

CUSTOMER'S NAME

MOUSER ELECTRONICS

ALPHA REFERENCE NO.



SP16090064

# SPECIFICATION

PART NO.	ALPHA MODEL NAME
	RV122F-20-15F-A10K-0072

MODEL NAME
MODEL NO.

APPROVAL

PREPARED BY	REVIEWED BY	APPROVED BY
 2016.9.09		 2016-9-9



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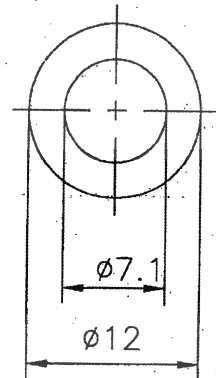
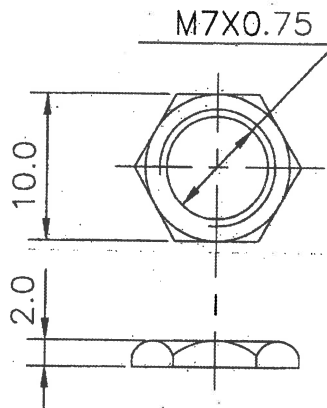
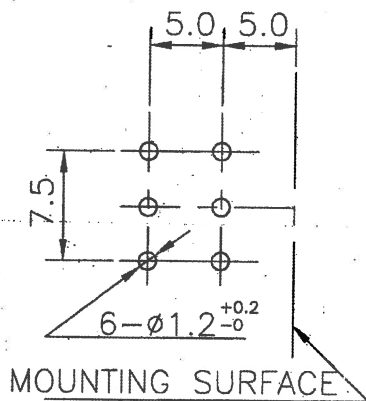
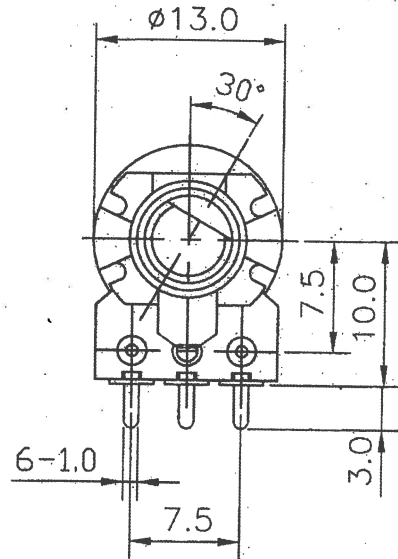
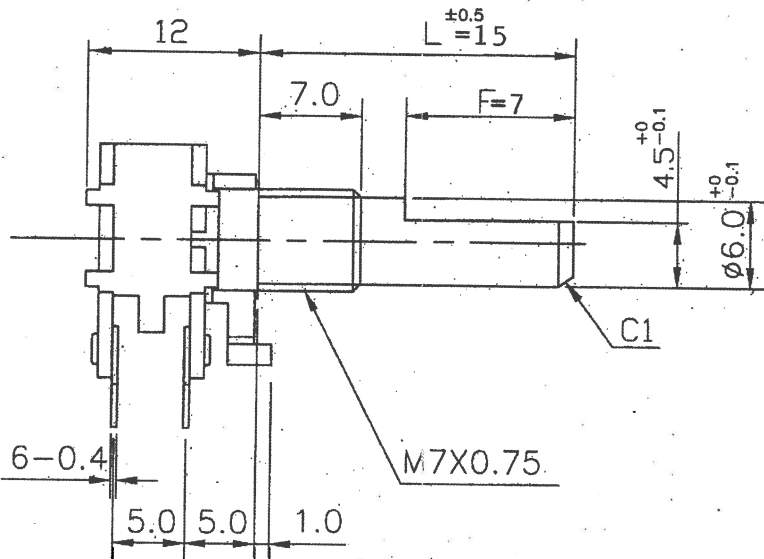
石碇福隆工業區艾華電子廠

JUN 10. 2008

收文日

文管中心  
2008.06.09  
發行庫

SHAFT SHOWN IN  
FULL C.C.W. POSITION



環保

P.C.B. MOUNTING HOLE DETAIL

NUT 1PC

WASHER 1PC

						-0072
						RV122F-20-(L)F-XXX
No.	DATE	DESCRIPTION	PART No.	NAME		
TOL. UNLESS OTHERWISE STATED	DIMENSION	SCALE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING No.
less than 10	±0.3	2 1	吳 97.6.4	王 2008.6.04	楊 2008.6.4	
above 10~30	±0.5		宜芬	茂松	孟鑫	
above 30~100	±1.0					
above	±5'					

12 $\phi$ 單軸多連迴轉型規格書

## SPECIFICATIONS OF ROTARY POTENTIOMETER

## 一、電氣規格：

Electrical characteristics :

1.1 全阻值：阻值適用範圍：1 K $\Omega$  - 500 K $\Omega$  (容許差 $\pm 20\%$ )Overall resistance range : 1 K $\Omega$  - 500 K $\Omega$  (Tolerance $\pm 20\%$ )

1.2 額定功率：B特性 0.08W B特性以外 0.04W

Power rating : B Taper 0.08W Except B Taper 0.04W

1.3 阻抗變化特性 Taper :

阻抗變化 特性 Taper	測定角度 Test point	端子 1-2 間輸出電壓	V1-2	端子 2-3 間輸出電壓	V2-3
		端子 1-3 間輸入電壓	V1-3 (%)	端子 1-3 間輸入電壓	V1-3 (%)
A	150°		10-25		
B	150°		40-60		
C	150°			10-25	
D(10A)	150°		6-15		
X(10C)	150°			6-15	
K(25A)	150°		18-34		
E(25C)	150°			18-34	

1.4 殘留阻值：1-2 端子/2-3 端子同。

Residual resistance : 1-2/2-3 Same

公稱阻抗值(K $\Omega$ ) Overall resistance(K $\Omega$ )	殘留阻值( $\Omega$ ) Residual resistance( $\Omega$ )
$R \leq 10$	10 以下      10MAX
$10 < R \leq 250$	20 以下      20MAX
$250 < R \leq 500$	全阻值的 0.1% 以下 0.1% Max of total resistance

1.5 轉動雜音：依 JIS 測定法 47mV 以下。

Rotation noise (Refer to JIS) : 47mV max.

1.6 絕緣阻抗：D.C 500V 主軸與端子絕緣阻抗須在 50M $\Omega$  以上。Insulation resistance : 50M $\Omega$  min. at D.C 500V between shaft and terminal.

1.7 耐電壓：A.C 500V 可耐 1 分鐘以上，軸與接頭之間不得有損傷或絕緣破壞之現象發生。

Dielectric test : Units shall be designed to withstand 500 volts between resistance elements and case for a period of one minute without damage or arcing.

1.8 最高使用電壓：A.C 100V. (A.C 專用)。

Maximum operating voltage : 100V A.C (A.C voltage only)

1.9 連動誤差：在前、後段的 1-3 端子間加 1KHZ, 2V 的電壓，以前段為基準，1-2 端子間的輸出測定

前段	後段誤差
-40~0dB 之間	在 $\pm 3$ dB 以內

Tracking error : Apply 2V (1KHZ) across terminals 1 and 3 of the front and rear sections measure the output level across terminals 1 and 2 of the outer section is within 3dB of the inner section output level which is -40 to 0 dB.

12 $\phi$ 單軸多連迴轉型規格書  
SPECIFICATIONS OF ROTARY POTENTIOMETER

二、機械規格：

Mechanical :

- 2.1 全迴轉角度：300 $\pm$ 5度  
Total rotation angle : 300 $\pm$ 5 $^{\circ}$
- 2.2 回轉轉矩：10~150gf-cm (迴轉速度 60度 / 1秒)  
Rotation torque : 10~150gf-cm. (Rotational speed 60 $^{\circ}$  / 1 sec)
- 2.3 軸鬆動：固定腳銲錫後軸前端加上 250gf-cm 之力矩，於軸前端移動 0.8  
xL/20mm P-P 以內。  
Play of shaft : The resistor shall be mounted by soldering the mounting legs on the panel ,and an end thrust of 250gf-cm at the end of the shaft shall be applied. Then the total play of the shaft shall not exceed 0.8xL/20mm P-P.
- 2.4 軸擠壓引張強度：在軸之方向加壓力或張力之靜負荷 10kgf,10秒鐘無異常。  
Axis push-pull strength : No damages with an application of push or pull force 10kgf for 10 sec.
- 2.5 軸之迴轉止動強度：3kgf-cm 以上。  
Shaft end stop strength : 3kgf-cm min.
- 2.6 軸承螺絲固定強度：7kgf-cm 以上。  
Bushing mount strength : 7kgf-cm min.
- 2.7 端子強度：銲錫後,不可發生顯著之鬆動接觸不良。  
Resistance to soldering heat : After soldering , there shall be no evidence of poor contact between resistance element and terminals ,or any physical damages as a result of the test .
- 2.8 CLICK 位置：150  $\pm$  2.5 $^{\circ}$   
POSITION OF CLICK : 150  $\pm$  2.5 $^{\circ}$
- 2.9 CLICK 脫出力：50~300gf-cm  
TORQUE OF CLICK : 50~300gf-cm
- ☆ (2.8, 2.9 僅適用於附 CLICK 時)  
(2.8, 2.9 IS USED FOR CLICK ONLY)

三、耐久性：

Reliability test :

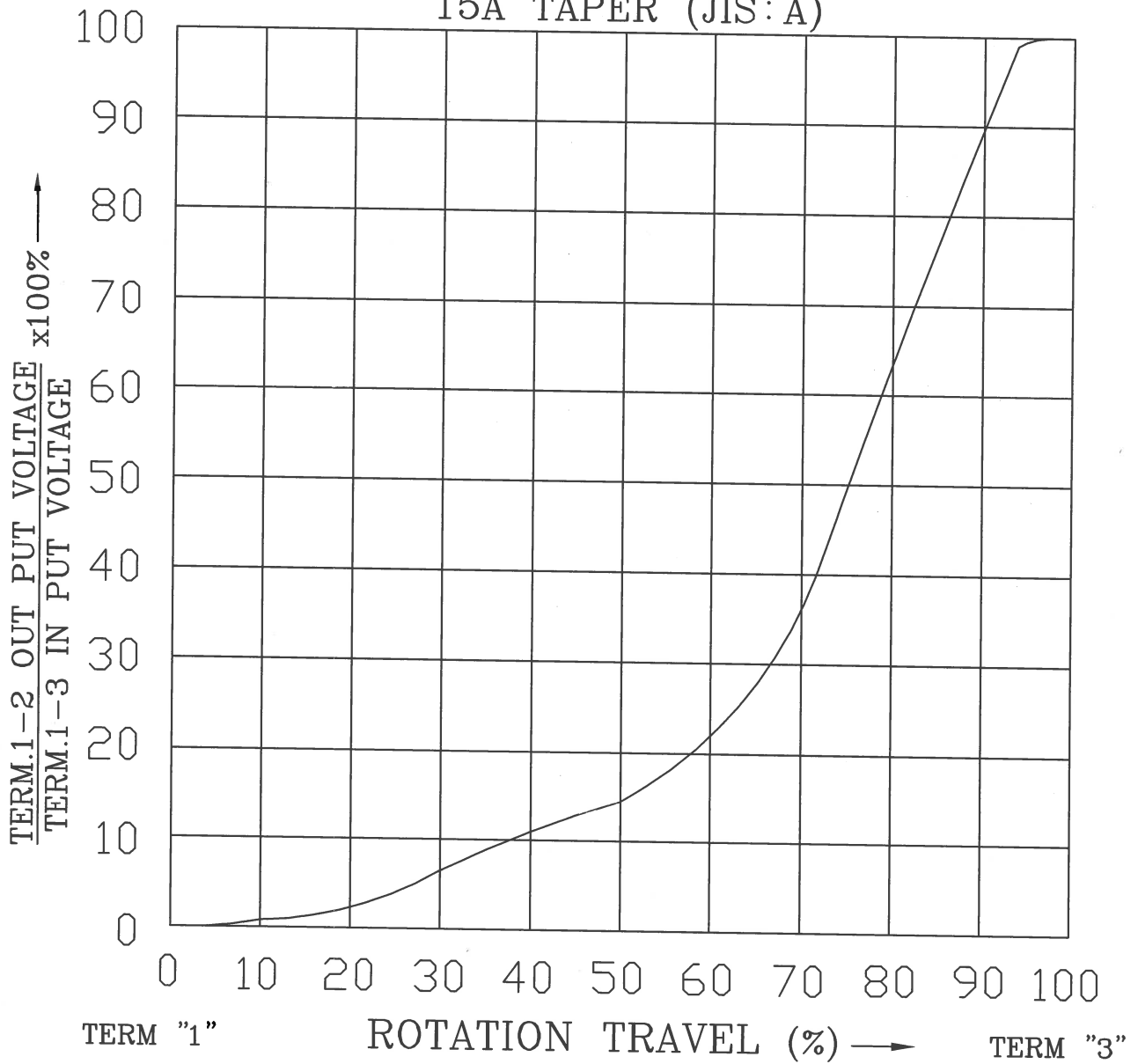
- 3.1 電阻體迴轉壽命特性：15,000轉以上，壽命試驗後 200mV 以下。  
Rotational life : 15,000 cycles min. After life test : 200mV max.  
\* (500 $\Omega$  resistance shall be endurable with life test of more than 5,000 cycles.)

四、其它 NOTE

- 4.1 依照 J I S C - 6 4 4 3 普通級碳素系可變電阻器。  
Meet or exceed J I S C - 6 4 4 3 Requirements .

# STANDARD RESISTANCE TAPER

15A TAPER (JIS: A)



NO.	DATE	DESCRIPTION		MODEL NAME			
TOL. UNLESS OTHERWISE STATED		DIMENSION	SCALE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NO.
less than 10 ±0.3		mm		何	王	王	
above 10 ~ 30 ±0.5				90.8.21	90.8.21	90.8.21	
above 30 ~100 ±1.0				建志	茂松	茂松	
above ±5'							