HF183F-Q MINIATURE HIGH-POWER DC RELAY

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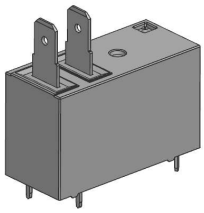


Features

- With 1 Form A 16A contact switching capability
- Low height: 17.9mm（QC terminal 27.6mm）
- Meet the reinforced insulation requirements specified in IEC61810, 60335, and 60730
- PCB,QC
- IEC60335-1 compliant products are available
- UL insulation system:Class F
- It is an environmental friendly product（RoHS compliant）
- The maximum ambient temperature reaches 85℃

RoHS compliant

CONTACT DATA

Contact arrangement	1A
Contact resistance	100mΩ max.(1A 6VDC)
Contact material	$AgSnO_2$
Contact rating(Res. load)	16A 250VAC
Max. swtiching voltage	250VAC
Max. switching current	16A
Max. switching power	4000VA
Mechanical endurance	1×10^6OPS
Electrical endurance	1×10^5OPS (16A 250VAC,Resistive load, 23℃, 1s on 9s off)

CHARACTERISTICS

Insulation resistance		1000MΩ(500VDC)
Dielectric strength	Between open contacts	5000VAC 1min
	Between coil & contacts	1000VAC 1min
Surge voltage		10kV(1.2/50μs)
Set time(at rated. volt.)		10ms max.
Release time(at rated. volt.)		5ms max.
Shock resistanc	Functional	$98m/s^2$
	Destructive	$980m/s^2$
Vibration resistance		10Hz to 150Hz 2.0 10g
Humidity		5 % to 85 % RH
Ambient temperature		-40℃ to 85℃
Termination		PCB
Unit weight		Approx. 15g
Construction		Flux proofed

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

COIL

Coil power	Approx. 530mW

COIL DATA 23℃

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC*	Coil Resistance Ω
5	3.5	0.5	7.5	47.2×(1±10%)
6	4.2	0.6	9.0	66.6×(1±10%)
9	6.3	0.9	13.5	152.8×(1±10%)
12	8.4	1.2	18	271.7×(1±10%)
18	12.6	1.8	27	611×(1±10%)
24	16.8	2.4	36	1086×(1±10%)
48	33.6	4.8	72	4347×(1±15%)

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

SAFETY APPROVAL RATINGS

UL/CUL	16A 250VAC Resistive load 23℃ 16A 250VAC Resistive load 85℃
TUV	16A 250VAC Resistive load 23℃ 16A 250VAC Resistive load 85℃

Notes: 1) Only some typical rating are listed above.If more details are required,please contact us.

ORDERING INFORMATION

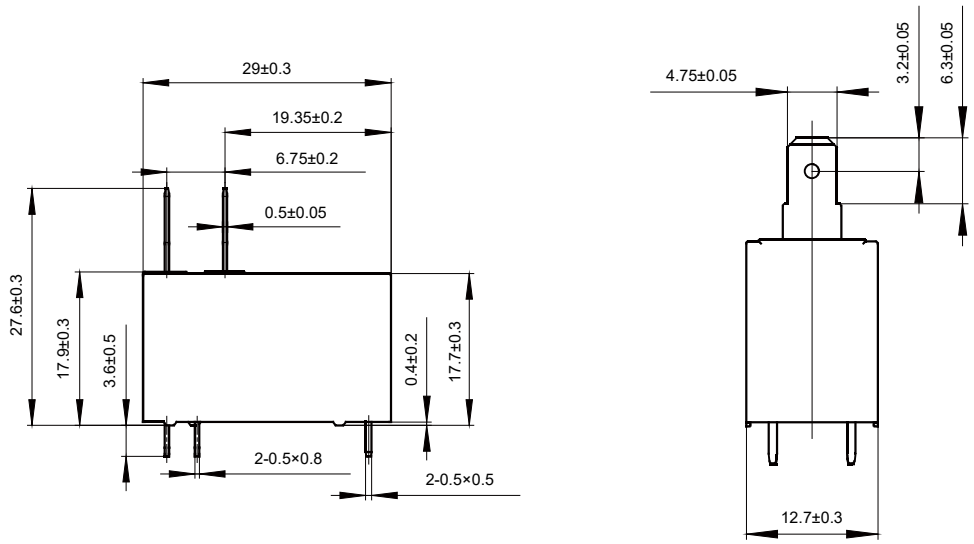
	HF183F-Q/	12	-H	3	T	F	（XXX）
Type							
Coil voltage	5,6,9,12,18,24,48VDC						
Contact arrangement	**H:** 1 Form A						
Structure	**3:** PCB,QC						
Contact material	**T:** $AgSnO_2$						
Insulation standard	**F:** Class F						
Special code[3)]	**XXX:** Customer special requirement			**Nil:** Standard type			

Notes: 1) Flux-proofed relays can not be used in the environment with pollutants like H_2S, SO_2, NO_2, dust, etc.
2) Water cleaning or surface process is not suggested after the flux-proofed relays are assembled on PCB.
3) The customer special requirement express as special code after evaluating by Hongfa.e.g.(335) stands for product in accordance to IEC 60335-1(GWT).

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

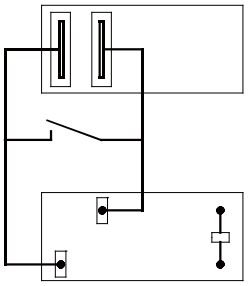
Outline Dimensions



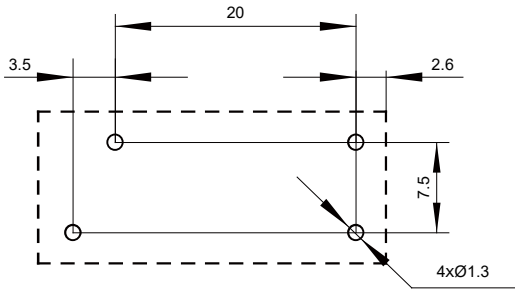
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Wiring Diagram



PCB Layout(Bottom view)



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