

PCB 继电器

HJR-21FF

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



ORDERING CODE 订购代码

HJR-21FF — S — H * (TBF-1) / 12VDC / XX						
1	2	3	4	5	6	7
1. Relay Model 继电器型号				5. Insulated Level 绝缘等级		
2. S: Sealed 密封				TBF-1: Class F 级		
3. 触点转换形式				Nil: Standard Type 标准		
H: Form A				6. Coil Nominal Voltage 线圈额定电压		
Z: Form C				3,5,6,9,12,18,24,48VDC		
4. 环境温度				7. 客户特性号		
F: TUV 105℃				IT: GWIT灼热丝750℃(at 2 minutes)		
Nil: TUV 85℃				Nil: Standard Type标准		

COIL DATA 线圈参数 (at 20℃)

Nominal Voltage额定电压(VDC)	3	5	6	9	12	24	48	0.36W
Coil Resistance线圈阻值($\Omega \pm 10\%$)	25	69	100	225	400	1600	6400	
Rated Current额定电流(mA)	120	71.4	60	40	30	15	7.5	
Max Operate Voltage 最大吸合电压(VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min Release Voltage最小释放电压(VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Coil Resistance线圈阻值($\Omega \pm 10\%$)	20	56	80	180	320	1280	5120	0.45W
Rated Current额定电流(mA)	150	90	75	50	37.5	18.7	9	
Max Operate Voltage 最大吸合电压(VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min Release Voltage最小释放电压(VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Max Applicable Voltage 最大过载电压	70℃时额定电压的130%, 23℃时额定电压的170%							

CONTACT DATA 触点参数

Contact Form触点形式	1H/1Z
Contact Material触点材料	Silver Alloy
Load负载	Resistive load($\cos \phi = 1$)
Contact Ratings触点负载	1H:12A 240VAC 15A 125VAC(TUV) 15A 120VAC , TV-5A@120VAC 1Z:10A 240VAC 12A 120VAC , TV-5A@120VAC 15A 125VAC(TVU)
Minimum load 最小负载	10mA 5VDC
Max Switching Voltage最大转换电压	250VAC/30VDC
Max Switching Current最大转换电流	15A
Max Switching Power 最大转换功率	2880VA/240W
Contact Resistance接触电阻	100m Ω Max at 6VDC 1A
Life Expectancy寿命	Electrical 电气寿命: 100, 000 Operations(at30Operations/minute)
	Mechanical机械寿命: 10, 000, 000 Operations(at300Operations/minute)

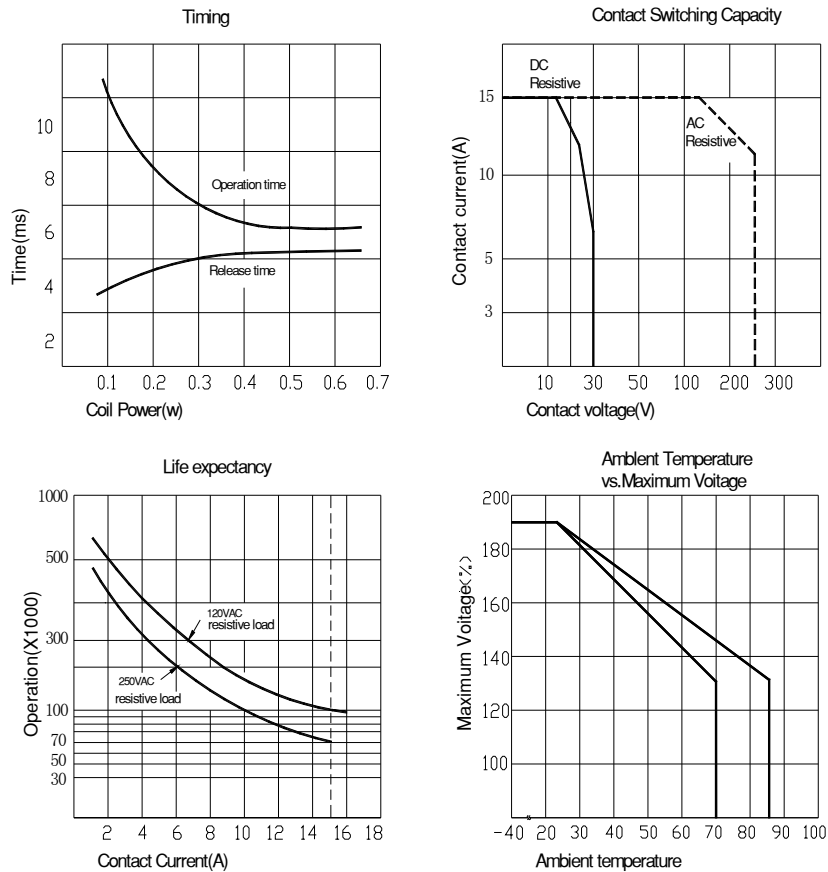
■ CHARACTERISTICS DATA 性能参数

Insulation Resistance绝缘阻值	100M Ω Min at 500VDC
Dielectric Strength Between Open Contacts触点间耐压	750VAC(for one minute)
Between Contacts and coil触点与线圈间耐压	1500VAC(for one minute)
Operate Time吸合时间	10ms
Release Time释放时间	5ms
Temperature Range环境温度	-40℃to+70℃ (Class F:85℃)
Shock Resistance冲击	Operating Extremes动作极限: 10G
	Damage Limits破坏极限: 100G
Vibration Resistance振动	10-55Hz, 1.5mm
Max. switching frequency最大转换频率	Mechanical:18,000operations/hr
	Electrical:1,800operations/hr
Humidity湿度	40-85%
Weight重量	Approx 13g
Safety Standard安全标准	UL cUL TÜV CQC

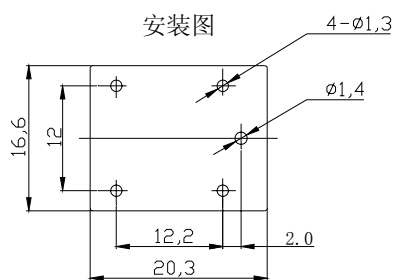
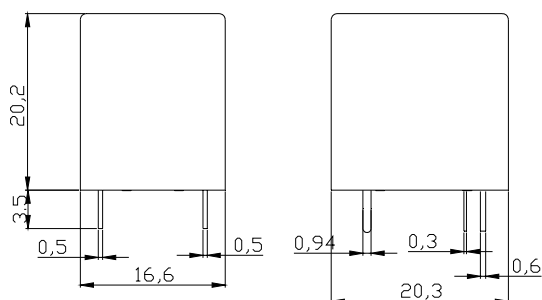
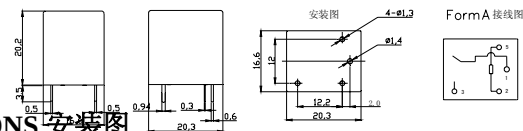
■ APPROVED STANDARDS 安全标准

Model(型号)	Coiling rating (线圈电压)	Safety Standard (安全标准)	Contact rating (触点负载)
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

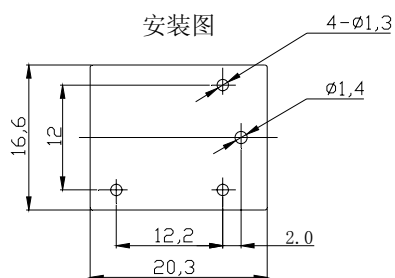
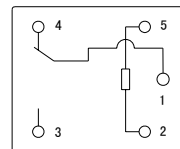
■ ENGINEERING DATA 设计参数



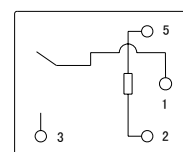
■ OVERALL AND MOUNTING DIMENSIONS 安装图



FormC 接线图



FormA 接线图



- 备注：1) 产品部分外形尺寸中未注尺寸公差：当外形尺寸 $\leq 1\text{mm}$ 时，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $1\sim 5\text{mm}$ 时，公差为 $\pm 0.3\text{mm}$ ；
当外形尺寸 $> 5\text{mm}$ 时，公差为 $\pm 0.4\text{mm}$ 。
- 2) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。

声 明：

本产品规格书仅供客户使用时参考，如有更改，恕不另行通知。