

Customer : AEE-DS

No. FX-1999-4546

Date : Sep. 02, 1999

Attention:

Your ref. No:

Your Part. No: 401806

## SPECIFICATIONS

ALPS :

MODEL RK14K1240D0F  
( 5k B X2 )

Spec. No. :

Sample No. : G4211412M

RECEIPT STATUS

RECEIVED

By. Date

Signature

Name

Title

ALPS ELECTRIC CO., LTD.

HEAD OFFICE  
1-7, YUKIGAYA-OHTSUKA-CHO.  
OHTA-KU, TOKYO 145-8501 JAPAN

DSG'D

APP'D

Sales

24678

## SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RK14K1240D0F POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

G4211412M  
K142D0Z21

3. MARKING

· MARKING ON ALL UNITS  
DATE CODE, RESIST. VALUE, TAPER

4. REMARKS

· FURNISH PACKAGE  
NUT: 1, WASHER: 1  
· NOTES

· This unit uses polycarbonate. To be careful for using this unit in such violent gas atmospheric condition as ammonia, amine, alkaline aqueous solution, aromatic hydrocarbon, keton, ester, alkyl hydrocarbon, etc.

# SPECIFICATIONS

## ELECTRICAL

1. Total resistance :  $5k \Omega \pm 20\%$
2. Rated power :  $0.05 W$
3. Rated voltage :

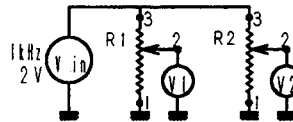
The rated voltage shall be the voltage of A. C.  
(commercial frequency, effective value) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following, however, the maximum working 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 ( $\Omega$ )

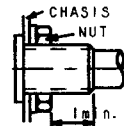
Maximum working voltage :  $50 V A.C.$  This potentiometer is designed for A.C. only.

4. Resistance taper : B
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  $150^\circ$



## MECHANICAL

1. Total rotational angle :  $300^\circ \pm 5^\circ$
2. Rotational torque :  $3 \sim 20 mN \cdot m$  (Rotational speed  $60^\circ / sec.$ )
3. Resistance to soldering heat :  
After soldering (Less than  $300^\circ C$  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  $0.6 N \cdot m$ .
5. Robustness after soldering resistor shaft against end thrust and pull force :  
With the potentiometer mounted, no damage with  $80N$  of push and pull force.
6. Robustness at shaft against side thrust :  
With the potentiometer mounted, no damage with **30N** of thrust force to the shaft top.
7. Shaft play :  
After installing the potentiometer, the resistor shall be mounted by soldering the mounting legs on the panel. When a side thrust of  $50mN \cdot m$  shall be applied at the end of the shaft, the total shaft play shall not exceed  $0.7XL/30 mm p-p$ .  
(L: Shaft length)
8. Bushing nut tightening strength : Tightening torque to be no greater than  $1N \cdot m$ .  
Pay attention otherwise the strength may not be assured.



## ENDURANCE

1. Rotational life :  $15,000$  cycles min.

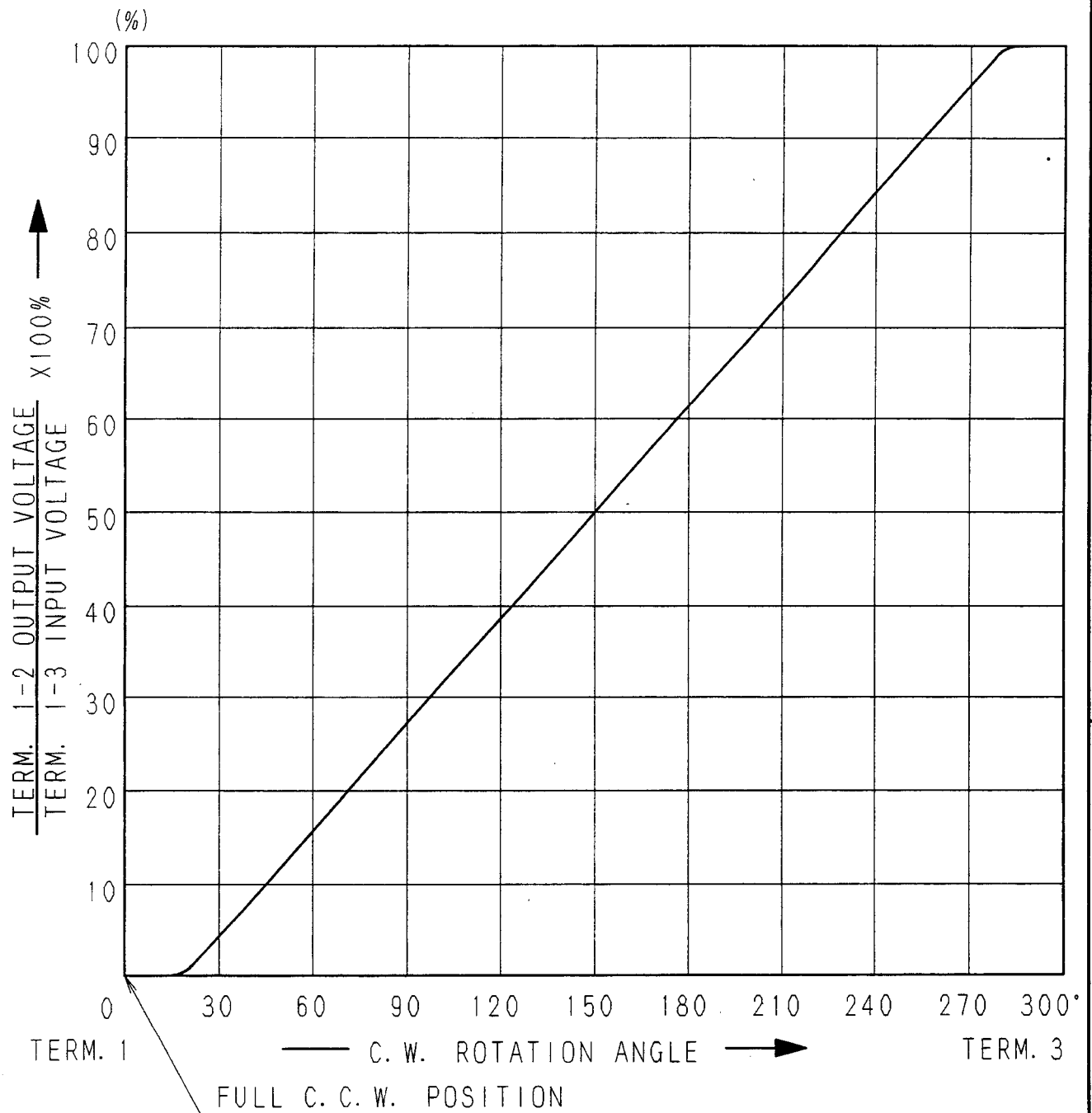
## NOTE

1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature :  $-10^\circ C \sim +60^\circ C$ , 3. Storage temperature :  $-30^\circ C \sim +70^\circ C$ .

|      |      |      |      |      |                                                                                                                    |              |              |              |
|------|------|------|------|------|--------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
|      |      |      |      |      |  <b>ALPS ELECTRIC CO., LTD.</b> |              |              |              |
|      |      |      |      |      | APPD.                                                                                                              | CHKD.        | DSGD.        | TITLE        |
|      |      |      |      |      | oct. 01. '92                                                                                                       | oct. 01. '92 | oct. 01. '92 | G4211412M    |
|      |      |      |      |      | S. Aizawa                                                                                                          | M. Satoh     | S. Sugawara  | DOCUMENT NO. |
| SYMB | DATE | APPD | CHKD | DSGD |                                                                                                                    |              |              |              |

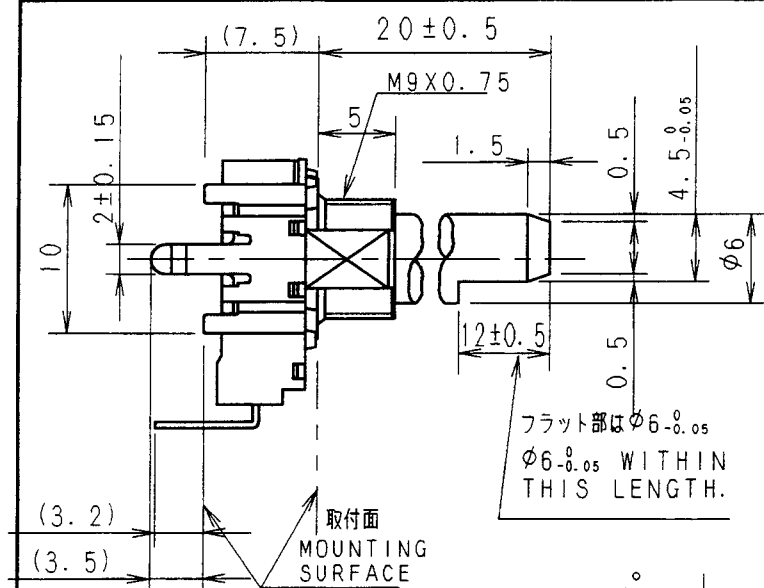


ALPS ELECTRIC CO., LTD  
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN



AT 150° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40~60 PERCENT.

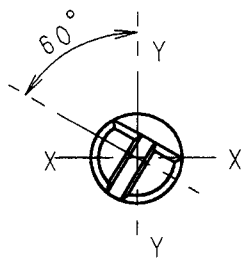
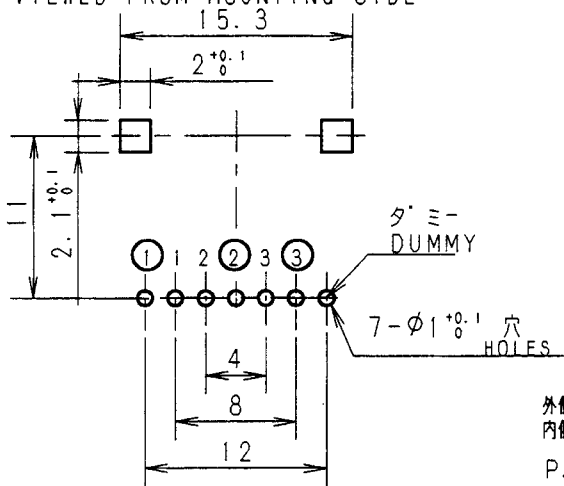
|      |      |      |      |      |              |              |              |                  |     |
|------|------|------|------|------|--------------|--------------|--------------|------------------|-----|
|      |      |      |      |      | APPD.        | CHKD.        | DSGD.        | NAME             | B01 |
|      |      |      |      |      | may. 27, '92 | may. 27, '92 | may. 27, '92 | RESISTANCE TAPER |     |
|      |      |      |      |      | M. Inoue     | K. Magami    | S. Sasaki    | DOCUMENT NO.     |     |
| SYMB | DATE | APPD | CHKD | DSGD |              |              |              | G4211412M        |     |



フラット部は  $\phi 6-0.05$   
 $\phi 6-0.05$  WITHIN  
 THIS LENGTH.

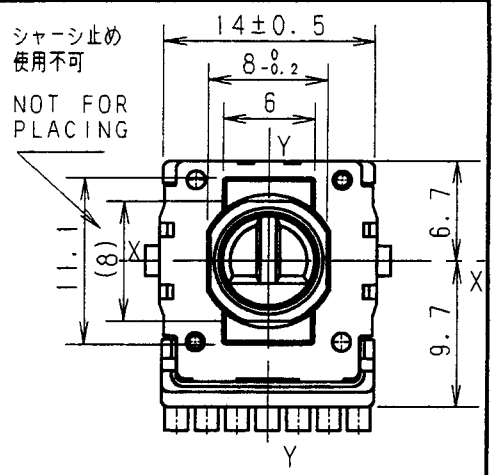
(3.2) 取付面  
 (3.5) MOUNTING  
 SURFACE

取付穴寸法図 (公差  $\pm 0.1$ )  
 ※挿入側からみた図  
 P. W. B. MOUNTING DETAIL  
 (TOLERANCE  $\pm 0.1$ )  
 VIEWED FROM MOUNTING SIDE

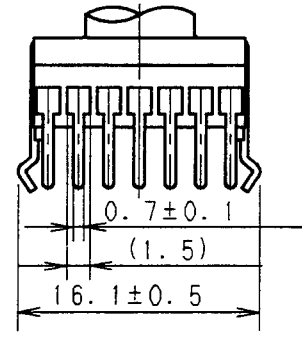


軸は反時計方向に  
 回しきった状態を示す  
 SHAFT SHOWN  
 IN FULL C. C. W.  
 POSITION.

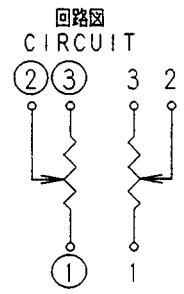
外側 OUTER R1 ①②③  
 内側 INNER R2 1 2 3  
 P. W. B. 板厚 T=1.6



シャ-シ止め  
 使用不可  
 NOT FOR  
 PLACING



軸はセンター位置又は  
 センタークリック位置を示す  
 SHAFT SHOWN IN  
 CENTER POSITION.  
 OR CENTER CLICK  
 POSITION



| 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       |            | G4211412M                          |  |
| CHKD.<br>M. SATOH '94-07-20         |      |      |      |                      |            | TITLE FIGURE<br>14形1軸2連絶縁軸ボリューム組立図 |  |
| APPD.<br>R. ARASAWA '94-07-20       |      |      |      |                      |            | DOCUMENT NO. F02<br>K142D0Z21      |  |
| SYMB                                | DATE | APPD | CHKD | DSGD                 | UNIT<br>mm |                                    |  |