

汽车继电器

TRFM

- Max.switching current 25A
- Different terminals available
- Conform to RoHS,ELV directive



■ORDERING CODE 订购代码

<u>TRFM</u>	<u>D</u>	<u>12V</u>	<u>F</u>	<u>H</u>	<u>R1</u>
1	2	3	4	5	6
1. Relay Model 继电器型号				H: Form 1A	
2. Coil Power 线圈功率				Z: Form 1C	
3. Coil Nominal Voltage 线圈额定电压				6. Coil transient suppression 线圈浪涌抑制	
				Blank(空白): Standard (标准)	
4. Encapsulation mode 封装方式				R1: Coil parallel with 1/2W resistor 180 Ω for Coil voltage 6VDC	
S : Sealed type 密封型				Coil parallel with 1/2W resistor 680 Ω for Coil voltage 12VDC	
F: Flux tight 防尘型				Coil parallel with 1/2W resistor 2700 Ω for Coil voltage 24VDC	
5. Contact arrangement 触点形式				D1: Coil parallel with diode 1N4148 the positive pole “+”on #1 teminal	
				D2: Coil parallel with diode 1N4148 the positive pole “+”on #2 teminal	

■COIL DATA 线圈参数 (at 20℃)

Nominal Voltage额定电压(VDC)	6	12	24	1.2W
Coil Resistance线圈阻值(Ω)	30	120	480	
Rated Current额定电流(mA)	200	100	50	
Max Operate Voltage 最大吸合电压(VDC)	3.9	7.8	15.6	
Min Release Voltage最小释放电压(VDC)	0.3	0.6	1.2	
Coil Resistance线圈阻值(Ω)	23	90	360	1.6W
Rated Current额定电流(mA)	261	133	67	
Max Operate Voltage 最大吸合电压(VDC)	3.9	7.8	15.6	
Min Release Voltage最小释放电压(VDC)	0.3	0.6	1.2	
Max ApplicableVoltage 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

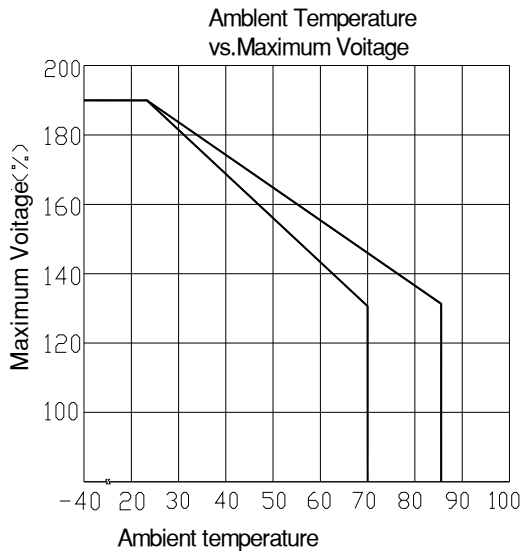
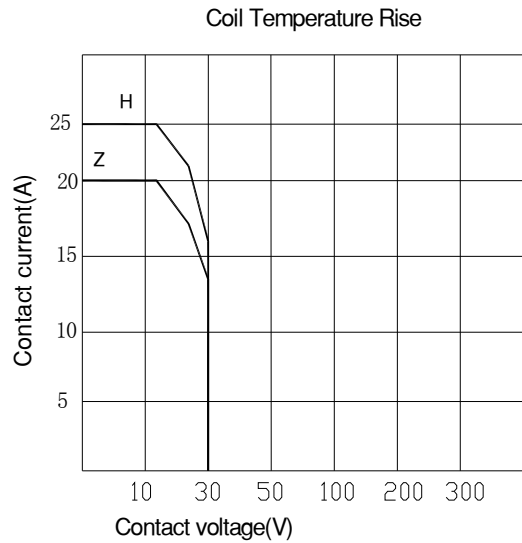
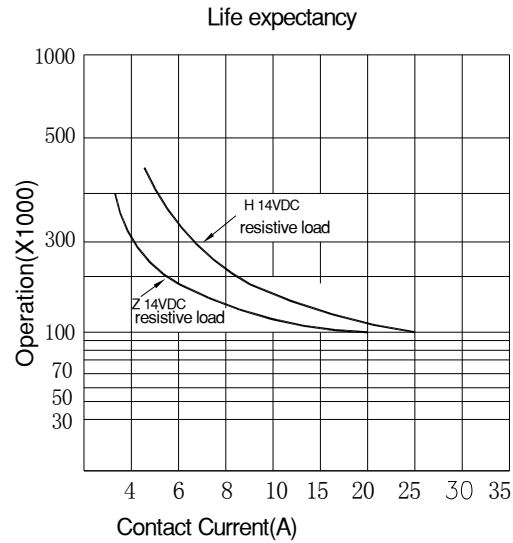
Contact Form触点形式	1H/1Z
Contact Material触点材料	Silver Alloy
Load负载	Resistive load(COS Φ 1)
Contact Ratings触点负载	1H: 25A 14VDC 1Z: 20A 14VDC
Max Switching Voltage最大转换电压	24VDC
Max Switching Current最大转换电流	25A
Max Switching Power 最大转换功率	350W

Contact Resistance接触电阻	50m 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)

■CENTACT DATA 一般参数

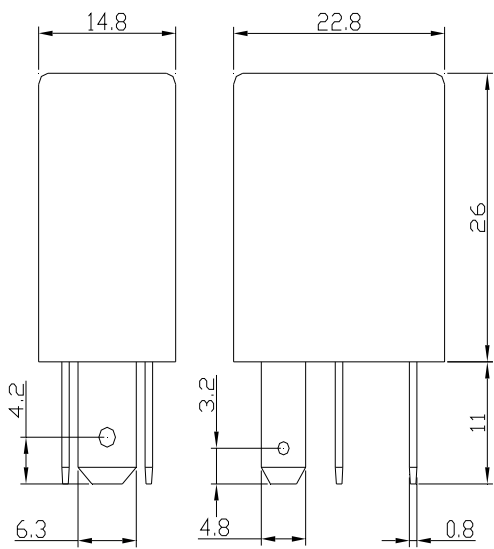
Insulation Resistance绝缘阻值	100M Ω Min at 500VDC
Dielectric Strength Between Open Contacts触点间耐压	500VAC(for one minute)
Between Contacts and coil触点与线圈间耐压	1000VAC(for one minute)
Operate Time吸合时间	10ms
Release Time释放时间	10ms
Temperature Range环境温度	-40℃to+85℃
Shock Resistance冲击	Operating Extremes动作极限: 10G
	Damage Limits破坏极限: 100G
Vibration Resistance振动	10-55Hz, 1.5mm
Max. switching frequency最大转换频率	Mechanical: 18,000 operations/hr
	Electrical: 1,800 operations/hr
Humidity湿度	85% (at 40℃)
Weight重量	Approx 18g
Safety Standard安全标准	

■ENGINEERING DATA 设计参数

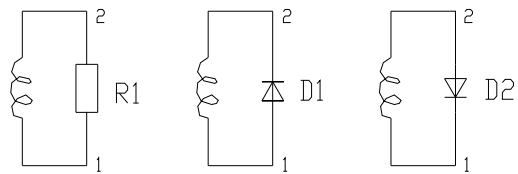


■OVERALL AND MOUNTING DIMENSIONS 外形图及安装图

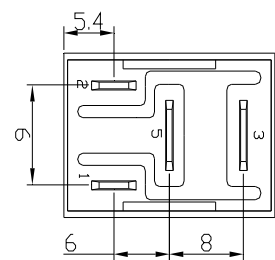
外形图



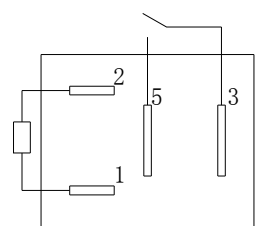
电阻（二极管）接线图



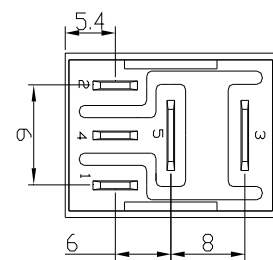
A 型安装图(快接式)



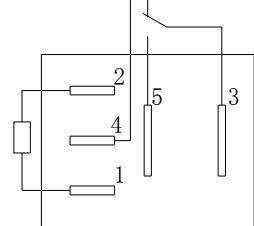
A 型接线图



C 型安装图(快接式)



C 型接线图



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。

Таблица возможной замены реле

силовые реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HF3FF	HJR-3FF	SRD(T73)	HLS8-T73	G5L
HF10FF-2			HLS-MK2P	MK2
HF10FF-3Z			HLS-MK3P	MK3
HF13F			HLS-13F	
HF18FF	HJQ-22		HLS-4453(18F)-4	MY4
HF21FF	HJR-21FF	SRU(22F)	HLS8-22F	G5L-E
HF32F	TRG1	SRSB	HLS-32F	835/835NL
HF32FA/32FA-T	TRG1	SRSB	HLS-32F	835/835NL
HF32FA-G	TRG1	SRSB	HLS-32F	835/835NL
HF33F	TRG2	SRSC	HLS-33F	G5SB
HF62F	TRA2F	SMIH(14FHA)	HLS-14FK	G5J
HF46F/HF46F-G	TRGB			202/202H
HF49FD				G5J
HF102F	TRAF		HLS-102F	G4A
HF115F	TRC2	SMIH(14FH)	HLS-14F2	G2RL
HF115FP	TRC3	SMIH(14FH)	HLS-14F3	
HF140FF	TRA3		HLS-14F	G2R/G2RG
HF13F	HJQ-13F-2C	SMB(13F)	HLS-13F-2	LY2
HF2100	HJQ-15F-1	SLC(T91)	HLS-T91(16F)-1	G7G
HF105F - 4	HJQ-15F-3	SLCH(T92)		
HF105F-1	HJQ-15F	SLA(T90)	HLS-T90(15F)	G8P
HF2160	HJQ-15F-2	SLI(T93)	HLS-T91(16F)-2	G7G/G8G
HF165FD	HJQ-15F	SLA	HLS-T90(15F)	G8P
JQC-21FF	HJR-21FF	SRD(T73)	HLS8-22F	
HF7FF	HJR-7FF	SRG(4123)	HLS8-T73	
HF141FF	TRA1		HLS-14F1	G2R
HF14FW	TRA2	SMIH(14FH)	HLS-14F2	G2R
HF14FF	TRA1		HLS-14F	G2R
HF36F	TRA4			
HF42F	TRA5			G5PA-2
HF8	TRDH	SRI(T72)	HLS-T72	
HF102F			HLS-102F	G4A
HLS-4453(18F)-2		SMBH(4453)	HLS-4453(18F)-2	MY2
HF18FF-3Z			HLS-4453(18F)-3	MY3

сигнальные реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HFD2	HJR1	SRC	HLS-4078	G5V-2
HFD4				
HFD27	HJR1-2	SRC	HLS-4078	G5V-2
HFD41	HJR4102	SRS		
HF41F			HLS6-4100H-1	G2E
HM4101F	HJR4102E			
HFD23			HLS6-23F	G5V-1

автомобильные реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HFKM, HFKS	TRAW	SLE(4117)	HLS-4117	
HVF6	TRFM			G8HN
HFKP	TRKP	SLB	HLS-4120	G8PE
	TRS			
	TRV3			
HFV4	TRV4	SLD	HLS-CMA3	G8JN
	TRV5			
HFV7	TRV6	SLDH	HLS-CMA3-1	G8JR
HFKW	HJR78F	SRA(T74)	HLS-T78	G8QN
			HLS-4121/4122	
HFV6		SLM	HLS-CMA6	G8H