

Customer: ALPS EUROPE DISTRIBUTION

No. K272007-1039

Date: Jun. 07, 2007

Attention:

Your ref. No.:

Your Part No.: RK27112A0A0W

## SPECIFICATIONS

ALPS' ;

MODEL: RK27112A0A0W  
( 500kA X2 )

Spec. No.:

Sample No.: F 4 2 6 2 0 5 7 M

### RECEIPT STATUS

#### RECEIVED

By Date

Signature

Name

Title

**ALPS**  
ALPS ELECTRIC CO., LTD.

DSG'D

*K. Abe*

APP'D

*S. Sato*

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 RK27112A0A0W POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.

F4262057M

K272A000F

3. MARKING

- MARKING ON ALL UNITS

EIA DATE CODE, RESIST. VALUE, TAPER

4. REMARKS

- FURNISH PACKAGE

NUT:1 WASHER:1

## • 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.

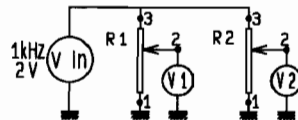
Although we are exerting our best efforts to maintain the quality of these products, we cannot guarantee that they will never cause short circuiting and open circuitry.

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

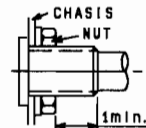
## ELECTRICAL

1. Total resistance : 500k $\Omega$ (nominal)  $\pm$  20%
2. Rated voltage :  
The rated voltage shall be the voltage of A.C. (commercial frequency, effective value)  
Maximum working voltage : 30V A.C. (A.C. Use only )
3. Resistance taper : A
4. Maximum attenuation level on full C.C.W. position : 100dB min.
5. Insertion loss on full C.W. position : 0.1dB max.
6. Sliding noise : Less than 47mV ( Measured by JIS C 6443. )  
(Neglected a impulsive noise at the c.w. and c.c.w. ends of position)
7. Insuration resistance : More than 100M $\Omega$  at 500V D.C.
8. Withstand voltage : 500V A.C. for 1 minute.
9. Gang error : 3dB max. at -70dB less than -60dB  
2dB max. at -60dB less than 0dB



## MECHANICAL

1. Total rotational angle : 300°  $\pm$  3°
2. Rotational torque : 8~35mN·m ( Rotational speed : 60°/sec )
3. Stopper strength : No damage with an application of 0.9N·m.
4. Resistance to soldering heat :  
After soldering ( Less than 350°C and within 5sec ), there shall be no evidence of poor contact between resistance element and terminal, or any physical damages as a result of the test.
5. Bushing nut tightening strength : Tightening torque to be no greater than 1.5N·m.  
Pay attention to tighten as shown right.  
Otherwise, the strength may not be assured.
6. Push / pull strength :  
No damages with an application of push or pull force 100N for 10 sec.




## ENDURANCE

1. Rotational life : 15,000 cycles min.

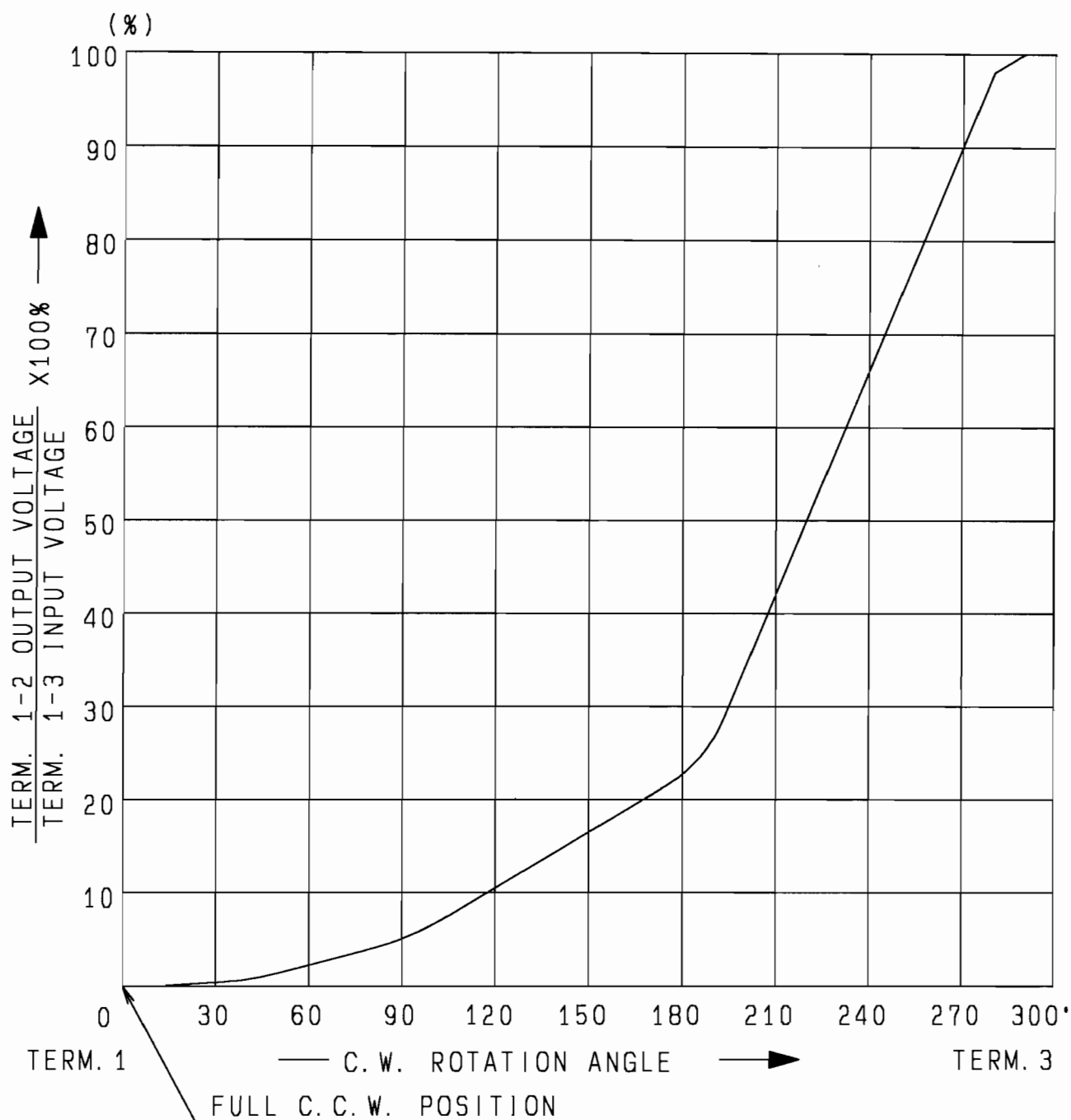
## NOTE

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

					 <b>ALPS ELECTRIC CO., LTD.</b>			
					APPD.	CHKD.	DSGD.	TITLE
					Nov. 22. '96	Nov. 22. '96	Nov. 22. '96	F4262057M
					Y. Yoshioka	M. Satoh	Y. Saitoh	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD				

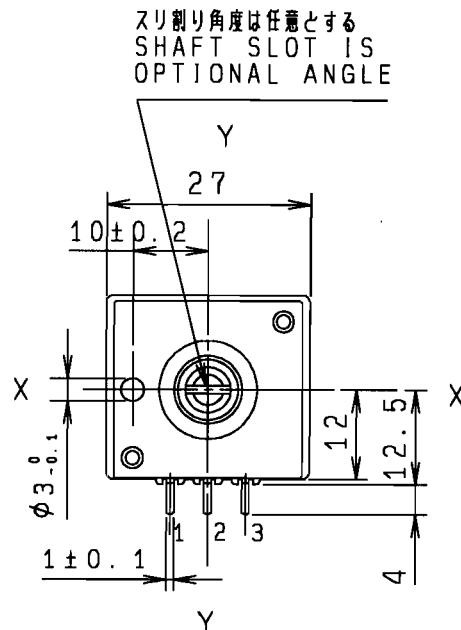
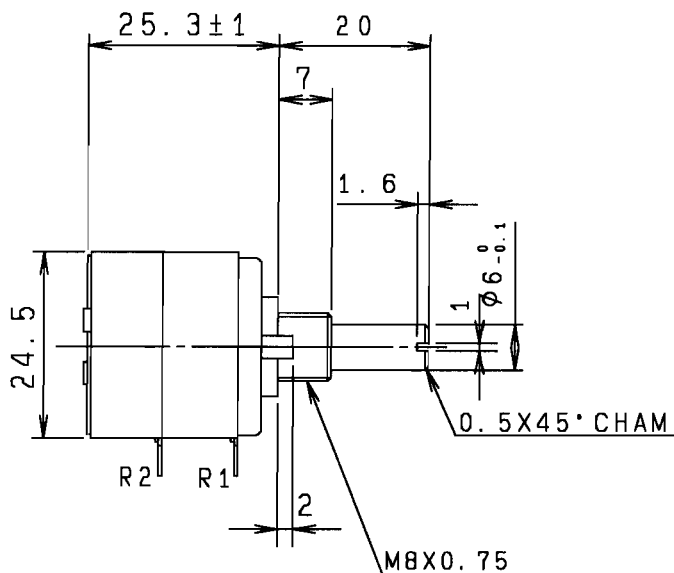


ALPS ELECTRIC CO., LTD  
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN



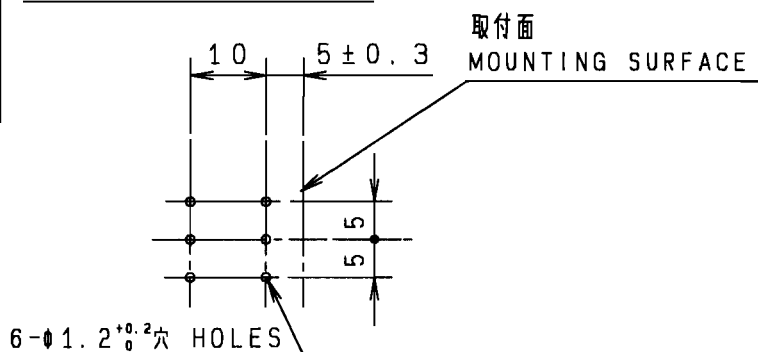
AT 180° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 15-30 PERCENT.

					APPD.	CHKD.	DSGD.	NAME
					Nov. 15, '96		Nov. 15, '96	RESISTANCE TAPER ( A )
					S. Sasaki		K. Tuunan	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD				F4262057M

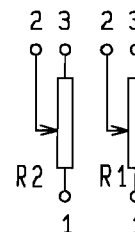


取付寸法図 許容差±0.1  
(挿入側から見た図)

P. W. B. MOUNTING DETAIL  
TOLERANCE±0.1  
VIEWED FROM MOUNTING SIDE



(回路図)  
CIRCUIT



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

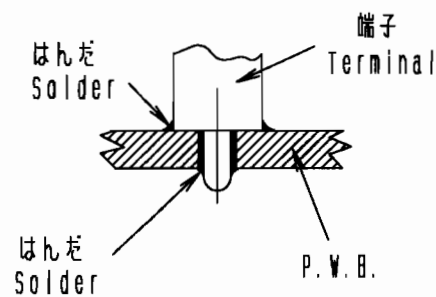
PART NO.	NAME	MATERIAL NAME / CODE	FINISH	
<b>ALPS ELECTRIC CO., LTD.</b>				
		DSGD. セツケイ1	SCALE	NO.
		Y. SAITOH 96-12-10	1:1	F4262057M
		CHKD.		TITLE
		Y. OHYA 96-12-10		27形1軸2連VR組立図
		APPD.	UNIT	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD
		M. SATOH 96-12-10	mm	K272A000F

< 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、  
お避け下さい。

Caution for soldering

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



					<b>ALPS ELECTRIC CO., LTD.</b>			
					APPD.	CHKD.	DSGD.	TITLE
					Apr. 14, '93	Apr. 14, '93	Apr. 14, '93	F 4 2 6 2 0 5 7 M
					S. Aizawa	M. Satoh	Y. Saitoh	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	OSGD				