

## FEATURES特点

New 981-1A-series Power relay is for Power Supplies of TV sets and Audio Systems

981-1A系列功率继电器用于电源供应器、电视机和音响系统

- UL safety approval. UL安规认证.
- TV Rated (TV-3, TV-5 or TV-8) available.  
供应TV额定负载 (TV-3, TV-5 或 TV-8).
- High sensitive with coil power consumption of 250mW and 540mW.  
线圈功耗为250mW和540mW
- Model conforming to UL508, TUV are available  
符合UL508, TUV提供



UL FILE NO.: E162117

TUV FILE NO.:

用途: 电视机、音响系统  
电源供应器

## CONTACT RATING 接点参数

Contact Form 接点形式	1A SPST-NO		
Max. Switching Power最大切换功率	250VA 300W		
Max. Switching Voltage最大切换电压	250VAC/30VDC		
Max. Switching Current最大切换电流	10A		
Min. Switching Current /Voltage 最小开关电流/电压	100mA 5VDC		
Rating Load(Resistive)额定负载(阻性)	10A/250VAC 10A/30VDC		
TV Rating TV负载	TV-3 250VAC	TV-5 250VAC	TV-8 250VAC
Contact Material接点材质	Ag Alloy 银合金		

## CHARACTERISTICS 性能参数

Electrical Life 电气寿命	1 × 10 <sup>6</sup>		
Mechanical Life机械寿命	1 × 10 <sup>7</sup>		
Insulation Resistance绝缘阻抗	Min. 100MΩ 500VDC		
Contact Resistance(Initial)接点电阻	≤ 100mΩ		
Operate Time 动作时间	≤ 15ms		
Release Time 开放时间	≤ 10ms		
Initial Dielectric Strength 耐压	between open contacts开放接点间: 50/60Hz 1000VAC 1min between contacts and coil接点线圈间: 50/60Hz 4000VAC 1min.		
Vibration Resistance 耐振动	Malfunction: 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	Malfunction: 误动作:	10G	
	Damage limits: 耐久:	100G	
Ambient Temperature环境温度	-40°C ~ +85°C (No freezing 无结冰)		
Relative Humidity相对湿度	85% at 40°C		
Unit Weight单位重量	约Approx. 10g		



# 981-1A-TV系列继电器SERIES RELAY

## ORDERING INFORMATION型号代码说明

981-1A-5 D-L  
 1 2 3 4 5

- |   |  |
|---|--|
| <p>1. Model Number 型号</p> <p>2. Contact Arrangement 接点形式<br/>1A= 1Form A 1组常开</p> <p>3. Coil Voltage 线圈电压<br/>3~48VDC</p> | <p>4. Coil Type 线圈形式<br/>D=DC 直流</p> <p>5. Coil Power 线圈功率<br/>L= High Sensitive 高灵敏度250mW<br/>D=Standard 标准型540mW</p> |
|---|--|

## 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 High Sensitive Coils 直流高灵敏线圈 (abt. 0.25W)	3	36	2.4	0.15	83.3
	5	100	4	0.25	50
	6	144	4.8	0.3	41.7
	9	325	7.2	0.45	27.7
	12	580	9.6	0.6	20.7
	24	2300	19.2	1.2	10.4
DC Standard Coils 直流标准型线圈 (abt. 0.54W)	48	9210	38.4	2.4	5.2
	3	17	2.4	0.15	176.5
	5	47	4	0.25	108.7
	6	68	4.8	0.3	88
	9	150	7.2	0.45	60
	12	270	9.6	0.6	44.4
24	1100	19.2	1.2	21.8	
48	4300	38.4	2.4	11.2	

\* 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%

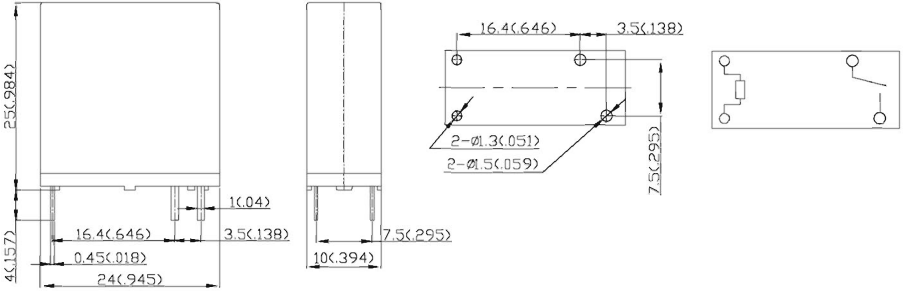
## OUTLINE DIMENSIONS 外部尺寸

UNIT: mm(inch) 单位: 毫米(英寸)

Dimensions尺寸

Internal Connections接线图  
(Bottom View底视图)

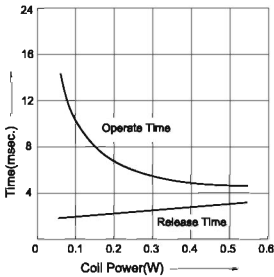
Drilling Plan孔位图  
(Bottom View底视图)



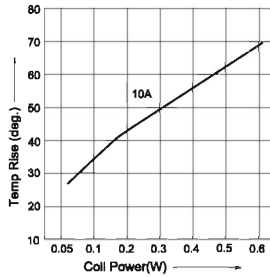
REMARK: Dimensions  $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.2\text{mm}$   
备注: 尺寸公差  $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , 印刷电路板孔 $+0.2\text{mm}$

## 981 Reference Data 参考资料

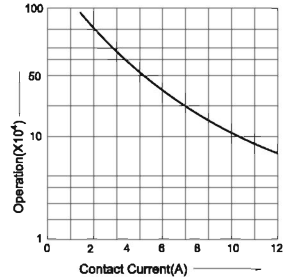
Timing



Coil Temperature Rise



Life Curves



## 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	3-48VDC	10A/250VAC 10A/30VDC TV-3,TV-5,TV-8
TUV	3-48VDC	10A/250VAC 10A/30VDC