

HFS32D(DC 100mA Type)

SOLID STATE RELAY



Features

- Small dimensions for high packing density PCB assembly or socket mount
- Photo isolation with 2500V dielectric strength
- Full compatibility to the electromechanical standard relay HF41F
- TTL and CMOS compatible
- For interface application between PLC and external loads
- Environmental friendly product (RoHS compliant)

DESCRIPTION

This SPST-NO SSR with small dimensions provides DC output switching for PCB assembly or socket mount occasion, especially for some high density mounting applications. The HFS32's DC input is compatible with 5V, 12V, 24V and 60V logic systems. The relays provide 2500Vrms opto-isolation between input and output.

The relays are full compatibility to the electromechanical standard relay HF41F, so is very convenient for using in industrial control.

INPUT PARAMETERS (Ta = 25°C)

Control voltage range		05D	4 VDC to 6VDC
		12D	9.6 VDC to 14.4VDC
		24D	19.2VDC to 28.8VDC
		60D	48 VDC to 72VDC
Must turn on voltage		05D	4VDC
		12D	9.6VDC
		24D	19.2VDC
		60D	48VDC
Must turn off voltage	Zero cross turn-on	05D	1VDC
		12D	3VDC
		24D	10VDC
		60D	20VDC
Max. Input current		05D	15mA
		12D	15mA
		24D	10mA
		60D	5mA

OUTPUT (Ta = 25°C)

Operating voltage range	48D	0 to 57.6VDC
Max. transient overvoltage	48D	58VDC
Load current ¹⁾		100mA
Max. on-state voltage drop		1.2VDC
Max. turn-on time		50μs
Max. turn-off time		300μs
Name of protection		Polarity protection



HONAF RELAY

ISO9001, ISO/TS16949, ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

2009 Rev. 1.02

GENERAL (Ta = 25°C)

Dielectric strength (input-output)		2500VAC 1min
Insulation resistance		1000MΩ (at 500VDC)
Vibration resistance		10 Hz to 55Hz 1.5mm DA
Ambient temperature	operating	-30°C to 80°C
	storage	-30°C to 100°C
Ambient humidity		45% to 85% RH
Unit weight		Approx. 4g
Shock resistance		Acceleration 1000m/s ² , continuous surge 11ms
Recommended soldering temperature		260 °C ,10s or 350°C,5s

Notes: 1) Refer to fig.1 Max.Load current vs.Ambient Temperature for load current.

ORDERING INFORMATION(AC Output Type)

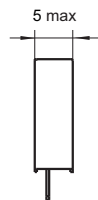
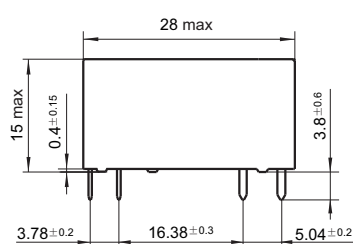
Type	HFS32D / 24D- 48D 0R1 T -N (XXX)
Input voltage	05D: 5VDC 12D: 12VDC 24D: 24VDC 60D: 60VDC
Load voltage	48D: 48VDC
Load current	0R1: 100mA
Output component	T: Transistor output
RC snubber	N: Without RC snubber
Special request code	

Notes: 1) The HFS32D is full compatible to the electromechanical standard relay HF41F by pins.

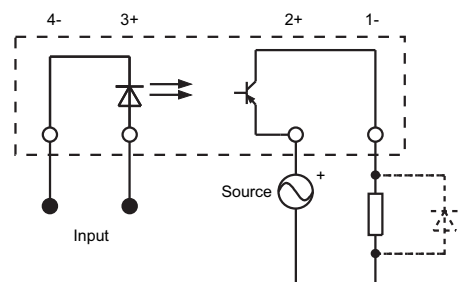
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions

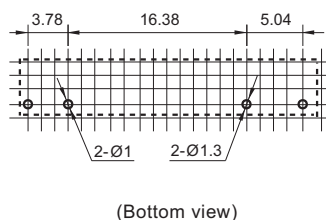


Wiring Diagram

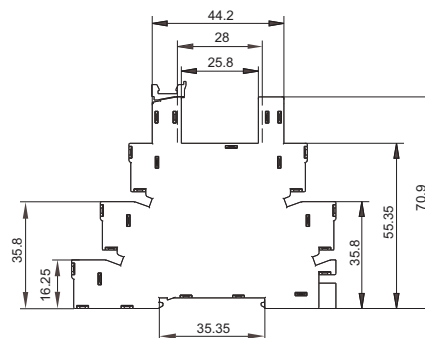


Mounting Holes Layout

PCB Layout



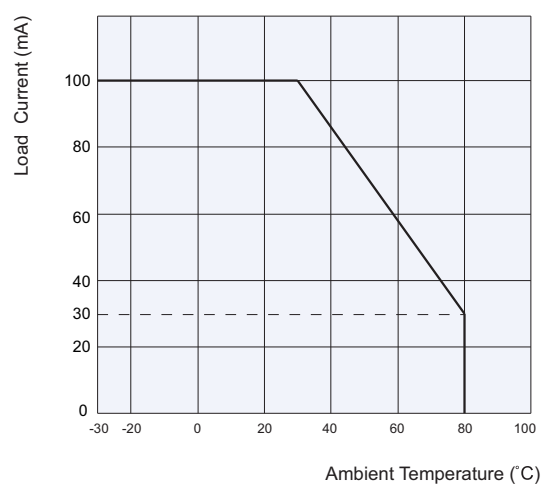
Socket Layout



CHARACTERISTIC CURVES

Max. Load Current vs. Ambient Temp.

HFS32D/□□D-□□D0R1T-N type



Disclaimer

This datasheet is for the customers' reference. All the specifications are 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.