

电位器规格书

POTENTIOMETER SPECIFICATIONS

1 一般事项 General information

1-1 适用型号 Applicable models	R090、R091 系列 R090、R091 Serial
1-2 使用环境温度 Usage environment temperature	☒ - 10℃ ~ + 70℃ ☐ - 20℃ ~ + 70℃
1-3 保存环境温度 Storage environment temperature	- 40℃ ~ + 70℃
1-4 测试条件 Test condition	温度: 5~35℃, 湿度: 45~85%HR Temperature: 5~35℃, Moisture: 45~85%HR
1-5 环保要求 Environmental requisition	本产品符合 RoHS 指令 This product is compliant with RoHS Directive
1-6 耐焊接热 Soldering heat-resistance	1、手工焊接温度最高 350℃ ± 5℃, 3 秒; Soldering iron Max ,350℃ ± 5℃ at 3 sec 2、自动焊接温度最高 265℃, 3 秒; 基板表面预热温度最高 100℃, 2 分内; Auto soldering 265℃ max. at 3 Sec. Preheating temperature of board surface: 100℃ max. at within 2 minutes. 3、以上过程均保证在 1 到 2 次。 To guarantee the above process at 1 or 2 times. 4、不适用回流焊。 No apply the reflow soldering.
1-7 原产地 Country of origin	中国 China

2 构造 CONSTRUCTION

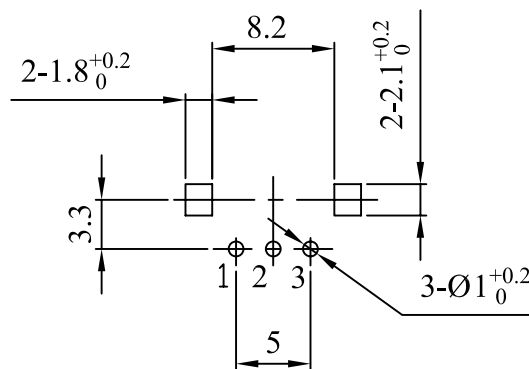
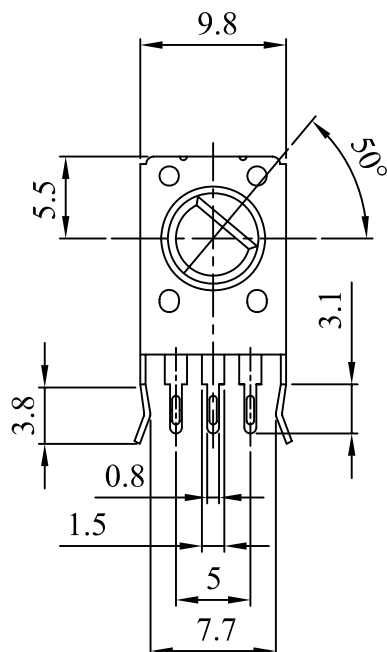
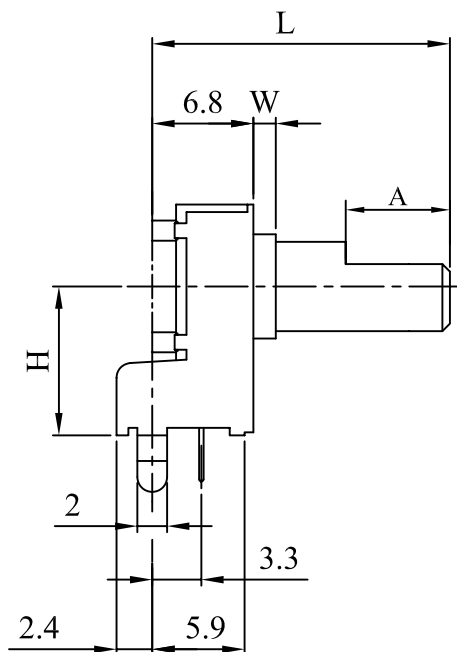
2-1 外观 Appearance	各部件应完整, 无锈蚀、裂痕、电镀不良 Every part should finished, not exist rust flaw crack and bad plating
2-2 寸法 Measurements	依照图面规定 Under conditions prescribed by design drawing.

3 机械性能 Mechanical characteristics

3-1 全回转角度 Total rotational angle	280° ± 10°
3-2 回转力矩 Rotational torque	☒ 20~120gf.cm ☐ ≤ 25gf.cm 注: 旋转速度: 60° /1 秒 Remark: Rotational velocity : 60° /1 Sec.
3-3 CC 脱出力 Detent torque	☒ 不适用(No apply) ☐ 30~150gf.cm
3-4 CC 点数 CC Quantity	☒ 0 ☐ 1

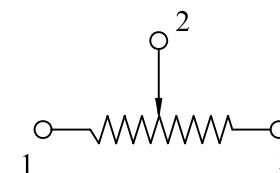
3-5 回转止动强度 Rotational stopper strength	最小 3Kgf.cm 3Kgf.cm Min.			
3-6 轴压引强度 Pull-Push Strength of Shaft	最大 5Kgf 5Kgf Max.			
3-7 轴摇晃度 Shaft wobble	在单个轴芯顶端施加 250gf，轴径向偏移量小于：0.8*轴长 L 尺寸/20mm On the tip of the single shaft exert 250gf，Shaft radial deviant be smaller than: 0.8*shaft long L size/20mm			
4 电气性能 Electrical characteristics				
4-1 全阻抗值 Total resistance	☒ 10 K Ω $\pm$ 20% ☐ K Ω $\pm$ 10% ☐ K Ω +___%/-___%			
4-2 阻抗变化特性 Resistance taper	☐ A ☒ B ☐ C ☐ _____			
4-3 残留阻抗值（端子：1-2, 2-3） End resistance（Terminal :1-2, 2-3）	R $\leq$ 10K Ω ：10 Ω 10K Ω < R $\leq$ 250K Ω ：20 Ω R > 250K Ω ：0.1% Max. of total resistance			
4-4 定格电力 Ratings power	0.05W			
4-5 最高使用电压 Maximum operating voltage	20V DC 或 50V AC 20VDC or 50V AC			
4-6 滑动杂音 Slider noise	最大 100mV 100mV Max.			
4-7 同步误差 Gang error	$\pm$ 4dB（-40dB~0dB） *只适用于双联 *Apply the Dual-Unit only			
4-8 绝缘抵抗 Insulation resistance	250V DC，100M Ω 以上 100M Ω Min. at 250V DC			
4-9 耐电压 Voltage proof	300V AC 1 分钟以上 1 Minute at 300V AC			
4-10 回转寿命 Rotational life	☒ 10,000 周 ☐ 15,000 周 ☐ 30,000 周 ☐ 100,000 周 注：无负荷状态以每小时 600 周旋转，允许阻值最大变化 $\pm$ 15%。 On the without load status according to the 600 r/h rotation, permissible resistance change $\pm$ 15% max.			
东莞市长泰尔电子有限公司 DONG GUAN CHANG TAI ELECTRONIC CO.,LTD		制 作 Designed By	审 核 Checked By	核 准 Approved By
		工程部 2022.03.07 李阳	工程部 2022.03.07 喻钊	工程部 2022.03.07 彭先炎

16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



Mounting hole detail

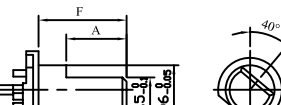
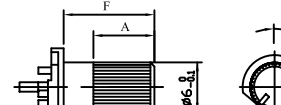
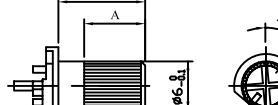
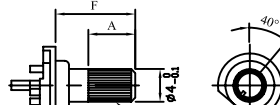
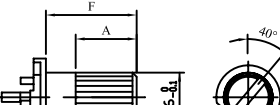
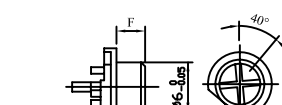
CIRCUIT: NO



product code	H	W
R09011NO	6.5	1.5
R09021NO	10	1.5
R09031NO	12.5	1.5

product code	H	W
R09041NO	6.5	4.5
R09051NO	10	4.5
R09061NO	12.5	4.5

轴的类型:

FB Shaft Style	PA Shaft Style	PB Shaft Style	QA Shaft Style	TA Shaft Style	SA Shaft Style																																																																																														
																																																																																																			
<table><tr><td>F</td><td>8.5</td><td>13.5</td><td>18.5</td><td>23.5</td><td>28.5</td></tr><tr><td>A</td><td>6</td><td>7</td><td>12</td><td>12</td><td>12</td></tr><tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table>	F	8.5	13.5	18.5	23.5	28.5	A	6	7	12	12	12	L	15	20	25	30	35	<table><tr><td>F</td><td>8.5</td><td>13.5</td><td>18.5</td><td>23.5</td><td>28.5</td></tr><tr><td>A</td><td>6</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table>	F	8.5	13.5	18.5	23.5	28.5	A	6	7	7	7	7	L	15	20	25	30	35	<table><tr><td>F</td><td>8.5</td><td>13.5</td><td>18.5</td><td>23.5</td><td>28.5</td></tr><tr><td>A</td><td>6</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table>	F	8.5	13.5	18.5	23.5	28.5	A	6	7	7	7	7	L	15	20	25	30	35	<table><tr><td>F</td><td>8.5</td><td>13.5</td><td>18.5</td><td>23.5</td><td>28.5</td></tr><tr><td>A</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table>	F	8.5	13.5	18.5	23.5	28.5	A	7	7	7	7	7	L	15	20	25	30	35	<table><tr><td>F</td><td>8.5</td><td>13.5</td><td>18.5</td><td>23.5</td><td>28.5</td></tr><tr><td>A</td><td>6</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table>	F	8.5	13.5	18.5	23.5	28.5	A	6	7	7	7	7	L	15	20	25	30	35	<table><tr><td>F</td><td>3</td></tr><tr><td>L</td><td>9.5</td></tr></table>	F	3	L	9.5
F	8.5	13.5	18.5	23.5	28.5																																																																																														
A	6	7	12	12	12																																																																																														
L	15	20	25	30	35																																																																																														
F	8.5	13.5	18.5	23.5	28.5																																																																																														
A	6	7	7	7	7																																																																																														
L	15	20	25	30	35																																																																																														
F	8.5	13.5	18.5	23.5	28.5																																																																																														
A	6	7	7	7	7																																																																																														
L	15	20	25	30	35																																																																																														
F	8.5	13.5	18.5	23.5	28.5																																																																																														
A	7	7	7	7	7																																																																																														
L	15	20	25	30	35																																																																																														
F	8.5	13.5	18.5	23.5	28.5																																																																																														
A	6	7	7	7	7																																																																																														
L	15	20	25	30	35																																																																																														
F	3																																																																																																		
L	9.5																																																																																																		

TB Shaft Style

Technical drawing of TB Shaft Style. The side view shows a shaft with a knurl, a dimension A for the knurl length, and a total length F. The end view shows a 40-degree chamfer, a 18 Tooth Knurl, and a diameter of 64mm. A C0.5 fillet is indicated at the transition.

F	8.5	13.5	18.5	23.5	28.5
A	7	7	7	7	7
L	15	20	25	30	35

FJ Shaft Style

Technical drawing of FJ Shaft Style. The side view shows a shaft with a dimension A for the knurl length and a total length F. The end view shows a 40-degree chamfer and a diameter of 64mm.

F	10.5			
A	9.0			
L	17			

未注尺寸公差

L≤1.0时 ±0.1

1.0<L≤10时 ±0.3

10<L≤30时 ±0.5

30<L≤100时 ±1.0

东莞市长泰尔电子有限公司

视角 制图 谢敏 出图日 2020-05-11

比例 3:1 单位 mm

版本 1.0 设计 审核 批准

品名 R090口1NO 组立图

图号 R090口1NO-

工程部
2022.03.07
李阳

工程部
2022.03.07
喻钊

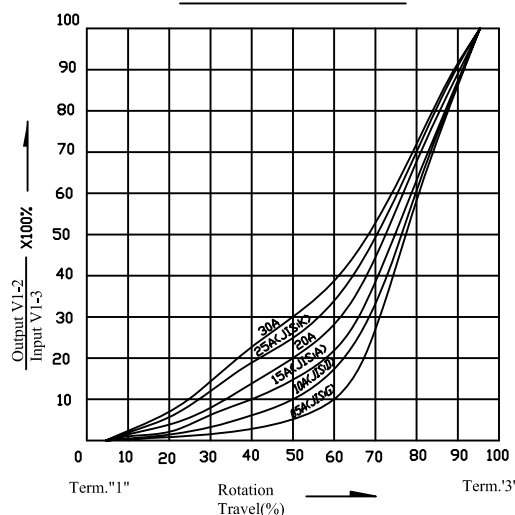
工程部
2022.03.07
彭先炎

标记	变更内容	改图	日期
▽			
▽			
▽			
▽			
▽			

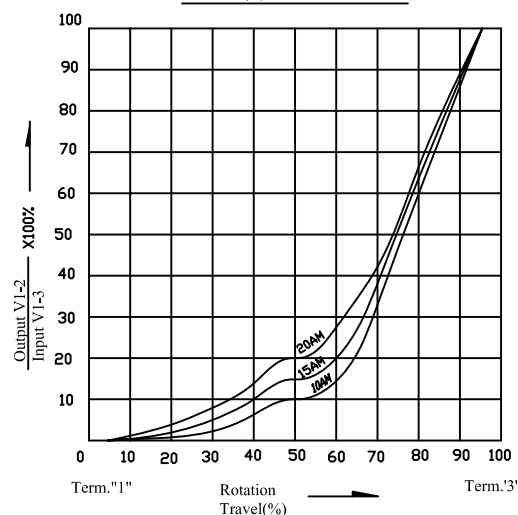
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

阻抗变化特性 Resistance tapers

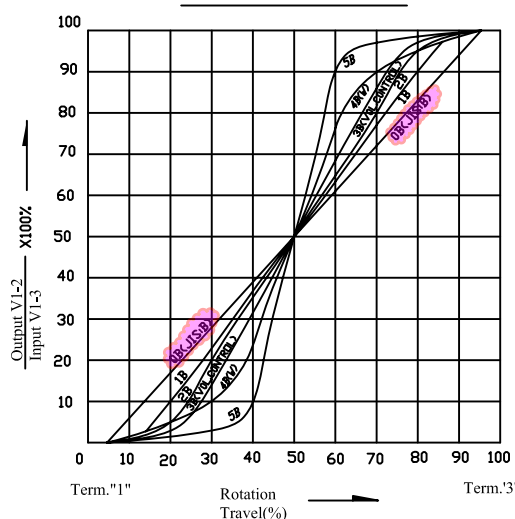
TAPERS (A) SERIES



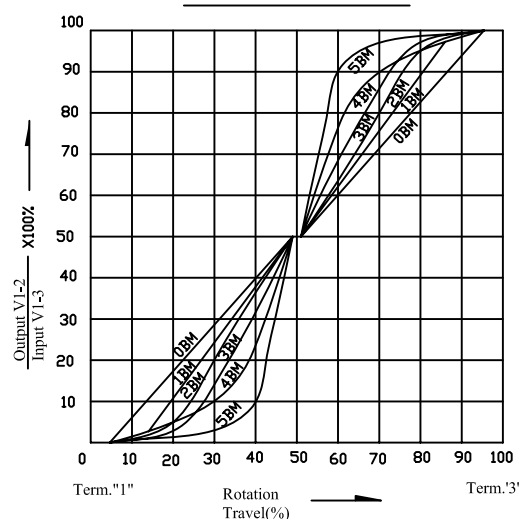
TAPERS (A) WITH 50% TAP



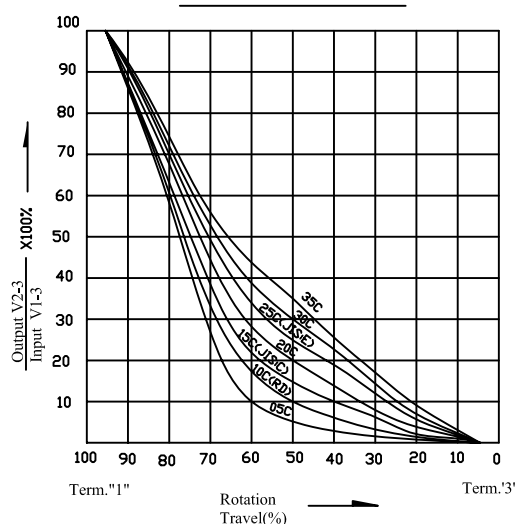
TAPERS (B) SERIES



TAPERS (B) WITH 50% TAP



TAPERS (C) SERIES



TAPERS (M) & (N)

