



PS No.	PS-010-071
Version	00
Date	2015-5-30

继电器规格书 RELAY SPECIFICATION

品名/Product Description RD-112D-S
零件编号/Part Number
客户名/Customer

客户批准/Customer Approval




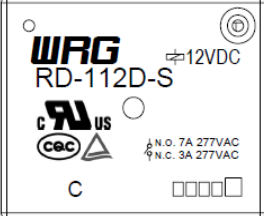
盖章处/STAMPING AREA

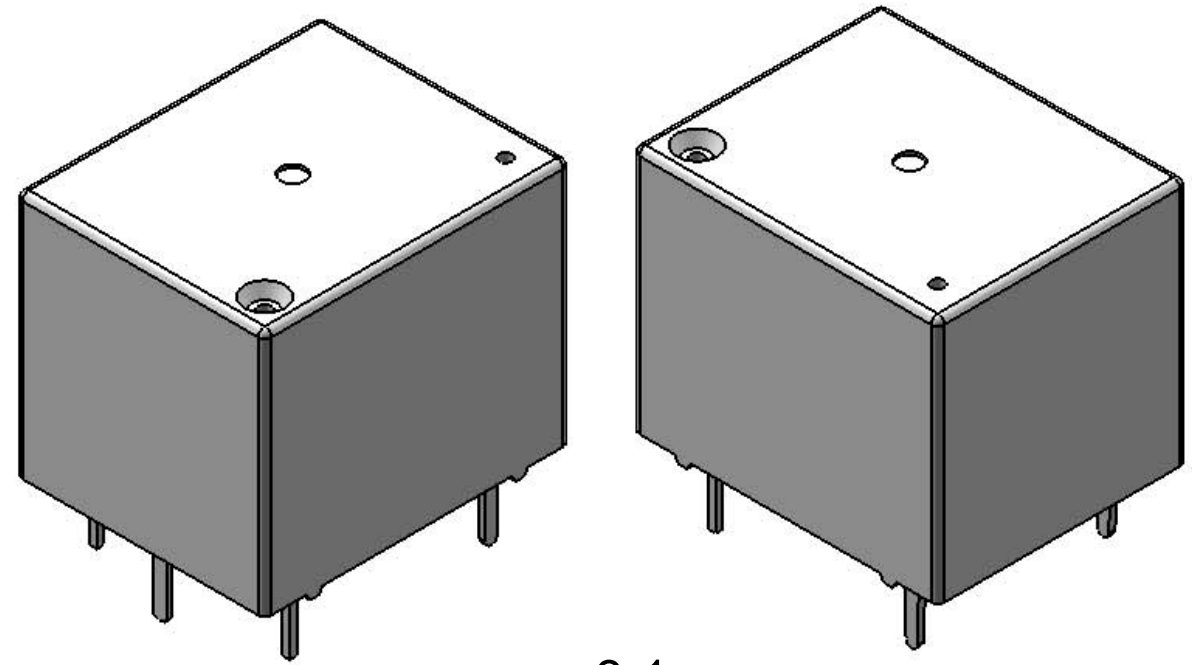
发行批准 / Issued by		
PD	SM	R&D
冯旭强	余明亮	钟久洪

继电器规格书 Relay Specification	型号 Type	RD-112D-S	产品编号 Part Number		PS No.:
1 零件清单/PARTS LIST					PS-010-071
No.	零件名 Part	材质 MATERIAL	型号/处理方式 TYPE/TREATMENT	UL FILE No. FLAME CLASS	Ver
1	外壳 Case	PBT	5010GN6-30 RG301	E53664 E171666	00
2	骨架 Bobbin	PBT	5010GN6-30 M8X	E53664	
3	铁芯 Core	铁 Steel	镀镍 Nickel Plated		
4	轭铁 Yoke	铁 Steel	镀镍 Nickel Plated		
5	衔铁 Armature	铁 Steel	镀镍 Nickel Plated		
6	B接点 B Contact	银合金 Ag Alloy			
7	M接点 M Contact	银合金 Ag Alloy			
8	可动接点 C Contact	银合金 Ag Alloy			
9	B端子 B Terminal	铜合金 Cu Alloy			
10	M端子 M Terminal	铜合金 Cu Alloy			
11	可动弹片 S.C.C	铜合金 Cu Alloy			
12	线圈端子 Coil Terminal	铜合金 Cu Alloy	镀锡 Solder Coated		
13	线材 Wire	聚氨酯漆包圆铜线 Polyurethane copper wire	3UEW 155(F Class)	E164502 E234867	
14	胶水 Sealing Resin	环氧树脂 Epoxy			
15	UV胶 UV Glue				

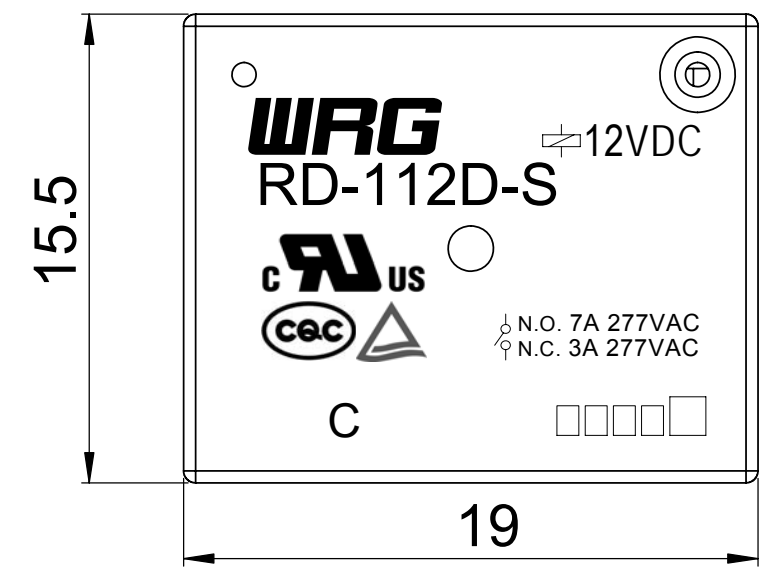
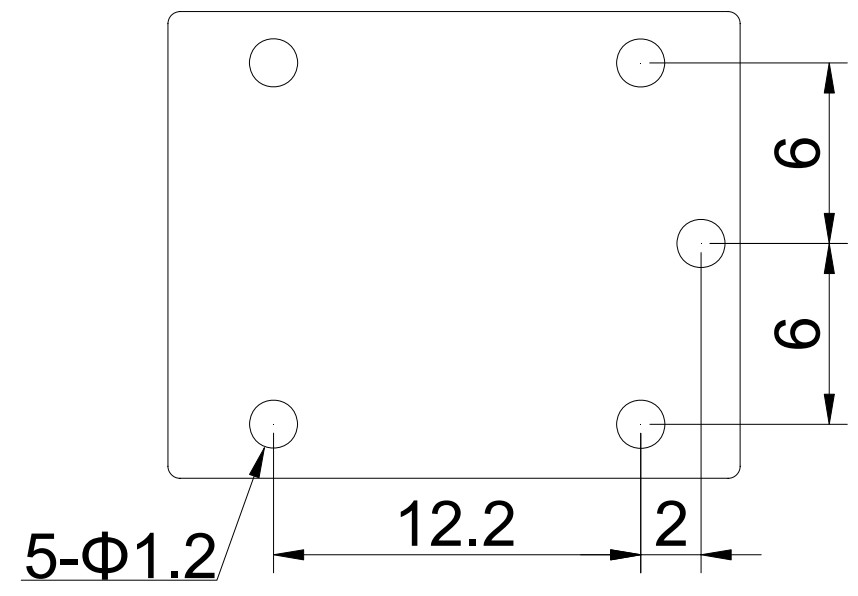
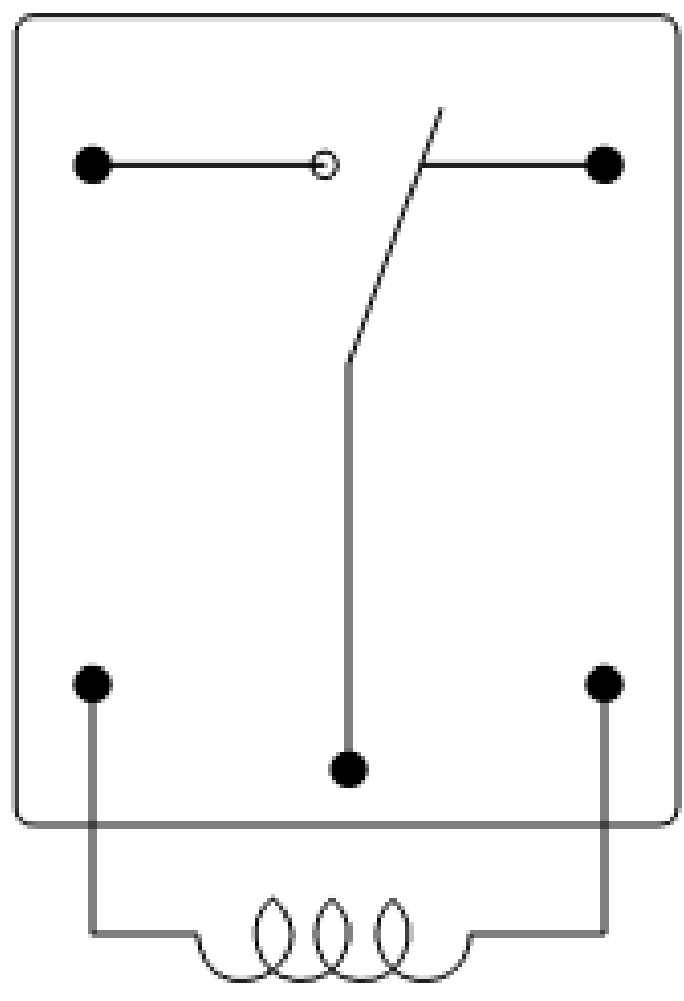
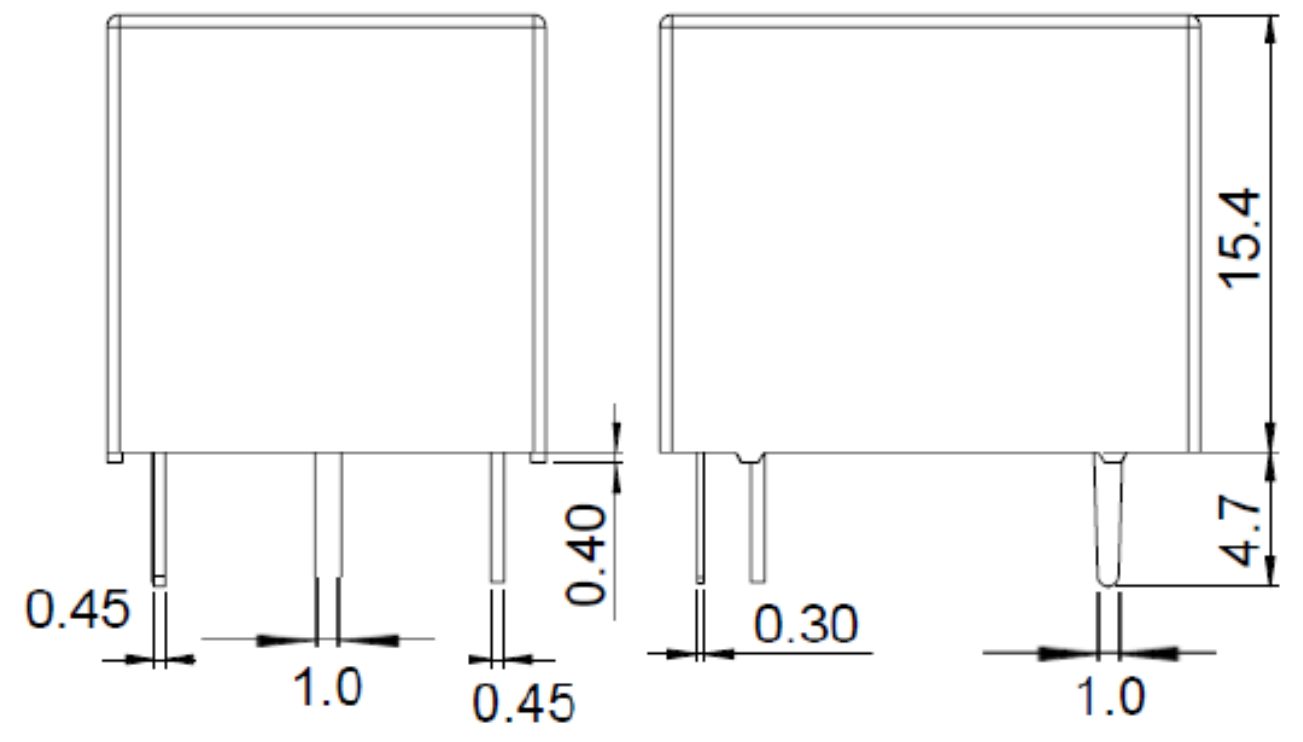
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<p>2. <u>性能/SPECIFICATIONS</u></p> <p>2.1 <u>驱动部分/COIL SPECIFICATIONS</u></p> <table border="0"> <tr> <td>2.1.1 额定电压</td> <td>12</td> <td>VDC (在20°C时)</td> <td></td> <td rowspan="2">PS-010-071</td> </tr> <tr> <td>Rated Coil Voltage</td> <td>12</td> <td>VDC at 20°C</td> <td></td> </tr> <tr> <td>2.1.2 额定功率</td> <td>0.36</td> <td>W (在20°C时)</td> <td></td> <td rowspan="2">Ver</td> </tr> <tr> <td>Nominal Power</td> <td>0.36</td> <td>W at 20°C</td> <td></td> </tr> <tr> <td>2.1.3 线圈电阻</td> <td>400</td> <td>$\Omega \pm 10\%$ (在20°C时)</td> <td></td> <td rowspan="2">00</td> </tr> <tr> <td>Coil Resistance</td> <td>400</td> <td>$\Omega \pm 10\%$ (at 20°C)</td> <td></td> </tr> <tr> <td>2.1.4 额定电流</td> <td>30</td> <td>$\text{mA} \pm 10\%$ (在20°C时)</td> <td></td> <td></td> </tr> <tr> <td>Nominal Current</td> <td>30</td> <td>$\text{mA} \pm 10\%$ (at 20°C)</td> <td></td> <td></td> </tr> <tr> <td>2.1.5 吸合电压</td> <td>9</td> <td>VDC以下 (在20°C时)</td> <td></td> <td></td> </tr> <tr> <td>Operate Voltage</td> <td>9</td> <td>VDC Max. at 20°C</td> <td></td> <td></td> </tr> <tr> <td>2.1.6 释放电压</td> <td>0.6</td> <td>VDC以上 (在20°C时)</td> <td></td> <td></td> </tr> <tr> <td>Release Voltage</td> <td>0.6</td> <td>VDC Min. at 20°C</td> <td></td> <td></td> </tr> <tr> <td>2.1.7 最大连续施加电压</td> <td>18.6</td> <td>VDC Max. 155%额定电压</td> <td></td> <td></td> </tr> <tr> <td>Max Power</td> <td>18.6</td> <td>VDC Max. 155%of Nominal</td> <td></td> <td></td> </tr> </table> <p>2.2 <u>开关部/CONTACT SPECIFICATION</u></p> <table border="0"> <tr> <td>2.2.1 开关类型</td> <td colspan="3">单刀转换型</td> <td></td> </tr> <tr> <td>Contact Configuration</td> <td colspan="3">1 Form C</td> <td></td> </tr> <tr> <td>2.2.2 接点规格</td> <td>N.O.:</td> <td>7</td> <td>A 277VAC (阻性负载)</td> <td></td> </tr> <tr> <td>Contact Rating</td> <td>N.O.:</td> <td>7</td> <td>A @277VAC (Resistive)</td> <td></td> </tr> <tr> <td></td> <td>N.C.:</td> <td>3</td> <td>A 277VAC (阻性负载)</td> <td></td> </tr> <tr> <td></td> <td>N.C.:</td> <td>3</td> <td>A @277VAC (Resistive)</td> <td></td> </tr> <tr> <td>2.2.3 接触电阻</td> <td>100</td> <td colspan="2">mΩ 以下, (初期值, DC 6V/1A条件下)</td> <td></td> </tr> <tr> <td>Contact Resistance</td> <td>100</td> <td colspan="2">mΩ Max. @ Initiate, DC 6V/1A</td> <td></td> </tr> <tr> <td></td> <td>500</td> <td colspan="2">mΩ 以下, (寿命试验后, DC 6V/1A条件下)</td> <td></td> </tr> <tr> <td></td> <td>500</td> <td colspan="2">mΩ Max. @ After Life, DC 6V/1A</td> <td></td> </tr> <tr> <td>2.2.4 吸合时间</td> <td>20</td> <td colspan="2">ms 以下 (额定电压下)</td> <td></td> </tr> <tr> <td>Operate Time</td> <td>20</td> <td colspan="2">ms Max. @ Rated Voltage</td> <td></td> </tr> <tr> <td>2.2.5 释放时间</td> <td>10</td> <td colspan="2">ms 以下 (施加额定电压后断开时)</td> <td></td> </tr> <tr> <td>Release Time</td> <td>10</td> <td colspan="2">ms Max. @ Rated Voltage</td> <td></td> </tr> <tr> <td>2.2.6 最大动作频率</td> <td>300</td> <td colspan="2">次/分 (无负载)</td> <td></td> </tr> <tr> <td>Max. Switching Rate</td> <td>300</td> <td colspan="2">ops./min. (no load).</td> <td></td> </tr> <tr> <td></td> <td>6</td> <td colspan="2">次/分 (额定负载)</td> <td></td> </tr> <tr> <td></td> <td>6</td> <td colspan="2">ops./min. (Rated load)</td> <td></td> </tr> </table>				2.1.1 额定电压	12	VDC (在20°C时)		PS-010-071	Rated Coil Voltage	12	VDC at 20°C		2.1.2 额定功率	0.36	W (在20°C时)		Ver	Nominal Power	0.36	W at 20°C		2.1.3 线圈电阻	400	$\Omega \pm 10\%$ (在20°C时)		00	Coil Resistance	400	$\Omega \pm 10\%$ (at 20°C)		2.1.4 额定电流	30	$\text{mA} \pm 10\%$ (在20°C时)			Nominal Current	30	$\text{mA} \pm 10\%$ (at 20°C)			2.1.5 吸合电压	9	VDC以下 (在20°C时)			Operate Voltage	9	VDC Max. at 20°C			2.1.6 释放电压	0.6	VDC以上 (在20°C时)			Release Voltage	0.6	VDC Min. at 20°C			2.1.7 最大连续施加电压	18.6	VDC Max. 155%额定电压			Max Power	18.6	VDC Max. 155%of Nominal			2.2.1 开关类型	单刀转换型				Contact Configuration	1 Form C				2.2.2 接点规格	N.O.:	7	A 277VAC (阻性负载)		Contact Rating	N.O.:	7	A @277VAC (Resistive)			N.C.:	3	A 277VAC (阻性负载)			N.C.:	3	A @277VAC (Resistive)		2.2.3 接触电阻	100	m Ω 以下, (初期值, DC 6V/1A条件下)			Contact Resistance	100	m Ω Max. @ Initiate, DC 6V/1A				500	m Ω 以下, (寿命试验后, DC 6V/1A条件下)				500	m Ω Max. @ After Life, DC 6V/1A			2.2.4 吸合时间	20	ms 以下 (额定电压下)			Operate Time	20	ms Max. @ Rated Voltage			2.2.5 释放时间	10	ms 以下 (施加额定电压后断开时)			Release Time	10	ms Max. @ Rated Voltage			2.2.6 最大动作频率	300	次/分 (无负载)			Max. Switching Rate	300	ops./min. (no load).				6	次/分 (额定负载)				6	ops./min. (Rated load)		
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2.3 特性/GENERAL SPECIFICATION					PS-010-071
2.3.1 绝缘电阻 Insulation Resistance	1000 MΩ以上 (500VDC) 1000 MΩ Min@500VDC				
2.3.2 介质耐压 Dielectric Strength	750 VAC/分钟(接点间) 1500 VAC/分钟(线圈/接点间) 750 VAC@50/60Hz 1 min.(Between Open Contacts) 1500 VAC@50/60Hz 1 min.(Between Coil and Contacts)				
2.3.3 电气寿命 Electrical Life	N.O.: 1X10 ⁵ 次以上 (额定阻性负载条件下, 气孔打开) N.O.: 1X10 ⁵ Cycle Min. @ Rate Load.Hole vent open N.C.: 1X10 ⁵ 次以上 (额定阻性负载条件下) N.C.: 1X10 ⁵ Cycle Min. @Rate Load				
2.3.4 机械寿命 Mechanical Life	1X10 ⁶ 次以上 (无负载) 1X10 ⁶ Cycle Min. @no load				
2.3.5 使用环境温度 Temperature	-40~105 °C (无凝结时) -40~105 °C @no condensation				
2.3.6 使用环境湿度 Humidity	20~85% RH (无凝结时) 20~85% RH @no condensation				
2.3.7 抗振动 Vibration	耐久 10~55 Hz, 双振幅 1.5mm Mechanical 10 to 55 Hz, 1.5mm double amplitude 误动作 10~55 Hz, 双振幅1.5mm Operational 10 to 55 Hz, 1.5mm double amplitude				
2.3.8 抗冲击 Shock	耐久 980 m/s ² Min (约100G) Mechanical 980 m/s ² Min (100G approximately) 误动作 98 m/s ² Min (约10G) Operational 98 m/s ² Min (10G approximately)				
2.3.9 重量 Weight	9 克 9 g				
2.3.10 焊锡条件 Solder ability	5s @ 260°C (波峰焊) 5s @ 260°C (wave soldering)				
2.4 端子性能/TERMINAL CHARACTERISTICS					Ver 00
2.4.1 端子强度 Terminals strength	5牛/10秒, 任意方向静态压力, 无异常, 但端子弯曲可以 5N 10s, There shall be no abnormalities. (The curving of the terminal shall be acceptable)				
2.4.2 可焊性 Terminal solderbility	260±5°C 5s, 端子头部3mm部分90%以上的面积有锡覆盖 (无铅焊锡) 260±5°C 5s, In Case of lead lead free solder, 90% of the dipped portion shall be solderd.				
2.4.3 耐热性 Soldering Heat Resistance	10s 260°C或3s 350°C, 端子头部3mm浸入锡中, 无异常发生 10s @ 260°C or 3s @ 350°C ,There shall be no abnormalities. (wave soldering)				

继电器规格书 Relay SPECIFICATION	型号 TYPE	RD-112D-S	产品编号 Part Number	PS No.:
2.5 <u>安全规格/SAFETY REQUIREMENTS</u>				PS-010-071
2.5.1 UL规格认定 (UL & C-UL) UL (UL & C-UL)	档案号: File No.:	E345228 		Ver 00
2.5.2 CQC标志认证 CQC	证书编号: Certificate No.:	CQC12002082387 		
2.5.3 TUV规格认定 TUV	证书号 Certificate No.:	R 50244311 		
3. <u>捺印图/Mark Layout</u>				
	注: 仅供参考. For reference only.			
结束/<END>				



3:1



型号	RD	子图号	承认	检图	制图
公差/TOLERANCES (. mm)		作图日期	船山		周波
		2012. 09. 10			
<1	± 0. 2	数量	版本	名称 (用途)	
1 ~ 5	± 0. 3	1	V1. 0	RD C型	
>5	± 0. 4	比例	页数	图号	U-010-11
		4: 1	1/1		