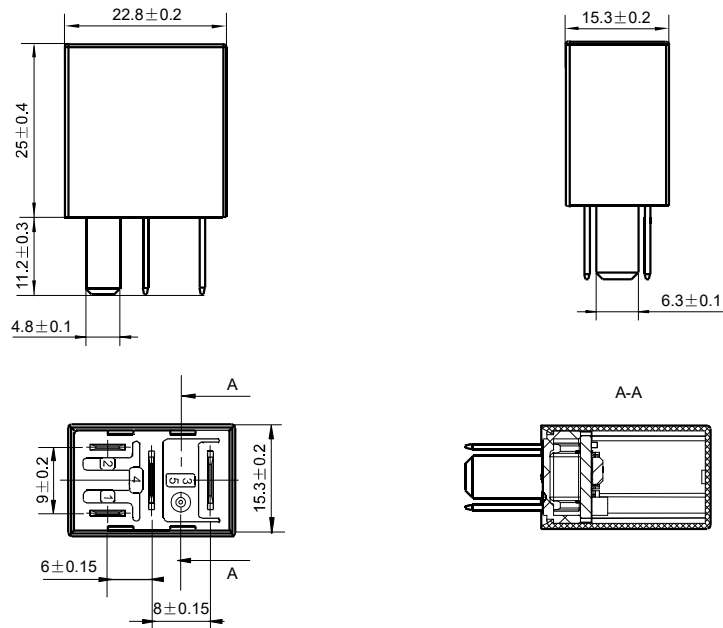


HONGFA RELAY

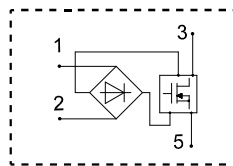
ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000, ISO/IEC 27001 CERTIFIED

2025 Rev. 1.00

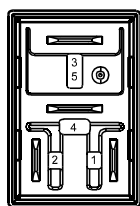
Outline Dimensions



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

Disclaimer

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.