

FEATURES特点

- UL & TUV safety approval. UL、TUV安规认证。
- High ratings 12 Amps super miniature relay.
高负载12安培超小型继电器
- Surge strength: 5000VAC 耐脉冲电压: 5000VAC
- 1 Form A (SPST-NO) contact. 1组常开接点形式
- TV-5 rated available. TV5负载
- Nominal power 450mW. 正常功耗450毫瓦特
- Operating power 260mW. 动作功耗260毫瓦特
- DIL pitch terminal. DIL型端子
- Washable type. (ultrasonic cleaning is not recommended.)
可清洗型(不建议用超声波清洗)



UL FILE NO.: E171095
TUV FILE NO.: R50064549

CONTACT RATING 接点参数

Contact Form接点形式	1A SPST-NO
Max. Switching Power最大切换功率	2770VA(10A) 300W(10A)
Max. Switching Voltage最大切换电压	277VAC 30VDC
Max. Switching Current最大切换电流	12A
Min. Switching Current / Voltage 最小切换电流/电压	100mA 5VDC
Rating Load(Resistive)额定负载(阻性)	12A/125VAC 10A/277VAC 10A/30VDC
Motor Load电机负载	1/4HP 125VAC 1/4HP 250VAC
TV Rating TV负载	TV-5 125VAC
Contact Material接点材质	Ag Alloy银合金

CHARACTERISTICS 性能参数

Electrical Life 电气寿命	1 × 10 ⁵	
Mechanical Life机械寿命	1 × 10 ⁷	
Insulation Resistance绝缘阻抗	Min. 100MΩ 500VDC	
Contact Resistance(Initial)接触电阻	≤ 100mΩ (6VDC 1A)	
Operate Time 动作时间	≤ 10ms	
Release Time 开放时间	≤ 5ms	
Initial Dielectric Strength 耐压	between open contacts开放接点间: 50/60Hz 500VAC 1min. between contacts and coil接点线圈间: 50/60Hz 2500VAC 1min.	
Vibration Resistance 耐振动	Malfuction: 误动作:	10 ~ 55Hz Double Amplitude双振幅 1.5mm
	Damage limits: 耐久:	10 ~ 55Hz Double Amplitude双振幅 1.5mm
Shock Resistance 耐冲击	Malfuction: 误动作:	10G
	Damage limits: 耐久:	100G
Ambient Temperature环境温度	-40℃ ~ +85℃ (No freezing 无结冰)	
Relative Humidity相对湿度	85% at 40℃	
Unit Weight单位重量	约Approx. 6g	

ORDERING INFORMATION 型号代码说明

971-1A-12 D 1 2 3 4	
1. Model Number 型号 2. Contact Arrangement 接点形式 1A = 1 Form A 1组常开	3. Coil Voltage 线圈电压 3、5、6、9、12、18、24VDC 4. Coil Type 线圈形式 D=DC直流

COIL RATINGS (at 20°C) 线圈额定值 (在20°C)

COIL TYPE 线圈形式	Coil Nominal Voltage 线圈额定电压 (V)	Coil Resistance 线圈阻抗 ($\Omega \pm 10\%$)	Pick-Up Voltage 动作电压(V) (Max)	Drop-Out Voltage 开放电压(V) (Min)	Nominal Current 额定电流 (mA)
DC Standard Coils 直流标准线圈 (abt. 0.45W)	3	20	2.25	0.3	150
	5	55	3.75	0.5	90.9
	6	80	4.5	0.6	75
	9	180	6.75	0.9	50
	12	320	9	1.2	37.5
	18	720	13.5	1.8	25
	24	1280	18	2.4	18.8

* Max Continuous Voltage at 20°C: 130% of Coil Normal Voltage.
 最大使用电压在20°C:线圈额定电压的130%

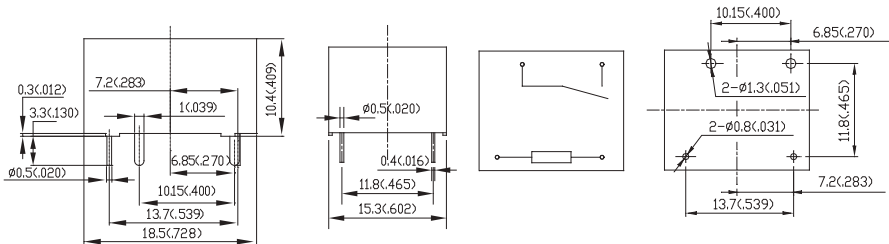
OUTLINE DIMENSIONS 外部尺寸

UNIT: mm(inch) 单位: 毫米(英寸)

Dimensions尺寸

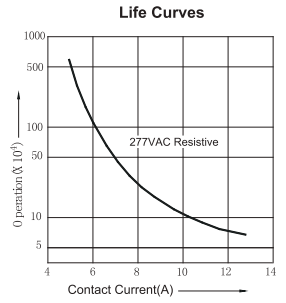
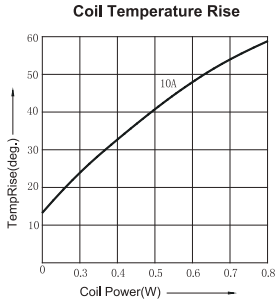
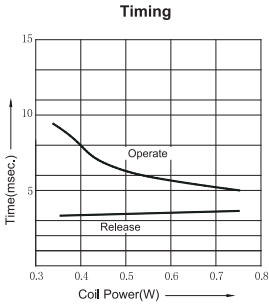
Internal Connections接线图
(Bottom View底视图)

Drilling Plan孔位图
(Bottom View底视图)



REMARK: Dimensions $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.2\text{mm}$
 备注: 尺寸公差 $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, 印刷电路板孔 $+0.2\text{mm}$

971 Reference Data 参考资料



SAFETY STANDARD 安规认证

SAFETY 安规名称	Coil Voltage 线圈电压	Contact Rated 接点额定值
UL	3-24VDC	12A 125VAC 10A 277VAC 125VAC TV-5 250VAC 1/4HP 125VAC 1/4HP
TUV	DC: 3V, 5V, 6V, 9V, 12V, 18V	10A 277VAC 10A 30VDC 250VAC 1/4HP 125VAC 1/4HP 125VAC 12A