

HF32FV-16

SUBMINIATURE HIGH POWER RELAY



File No.: E134517



File No.: 40012204



File No.: CQC14002120720



Features

- 16A switching capability
- Dielectric strength 4kV(between coil and contacts)
- 1 Form A configuration
- UL insulation system: Class F
- Product in accordance to IEC 62368-1 available

CONTACT DATA

Contact arrangement	1A
Contact resistance ¹⁾	≤100mΩ (at 1A 6VDC)
Contact material	AgSnO ₂
Contact rating(General use)	16A 250VAC
Max. switching voltage	250VAC
Max. switching current	16A
Max. switching power	4000VA
Mechanical endurance	1 x 10 ⁶ 次
Electrical endurance	1 x 10 ⁴ 次 (16A 250VAC, General use, 85°C, 1s on 9s off) 5 x 10 ⁴ 次 (16A 250VAC, Resistive load, 85°C, 1s on 9s off)

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

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)		10ms max.
Release time (at nomi. volt.)		5msmax.
Humidity	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		5% to 85% RH
Ambient temperature		-40°C to 85°C
Termination		PCB
Unit weight		Approx. 7g
Construction		Flux proofed

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

COIL

Coil power	Standard:Approx. 800mW Sensitive type:Approx.400mW
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COIL DATA

at 23°C

Standard type

Nominal Voltage VDC	Pick-up Voltage VDC max. ¹⁾	Drop-out Voltage VDC min. ¹⁾	Max. Voltage VDC *2)	Coil Resistance Ω
12	≤9	≥1.2	13.2	180 x (1±10%)
24	≤18	≥2.4	26.4	720 x (1±10%)

L type

Nominal Voltage VDC	Pick-up Voltage VDC max. ¹⁾	Drop-out Voltage VDC min. ¹⁾	Max. Voltage VDC *2)	Coil Resistance Ω
5	≤3.5	≥0.5	6.5	62 x (1±10%)
12	≤9	≥1.2	15.6	360x (1±10%)
24	≤18	≥2.4	31.2	1440 x (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.

3) When using standard products,it needs to drive at rated voltage,and then step down the voltage (50% of rated voltage) to hold.

SAFETY APPROVAL RATINGS

UL/CUL	1 Form A	16A 250 / 277VAC at 85°C
VDE	1 Form A	16A 250VAC at 85°C
CQC	1 Form A	16A 250VAC at 85°C

Notes: 1) Only typical loads are listed above. Other load specifications can be available upon request.



HONGFA RELAY

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

2019 Rev. 1.00

ORDERING INFORMATION

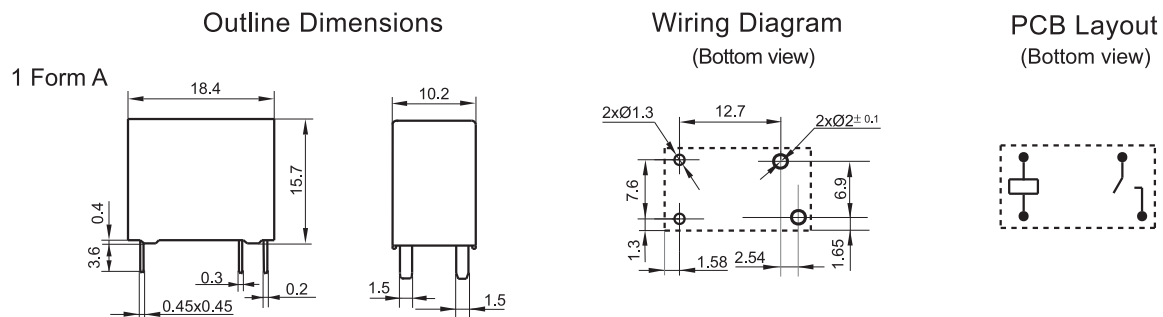
Type	HF32FV-16/	12	-H	L ¹⁾	T	F	(XXX)
Coil voltage	5(Only for L type), 12, 24VDC						
Contact arrangement	H: 1 Form A						
Coil power	L: Sensitive Nil: Standard						
Contact material	T: AgSnO ₂						
Insulation standard	F: Class F						
Special code ¹⁾	XXX: Customer special requirement Nil: Standard						

Notes: 1) Sensitive type approval is pending.

2) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

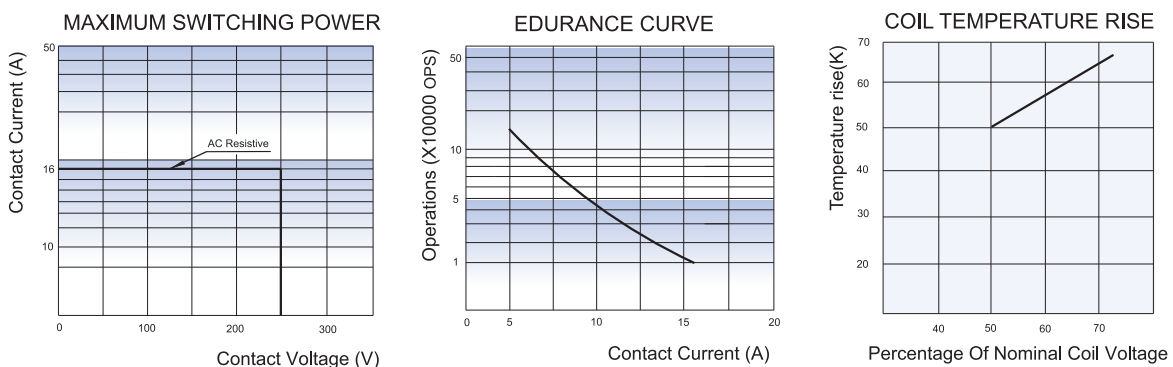
Unit: mm



Remark: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 $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

CHARACTERISTIC CURVES



Test conditions: General use, 250VAC
cos ϕ 0.75, 85°C, 1s on 9s off

Test conditions: 85°C 16A
Mounting distance: 10mm
Driving voltage: Coil activated with rated voltage, then reduce to 50% of rated voltage.

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.