Customer: ALBS ALLTRONIC

No. FX-2002-6507

Date: Apr. 17, 2002

Attention:

Your ref. No:

Your Part. No: 401968

SPECIFICATIONS

ALPS';

MODEL RK11K1130A2X (10k B)

Spec. No. :

Sample No. : G6644111M

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 M. Sato

APP'D S. Sato

Sales

No. FX-2002-6507

SPECIFICATIONS

1.THIS SPECIFICATIONS APPLY TO RK11K1130A2X POTENTIOMETER.

2.CONTENTS OF THIS SPECIFICATIONS.

G6644111M
K111F0Z01

3.MARKING

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

4.REMARKS

· 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.

·CAUTION

Regardless of the suggested applications of these products being introduced in the specifications, when using them for equipment and devices requiring a high degree of safety, respective manufacturers will please preserve safety of the planned equipment and devices by providing necessary protectve circuits and redundancy circuits and reconfirm if safety is being duly preserved.

Products being introduced in the specifications have been designed and manufactured for applications to ordinary electronic equipment and devices such as the AV equipment, electric home appliances, office machines and communications equipment. Consequently, when employing these products for applications requiring a high degree of safety and reliability such as the medical equipment, aviation and aircraft equipment, space equipment and burglar alarm equipment, the using manufacturers will please thoroughly study the proprieties of these products for the planned applications.

Although we are exerting our best efforts to maintain the quality of these products, we cannot guarantee that they will never cause short circuiting and open circuitry.
Therefore, when designing an equipment or device with whitch the priority is given to the safety, you will please carefully study the influences to the whole equipment of a single function failure of Potentiometers and Encoders in advance to make out a fail-safe design providing.

SPECIFICATIONS

ELECTRICAL

1. Total resistance : 10k Ω±20%
2. Rated power : 0.05 W
3. 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.

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

Where E : Rated voltage (V)
P : Rated power(dissipation) (W)
R : Nominal total resistance (Ω)

Maximum working voltage : 50 V A.C. , 20 V D.C.

4. Resistance taper : B
5. Residual resistance between term. 1&2, 2&3 : 20Ω max.
6. Sliding noise : Less than 100 mV. (Measured by JIS C 6443)
7. Insulation resistance : More than 100 MΩ at 500V D.C.
8. Withstand voltage: 500V A.C. for one mimute.

MECHANICAL

1. Total rotational angle : 300°±5°
2. Rotational torque : 3~20 mN·m (Rotational speed 60°/sec.)
3. Resistance to soldering heat :
   After soldering (Less than 300°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 0.5N·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 / 20mm 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~+60°C, 3. Storage temperature :-30°C~+70°C.

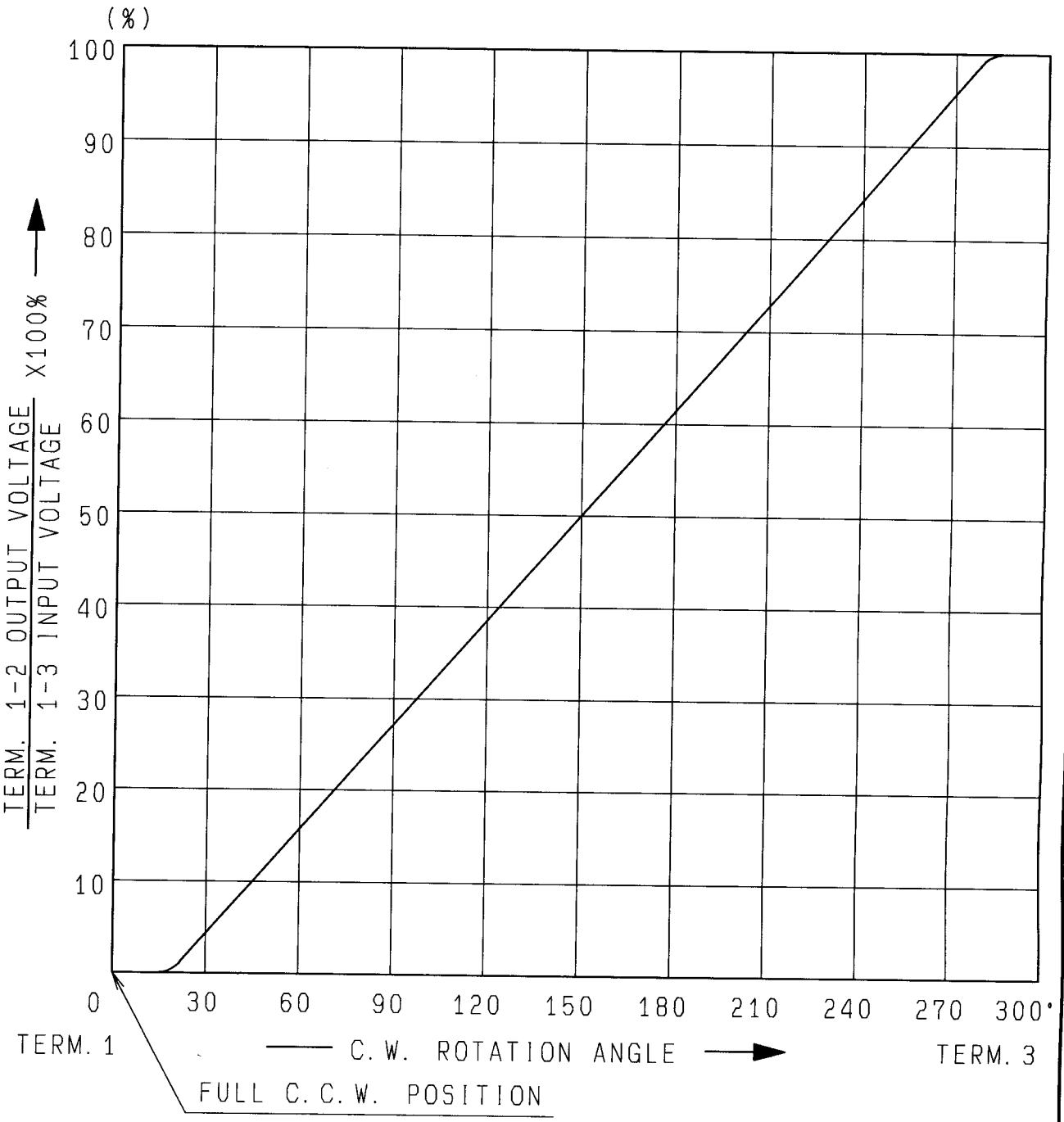
SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
oct. 01, '92	oct. 01, '92	oct. 01, '92	G66441111M
S. Aizawa	M. Satoh	S. Sugawara	DOCUMENT NO.

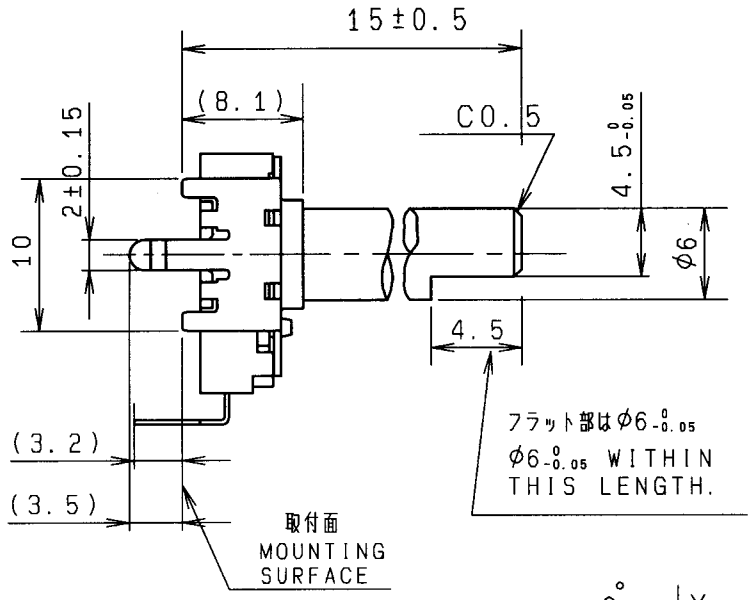
ALPS ELECTRIC CO., LTD

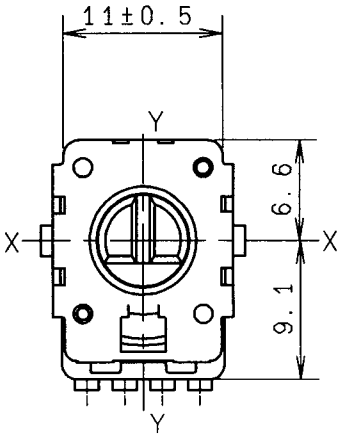
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN

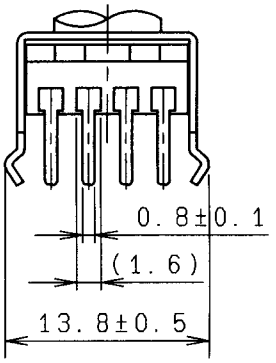


AT 150° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40~60 PERCENT.

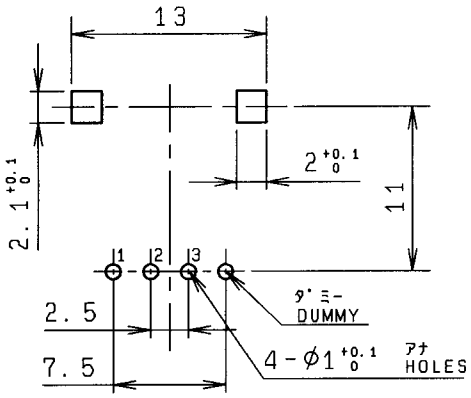
SYMB	DATE	APPD	CHKD	DSGD	APPD.	CHKD.	DSGD.	NAME	B01
					may. 27, '92	may. 27, '92	may. 27, '92	RESISTANCE TAPER	
					M. Inoue	K. Magami	S. Sasaki	DOCUMENT NO. G6644111M	

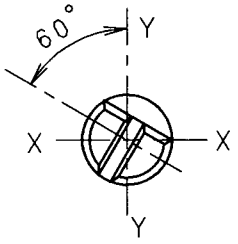






取付穴寸法図(公差±0.1)
*挿入側からみた図
P.W.B. MOUNTING DETAIL
(TOLERANCE±0.1)
VIEWED FROM MOUNTING SIDE





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.

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.

回路図
CIRCUIT

P.W.B. 板厚 T=1.6

指定なき部分の許容差 TOLERANCES UNLESS OTHERWISE SPEC	
L≦10	±0.3
10＜L＜100	±0.5
100≦L	±0.8
角度 ANGULAR DIMENSION	±5°

PART NO.	NAME	MATERIAL NAME / CODE	FINISH
—	—	—	—

SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

DSGD. 1-設計1課 Y. SAITOH '94-07-20	SCALE 2 : 1	NO. G6644111M
CHKD. M. SATOH '94-07-20		TITLE FIGURE 11形単連絶縁軸ボリューム組立図
APPD. R. ARASAWA '94-07-20	UNIT mm	DOCUMENT NO. F01 K111F0Z01