

# HFS27 (DC type)

# SOLID STATE RELAY



File No.:E134481



File No.:R50087694



### Features

- Bipolar transistor output
- Photo isolation
- 2500V dielectric strength
- Single in-line PCB package
- RoHS compliant

### INPUT (TA = 25°C)

Rated input voltage	05D	5VDC
	12D	12VDC
	24D	24VDC
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		1VDC
Input current	05D	20mA
	12D	20mA
	24D	16mA
Input resistance	05D	300Ω
	12D	800Ω
	24D	2000Ω

### OUTPUT (TA = 25°C)

Type	<input type="checkbox"/> D-50D2T	<input type="checkbox"/> D-100D2T
Rated load voltage	4 to 50VDC	4 to 100VDC
Load voltage range	3 to 60VDC	3 to 100VDC
Max. transient overvoltage	66Vpk	110Vpk
Load current	0.1 to 2A	
Max. surge current (10ms)	8Apk	
Max. output on voltage drop	1.5Vrms	
Max. output on leakage current	0.1mA	
Max. turn-on time	0.5ms	
Max. turn-off time	1ms	

### GENERAL (TA = 25°C)

Dielectric strength (input to output)	2500VAC, 50/60Hz, 1min
Insulation resistance (input to output)	1000MΩ (at 500VDC)
Max. capacitance (input to output)	8pF
Shock resistance	Acceleration: 1000m/s <sup>2</sup> , continuous surge: 11ms
Vibration resistance	10 to 55Hz 1.5 mm DA
Ambient humidity	45% to 85% RH
Operating temperature	-30°C to 85°C
Storage temperature	-30°C to 100°C
Unit weight	Approx. 20g
Recommended soldering temperature	260°C, 10s or 350°C, 5s

### DESCRIPTION

HFS27 is a SPST-NO printed circuit mount SIP, DC output SSR. The HFS27 DC SSR range offers a choice of 50VDC, 100VDC versions. Input voltage specifications have 5VDC, 12VDC and 24VDC. Thanks to excellent structure designing, it has 2A load current under poor ventilation.



HONGFA RELAY

ISO9001, ISO/TS16949, ISO14001, OHSAS18001 CERTIFIED

2007 Rev. 1.00

## ORDERING INFORMATION

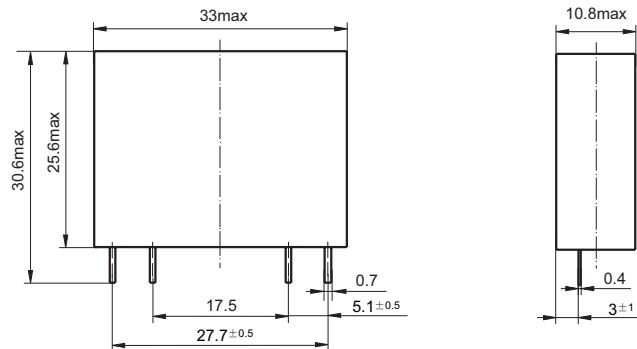
Type	HFS27 /	05D	50D	2	T	(XXX)
Input voltage	05D: 4 to 6VDC 12D: 9.6 to 14.4VDC		24D: 19.2 to 28.8VDC			
Load voltage	50D: 3 to 60VDC		100D: 3 to 100VDC			
Load current	2: 0.1 to 2A					
Output component	T: Transistor output					
Customer special code	Only for special requirements, e.g. (555) stands for RoHS compliant					

Notes: HFS27 is an environmental friendly product, please mark special code (555) when order.

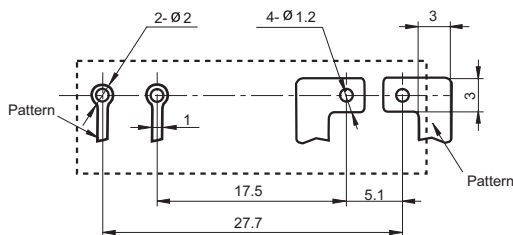
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

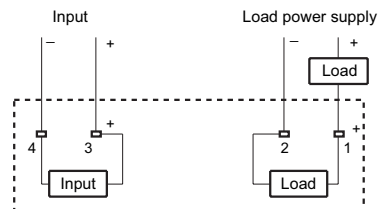
### Outline Dimensions



### PCB Layout (Bottom view)

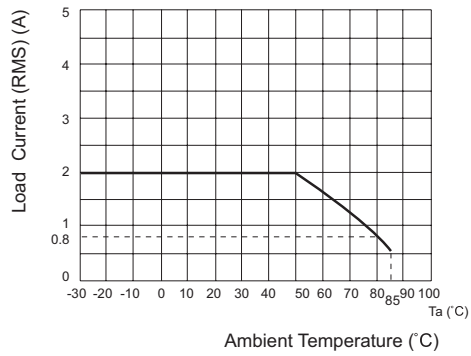


### Wiring Diagram (Bottom view)

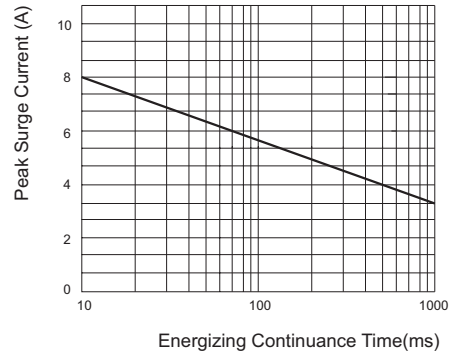


## CHARACTERISTIC CURVES

Max. Load Current vs. Ambient Temp. (2A)



Max. Permissible Non-repetitive Peak Surge Current vs. Continuance 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.