

HF162F/HF162F-E SUBMINIATURE INTERMEDIATE POWER RELAY

UL US

File No.:E133481



Pending



Features

- High inrush current: TV-8 125VAC (118A inrush current)
- 3A/100A 250VAC capacitive load
- Low height, only 9.3mm (excluding buttons)
- High sensitivity: 250mW,
Ideal for device power reduction
- Silent type available
- Typical applications: Flat-panel TVs, Audio visual equipment and other slim profile devices
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (26.3 x 26.1 x 10.0) mm

CONTACT DATA

Contact arrangement	1A
Contact resistance	100mΩ (at 1A 6VDC)
Contact material	Silver alloy
Contact rating	10A 125VAC 8A 277VAC 5A 277VAC TV-8 125VAC 3A/100A 250VAC (Capacitive)
Max. switching voltage	277VAC
Max. switching current	10A
Max. switching power	2216VA
Mechanical endurance	1 x 10 ⁶ OPS
Electrical endurance	1 x 10 ⁵ OPS (See approval reports for more details)

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	1000VAC 1min
Surge voltage (between coil & contacts)	10kV (1.2 x 50μs)	
Operate time (at nomi. volt.)	15ms max.	
Release time (at nomi. volt.)	5ms max.	
Ambient temperature	-40°C to 70°C	
Humidity	5% to 85% RH	
Shock resistance	Functional	196m/s ²
	Destructive	980m/s ²
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Termination	PCB	
Unit weight	Approx. 12g	
Construction	Flux proofed	

Notes: 1) The data shown above are initial values.

2) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power	250mW
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COIL DATA

at 23°C

Standard type

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.25	0.3	3.9	36 x (1±10%)
5	3.75	0.5	6.5	100 x (1±10%)
6	4.5	0.6	7.8	145 x (1±10%)
9	6.75	0.9	11.7	325 x (1±10%)
12	9.0	1.2	15.6	575 x (1±10%)
18	13.5	1.8	23.4	1300 x (1±10%)
24	18.0	2.4	31.2	2300 x (1±10%)

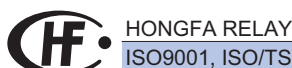
Silent type

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.4	0.3	3.9	36 x (1±10%)
5	4.0	0.5	6.5	100 x (1±10%)
6	4.8	0.6	7.8	145 x (1±10%)
9	7.2	0.9	11.7	325 x (1±10%)
12	9.6	1.2	15.6	575 x (1±10%)
18	14.4	1.8	23.4	1300 x (1±10%)
24	19.2	2.4	31.2	2300 x (1±10%)

SAFETY APPROVAL RATINGS

UL/CUL	10A 125VAC 8A 277VAC 5A 277VAC TV-8 125VAC
	SEMKO (Pending) 3A/100A 250VAC, 40T85μ

Notes: Only some typical ratings are listed above. If more details are required, please contact us.



HONGFA RELAY

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

2010 Rev. 1.00

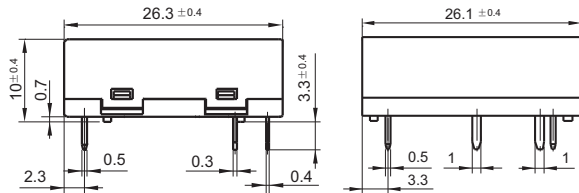
ORDERING INFORMATION

	HF162F /	12	-H	(XXX)
Type	HF162F: Standard type HF162F-E: Silent type			
Coil voltage	3, 5, 6, 9, 12, 18, 24VDC			
Contact arrangement	H: 1 Form A			
Customer special code				

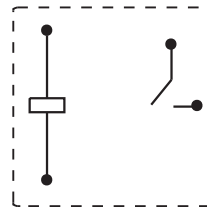
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

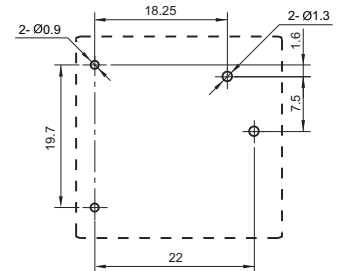
Outline Dimensions



Wiring Diagram
(Bottom view)



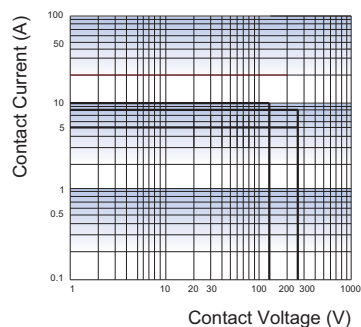
PCB Layout
(Bottom view)



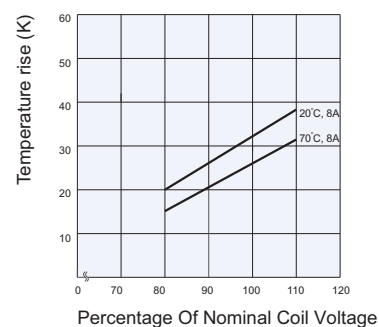
- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.
2) The tolerance without indicating for PCB layout is always ± 0.1 mm.

CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



COIL TEMPERATURE RISE



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.

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