

PCB

HJR-21FF

- 12A switching capability
- SPST-NO configuration
- Small footprint
- Sealed version available
- Class B/F available
- Conform to RoHS,ELV directive



ORDERING CODE

HJR-21FF — S — H * (TBF-1) / 12VDC / XX						
1	2	3	4	5	6	7
1. Relay Model						
2. S: Sealed						
3. H: Form A Z: Form C						
4. F: TUV 105°C Nil: TUV 85°C						
				5. Insulated Level TBF - 1 : Class F Nil: Standard Type		
				6. Coil Nominal Voltage 3,5,6,9,12,18,24,48VDC		
				7. IT : G W IT 750°C(at 2 s) Nil: Standard Type		

COIL DATA (at 20°C)

Nominal Voltage (VDC)	3	5	6	9	12	24	48	0.36W
Coil Resistance ($\Omega \pm 10\%$)	25	69	100	225	400	1600	6400	
Rated Current (mA)	120	71.4	60	40	30	15	7.5	
Max Operate Voltage (VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min Release Voltage (VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Coil Resistance ($\Omega \pm 10\%$)	20	56	80	180	320	1280	5120	0.45W
Rated Current (mA)	150	90	75	50	37.5	18.7	9	
Max Operate Voltage (VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min Release Voltage (VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Max Applicable Voltage	70°C 130%, 23°C 170%							

CONTACT DATA

Contact Form	1H/1Z	
Contact Material	Silver Alloy	
Load	Resistive load(COS Φ =1)	
Contact Ratings	1H:12A 240VAC 15A 125VAC(TUV) 15A120VAC , TV-5A@120VAC	1Z:10A 240VAC 12A 120VAC , TV-5A@120VAC 15A 125VAC(TVU)
Minimum load	10mA 5VDC	
Max Switching Voltage	250VAC/30VDC	
Max Switching Current	15A	
Max Switching Power	2770VA/240W	
Contact Resistance	100m Ω Max at 6VDC 1A	
Life Expectancy	Electrical : 100, 000 Operations(at30Operations/minute)	
	Mechanical : 10, 000, 000 Operations(at300Operations/minute)	

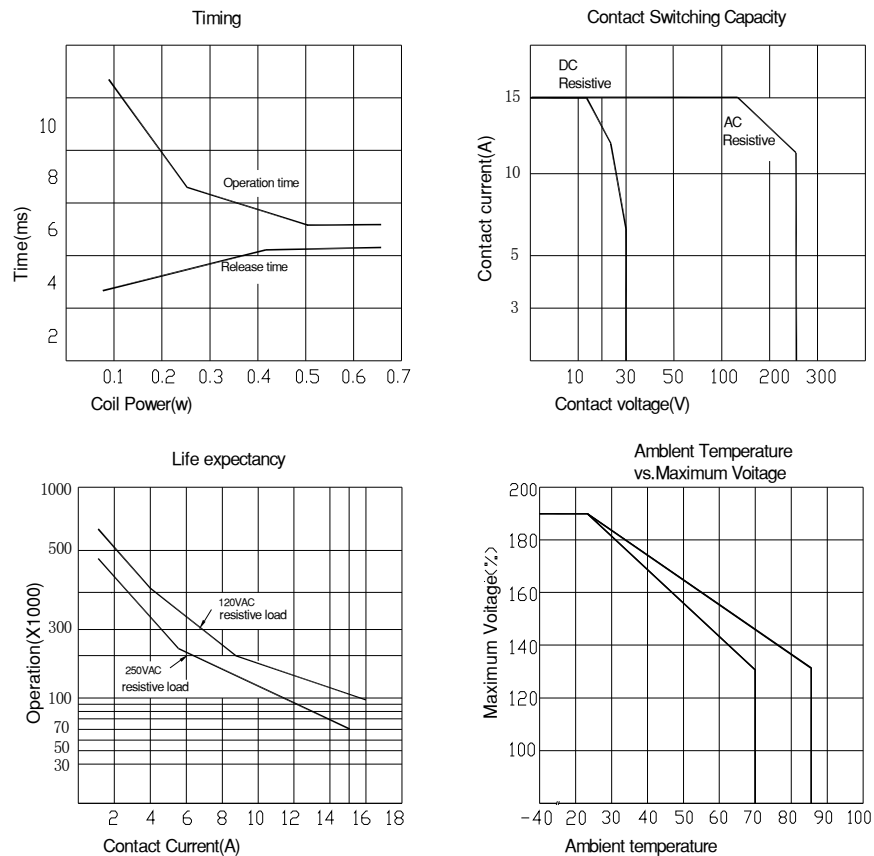
■ CHARACTERISTICS DATA

Insulation Resistance	100M Ω Min at 500VDC
Dielectric Strength Between Open Contacts	750VAC(for one minute)
Between Contacts and coil	1500VAC(for one minute)
Operate Time	10ms
Release Time	5ms
Temperature Range	-40°Cto+70°C (Class F:85°C)
Shock Resistance	Operating Extremes : 10G
	Damage Limits : 100G
Vibration Resistance	10-55Hz, 1.5mm
Max. switching frequency	Mechanical:18,000operations/hr
	Electrical:1,800operations/hr
Humidity	40-85%
Weight	Approx 13g
Safety Standard	UL cUL TÜV CQC

■ APPROVED STANDARDS

Model	Coiling rating	Safety Standard	Contact rating
HJR-21FF	3 to 48VDC	UL/cUL	H: 15A 120VAC 12A 240VAC TV-5A@ 120VAC
			Z,D: 12A 120VAC 10A 240VAC TV-5A@ 120VAC
		TÜV	H: 15A 125VAC 12A 240VAC
			Z: 15A 125VAC 10A 240VAC
		CQC	10A: 240VAC
			H: 12A 240VAC

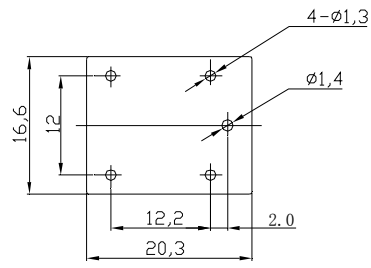
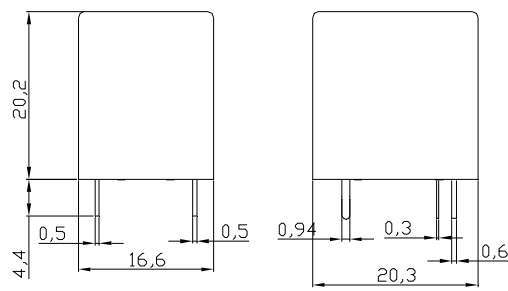
■ ENGINEERING DATA



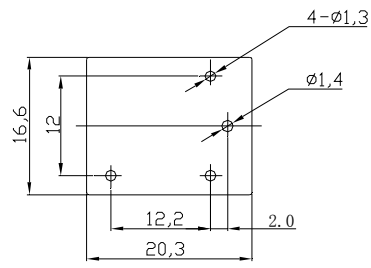
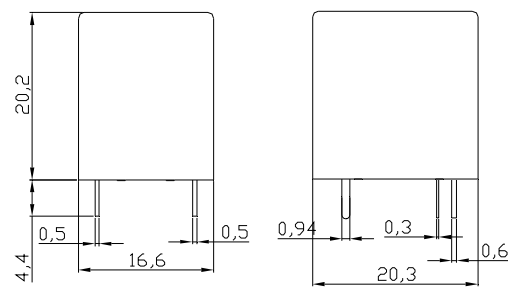
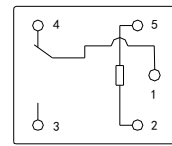
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■ OVERALL AND MOUNTING DIMENSIONS



Form C



Form A

