

1. 安规认证:
Safety Standard
 - UL: File No. E333244
 - TUV: File No.50183595
 - CQC: File No. CQC10002054547

2. 接点规格:
Contact Specification
 - 2.1 接点间隙:
Contact Gap
 - 最小 0.30 mm
 - 0.30 mm Minimum

 - 2.2 接触电阻:
Contact Resistance
 - ≤100mΩ at 1A/6VDC

 - 2.3 触点负载:
Contact Capacity
 - 10A/250VAC
 - 10A/30VDC

3. 线圈规格:
Coil Specification at 20°C
 - 3.1 额定电压:
Rated Voltage
 - 12VDC

 - 3.2 额定电流:
Nominal Current
 - 37.5mA

 - 3.3 额定功率:
Rated Power Consumption
 - 0.45 W

 - 3.4 感动电压:
Pull In Voltage
 - ≅DC 9.0V (當電壓漸漸施加於繼電器時接點之動作電壓, 為額定電壓之75%)
 - ≅ DC 9.0V (Contact operating voltage when voltage is gradually applied. It is 75% of the Rated Voltage)

 - 3.5 开放电压:
Drop Out Voltage
 - ≥DC 1.20V (當額定電壓漸漸的減少時接點放開之電壓, 為額定電壓之10%)
 - ≥DC 1.20V (Contact breaking voltage when rated voltage is gradually reduced. It is 10% of the Rated Voltage)

 - 3.6 最大允许电压:
Max. Allowable Voltage
 - DC 15.6V (額定电压 130%)
 - DC 15.6V (130% of the Rated Voltage)

 - 3.7 线圈电阻:
Coil Resistance
 - 320Ω ± 10%

 - 3.8 吸合时间:
Operate Time
 - ≤10 ms (不含触点抖动时间)
 - ≤10 milliseconds (excluding bounce time)

 - 3.9 开放时间:
Release Time
 - ≤5 ms (不含触点抖动时间)
 - ≤5 milliseconds (excluding bounce time)

3.10线圈温升:
Coil Temperature Rise

继电器空载，线圈加额定最大允许电压，温度稳定后测量温升不超过**35度**(不含环境温度)

35°C Maximum.

Maximum Allowable Voltage is applied to Coil while no load should be applied to Contacts, then the temperature should be measured when the value is stabilized. Environment temperature should not be included in.

4. 电气特性:
Electrical Characteristics

4.1 触点寿命:
Life Expectancy

4.1.1电气寿命: 10A 250VAC 10A/30VDC 100,000 次
Electrical Life 100,000 operations Minimum at 10A/250VAC 10A/30VDC

4.1.2机械寿命: 10,000,000 次
Mechanical Life 10,000,000 operations Minimum at No Load condition.

4.1.3 动作频率: 电气: 每分钟**6** 次
Maximum Operating Frequency 机械: 每分种**300** 次
Electrical: 6 operations/minute.
Mechanical: 300 operations/minute.

4.2 绝缘耐压:
Dielectric Strength

4.2.1触点间耐压: 1,000VAC, 50/60 Hz (1 分钟)
Between Contacts 1,000VAC at Test Frequency 50/60 Hz, 1 minute.

4.2.2线圈和触点间耐压: 1,500VAC, 50/60 HZ (1 分钟)
Between Coil & Contact 1,500VAC at Test Frequency 50/60 Hz, 1 minute.

4.3 绝缘阻抗: $\geq 500\text{VDC}$ 100 M Ω
Insulation Resistance $\geq 100\text{ M}\Omega$ Minimum 500VDC

4.4 耐震动
Vibration

4.4.1 振动耐久能力:
function after vibration

在无激励状态下，继电器在振幅宽度为 1.5mm, 频率为 10-55HZ, 三个轴各方向各进行振动 2 小时，实验后外观结构无异常，且电气性能符合规定要求。

The Coil shall be maintained under not energized condition, double amplitude 1.5 mm, the entire frequency range changes from 10 to 55 Hz then returns to 10 Hz shall be made in 1 minute. This motion shall be applied for a period of 2 hours in each of 3 mutually perpendicular axis. There should not be any deformations in construction and in appearance, while the Electrical Specifications should be fulfilled after the test.

4.4.2 耐振动 (误动作):
Endurance (Error
Operation)

在吸合/释放状态下，继电器在振幅是 1.5mm, 频率 10-55HZ。三轴各方向进行 5 分钟振动，触点误动作不超过 1ms, 实验后外观、结构不可异常，电气性能符合规格要求

The Coil shall be maintained under energized condition, double amplitude 1.5 mm, the entire frequency range changes from 10 to 55 Hz then returns to 10 Hz shall be made in 1 minute. This motion shall be applied for a period of 5 minutes in 3 mutually perpendicular axis. Malfunction is not allowed during the test (contact breaking time should be less than 1 millisecond) In addition, there should not be any deformations in construction and in appearance while the Electrical Specifications should be fulfilled after the test.

4.5 耐冲击:
Shock

4.5.1 冲击耐久能力:
Function after shock

继电器在三轴六方向耐受加速度 981m/s^2 及作用时间 6 毫秒的冲击各二次，产品结构和性能无异常

No trouble on structure and characteristics after the relay is subjected to shock of 981m/s^2 for 6ms in both directions of each of three mutually perpendicular axes for 2 times respectively.

4.5.2 耐冲击 (误动作):
Endurance (Error
Operation)

在吸合/释放状态下，继电器在三轴六方向耐受加速度 98.1m/s^2 及作用时间 11 毫秒的冲击各二次，触点误动作不超过 1 毫秒

No opening or closing of any closed or opened contact circuit respectively exceed 1ms when the relay is subjected to shock of 98.1m/s^2 for 11ms in both directions of each of three mutually perpendicular axes for 2 times respectively, while it is in operate condition and in release condition.

5. 环境特性:
Environmental
Characteristics

5.1 温度范围:
Temperature Range

5.1.1 使用温度范围: Operating Temperature Range	-40 + 85°C 使用温度范围是代表继电器在线圈的动作电压范围内可以持续动作的温度范围（低温无水滴凝结现象） Operating temperature range is the range of ambient temperature of which the Relay can be operated continuously within operative voltage range of coil (no condensation of water drops under low temperature condition)
5.1.2 储存温度: Storage Temperature Range	-40 + 70°C 储存温度范围是代表继电器在没有损伤状况下，可以被储存的温度范围（低温无水滴凝结现象） Storage temperature range is the range of ambient temperature of which the Relay can be stored without damages (no condensation of water drops under low temperature condition).
5.2 湿度范围: Humidity Range	45~85% RH.
5.3 耐寒性: Cold Resistance	
5.3.1 使用耐寒性 Cold Resistance in Use	继电器在没有输入状态下，在恒温箱-40 ± 2° C 的温度连续保持 2 小时。保持原状态操作回路上的定额电压实验时继电器能正常动作。（低温时没有水滴凝结现象） Relay should be kept in temperature chamber at -40 ± 2° C for two hours that no current or voltage shall be supplied to Relay. Such condition shall be maintained while the rated voltage is supplied to Relay, then the Relay shall operate normally. (No condensation of water drops under low temperature condition)
5.3.2 储存耐寒性: Storage Cold Resistance	继电器在恒温箱-40 ± 2° C 的温度连续保持 72 小时。然后于常温中消除水滴 1-2 小时后，进行结构、动作、及绝缘阻抗、耐压测试，结果符合要求（低温无水滴凝结现象） Relay should be kept in temperature chamber at -40 ± 2° C for 72 hours. Then the Relays shall be maintained at standard atmospheric condition for 1 to 2 hours after which measurement shall be made. Construction, Relay operation, Insulation Resistance and Dielectric Strength shall satisfy the specification requirements. (No condensation of water drops under low temperature condition)
5.4 耐热性: Heat Resistance	
5.4.1 使用耐热性: Heat Resistance in Use	继电器在操作回路上提供定额电压，接点部分提供定额电流状态下，在恒温 85 ± 2° C 的温度连续保持 2 小时，保持原状态进行继电器动作测试，结果必须符合规格要求。 Relay should be kept in temperature chamber at 85 ± 2° C for two hours that rated Voltage should be supplied to Coil while rated Current should be supplied to Contacts. Such condition shall be maintained while the rated voltage is supplied to Relay, then Relay shall operate normally.

5.4.2 储存耐热性:
Storage Heat
Resistance

继电器在恒温箱 $70 \pm 2^{\circ}\text{C}$ 的温度连续保持 16 小时，在常温，常湿状态下，放置 1-2 小时后，进行结构、动作、绝缘阻耐压测试，结果符合要求。

Relay should be kept in temperature chamber at $70 \pm 2^{\circ}\text{C}$ for 16 hours. Then the Relays shall be maintained at standard atmospheric condition for 1 to 2 hours after which measurement shall be made. Construction, Relay operation, Insulation Resistance and Dielectric Strength shall satisfy the specification requirements.

5.5 耐湿性:
Moisture Resistance

继电器在温度 $40 \pm 2^{\circ}\text{C}$ ，相对湿度在 90~95% 环境下连续保持 48 小时，然后于常温常湿状态放置 1-2 小时，进行结构、动作、绝缘阻抗、耐压测试，结果需要符合要求

Relay should be kept in temperature chamber at $40 \pm 2^{\circ}\text{C}$ (90~95% RH) for 48 hours. Then the Relays shall be maintained at standard atmospheric condition for 1 to 2 hours after which measurement shall be made. Construction, Relay operation, Insulation Resistance, Dielectric Strength shall satisfy the specification requirements.

6. 端脚特性:
Terminal Characteristics

6.1 端脚强度:
Terminal Strength

在水平方向负重 300 克持续 1 分钟，测试后端脚不能有任何的松脱或弯曲。

A load of 300g should be applied to the Terminal for one minute in horizontal direction. There should not be any looseness or bending of Terminals.

6.2 焊锡测试:
Soldering Dip Test

温度 $260 \pm 10^{\circ}\text{C}$ ，时间 5 ± 0.5 秒，浸锡端子前端 2--3mm，沾锡面积需要达到 90% 以上。

The front 2--3 mm of Terminal should be immersed for 5 ± 0.5 seconds at $260 \pm 10^{\circ}\text{C}$. Soldered area must be minimum 90% of the soldering surface.

6.3 耐焊接热性:
Soldering Heat Resistance

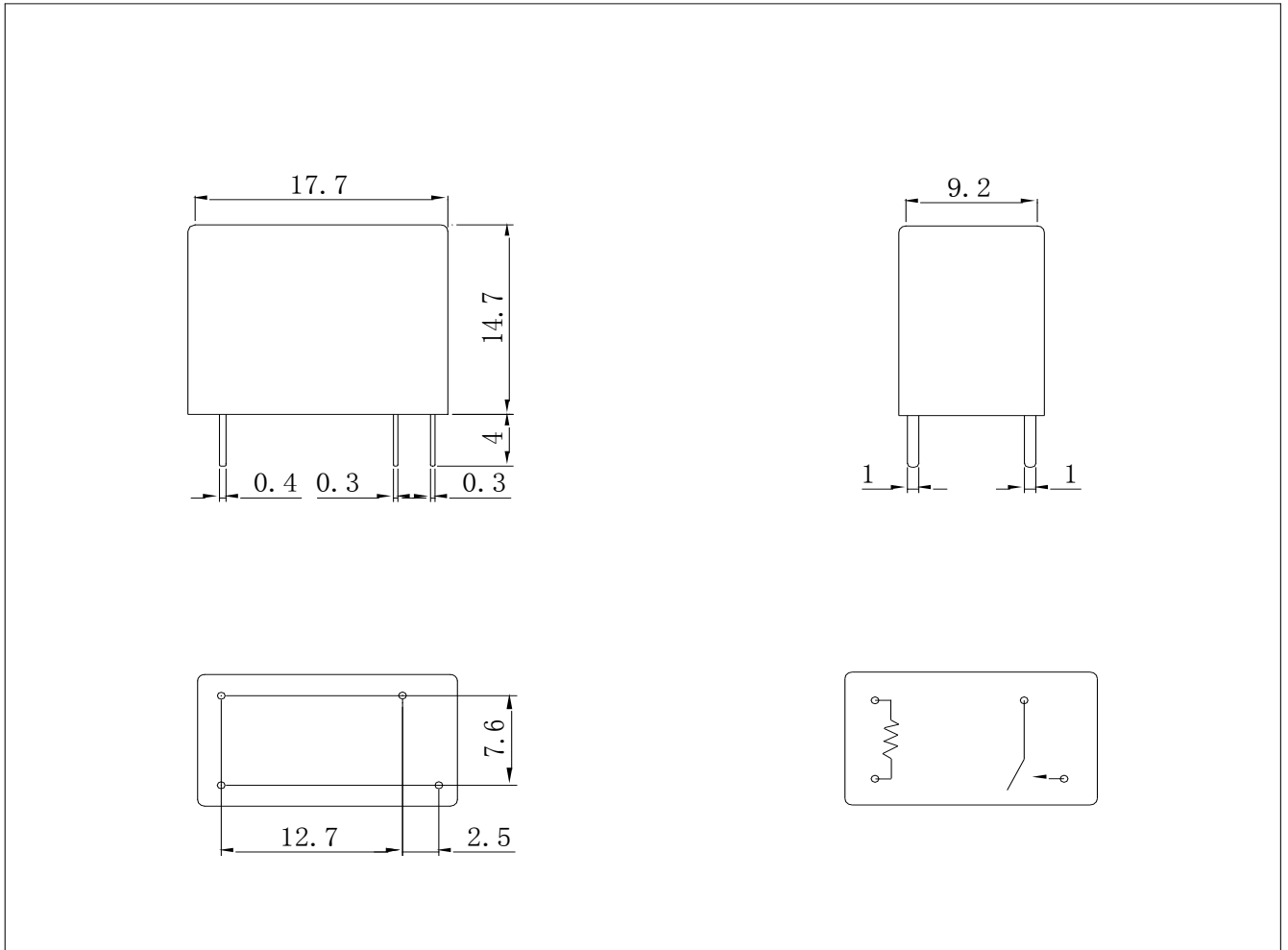
当端脚浸到 350°C 的锡炉内 3 秒钟，继电器必须能符合所有电气和机械规格要求，外观也不能改变。

When the Terminal are immersed into soldering bath at 350°C for 3 seconds, the Relay shall satisfy all electrical and mechanical specifications and must not have excessive change in outside appearance.

7. 抽样检查标准:
Sample Test Method

GB2828-87, 以一般检查水平 II 级 AQL-0.4
GB2828-87 Level – General II, AQL 0.4.

外型尺寸



13	Contact	Ag-Alloy			
12	M Terminal	C5191R-1/2H			
11	Movable Spring	C5191-EH			
10	Hinge	PCu			
9	Yoke	DT4E			
8	Armature	DT4E			
7	Core	DT4C			
6	Coil Wire	Cu	Snp		3UEW/F
5	Coil Terminal	BS-EH			
4	Card	P. B. T		94V-0	
3	Base	P. B. T		94V-0	
2	Case	P. B. T		94V-0	
1	Bobbin	P. B. T		94V-0	
NO.	Name	Material	Finish	Flame Class	Note
制图	检图	承认	品名 用途	BJ SPST	日期 2008-07-18
					图号 BJ-000