

# SPECIFICATIONS

## ELECTRICAL

- 1.Total resistance : 10k  $\Omega \pm 20\%$
- 2.Rated power : 0.05 W
- 3.Rated voltage :

The rated voltage shall be the voltage of A.C.

(commercial frequency ,effective value ) corresponding to the rated power (dissipation),and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following,

however, the maximum working voltage of the following shall be the rated voltage.

$$E = \sqrt{P \cdot R} \text{ (V)}$$

Where E : Rated voltage (V)

P : Rated power(dissipation) (W)

R : Nominal total resistance ( $\Omega$ )

Maximum working voltage : 50 V A.C. This potentiometer is designed for A.C. only.

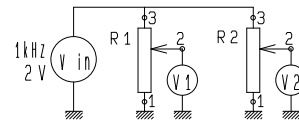
- 4.Resistance taper : A
- 5.Residual resistance between term. 1&2,2&3 : 30 $\Omega$  max.

- 6.Sliding noise : Less than 100 mV. (Measured by JIS C 6443)

7. Insulation resistance : More than 100 M $\Omega$  at 250V D.C.

8. Withstand voltage: 300V A.C. for one minute.

9. Gang error : 2 dB max. at 150°



## MECHANICAL

- 1.Total rotational angle : 300° $\pm 5^\circ$
- 2.Rotational torque : 3~20 mN·m (Rotational speed 60°/sec.)
3. Resistance to soldering heat :  
After soldering (Less than 350°C and within 3 seconds) there shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of the test.
4. Stopper strength : No damage with an application of 0.6N·m.
5. Robustness of shaft against end thrust and pull force :  
with the potentiometer mounted, no damage with 80N of puah and pull force.
6. Robustness of shaft against side thrust :  
with the potentiometer mounted, no damage with 30N of thrust force to the shaft top.
7. Shaft play :  
The resistor shall be mounted by soldering the mounting legs on the panel. When a side thrust of 50mN·m shall be applied at the end of the shaft, the total shaft play shall not exceed 0.7XL / 20 mm p-p.( L : shaft length )
8. The inclination of shaft shall be within 0.35 mm to the center of shaft, which is parallel to the mounting surface.
9. Eccentricity of shaft :  
The eccentricity of the root of shaft shall not exceed 0.35mm to the center of the mounting position.

## ENDURANCE

1. Rotational life : 15,000 cycles min.

## NOTE

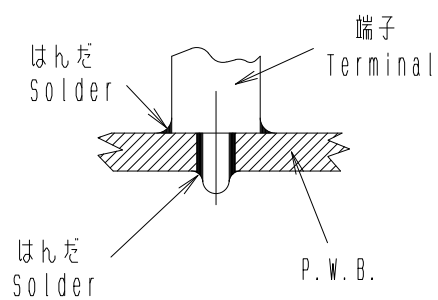
1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature : -10°C~+70°C, 3. Storage temperature : -30°C~+70°C.

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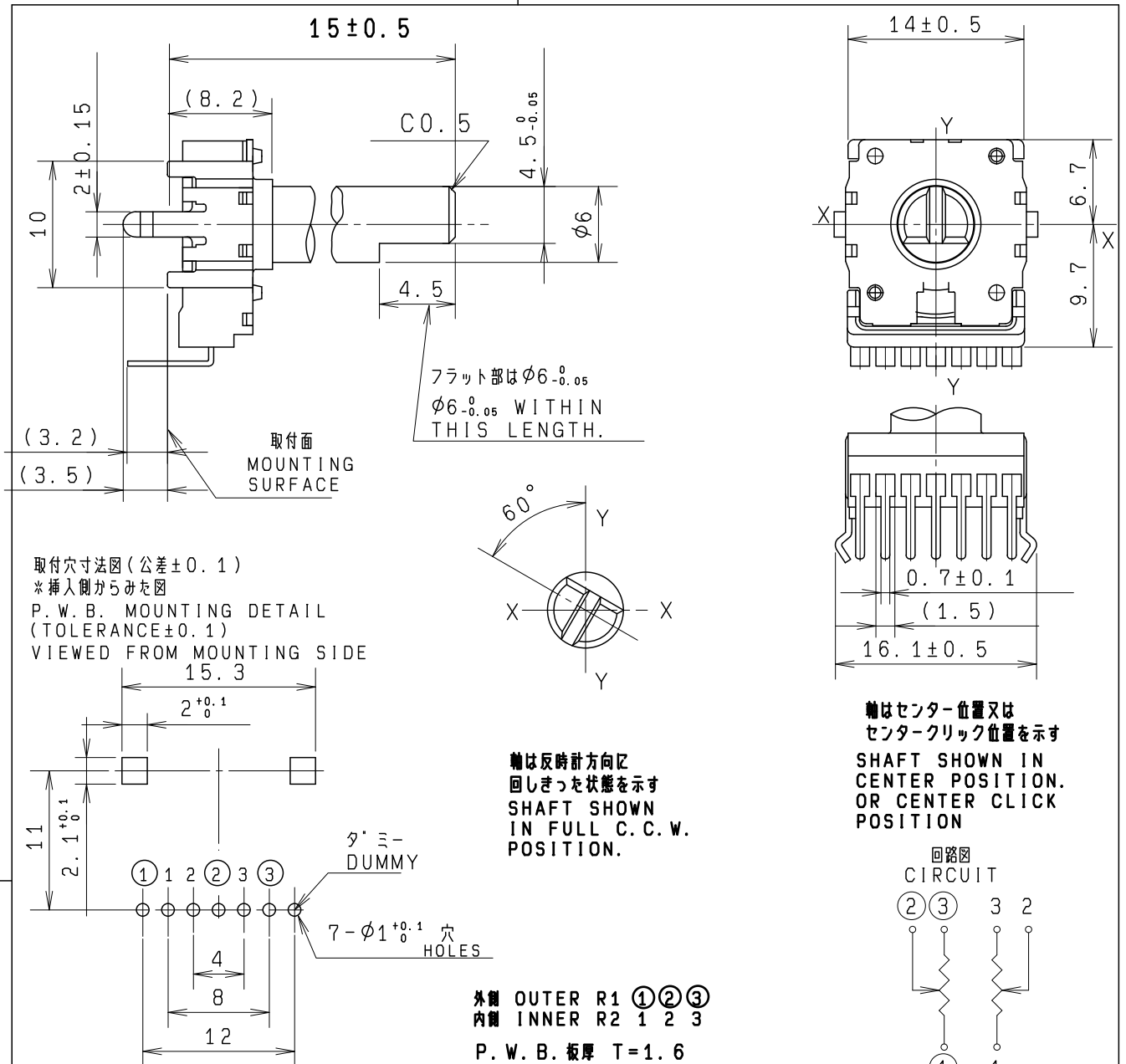
|      |      |      |      |      |              |              |              |                           |
|------|------|------|------|------|--------------|--------------|--------------|---------------------------|
|      |      |      |      |      | APPD.        | CHKD.        | DSGD.        | TITLE                     |
|      |      |      |      |      | oct. 01, '92 | oct. 01, '92 | oct. 01, '92 | R K 1 4 K 1 2 3 1 A 1 4 E |
|      |      |      |      |      | S. Aizawa    | M. Satoh     | S. Sugawara  | DOCUMENT NO.              |
| SYMB | DATE | APPD | CHKD | DSGD |              |              |              |                           |

図のようにP、W、Bの上面に はんだ付けをする配線は、  
お避け下さい。

Please avoid soldering on upper surface of P.W.B. as shown



|      |      |      |      |      |                                |                     |                     |                           |  |
|------|------|------|------|------|--------------------------------|---------------------|---------------------|---------------------------|--|
|      |      |      |      |      | <b>ALPS ELECTRIC CO., LTD.</b> |                     |                     |                           |  |
|      |      |      |      |      | APPD.                          | CHKD.               | DSGD.               | TITLE                     |  |
|      |      |      |      |      | <i>Apr. 14, '93</i>            | <i>Apr. 14, '93</i> | <i>Apr. 14, '93</i> | R K 1 4 K 1 2 3 1 A 1 4 E |  |
|      |      |      |      |      | <i>S. Aizawa</i>               | <i>M. Satoh</i>     | <i>Y. Saitoh</i>    | DOCUMENT NO.              |  |
| SYMB | DATE | APPD | CHKD | DSGD |                                |                     |                     |                           |  |



| 指定なき部分の許容差<br>TOLERANCES UNLESS OTHERWISE SPEC |               |
|------------------------------------------------|---------------|
| $L \leq 10$                                    | $\pm 0.3$     |
| $10 < L < 100$                                 | $\pm 0.5$     |
| $100 \leq L$                                   | $\pm 0.8$     |
| 角度<br>ANGULAR DIMENSION                        | $\pm 5^\circ$ |

| PART NO.                       | NAME | MATERIAL NAME / CODE                | FINISH                               |
|--------------------------------|------|-------------------------------------|--------------------------------------|
|                                |      |                                     |                                      |
| <b>ALPS ELECTRIC CO., LTD.</b> |      |                                     |                                      |
|                                |      | DSGD. 1-設計1課<br>Y, SAITOH '94-07-20 | SCALE<br>2 : 1                       |
|                                |      | CHKD.<br>M, SATOH '94-07-20         | NO.<br>RK14K1231F15                  |
|                                |      | APPD.<br>R, ARASAWA '94-07-20       | TITLE<br>FIGURE<br>14形1軸2連絶縁軸ポリ-4組立図 |
| SYMB                           | DATE | APPD                                | CHKD                                 |
|                                |      |                                     | DSGD                                 |
|                                |      | UNIT<br>mm                          | DOCUMENT NO.<br>K142B0Z01            |
|                                |      |                                     | F01                                  |