

Customer: ALPS EUROPE DISTRIBUTION

No. KK-2007-3297

Date: May. 10, 2007

Attention:

Your ref. No.:

Your Part No.: RK27112

SPECIFICATIONS

ALPS' ;

MODEL: RK271122002D
(10kBX2)

Spec. No.:

Sample No.: F 4 0 7 9 6 5 1 M

RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

ALPS
ALPS ELECTRIC CO., LTD.

DSG'D

Y. Ohya

APP'D

S. Ikenoue

ENG. DEPT. DIVISION

Sales

Head Office

1-7, Yukigaya-otsuka-cho, Ota-ku, Tokyo, 145-8501 Japan
Phone, +81(3)3726-1211

B6523

Q1003#03A (EA)

S P E C I F I C A T I O N S

1. THIS SPECIFICATIONS APPLY TO RK271122002D POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.

5K272A000M

K272A0A0G

4K-1

3. MARKING

- MARKING ON ALL UNITS

DATE CODE, RESIST. VALUE, TAPER

4. REMARKS

- FURNISH PACKAGE

NUT:1 WASHER:1

- NOTES

• Marking \Rightarrow in specifications shows standard and condition for application.

- CAUTION

There is a possibility that might be affected by contact resistance of resistive element and wiper in case of low impedance of output side in voltage regulation circuit.

For this reason, we require that you adjust to impedance of output side more than 100 times of total resistance.

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 protective 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.

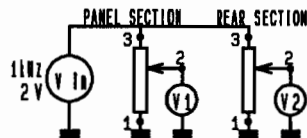
Although we are exerting our best efforts to maintain the quality of these products, we cannot guarantee that they will never cause short circuiting and open circuitry.

Therefore, when designing an equipment or device with which 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

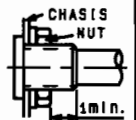
ELECTRICAL

1. Total resistance $10\text{ k}\Omega \pm 20\%$
2. Rated voltage 30V A.C.
This potentiometer is designed for A.C. voltage only.
3. Resistance taper: See (HSB01)
4. Residual resistance between terminals
 between terminal 1 & 2 : 100Ω max.
 between terminal 2 & 3 : 100Ω max.
5. Sliding noise : Less than 47mV (Measured by JIS C 6443)
 (Neglected a impulsive noise at the C.W. and
 C.C.W. ends position and around detent position.)
6. Insulation resistance : More than $100\text{ M}\Omega$ at 500V D.C.
7. Dielectric strength : Units shall be designed to withstand 500V A.C.
 50Hz R.M.S. between resistance element and case
 for a period of 1 minute without damage or arcing.
8. Gang error : 2 dB max. at Click position
 Measure between
 (R1&R2)



MECHANICAL

1. Total rotational angle $300^\circ \pm 3^\circ$
2. Rotational torque $6\text{--}35\text{mN}\cdot\text{m}$ (Rotational speed $60^\circ/\text{sec.}$ at 20°C)
3. Stopper strength No damage with an application of $0.9\text{ N}\cdot\text{m}$.
4. Resistance to soldering heat After soldering (Less than 350°C and within 5 s.) there shall be no evidence of poor contact between resistance element and terminals, or any physical damage as a result of the test.
5. Bushing nut tightening strength Tightening torque to be no greater than $1.5\text{ N}\cdot\text{m}$.
 *Pay attention otherwise the strength may not be assured.
6. Push / pull strength No damages with an application of push or pull force 100 N for 10 s.
7. Click position : $150^\circ \pm 3^\circ$
8. Click torque: Rotational torque $+(5\text{--}30)\text{mN}\cdot\text{m}$



ENDURANCE

1. Rotational life : $15,000\text{ cycles min.}$

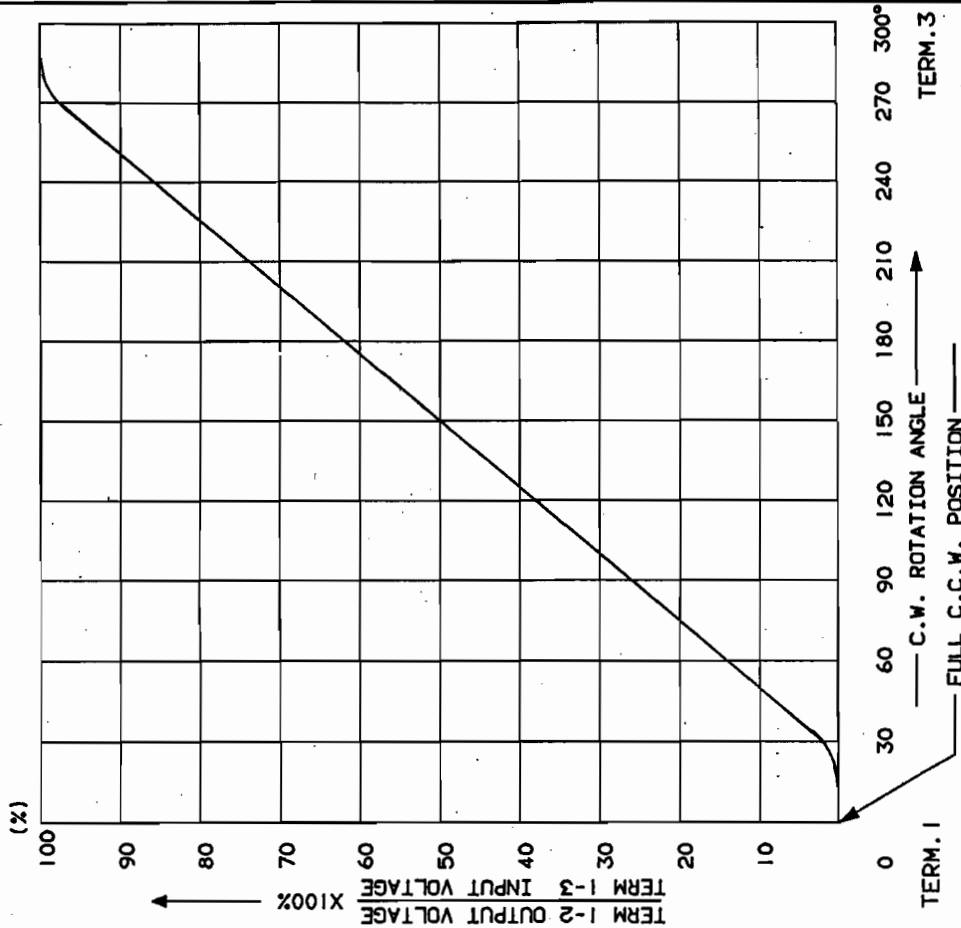
NOTES

1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. This type is protected against sulfides.
3. Operating temperature: -10°C to $+70^\circ\text{C}$
4. Storage temperature: -20°C to $+80^\circ\text{C}$

ALPS ELECTRIC CO., LTD.				
		APPD. DESIGN 07.5.15 IKENOUE	CHKD.	DSGD. DESIGN 07.5.14 Y.OHYA
			TITLE _____	
			DOCUMENT NO. 5K272A000M	
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.

SYMB	DATE	APPD	CHKO	DSGD	SCALE	TITLE	UNIT	DOCUMENT NO.
Original	80-09-13	S.S.	Y.O	APPD.	K. Chonan May 10 '86	RESISTANCE TAPER	m m	H S B 01
SYMB	DATE	APPD	CHKO	DSGD				

TONE

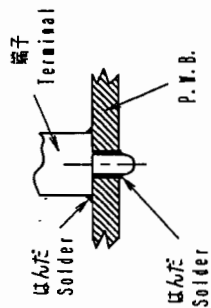
OR

< はんだ付け時の注意事項 >

図のようにP. W. Bの上面に はんだ付けをする配線は、お断り下さい。

Caution for soldering

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



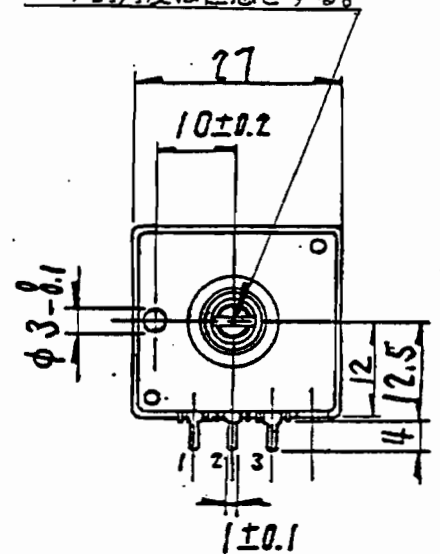
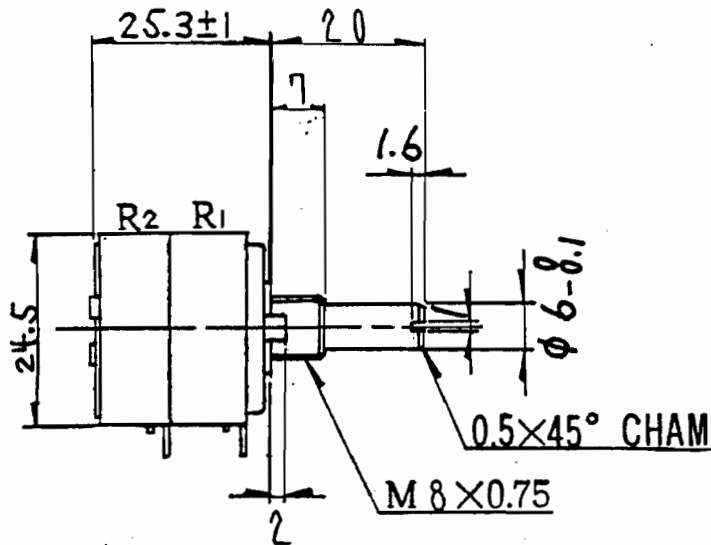
ALPS ALPS ELECTRIC CO., LTD.

SYMB	DATE	APPD	CHKO	DSGD	TITLE	DOCUMENT NO.
						4K-1

OR

SHAFT SLOT IS OPTIONAL ANGLE

スリ割角度は任意とする。



P.W.B. MOUNTING DETAIL

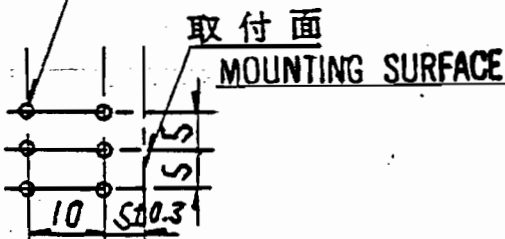
TOLERANCE ± 0.1

VIEWED FROM MOUNTING SIDE

取付穴寸法図

許容差 ± 0.1 (挿入側より)

6- $\phi 1.2^{+0.2}$ HOLES



許容差の指定なき寸法の公差 TOLERANCES UNLESS OTHERWISE SPEC	
BASIC DIMENSIONS	TOLERANCE
$L \leq 10$	± 0.3
$10 < L < 100$	± 0.5
$100 \leq L$	± 0.8
角度 ANGULAR DIMENSION	$\pm 5^\circ$

				300 $\pm 3^\circ$					
部	番	名	称	材	料	規	格	処	理
									23.2g
				三角法	単位 mm	尺度	150° CLICK		
				承認	照査	設計	図名		
				WET	W生設計	W生設計	1軸2連 小型 デイテント VR組立図		
FORM REV	34.2-1	相沢	佐藤	大矢	57.9.1	57.9.08	図番		
記号	年月日	承認	用重	設計	大谷	佐々木	大和		
							K272A0A0G		59.1.20