

## FEATURES 特点

- UL, CE, TUV & CQC safety approval.  
UL, CE, TUV 及 CQC 安规认证。
- Single contact 953 series relay offers 30A switching capacity for various kinds of applications.  
单触点953系列继电器提供30安培转换容量，适用于多种产品。
- Both PCB terminal & Quick Connect Terminal for contacts.  
有电路板端子及快接端子供安装连接。
- UL class F coil insulation type available.  
可提供UL class F线圈绝缘型。



UL FILE NO.: E162117  
TUV FILE NO.: R02158203  
CQC FILE NO.: CQC02001001783

用途：汽车、机床电器、电子设备、  
空调和各种家用电器。

## CONTACT RATING 接点参数

Contact Form接点形式	1A SPST-NO	1B SPST-NC	1C SPDT	
			NO	NC
Max. Switching Power最大切换功率	750VA(30A) 600W (20A)	4800VA 300W	750VA600W	
Max. Switching Voltage最大切换电压	250VAC 30VDC	250VAC 20VDC	250VAC 30VDC	
Max. Switching Current最大切换电流	30A	20A	30A	
Min. Switching Current/Voltage 最小切换电流/电压	100mA 5VDC			
Rating Load(Resistive)额定负载(阻性)	20A / 277VAC 20A / 30VDC 30A / 250VAC	15A / 277VAC 20A / 240VAC 10A / 30VDC	20A / 277VAC 30A / 240VAC 20A / 30VDC	15A / 277VAC 30A / 240VAC 10A / 30VDC
Contact Material 接点材质	Ag Alloy 银合金			

## CHARACTERISTICS 性能参数

Electrical Life 电气寿命	$1 \times 10^5$
Mechanical Life机械寿命	$1 \times 10^7$
Insulation Resistance绝缘阻抗	Min. 500M $\Omega$ 500VDC
Contact Resistance(Initial)接触电阻	$\leq 100m\Omega$ (6VDC 1A)
Operate Time 动作时间	$\leq 15ms$
Release Time 开放时间	$\leq 10ms$
Initial Dielectric Strength 耐压	between open contact开放接点间: 50/60Hz 1500VAC 1min. between contacts and coil接点与线圈间: 50/60Hz 2500VAC 1min.



# 953K系列继电器 SERIES RELAY

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. 28g	

## ORDERING INFORMATION型号代码说明

953 -1C - 12 D K F 1 2 3 4 5 6	
1. Model Number 型号 2. Contact Arrangement 接点形式 1A = 1 Form A 1 组常开 1C = 1 Form C 1 组转换 3. Coil Voltage线圈电压 5、6、9、12、18、24、36、48VDC 6、12、24、110、220VAC	4. Coil Type 线圈形式 D=DC直流 A=AC交流 5. Enclosure Connect Type 密封连接方式 K = Double Connect IV Type双连接IV 型 6. Type of Insulation 绝缘等级 Nil = Class A F = Class F

## 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. 0.9W)	5	27	3.75	0.5	185
	6	40	4.5	0.6	150
	9	97	6.75	0.9	93
	12	155	9	1.2	77
	18	380	13.5	1.8	47
	24	660	18	2.4	36
	36	1440	27	3.6	25
	48	2560	36	4.8	19
AC Coils 交流线圈 (abt. 1.2VA~1.8VA)	6	10	4.8	0.6	
	12	43	9.6	1.2	
	24	160	19.2	2.4	
	110	3160	88	11	
	220	13490	176	22	

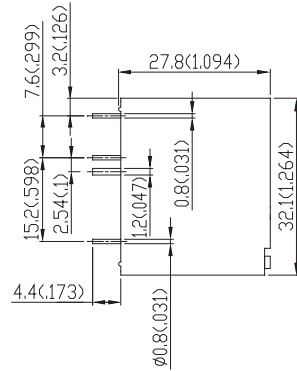
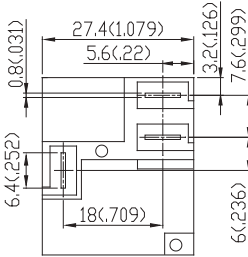
\* Max Continuous Voltage at 20°C: 130% of Coil Normal Voltage. 最大使用电压在20°C:线圈额定电压的130%

\* AC coils Max continuous Voltage at 20°C 110% 交流线圈最大使用电压在20°C: 线圈额定电压的110%

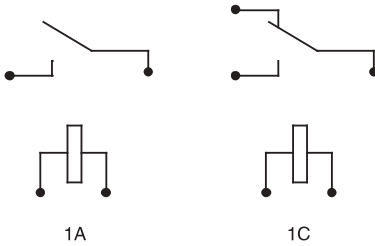
## OUTLINE DIMENSIONS 外部尺寸

UNIT: mm(inch) 单位: 毫米(英寸)

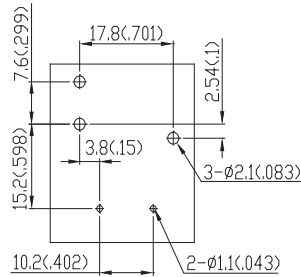
Dimensions尺寸



Internal Connections 接线图  
(Bottom View 底视图)



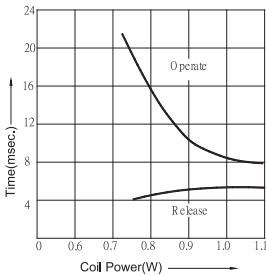
Drilling Plan 孔位图  
(Bottom View 底视图)



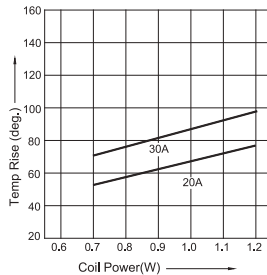
REMARK: Dimensions  $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.2\text{mm}$   
备注: 尺寸公差  $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , 印刷电路板孔  $+0.2\text{mm}$

## 953K Reference Data 参考资料

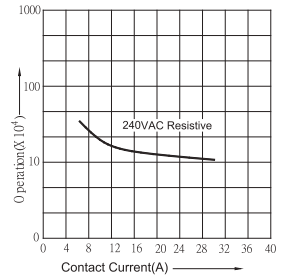
Timing



Coil Temperature Rise



Life Curves



## SAFETY STANDARD安规认证

### ●UL APPROVAL UL 认证

Contact Form接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	20A / 277VAC 20A / 30VDC	15A / 277VAC 10A / 30VDC	19.8A / 277VAC 30A / 240VAC	19.8A / 277VAC 30A / 240 VAC
General Purpose Load通用负载	15A / 277VAC	8A / 277VAC	—————	—————
Motor Load电机负载	16.0FLA / 96.0LRA 240VAC	10.0FLA / 58.0LRA /240VAC	—————	—————
Horse Power马力	FLA 12 / 250VAC 2HP FLA 16 / 125VAC 1HP	FLA 4.9 / 250VAC 1/2HP FLA 5.8 / 125VAC 1/4HP	FLA11.2 / LRA67.2 FLA10.3 / LRA61.8	
Ballast镇流负载	—————	—————	20A	
Coil Voltage线圈电压	5 – 110 VDC 6 – 220 VAC			

### ●TUV APPROVAL TUV认证

Contact Form接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	30A / 250VAC 20A / 30VDC	10A / 250VAC 10A / 30VDC	30A / 250VAC 20A / 30VDC	10A / 250VAC 10A / 30VDC
Inductive Load感性负载 (L/R: 7ms)	10A / 30 VDC	8A / 30VDC	10A / 30VDC	8A / 30VDC
Coil Voltage线圈电压	DC: 5V,6V,9V,12V,18V,24V, 48V,110V AC: 6V,12V,24V,110V, 220V			

### ●CQC APPROVAL CQC认证

Contact Form接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	30A / 240VAC	20A / 240VAC	30A / 240VAC	20A / 240VAC
Coil Voltage线圈电压	DC: 5V,9V,12V, 24V, 36V,48V AC: 110V, 220V			