

Customer : ROXBURGH ELECTRONICS LIMITED

No. AD-96-1017

Date : Jan. 29, 1996

Attention: \_\_\_\_\_

Your ref. No: \_\_\_\_\_

Your Part. No: 211127

**SPECIFICATIONS**

ALPS :

MODEL \_ **RK09711110K** \_\_\_\_\_

**F.E.C. No: 642-897**

Sample No. : G0444854M

RECEIPT STATUS
RECEIVED
By. Date _____
Signature _____
Name
Title

ALPS ELECTRIC CO., LTD.

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

DSG'D *M. Asama*

APP'D *M. Endo*

ENG. DEPT. DIVISION

Sales \_\_\_\_\_

**SPECIFICATIONS**

1. THIS SPECIFICATIONS APPLY TO RK0971110 POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

G0444854M  
K091K0001

3. MARKING

MARKING ON ALL UNITS  
DATE CODE RESIST. VALUE TAPER

4. REMARKS

FURNISH PACKAGE  
NUT: 1, WASHER: 1

**ELECTRICAL**

- 1. Total resistance: Single shaft (R1)  
10 kΩ 20%
- 2. Rated power: 0.05W
- 3. Rated voltage: Please refer to the attached.
- 4. Resistance taper: Please refer to the attached.
- 5. Tap position: \_\_\_\_\_
- 6. Tap resistance between terminals: \_\_\_\_\_
- 7. Residual resistance between terminals: 1&2, 2&3 : 20Ω max.
- 8. Sliding noise : (Measured by JIS C 6443) Less than 100mV
- 9. Insulation resistance : More than 100 MΩ at 250V D.C.
- 10. Withstand voltage: 300V A.C. for 1 minute.
- 11. Gains error : \_\_\_\_\_

- 12. Switch rating: (Resistor load) \_\_\_\_\_
- 13. Switch contact resistance: \_\_\_\_\_
- 14. Circuit: \_\_\_\_\_

**MECHANICAL**

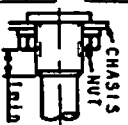
- 1. Total rotational angle : 300° ±5°
- 2. Rotational torque: (Rotational speed 60/sec.) 20-250 gf.cm.
- 3. Stopper strength : 5 kf.cm min.
- 4. Resistance to soldering heat : Please refer to the attached.
- 5. Bushing nut tightening strength : Tightening torque to be no greater than 10 kgf.cm. Pay attention otherwise the strength may not be assured.
- 6. Push / pull strength : No damages with an application of Push or pull force 10 kgf for 10 sec.
- 7. Shaft wobble : (Apply the moment of 500gf.cm at the point of 30mm from mounting surface) (L: Shaft length) (If the shaft length is less than 30mm, the value shall be calculated proportionally.)
- 8. Operation force of shaft: \_\_\_\_\_
- 9. Click position : \_\_\_\_\_
- 10. Click torque: \_\_\_\_\_
- 11. Rotation play at the click position: \_\_\_\_\_
- 12. Contact arrangement : \_\_\_\_\_
- 13. Switching angle : \_\_\_\_\_
- 14. Switch operation torque : \_\_\_\_\_

**ENDURANCE**

- 1. Rotational life : More than 15,000 cycles.

**NOTES**

- 1. The items except above mentioned items shall meet or exceed JIS C 6443.
- 2. This type is protected against sulfides.



**ALPS ELECTRIC CO., LTD.**

TITLE	SPECIFICATIONS			SYMB	DATE	APPRO. (CHKD) (DSGD)	APPD.	CHKD.	DSGD.	NO.
							May. 05, '94 R. Aizawa	May. 05, '94 M. Endo	May. 05, '94 I. Yamaguchi	G0444854M



(R11)

**Rated voltage :**  
The rated voltage shall be the voltage of D. C. or 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.

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

Where E : Rated voltage (V)  
P : Rated power (dissipation) (W)  
R : Nominal total resistance ( $\Omega$ )  
Maximum working voltage : 50 V A. C. , 10 V D. C.

**Resistance to soldering heat**

There shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of soldering.

• Die soldering

Condition of soldering :  
Soldering shall be certified with following condition.  
Substrate to be soldered :  
Copper clad laminated phenol board in one surface of 1.6 mm thickness.

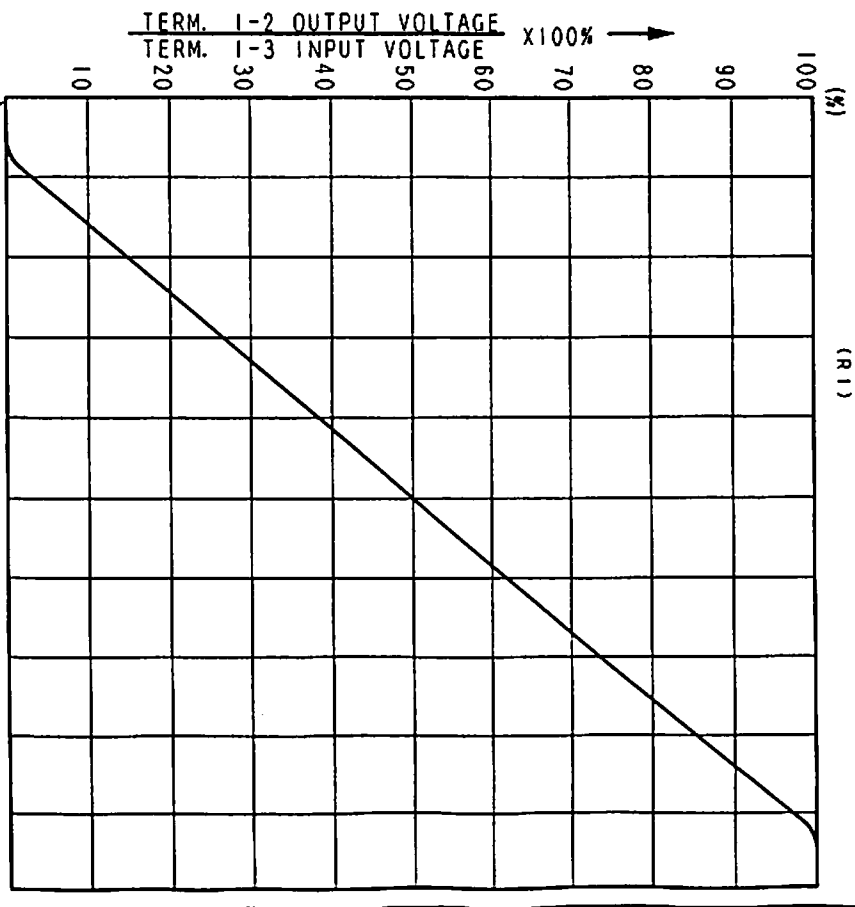
Solder flux :  
Flux of 0.82 specific weight in bubbling type solder fluxcoating apparatus shall be used and bubbling surface height shall be defined substantially as half thickness of substrate.  
Flux shall not flow up on substrate surface.

Preheating :  
Surface temperature of substrate shall be settled within 100 C in 2 minutes.  
Dip soldering :  
To be performed in 3 seconds within 250°C.

Please use the above process only 1 or 2 times.

• Manual soldering  
To be performed in 3 seconds within 300°C.

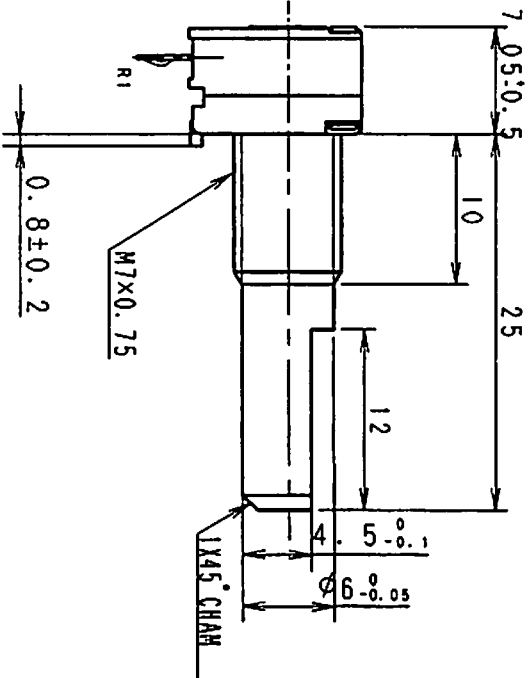
SYMB	UNIT	APPRO	CHKD.	OSGO.	NAME
		Nov. 21 '94	Nov. 23 '94	Nov. 23 '94	DOCUMENT NO
		R. Hasegawa	M. Endo	I. Saitoh	



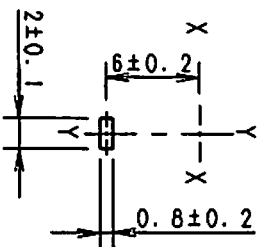
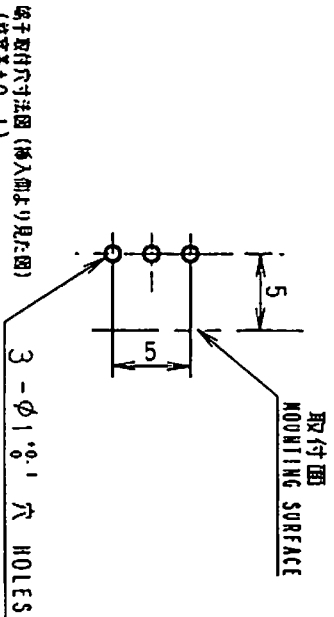
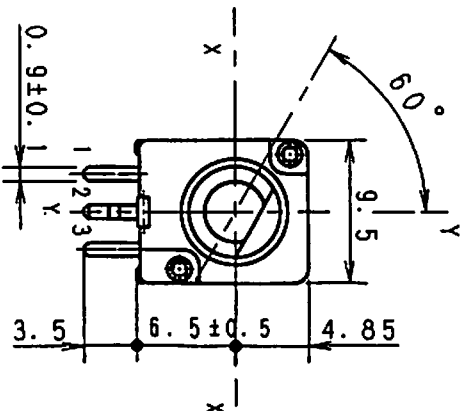
AT 150° C. W. SHAFT ROTATION FROM FULL C. C. W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40-60 PERCENT.

SYMB	DATE	APPRO	CHKD.	OSGO.	NAME
		Nov. 21 '94	Nov. 23 '94	Nov. 23 '94	RESISTANCE TAPER
		I. Hasegawa	S. Saitoh	I. Saitoh	K09-B01

NOTES  
 BUSHING MATERIAL ----- ZINC ALLOY DIE CASTING  
 SHAFT MATERIAL ----- ALUMINIUM



LOCATING LUG DETAIL  
 シャフト止め詳細図



上図は軸を反時計方向に  
 回し切った状態を示す。  
 SHAFT SHOWN IN  
 FULL CCW POSITION

端子取付寸法図 (挿入部より見た図)  
 (許容差±0.1)  
 MOUNTING HOLE DETAIL  
 (TOLERANCE±0.1)  
 VIEWED FROM  
 MOUNTING SIDE

指定なき部分の許容差  
 TOLERANCES UNLESS OTHERWISE SPEC

角 度	±0.3
10° < L < 100°	±0.5
100° < L	±0.8
角 度	±5°
ANGULAR DIMENSION	

SYMB	DATE	APPD	CHKD	OSGD

**ALPS ELECTRIC CO., LTD.**

DESIGN. 設計者 野田	SCALE	TITLE
T. YAMAGUTI '94-05-23	1/2	G0444854M
CHKD. 検査者		
M. ENDO '94-05-23		9系用 変圧器用
APPO. 承認者	UNIT	DOCUMENT NO.
R. ARASAWA '94-05-23	M	K091K0001