

HFS40(JGX-40F)

SOLID STATE RELAY



Features

- 2500V dielectric strength
- LED status indicator
- Photo isolation
- Bipolar transistor output
- Printed circuit board mount
- RoHS compliant

INPUT

Control voltage range	05D	4 to 6VDC
	12D	9.6 to 14.4VDC
	24D	19.2 to 28.8VDC
Must operate voltage	05D	4VDC
	12D	9.6VDC
	24D	19.2VDC
Must release voltage	05D	1.0VDC
	12D	
	24D	
Max. reverse protection voltage	05D	-6VDC
	12D	-14.4VDC
	24D	-28.8VDC
Max. input current		20mA

OUTPUT

Load voltage range	50D: 3 to 52.8VDC
	100D: 3 to 125VDC
Load current range	0.01 to 2A
Max. surge current (10ms)	8A
Max. leakage current	0.1mA
Max. on-state voltage drop	1.5VDC
Max. turn-on time	1ms
Max. turn-off time	1ms
Max. transient overvoltage	50D: 80Vpk
	100D: 125Vpk

GENERAL

Dielectric strength		2500VAC, 50/60Hz, 1min.
Insulation resistance (input to output)		1000MΩ (at 500VDC)
Max. capacitance (input to output)		5pF
Shock durability		1000m/s ²
Ambient temperature	Operating	-30°C to +80°C
	Storage	-30°C to +100°C
Ambient humidity		45 to 85% RH
Unit weight		18g

DESCRIPTION

This SPST-NO printed circuit board mount SSR provides DC output switching in a high density package. The HFS40's DC input is compatible with 5, 12 and 24V logic systems. The relays include a LED indicator to provide input status information. The relays provide 2500VAC opto-isolation, between input and output. Encapsulation, thermally conductive epoxy.

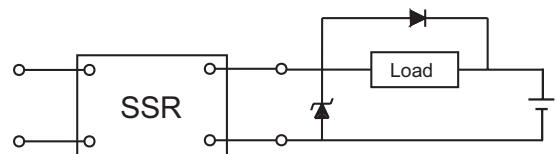
APPLICATIONS

- I/O interface
- Programmable controllers

PRECAUTIONS

1. Soldering must be completed within 10 seconds at 260°C or less or within 5 seconds at 350°C or less.
2. The SSR case serves to dissipate heat. Install the relays so that they are adequately ventilated. If poor ventilation is unavoidable, reduce the load current by half.
3. When using the HFS40 series for a DC load with a peak voltage of more than rated voltage, connect the load terminals of the relay to an inrush absorber (varistor).
4. Before connecting a load that generates a high surge current, such as a lamp load to the SSR, make sure that the SSR can withstand the surge current of the load.
5. The product data sheet shows the non-repetitive peak value of the surge current that flows through the SSR. Normally, use 1/2 the non-repetitive peak surge current as the standard value.

If a surge current exceeding that value is expected, connect a quick-blowing fuse to protect the SSR.



HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2006 Rev. 2.00

ORDERING INFORMATION

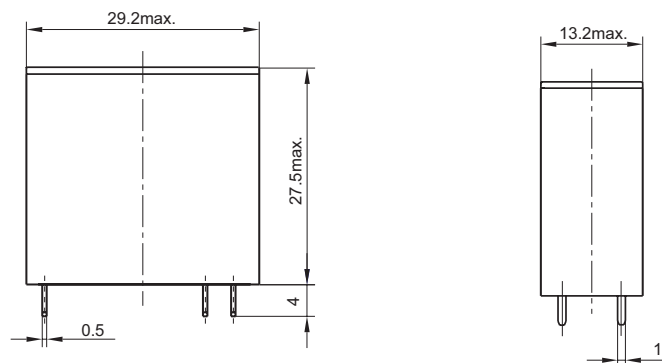
Type	HFS40 / 05 D- 50 D 2 T- L XXX									
Input voltage	05: 4 to 6V 12: 9.6 to 14.4V 24: 19.2 to 28.8V									
Input voltage form	D: DC									
Load voltage	50: 50V 100: 100V									
Load voltage form	D: DC									
Load current	2: 2A									
Output component	T: Transistor output									
LED indicator	L: With LED									
Special request code	(Only for special requirements, e.g. 555 stand for RoHS compliant)									

Notes: HFS40 is an environmental friendly product, please mark special code (555) when order.

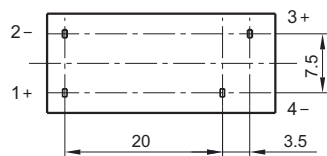
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

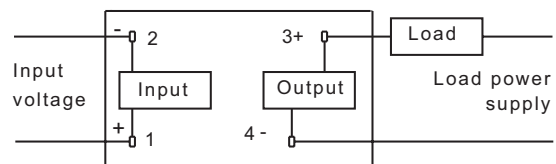
Outline Dimensions



PCB Layout

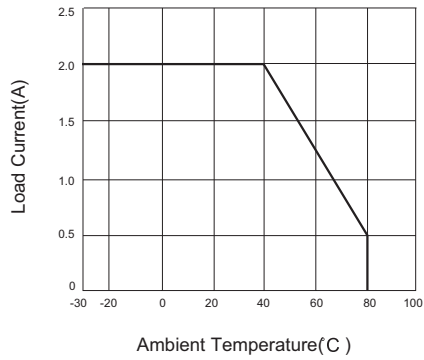


Wiring Diagram

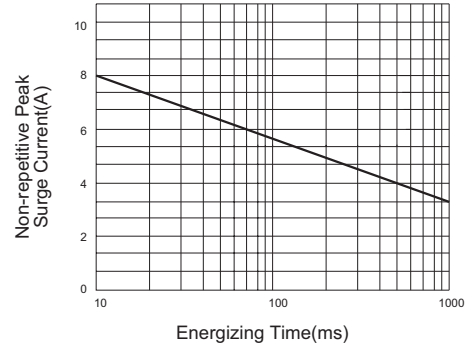


CHARACTERISTIC CURVE

Max. Load Current
vs. Ambient Temperature



Max. Permissible Non-repetitive
Peak Surge Current vs. Energizing Time



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.