




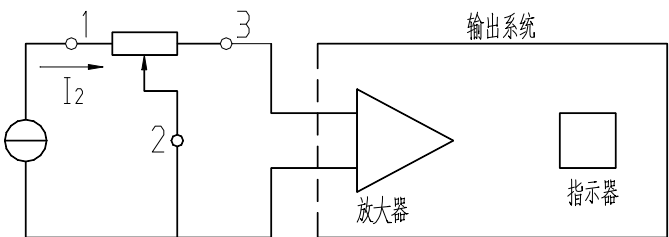


### Mounting hole details

 <b>东莞市凡睿电子科技有限公司</b> DONG GUAN FAN RUI ELECTRONICS & TECHNOLOGY CO., LTD.									
									
				<b>Devision</b>		<b>Date</b>		<b>Design</b>	
<b>Title</b>		<b>RV10 Series</b>		 <b>Unit</b>		<b>Scale</b>		<b>TOLERANCE</b>	
<b>Code</b>		/		MM		3:1			
<b>Dwg Name</b>		RV105NH-6-B100K±20%		MTL				UNDER 10 ±0.3	
<b>Dwg No</b>		GC-G-RV10-004		SPEC				10~100 ±0.5	
<b>DESIGN</b>		<b>CHECK</b>		<b>APPROVAL</b>		DISPOSAL		OVER 100 ±0.8	
								ANGULAR DIMENSION ±5°	

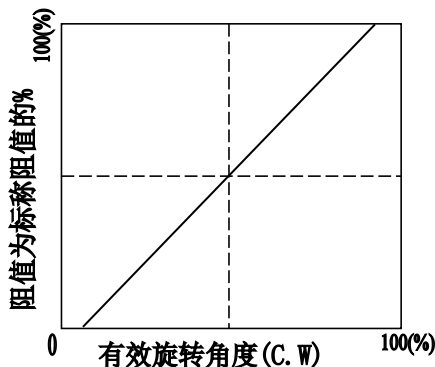
1. General Characteristics		1. 一般特性	
1.1 Shape and dimensions In accordance with the outline and dimension drawing.		1.1 形状尺寸 见附图	
1.2 Operating temperature range -10°C ~ +75°C		1.2 使用温度范围 -10°C ~ +70°C	
1.3 Conserving temperature range -20°C ~ +85°C		1.3 保存温度范围 -20°C ~ +85°C	
1.4 Test conditions Ordinary temperature (5~35°C) Ordinary humidity (45~85°C) Ordinary atmospheric pressure (86~106kPa)		1.4 测试条件 常温 (温度 5~35°C) 常湿 (湿度 45~85%) 常压 (气压 86~106kPa)	
2. Mechanical Characteristics		2. 机械特性	
	Item 项目	Measuring condition 测试条件	Specifications 规格
Rotation operation	2.1 Total rotation angle 全回转角度		235° ±10°
回转操作	2.2 Operating force 动作力	Measure the rotation torque 测试旋转力矩	10~200 gf.cm
	2.3 Lever Stop Strength 止档力矩	Measure when rotate to the tail-end by CW or CCW. 顺时针(或逆时针)旋到底测试	≥200gf.cm
3. Electrical characteristics		3. 电气特性	
Item 项目	Measuring condition 测试条件		Specifications 规格
3.1 Rating 额定值	Power rating(70°C) 70°C时额定功率 W		0.15W
	Max operating voltage (virtual value of direct current or alternating current) 极限电压(直流或交流峰有效值) V		200V
	Insulating voltage (Max direct current or alternating current) 绝缘电压(直流或交流峰值)		300V

Item 项目		Measuring condition 测试条件	Specifications 规格
3.2	Total Resistance error 总阻误差	Measurement shall be made at 1、3 terminals of resistance. 在电阻体的 1、3 端测试	$\Delta R \pm 20\% R$
3.3	Residual resistance 残留电阻	Measurement shall be made separately when potentiometers rotate at 1 terminal and 3 terminal. 电位器旋至 1 与 3 端时分别测试	$R_{1,2} \leq 10 \Omega$ $R_{2,3} \leq 10 \Omega$
3.4	Slider noise 滑动噪声	<p>The residual resistance with the shaft (lever) placed at the end of terminal 1, shall be measured between the terminals 1 and 2. Next with the shaft (lever) placed at the end of terminal 3, the resistance shall be measured between the terminals 2 and 3. If there are tapped terminals, the shaft (lever) shall be turned (moved) and the resulting minimum resistance between the taped terminal and the terminal 2 shall be measured.</p>  <p>按照如图的测试电路测试，以每分钟 2~5 圈的速度转动旋钮。</p>	$\leq 68mV$
3.5	Insulation resistance 绝缘电阻	Measure to Apply DC250V. (Between terminal for reinforcing and the other terminals) DC250V 测试	100M $\Omega$ min. 不小于 100M $\Omega$
3.6	Withstand voltage 耐电压	Apply A.C250V for 1min(Between terminal for reinforcing and the other terminals) A.C250V1 分钟	No damage. Arc and dielectric breakdown. 无损伤、电弧和电故障

4. Endurance		4. 耐久特性	
Item 项目	Measuring condition 测试条件	Specifications 规格	
4.1 Heat resistance  耐热特性	Temperature . . . . . $85 \pm 2^{\circ}\text{C}$ Time . . . . . 16 hours After that , leave in ordinary temp and humidity for an hour. Then measure. 温度 . . . . . $85 \pm 2^{\circ}\text{C}$ 时间 . . . . . 16 小时 然后放置在常温和湿度下一个小时再测试。	Item 2.2 2.3 3.2 3.3 3.4 The same as the initial spec.	项目: 2.2 2.3 3.2 3.3 3.4 同初始规格
4.2 Moisture resistance  耐湿特性	Temperature . . . . . $40 \pm 2^{\circ}\text{C}$ Humidity . . . . . 90~95%Rh Time . . . . . $96 \pm 4$ hours After that , leave in ordinary temp and humidity for an hour. Then measure. 温度 . . . . . $40 \pm 2^{\circ}\text{C}$ 湿度 . . . . . 90~95%Rh 时间 . . . . . $96 \pm 4$ 小时 然后放置在常温和湿度下一个小时再测试。	The same as above.	同上
4.3 Low temperature resistance  耐寒特性	Temperature . . . . . $-20 \pm 3^{\circ}\text{C}$ Time . . . . . $16 \pm 2$ hours After that , leave in ordinary temp and humidity for an hour. Then measure 温度 . . . . . $-20 \pm 3^{\circ}\text{C}$ 时间 . . . . . $16 \pm 2$ 小时 然后放置在常温和湿度下一个小时再测试。	The same as above.	同上
4.4 H <sub>2</sub> S resistance  耐硫化特 性	Density . . . . . $3 \pm 1$ ppm. Temperature . . . . . $40 \pm 2^{\circ}\text{C}$ Humidity . . . . . 80%Rh Time . . . . . $24 \pm 2$ hours After that , leave in ordinary temp and humidity for an hour. Then measure. 浓度 . . . . . $3 \pm 1$ ppm. 温度 . . . . . $40 \pm 2^{\circ}\text{C}$ 湿度 . . . . . 80%Rh 时间 . . . . . $24 \pm 2$ 小时 然后放置在常温和湿度下一个小时再测试。	The same as above.	同上

Item 项目	Measuring condition 测试条件	Specifications 规格
4.5 Vibration 耐振动特性	Amplitude . . . . . 1.5mm Frequency . . . . . 10~55~10Hz for 1 min Vibration directions X.Y.Z (3 directions) Time . . . . . X.Y.Z. each 2 hours 振幅 . . . . . 1.5mm 频率 . . . . . 10~55~10Hz 1 分钟 颤动方向 X.Y.Z (3 个方位) 时间 . . . . . X.Y.Z. 各 2 小时	The same as above. 同上
4.6 Impact resistance 耐冲击特性	Accelation . . . . . 735m/s(75G) Time . . . . . 6ms Directions . . . . . 6 directions×3 times 加速度 . . . . . 735m/s(75G) 作用时间 . . . . . 6ms 方向 . . . . . 6 个方位×3 次	There shall not be visual transformation and noticeable wobble of terminal etc.. 无视觉变化和明显的端部摆振。
4.7 Rotation life 旋转寿命	Operation times . . . . . 5,000T Reciprocate 5,000 times at a speed of 10 ~ 15 times reciprocation per minute with no-load in the ordinary temp and humidity. 操作次数 . . . . . 5,000T 在常温、常湿, 无负载的情况下, 以每分钟往复 10~15 次的速度进行 5,000 次	tem 2.2 2.3 3.3 3.4 The same as the initial spec. Item 3.2 $\Delta R \leq 25\% R$ 项目 2.2 2.3 3.3 3.4: 同初始规格 项目: 3.2 $\Delta R \leq 25\% R$

附图:  
(线性规律)



设计	审核	批准
印章		日期