

CUSTOMER'S NAME

MOUSER ELECTRONICS

ALPHA REFERENCE NO.

SP19070077




SPECIFICATION

PART NO.	ALPHA MODEL NAME
	RD901F-40-15R1-B100K-00DL1
	311-1940F-15R1-B100K

MODEL NAME

MODEL NO.

APPROVAL

PREPARED BY	REVIEWED BY	APPROVED BY
 2019.7.13 彩霞	 2019-7-13 延玲	 2019.7.15 祖衛



台灣艾華電子工業股份有限公司

33045 桃園市桃園區中正路 1221 號 9 樓

TAIWAN ALPHA ELECTRONIC CO., LTD.

9F, No. 1221, Chung Cheng Rd., Taoyuan Dist., Taoyuan City, 330 Taiwan

Tel: 886-3-3577799 Fax: 886-3-3577700

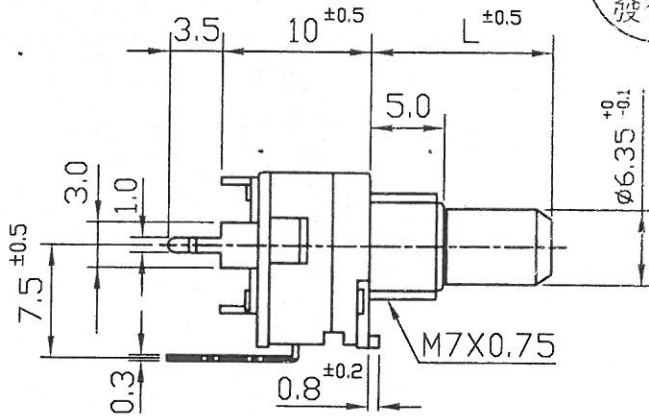
EMAIL: sales@taiwanalpha.com.tw

URL: <http://www.taiwanalpha.com>

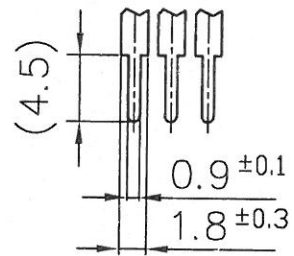
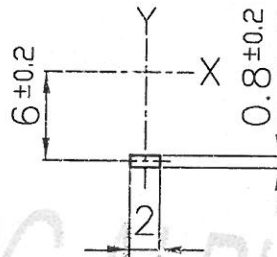
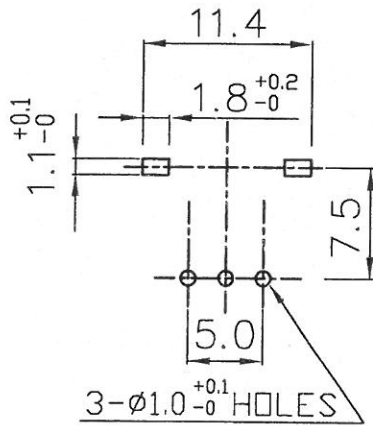
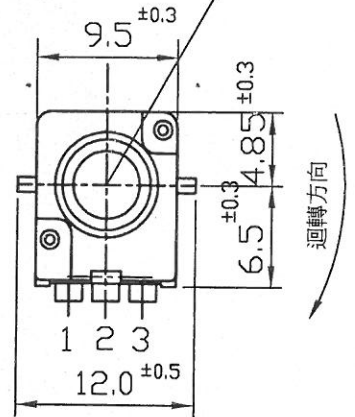
文管中心
2012.05.10
發行章

SHAFT SHOWN IN
FULL C.C.W. POSITION

(迴轉開始位置)



	L
	15



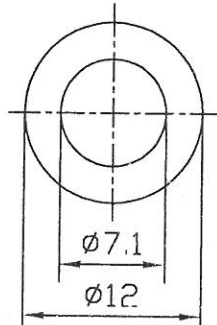
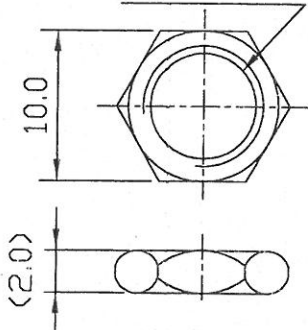
DG ALPHA

P.C.B. MOUNTING HOLE DETAIL

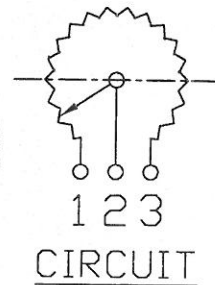
NUT 1PC
M7X0.75

WASHER 1PC

● 300° ROTATION
MONO UNIT



2012-05-15
收文日



CIRCUIT

-<OODL1>

RD901F-40-(L)R1-XXX-0XD

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	2:1	李 2012.5.9 延玲	劉 2012.5.9 全紅	
above	10~30	±0.5					
above	30~100	±1.0					
above		±5'					

9Ø 單軸單連迴轉型規格書

SPECIFICATIONS OF ROTARY POTENTIOMETER

一、電氣規格：

Electrical characteristics :

- 1.1 全阻值：阻值適用範圍：1 KΩ- 500 KΩ (容許差±20%) 1000 KΩ 以上 (容許差±30%)
Overall resistance range : 1 KΩ- 500 KΩ (Tolerance±20%) 1000 KΩ Min (Tolerance±30%)
(500Ω 適用 B Taper) (500Ω B Taper Only)
- 1.2 額定功率：B 特性 0.05W B 特性以外 0.02W
Power rating : B Taper 0.05W Except B Taper 0.02W
- 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	
E(25C)	*150°			18-34	
K(25A)	150°	18-34			
M	75±5°	40-60			
	150°	98-100			
*N	*75±5°			40-60	
	*150°			98-100	

(註) *記號表示自第三端子測起

*With respect to terminal 3

- 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(KΩ) Overall resistance(KΩ)	殘留阻值 (Ω) Residual resistance(Ω)
$R \leq 10$	20 以下 20MAX
$10 < R \leq 50$	30 以下 30MAX
$50 < R \leq 500$	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 100mV 以下·

Rotation noise (Refer to JIS) : 100mV max.

- 1.6 絕緣阻抗：D.C 250V 須在 100MΩ 以上·

Insulation resistance : 100MΩ min. At D.C 250 Volts

- 1.7 耐電壓：A.C 300V 可耐 1 分鐘以上·

Dielectric test : Units shall be designed to withstand 300 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 50V (A.C 專用)·

Maximum operating voltage : 50V A.C (A.C voltage only)

9Ø 單軸單連迴轉型規格書
SPECIFICATIONS OF ROTARY POTENTIOMETER

二、機械規格：

Mechanical：

- 2.1 全迴轉角度：300±5度
Total rotation angle：300±5°
- 2.2 回轉轉矩：20~250gf-cm (迴轉速度 60度 / 1秒)
Rotation torque：20~250gf-cm. (Rotational speed 60° / 1 sec)
- 2.3 軸鬆動：固定腳錫後軸前端加上 250gf-cm 之力矩，於軸前端移動 0.8
×L/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：4kgf-cm 以上。
Shaft end stop strength：4kgf-cm min.
- 2.6 軸承螺絲固定強度：7kgf-cm 以上。
Bushing mount strength：7kgf-cm min.
- 2.7 錫耐熱性能：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±5度 (center click)
Click position：150±5° (center click)
- 2.9 Click 脫出力：30~250gf-cm (迴轉速度 60° / 1秒)
Click torque：30~250gf-cm (Rotational 60° / 1 sec)
- 2.10 Click 壽命：5,000轉以上。
Click life：5,000cycles min.
- ☆ (2.8, 2.9, 2.10 僅適用於附 CLICK 時)
(2.8, 2.9, 2.10 IS USED FOR CLICK ONLY)

三、耐久性：

Reliability test：

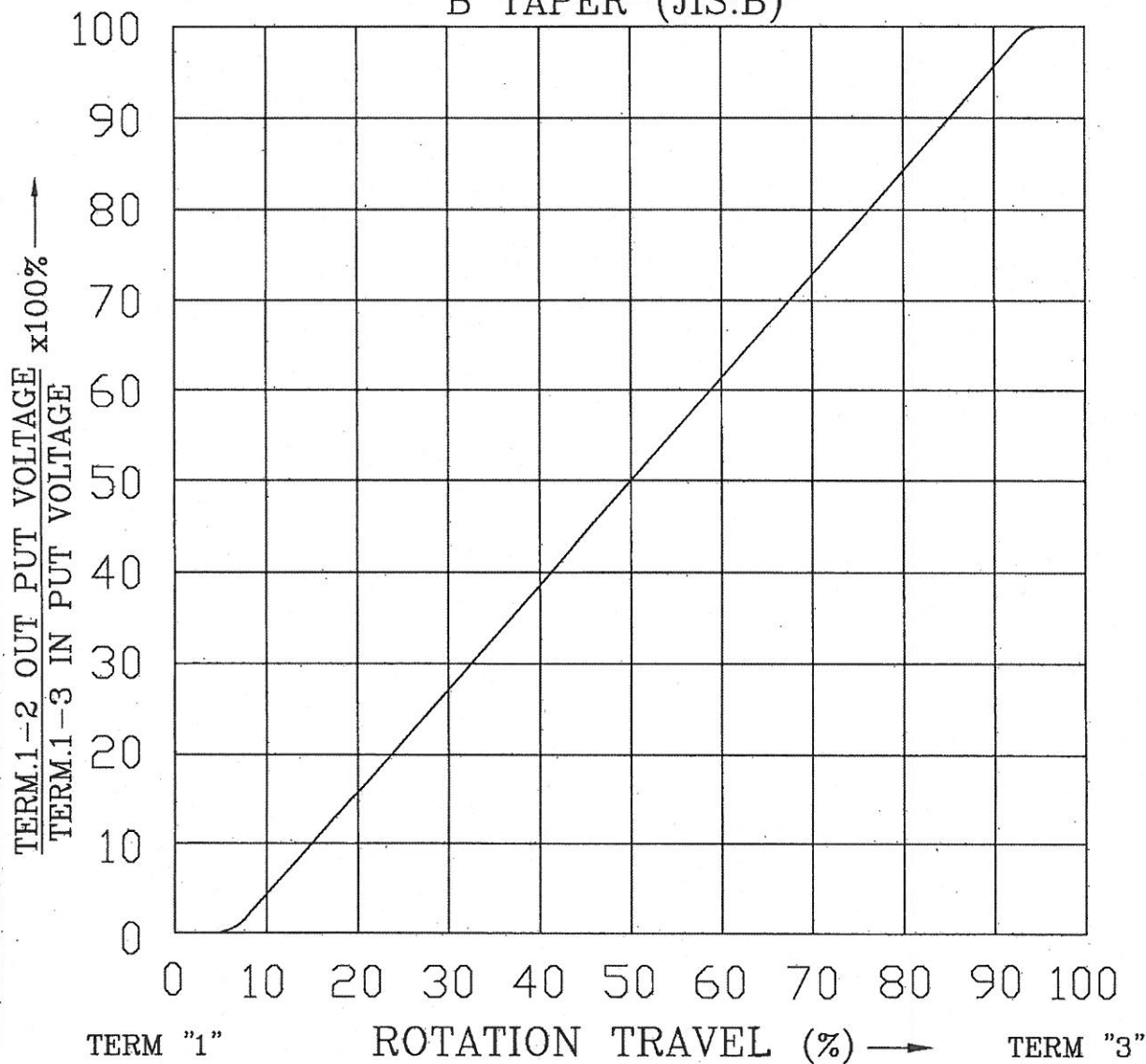
- 3.1 電阻體迴轉壽命特性：15,000轉以上。(阻值 500Ω 5,000回轉)
Rotational life：15,000 cycles min.
* (500Ω resistance shall be endurable with life test of more than 5,000 cycles.)

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.
- 4.2 使用溫度：10°C~+70°C
Operating temperature range: 10°C~+70°C
- 4.3 儲存溫度：-20°C~+80°C
Storage temperature range：-20°C~+80°C

STANDARD RESISTANCE TAPER

B TAPER (JIS:B)



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 90.8.21 建志	王 90.8.21 茂松	王 90.8.21 茂松		
above 10 ~ 30	±0.5						
above 30 ~ 100	±1.0						
above	±5°						