

特点 FEATURES

- 单接点953系列继电器提供50A切换容量适用于多种用途
Single contact 953 series relay offers 50A switching capacity for various kinds of applications.
- 对单刀单掷—常开接点形式达到50A切换电流及对单刀双掷—常闭可
达到40A切换电流
Up to 50A switching in SPST -NO and 40A switching in SPDT -NC arrangement.
- 提供 UL F级线圈绝缘
UL class F coil insulation type available.
- 可提供符合IEC 60730-1/IEC 60335-1标准的产品
Products in accordance to IEC 60730-1/IEC 60335-1 standards.



用途举例 USE EXAMPLES

汽车充电装置

接点参数 CONTACT RATING

接点形式 Contact Form	1A SPST-NO	1B SPST-NC	1C SPDT	
			NO	NC
最大切换功率 Max. Switching Power	12500VA 900W	10000VA 600W	12500VA 900W	
最大切换电压 Max. Switching Voltage	250VAC 30VDC			
最大切换电流 Max. Switching Current	50A	40A	50A	
最小切换电流/电压 Min. Switching Current/Voltage	100mA 5VDC			
额定负载(阻性) Rating Load(Resistive)	50A / 250VAC 30A / 30VDC	40A / 250VAC 20A / 30VDC	50A / 250VAC 30A / 30VDC	40A / 250VAC 20A / 30VDC
接点材质 Contact Material	银合金 Ag Alloy			

性能参数 CHARACTERISTICS

电气寿命 Electrical Life	3×10 ⁴ operations(50A 250VAC 55°C) 1×10 ⁴ operations(40A 250VAC 55°C)	
机械寿命 Mechanical Life	1×10 ⁶	
绝缘阻抗 Insulation Resistance	Min. 1000MΩ 500VDC	
接触电阻 Contact Resistance(Initial)	≤100mΩ (6VDC 1A)	
动作时间 Operate Time	≤15ms	
开放时间 Release Time	≤10ms	
耐压 Initial Dielectric Strength	开放接点间 between open contacts: 50/60Hz 1500VAC 1min. 线圈接点间 between contact and coil: 50/60Hz 2500VAC 1 min. 线圈接点间 between contact and coil: 50/60Hz 4000VAC 1 min. (-V)	
耐振动 Vibration Resistance	误动作: Functional:	10~55Hz 双振幅 Double Amplitude 1.5mm
	耐久: Destructive:	10~55Hz 双振幅 Double Amplitude 1.5mm
耐冲击 Shock Resistance	误动作: Functional:	10G
	耐久: Destructive:	100G



953 50A系列继电器SERIES RELAY

环境温度 Ambient Temperature	-40℃~-55℃ (无结冰 No freezing)
相对湿度 Relative Humidity	20%-85%RH
单位重量 Unit Weight	约Approx.25g

型号代码说明 ORDERING INFORMATION

953-50W - 1C - 12D S - V

1. 型号 Model Number
953-50=0.9W 953-50W=1.4W(GAP:1.8mm)
2. 接点形式 Contact Arrangement
1组常开 1A = 1 Form A 1组常闭 1B = 1 Form B 1组转换 1C = 1 Form C
3. 线圈电压 Coil Voltage
5、12、24、48VDC
4. 密封型式 Enclosure
防助焊剂型 Nil = Flux-proof Type 密封型 S = Sealed Type
5. 线圈接点间耐压 between contact and coil
Nil = 2500VAC V = 4000VAC

线圈额定值 (在20℃) COIL RATINGS (AT 20℃)

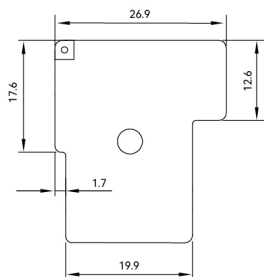
线圈形式 Coil Type	线圈额定电压 (V) Coil Nominal Voltage	线圈阻抗 (Ω±10%) Coil Resistance	动作电压(V) (Max) Pick-Up Voltage	开放电压(V) (Min) Drop-Out Voltage	额定电流 (mA) Nominal Current
直流标准线圈 (abt. 0.9W) DC Standard Coils	5	27	3.75	0.5	185
	12	155	9	1.2	77
	24	660	18	2.4	36
	48	2560	36	4.8	19
直流线圈 (abt. 1.4W) DC Coils	5	18	3.75	0.5	27.8
	12	103	9	1.2	116
	24	411	18	2.4	58
	48	1646	36	4.8	29

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

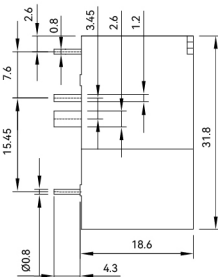
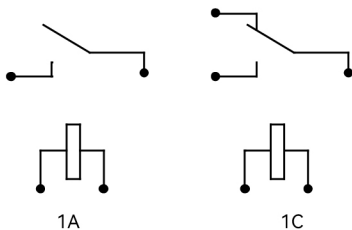
外部尺寸 OUTLINE DIMENSIONS

单位: 毫米 UNIT: mm

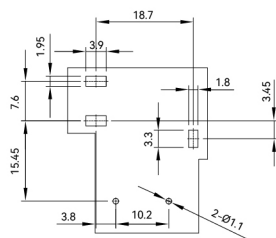
尺寸 Dimensions



接线图 Internal Connections
(底视图 Bottom View)



孔位图 PCB Layout
(底视图 Bottom View)

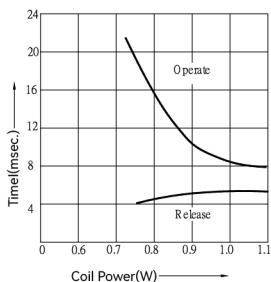


备注: 尺寸公差 $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, 印刷电路板孔 $+0.2\text{mm}$

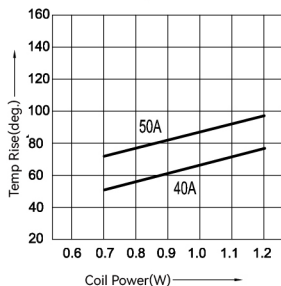
REMARK: Dimensions $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.2\text{mm}$

参考资料 953G REFERENCE DATA

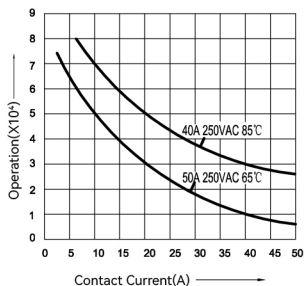
Timing



Coil Temperature Rise



Life Curves





953 50A系列继电器SERIES RELAY

安规认证 SAFETY STANDARD

安规名称 Approval	线圈电压 Coil Voltage	接点额定值 Contact Rating
UL FILE NO.: E162117	DC:5V ~ 48V	NO: 50A 250/240/125VAC NO: 30A 30/28/14VDC NC: 40A 250/240/125VAC NC: 20A 30/28/14VDC 接通40A载流70A断开40A 250VAC
TUV FILE NO.: R02158203	DC:5V,6V,9V,12V,18V,24V,48V	NO: 50A 250/240/125VAC NO: 30A 30/28/14VDC NC: 40A 250/240/125VAC NC: 20A 30/28/14VDC 接通40A载流70A断开40A 250VAC
CQC FILE NO.: CQC02001001783	DC:5V,6V,9V,12V,24V,36V,48V	NO: 50A 250/240/125VAC NO: 30A 30/28/14VDC NC: 40A 250/240/125VAC NC: 20A 30/28/14VDC 接通40A载流70A断开40A 250VAC