



PS No.	PS-040-018
Version	00
Date	2015-7-6

# 继电器规格书 RELAY SPECIFICATION

品名/Product Description      R53G-112DMF-1-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
许忠	余明亮	冯旭强



继电器规格书 Relay Specification	型号 Type	R53G-112DMF-1-S	产品编号 Part Number	
1. 零件清单/PARTS LIST				
No.	零件名 Part	材质 MATERIAL	型号/处理方式 TYPE/TREATMENT	UL FILE No. FLAME CLASS
1	骨架 Bobbin	PBT	5010GN6-30 M8X	E53664
2	外壳 Case	PBT PBT	RG301 5010GN6-30 M8	E171666 E53664
3	底板 Base	PET PET	FR530 RG305	E41938 E171666
4	铁芯 Core	铁 Steel	镀镍 Nickel Plated	
5	轭铁 Yoke	铁 Steel	镀镍 Nickel Plated	
6	衔铁 Armature	铁 Steel	镀镍 Nickel Plated	
7	可动弹片 S.C.C	铜合金 Cu Alloy		
8	M接点 M Contact	银合金 Ag Alloy		
9	可动接点 C Contact	银合金 Ag Alloy		
10	M端子 M Terminal	铜合金 Cu Alloy		
11	假B端子 Dummy B Terminal	铝合金 Aluminium Alloy		
12	线圈端子 Coil Terminal	铜包钢 Cu covered Steel	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	绝缘片 Insulating sheet	CP	S100P	E106764
16	UV胶 UV Glue			

PS No.:

PS-040-018

Ver

00

继电器规格书 Relay Specification	型号 Type	R53G-112DMF-1-S	产品编号 Part Number	PS No.:
				PS-040-018
				Ver
				00
2. <u>性能/SPECIFICATIONS</u>				
2.1 <u>驱动部分/COIL SPECIFICATIONS</u>				
2.1.1 额定电压 Rated Coil Voltage	12	VDC (在20℃时) VDC at 20℃		
2.1.2 额定功率 Nominal Power	0.9	W (在20℃时) W at 20℃		
2.1.3 线圈电阻 Coil Resistance	155	$\Omega \pm 10\%$ (在20℃时) $\Omega \pm 10\%$ (at 20℃)		
2.1.4 额定电流 Nominal Current	77.4	mA $\pm 10\%$ (在20℃时) mA $\pm 10\%$ (at 20℃)		
2.1.5 吸合电压 Operate Voltage	9	VDC以下 (在20℃时) VDC Max. at 20℃		
2.1.6 释放电压 Release Voltage	0.6	VDC以上 (在20℃时) VDC Min. at 20℃		
2.1.7 最大连续施加电压 Max Power	18.6	VDC Max. 155%额定电压 VDC Max. 155% of Nominal		
2.2 <u>开关部/CONTACT SPECIFICATION</u>				
2.2.1 开关类型 Contact Configuration	单刀常开型 1 Form A			
2.2.2 接点规格 Contact Rating	40	A 277VAC (阻性负载) A @277VAC (Resistive)		
	30	A 250VAC (阻性负载) A @250VAC (Resistive)		
2.2.3 接触电阻 Contact Resistance	100	m $\Omega$ 以下, (初期值, DC 6V/1A条件下) m $\Omega$ Max. @ Initiate, DC 6V/1A		
	500	m $\Omega$ 以下, (寿命试验后, DC 6V/1A条件下) m $\Omega$ Max. @ After Life, DC 6V/1A		
2.2.4 吸合时间 Operate Time	20	ms 以下 (额定电压下) ms Max. @ Rated Voltage		
2.2.5 释放时间 Release Time	10	ms 以下 (施加额定电压后断开时) ms Max. @ Rated Voltage		
2.2.6 最大动作频率 Max. Switching Rate	300	次/分 (无负载) ops./min. (no load).		
	6	次/分 (额定负载) ops./min. (Rated load)		

继电器规格书 Relay Specification	型号 Type	R53G-112DMF-1-S	产品编号 Part Number	PS No.:
2.3 特性/GENERAL SPECIFICATION				PS-040-018
2.3.1 绝缘电阻 Insulation Resistance	1000 MΩ以上 (500VDC) 1000 MΩ Min@500VDC			Ver
2.3.2 介质耐压 Dielectric Strength	1500 VAC/分钟(接点间) 2500 VAC/分钟(线圈/接点间) 1500 VAC@50/60Hz 1 min.(Between Open Contacts) 2500 VAC@50/60Hz 1 min.(Between Coil and Contacts)			00
2.3.3 电气寿命 Electrical Life	1.5X10 <sup>4</sup> 次以上 (40A AC277V额定阻性负载条件下,气孔打开) 1.5X10 <sup>4</sup> Cycle Min. @40A AC277V Rate Load, open vent hole.			
2.3.4 机械寿命 Mechanical Life	1X10 <sup>6</sup> 次以上 (无负载) 1X10 <sup>6</sup> Cycle Min. @no load			
2.3.5 使用环境温度 Temperature	-40~85 °C (无凝结时) -40~85 °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 Mechanical 误动作 Operational	10~55 Hz, 双振幅 1.5mm 10 to 55 Hz, 1.5mm double amplitude 10~55 Hz, 双振幅1.5mm 10 to 55 Hz, 1.5mm double amplitude		
2.3.8 抗冲击 Shock	耐久 Mechanical 误动作 Operational	980 m/s <sup>2</sup> Min (约100G) 980 m/s <sup>2</sup> Min (100G approximately) 98 m/s <sup>2</sup> Min (约10G) 98 m/s <sup>2</sup> Min (10G approximately)		
2.3.9 重量 Weight	33 克 33 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				
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)			

2.5 安全规格/SAFETY REQUIREMENTS

2.5.1 UL规格认定 (UL & C-UL)  
UL (UL & C-UL)

档案号: E241569  
File No.:



2.5.2 CQC标志认证  
CQC

证书编号: CQC14002112000  
Certificate No.:

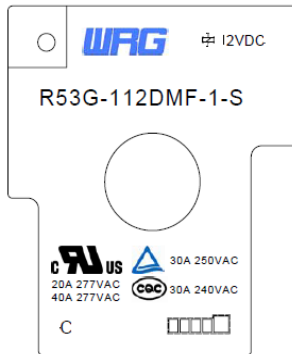


2.5.3 TUV规格认定  
TUV

证书号 R 502812540001  
Certificate No.



3. 捺印图/Mark Layout



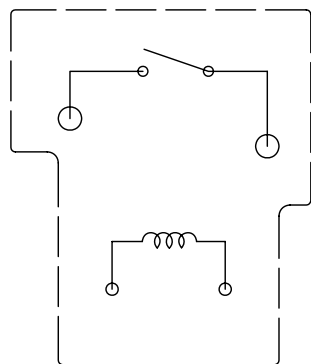
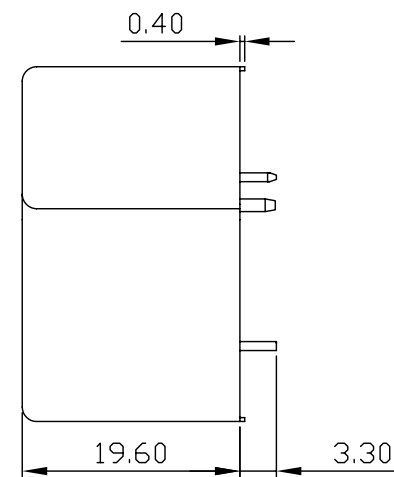
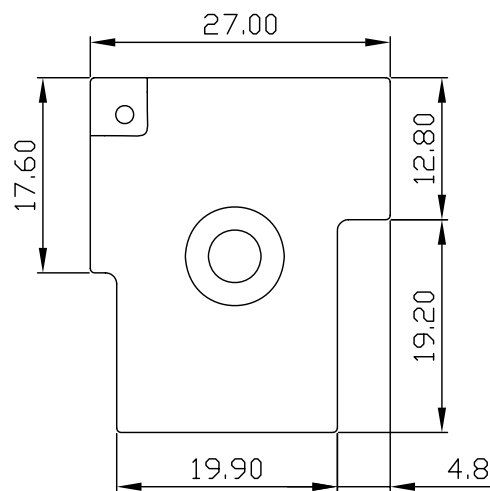
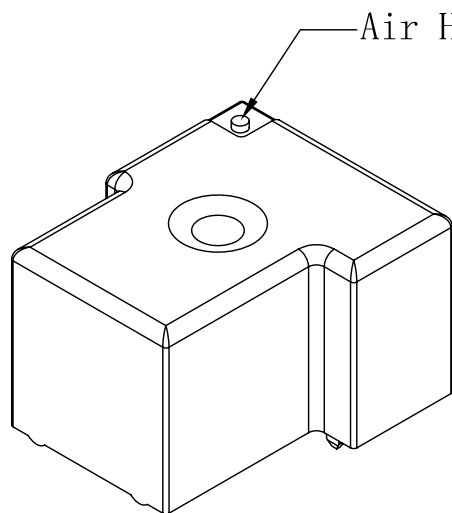
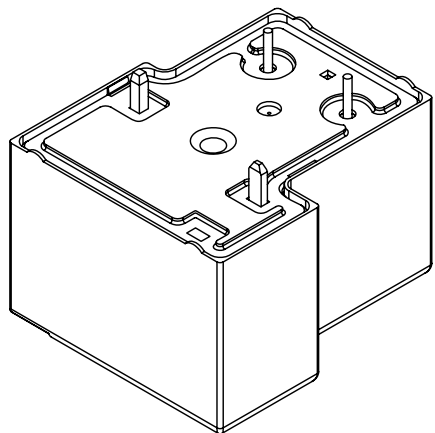
注:  
仅供参考.  
For reference only.

注/Remark

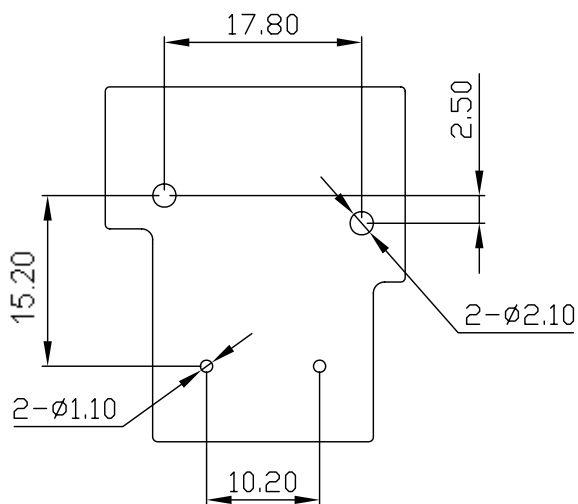
以中文版为准, 英文版仅供参考。

Chinese version is the standard one, English version is only for information.

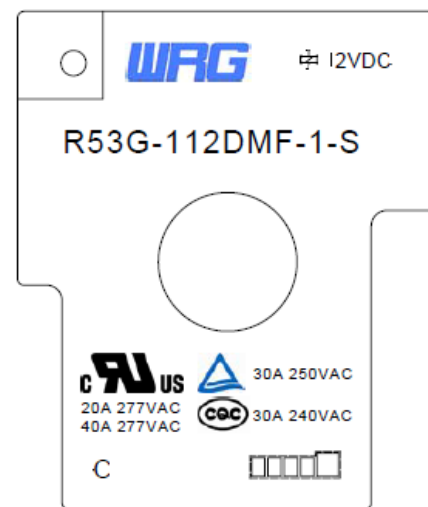
结束/<END>



接线图



PCB



型号	R53G	子图号	承认	检图	制图
公差/TOLERANCES (mm)		作图日期	船山		李莉芳
<1	±0.2	数量	版本	名称 (用途)	
1~5	±0.3	1	V1.0	R53G	
>5	±0.4	比例	页数	图号	U-040-14
		1:1	1/1		

