

POWER RELAY

HJR-21FD(-T)

- 20A switching capability
- TV-8 125VAC
- Surge voltage up to 6kV(Between coil and contacts)
- 105°C
- Plastic sealed and flux proofed types available
- RoHS Compliant



CONTACT DATA

Contact Arrangement	1H/1Z	
Contact Material	Silver Alloy	
Load	Resistive load (cos Φ=1)	
Contact Ratings	1H: 17A 277VAC TV-8@ 125VAC;	1Z: (NO/NC)17A/10A 277VAC
Min. Contact Load	100mA 5VDC	
Max. Switching Voltage	277VAC	
Max. Switching Current	20A	
Max. Switching Power	4700VA	
Contact Resistance	≤100mΩ (6VDC 1A)	
Electrical Endurance	1 × 10 ⁵ OPS(at 6 OPS/min)	
Mechanical Endurance	1 × 10 ⁷ OPS(at 300 OPS/min)	

CHARACTERISTICS

Insulation Resistance		100MΩ Min. at 500VDC
Dielectric Strength	Between Open Contacts	1000VAC (50/60Hz 1 min)
	Between Contacts and Coil	2500VAC (50/60Hz 1 min)
Surge Voltage Between Contacts & Coil		6KV (1.2×50μs)
Operate Time		≤15ms
Release Time		≤10ms
Ambient Temperature		-40°C ~ +85°C(-T: 105°C) no freezing
Shock Resistance	Functional : 10G	
	Destructive : 100G	
Vibration Resistance		10~55Hz, 1.5mm DA
Humidity		20~85%
Unit Weight		Approx. 14g
Construction		Plastic Sealed

■ COIL DATA (at 23°C)

Rated Voltage (VDC)	3	5	6	9	12	18	24	48	0.36 W
Coil Resistance ($\Omega \pm 10\%$)	25	70	100	225	400	900	1600	6400	
Rated Current (mA)	120	72	60	40	30	20	15	7.5	
Max. Operate Voltage (VDC)	2.25	3.75	4.5	6.75	9	13.5	18	36	
Min. Release Voltage (VDC)	0.15	0.25	0.3	0.45	0.6	0.9	1.2	2.4	
Max. Voltage	3.9	6.5	7.8	11.7	15.6	23.4	31.2	62.4	

Remark: Max. Voltage refers to the maximum voltage which relay coil could endure in a period of time..

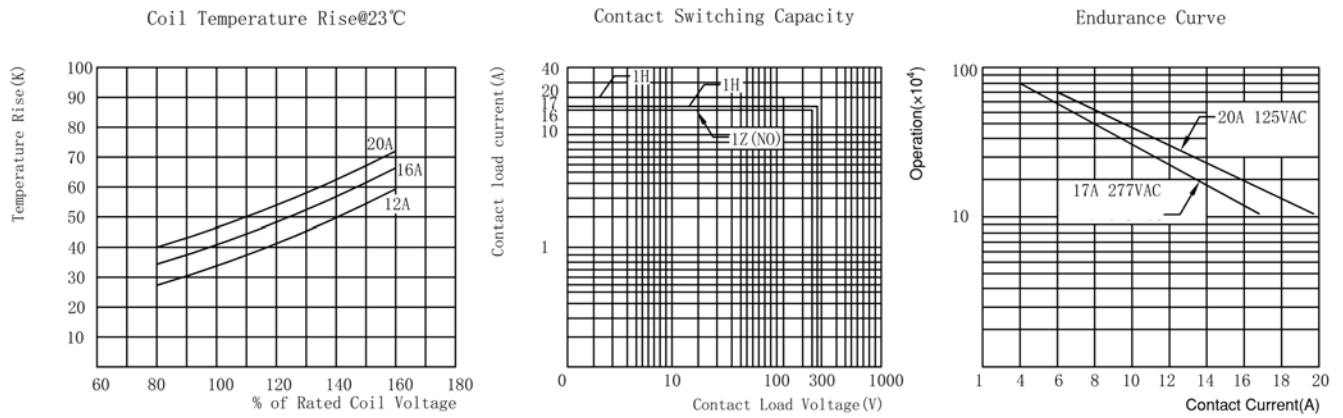
■ SAFETY APPROVED RATINGS

Type	Coil Voltage	Safety Approval	Contact Ratings
HJR-21FD HJR-21FD-T	3 ~ 48VDC	UL	NO: 17A 277VAC; 1HP 277VAC 1/2HP 125VAC TV-8@125VAC NC: 10A 277VAC 1/HP 277VAC
		TÜV	NO: 17A 277VAC 8A 277VAC $\cos \phi = 0.4$ 7A 400VAC NC: 10A 277VAC
		CQC	NO: 17A 277VAC; NC: 10A 277VAC

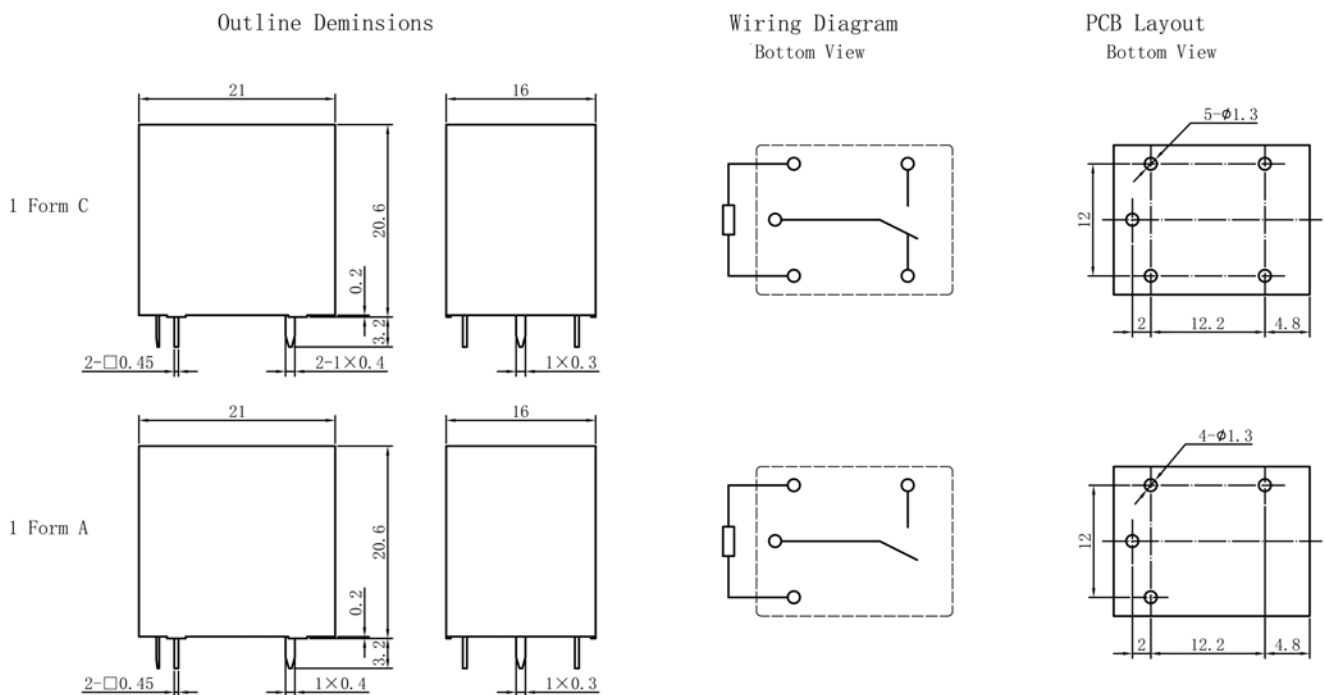
■ ORDERING INFORMATION

	HJR-21FD	D	-SS	-1	12	H	3	F	-(XX)
Type	HJR-21FD: 85°C HJR-21FD-T: 105°C								
Coil Power	D: 0.36W								
Construction	SS: Plastic sealed SH: Flux proofed								
Contact Sets	1: 1 group								
Coil Voltage	03, 05, 06, 09, 12, 18, 24, 48VDC								
Contact Arrangement	H: 1 Form A Nil: 1 Form C								
Contact Material	Nil: AgSnO ₂ 1: AgCdO 3: AgNi								
Insulated Standard	F: Class F(155°C) (155°C) Nil: Standard Type								
Special Code	XX: Customer Special Requirement IT: Compliant with IEC 60335-1 (GWT) Nil: Standard Type IT: IEC 60335-1 (GWT)								

■ CHARACTERISTIC CURVES



■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT



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 additional tin top is max. 1mm.
- 3) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Disclaimer:

The specification is for reference only. Specification subject to change without notice.