

CUSTOMER'S NAME

MOUSER ELECTRONICS

ALPHA REFERENCE NO.




SP19070080

SPECIFICATION

| PART NO. | ALPHA MODEL NAME |
|----------|-------------------------|
| | RV16AF-10-15S1-A100K-LA |
| | 313-1500F-100K |
| | |
| | |
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| |
|------------|
| 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 |



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TAIWAN ALPHA ELECTRONIC CO., LTD.

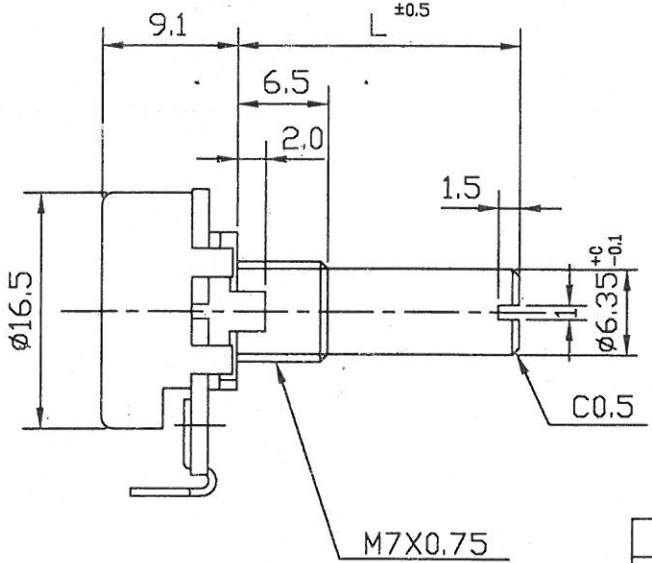
9F, No. 1221, Chung Cheng Rd., Taoyuan Dist., Taoyuan City, 330 Taiwan

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

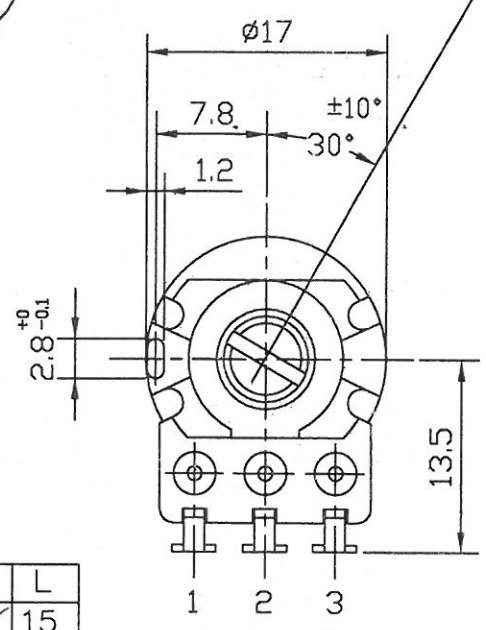
EMAIL: sales@taiwanalpha.com.tw

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

文管中心
2016.06.23
發行章



FULL C.C.W. POSITION

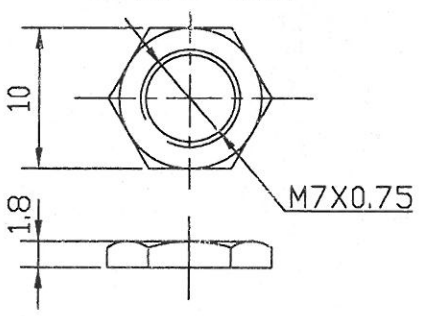


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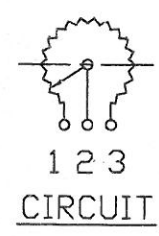
DG ALPHA

NUT 1 PC

WASHER 1 PC t=0.4



● 300° ROTATION
MONO UNIT



NOTE:
BUSHING MATERIAL IS ZINC ALLOY DIECASTING.

2016-06-27
收文日

RV16AF-10-(L)S1-XXX(-LA)

| | | | | | | | |
|------------------------------|--------|-------------|----------|----------------------|------------|---------------------|-------------|
| No. | DATE | DESCRIPTION | PART No. | NAME | | | |
| TOL.UNILESS OTHERWISE STATED | | DIMENSION | SCALE | DRAWN BY | CHECKED BY | APPROVED BY | DRAWING No. |
| less than | 10 | ±0.3 | 2 1 | 姚 2016.6.14 榕偉 | | 潘 2016.6.14 坤 | |
| above | 10~30 | ±0.5 | | | | | |
| above | 30~100 | ±1.0 | | | | | |
| above | | ±5' | | | | | |

16Ø 單軸單連迴轉式 VR 規格書

SPECIFICATIONS OF 16Ø ROTARY POTENTIOMETER

一、機械規格 MECHANICAL CHARACTERISITICS :

1.1 全迴轉角度：300 ± 5 度

OVERALL ROTATION ANGLE : 300 ± 5° .

1.2 迴轉轉矩：20~200gf-cm (迴轉速度 60 度 / 1 秒)

OPERATION TORQUE : 20 ~ 200gf-cm . (ROTATIONAL SPEED 60° / 1 sec)

1.3 起動迴轉轉矩：450gf-cm 以下

STARTING TORQUE : 450gf-cm MAX .

1.4 軸鬆動：固定腳焊錫後軸前端加上 500gf-cm 之力矩，於軸前端移動之

0.7 × L / 30 mm 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 500gf-cm AT THE END OF THE SHAFT SHALL BE APPLIED .

THEN THE TOTAL PLAY OF THE SHAFT SHALL BE NOT EXCEED 0.7 × L / 30 mm P-P .

1.5 軸擠壓引張強度：焊錫後擠壓，引張耐 8kgf，3 秒（指施加於垂直軸之端面而言）不可有電氣或機械上的異常 .

STRENGTH OF SHAFT AGAINST END THRUST :

THE SHAFT SHALL WITHSTAND AGAINST END THRUST OF NOT LESS THAN 8kgf FOR 3 SECONDS .

1.6 軸之迴轉止動強度：6kgf-cm 以上 .

SHAFT END STOP STRENGTH : 6kgf-cm MIN .

1.7 軸橫擠壓強度：鉍錫後軸前端垂直方向耐 3kgf-cm，3 秒後不可有電氣或機械上的異常 . (1.6，1.7 項並不包含鉍錫部位之浮起)

ROBUSTNESS OF SHAFT AGAINST SIDE THRUST :

THE SHAFT SHALL WITHSTAND AGAINST SIDE THRUST OF NOT LESS THAN 3kgf-cm FOR 3 SECONDS ON THE END OF THE SHAFT AT RIGHT ANGLES TO THE AXIS OF THE SHAFT AFTER MOUNTING THE RESISTOR BY SOLDERING .

1.8 鉍錫耐熱性：鉍錫後,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 ELLEMENT AND TERMINALS , OR ANY PHYSICAL DAMAGES AS A RESULT OF THE TEST .

- 1.9 軸承螺絲固定強度：7kgf-cm 以上。
BUSHING MOUNT STRENGTH：7kgf-cm MIN.
- 1.10 CLICK 位置：150 ± 2.5°
POSITION OF CLICK：150 ± 2.5°
- 1.11 CLICK 脫出力：30~250gf-cm
TORQUE OF CLICK：30~250gf-cm
☆ (1.10, 1.11 僅適用於附 CLICK 時)
(1.10, 1.11 IS USED FOR CLICK ONLY)

二、電器規格 ELECTRICAL CHARACTERISTICS：

- 2.1 全阻值：阻值適用範圍 1KΩ~500KΩ (容許差 ± 20%)
OVERALL RESISTANCE RANGE：1KΩ~500KΩ (TOLERANCE± 20%)
- 2.2 額定功率：B 線性 0.125W。 B 以外線性 0.06W
POWER RATING：B TAPER 0.125W。 EXCEPT B 0.06W
- 2.3 殘留阻值：1~2 端子 / 2~3 端子同。
RESIDUAL RESISTANCE：terminal 1~2 / 2~3

| 公稱阻抗值 (KΩ) OVERALL RESISTANCE (KΩ) | 殘留阻值 (Ω) MAXIMUM ATTENUATION LEVEL (Ω) |
|---------------------------------------|---|
| R ≤ 20 | 10 以下 10MAX |
| 20 < R ≤ 100 | 20 以下 20MAX |
| 100 < R ≤ 1M | 50 以下 50MAX |

2.4 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 $\frac{V1-2}{V1-3}$ | 端子 2-3 間輸出電壓 $\frac{V2-3}{V1-3}$ |
|---------------------|------------------------|----------------------------------|----------------------------------|
| | | 端子 1-3 間輸出電壓 (%) | |
| A | 150° | 10-25 | |
| B | 150° | 40-60 | |
| * C | * 150° | | 10-25 |
| D(10A) | 150° | 6-15 | |
| * E(25C) | * 150° | | 15-35 |
| K(25A) | 150° | 15-35 | |
| W(4B) | 90±5° | 5-15 | |
| | 150° | 40-60 | |
| | 210±5° | 85-95 | |
| M | 75±5° | 40-60 | |
| | 150° | 98-100 | |
| * N | * 75±5° | | 40-60 |
| | * 150° | | 98-100 |
| * X(10C) | * 150° | | 6-15 |

(註) * 記號表示自第三端子測起 * WITH RESPECT TO TERMINAL 3

- 2.5 轉動雜音：依 JIS 測定法 47mV 以下 (W : 200mv 以下).
ROTATION NOISE (REFER TO JIS) : 47mV MAX . (W : 200mV MAX) .
- 2.6 絕緣阻抗：D.C 500V 須在 100MΩ 以上
INSULATION RESISTANCE : 100MΩ MIN . AT D.C 500 VOLTS
- 2.7 耐電壓：A.C 500V 可耐 1 分鐘以上
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 .
- 2.8 最高使用電壓：A.C 150V .
MAXIMUM OPERATING VOLTAGE : 150V A.C

三、耐久性能 ENDURANCE CHARACTERISTICS :

- 3.1 電阻體迴轉壽命特性：15,000 迴轉以上
ROTATIONAL LIFE : MORE THAN 15,000 CYCLES

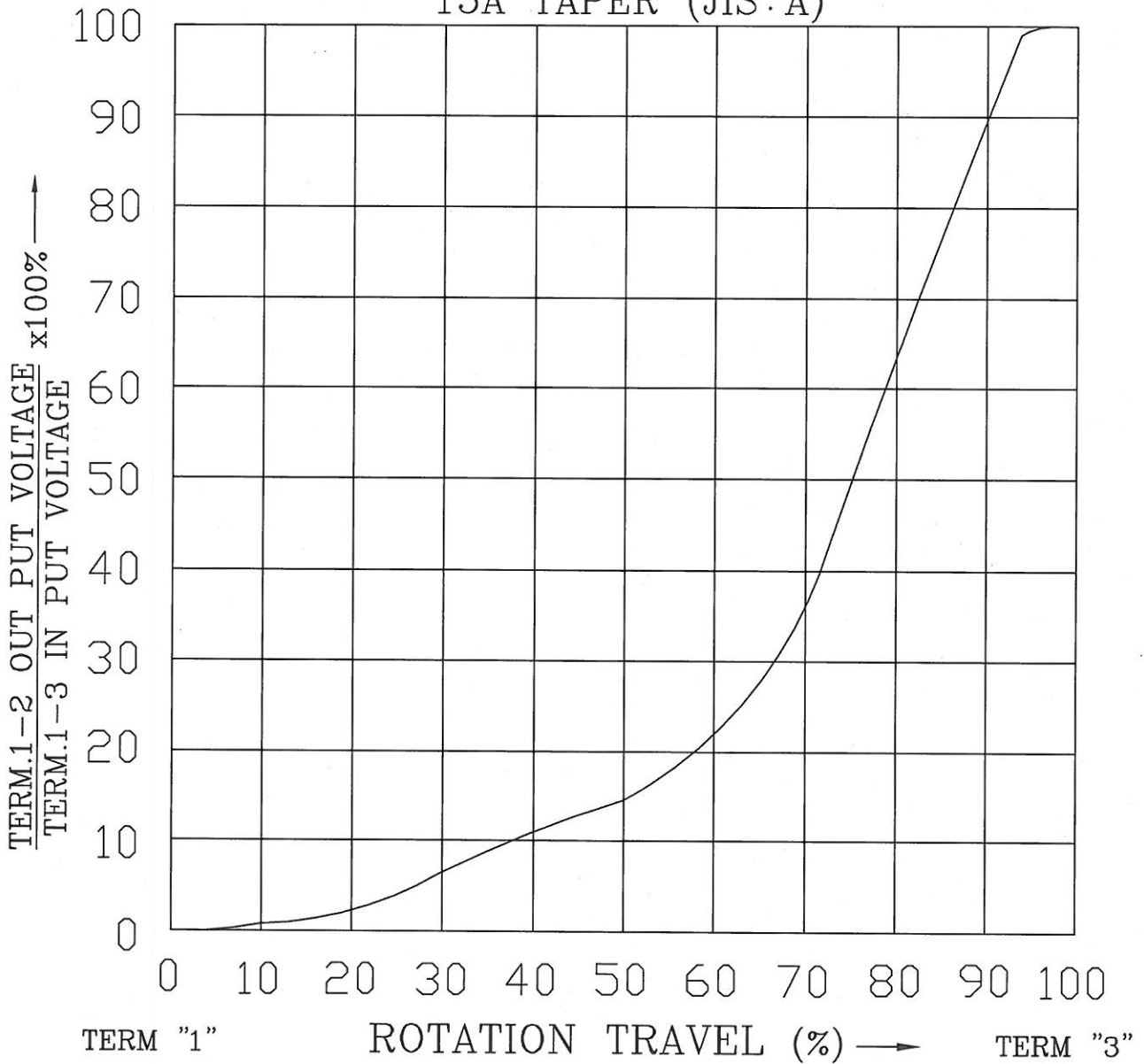
四、其他之性能 依照 JISC 6443 普通級碳素系可變電阻器：

NOTE MEET OR EXCEED JISC 6443 REQUIREMENTS .

- 4.1 使用溫度：-10°C~+70°C
Operating temperature range: -10°C~+70°C
- 4.2 儲存溫度：-25°C~+75°C
Storage temperature range : -25°C~+75°C

STANDARD RESISTANCE TAPER

15A TAPER (JIS:A)



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|------------------------------|-----------|-------------|------------|------------|-------------|-------------|
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| 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° | | | | | | |