

HF195F

MINIATURE HIGH POWER RELAY



File No.: E133481



File No.: R50530822



File No.: CQC21002323731



Features

- Able to work in a fluorine liquid environment
- 32A carrying capability
- 4kV dielectric strength(between coil and contacts)
- Contact gap:≥2.4mm
- Meet to IEC62368-1 Clause G2.1 and G2.2
- UL insulation system:Class F
- Outline Dimensions: (26.6 × 22.2 × 29) mm

RoHS compliant

CONTACT DATA

Contact arrangement	1A
Contact resistance	10mΩ max.(20A 6VDC)
Contact material	AgSnO ₂
Max. Switching voltage	277VAC
Max. Carrying current	32A
Mechanical endurance	1×10 ⁵ ops
	1×10 ⁴ ops
Electrical endurance	(Making 5A, Carrying 32A, Breaking 5A, 277VAC, Resistive load, 85°C, 1s on 9s off)

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

COIL

Coil power	Approx. 2.8W
Holding voltage	32% to 36%U _N (at 85°C)

Notes: 1) The coil holding voltage is the voltage applied to coil 200ms after the rated voltage.
 2) To avoid overheating and burning, the coil can not be consistently applied to with voltage larger than maximum holding voltage.
 3) To energize relay properly apply 100%~120% rated coil voltage for 200ms.

COIL DATA

23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min	Max. Allowable Voltage VDC	Coil Resistance Ω
12	9.6	0.6	13.2	51×(1±10%)
24	19.2	1.2	26.4	206×(1±10%)
48	38.4	2.4	52.8	823×(1±10%)

Notes: 1) The data shown above are initial values.
 2) Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time.

CHARACTERISTICS

Insulation resistance		1000MΩ(500VDC)
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	2000VAC 1min
Surge Voltage(Between coil & contacts)		6kV(1.2×50μs)
Operate time (at nomi. volt.)		10ms max.
Release time (at nomi. volt.)		5ms max.
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		5% to 85%RH
Ambient temperature		-40℃ to 85℃
Termination		PCB
Unit weight		Approx.30g
Construction		Plastic sealed

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

SAFETY APPROVAL RATINGS

UL/CUL	Making 5A, Loading 32A, Breaking 5A 277VAC 85°C
	Making 5A, Loading 25A, Breaking 5A 277VAC 105°C
TUV	Making 5A, Loading 32A, Breaking 5A 277VAC 85°C
	Making 5A, Loading 25A, Breaking 5A 277VAC 105°C

Notes: The typical loads listed above are only part of the product certification. The detailed test conditions of each load are different, so the electrical durability is different. For more information, please contact us.



HONGFA RELAY

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

2023 Rev. 2.00

ORDERING INFORMATION

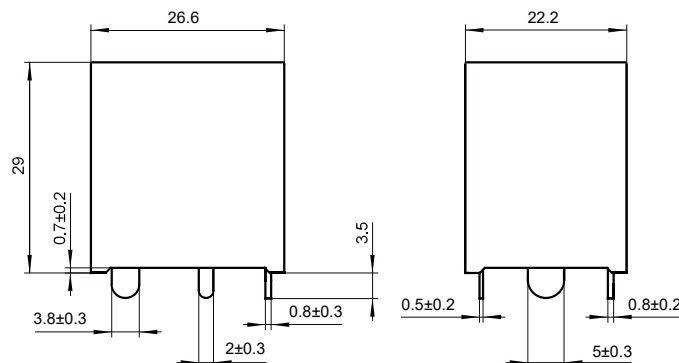
Type	HF195F/	12	-H	S	1	T	F	(XXX)
Coil voltage	12, 24, 48VDC							
Contact arrangement	H: 1 Form A							
Construction	S: Plastic sealed							
Version	1: Type 1 PCB layout							
Contact material	T: AgSnO ₂							
Insulation standard	F: Class F							
Special code	XXX: Customer special requiremen; Nil: Standard							

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

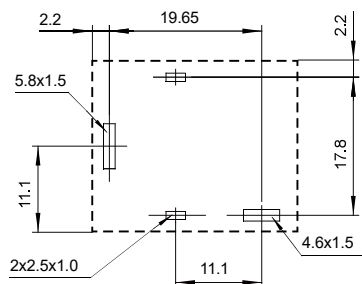
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

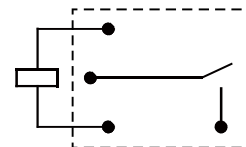
Outline Dimensions



PCB Layout(Bottom view)



Wiring Diagram(Bottom view)



- Notes: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$ and $\leq 30\text{mm}$, tolerance should be $\pm 0.4\text{mm}$; outline dimension $> 30\text{mm}$, tolerance should be $\pm 0.6\text{mm}$.
2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

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.

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