

Customer: AVNET ASIA PTE LTD

No. K272010-1393

Date: Mar. 29, 2010

Attention:

Your ref. No.:

Your Part No.: --

## SPECIFICATIONS

ALPS' ;

MODEL: RK27112A00A6  
( 20kA X2 )

Spec. No.:

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

### RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

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

DSG'D

*K. Abe*

APP'D

*S. Sato*

ENG. DEPT.

Sales

Head Office

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

E1099

Q1003#03A (EA)

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

1. THIS SPECIFICATIONS APPLY TO RK27112A00A6 POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.

F9754179M

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.

1. For the export of products which are controlled items subject to foreign and domestic export laws and regulations, you must obtain approval and/or follow the formalities of such laws and regulations.

2. Products must not be used for military and/or antisocial purposes such as terrorism, and shall not be supplied to any party intending to use the products for such purposes.

3. Unless provided otherwise, the products have been designed and manufactured for application to equipment and devices which are sold to end-users in the market, such as AV (audio visual) equipment, home electric equipment, office and commercial electronic equipment, information and communication equipment or amusement equipment. The products are not intended for use in, and must not be used for, any application of nuclear equipment, driving control equipment for aerospace or any other unauthorized use.

With the exception of the above mentioned banned applications, for applications involving high levels of safety and liability such as medical equipment, burglar alarm equipment, disaster prevention equipment and undersea equipment, please contact an Alps sales representative and/or evaluate the total system on the applicability. Also, implement a fail-safe design, protection circuit, redundant circuit, malfunction protection and/or fire protection into the complete system for safety and reliability of the total system.

4. Before using products which were not specifically designed for use in automotive applications, please contact an Alps sales representative.

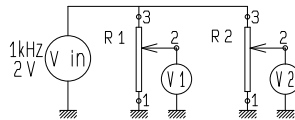
5. The products shall be stored in the original packaging and kept at room temperature and humidity, out of direct sunlight, and away from any and all corrosive gas. The products shall be completely used as soon as possible, but no later than 6 months from the date of delivery.

Once product packaging is opened, the complete quantity of such products shall be promptly used.

# SPECIFICATIONS

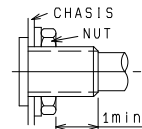
## ELECTRICAL

1. Total resistance : 20k $\Omega$ (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 : 80dB 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 -60dB less than -40dB  
2dB max. at -40dB 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℃ 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.

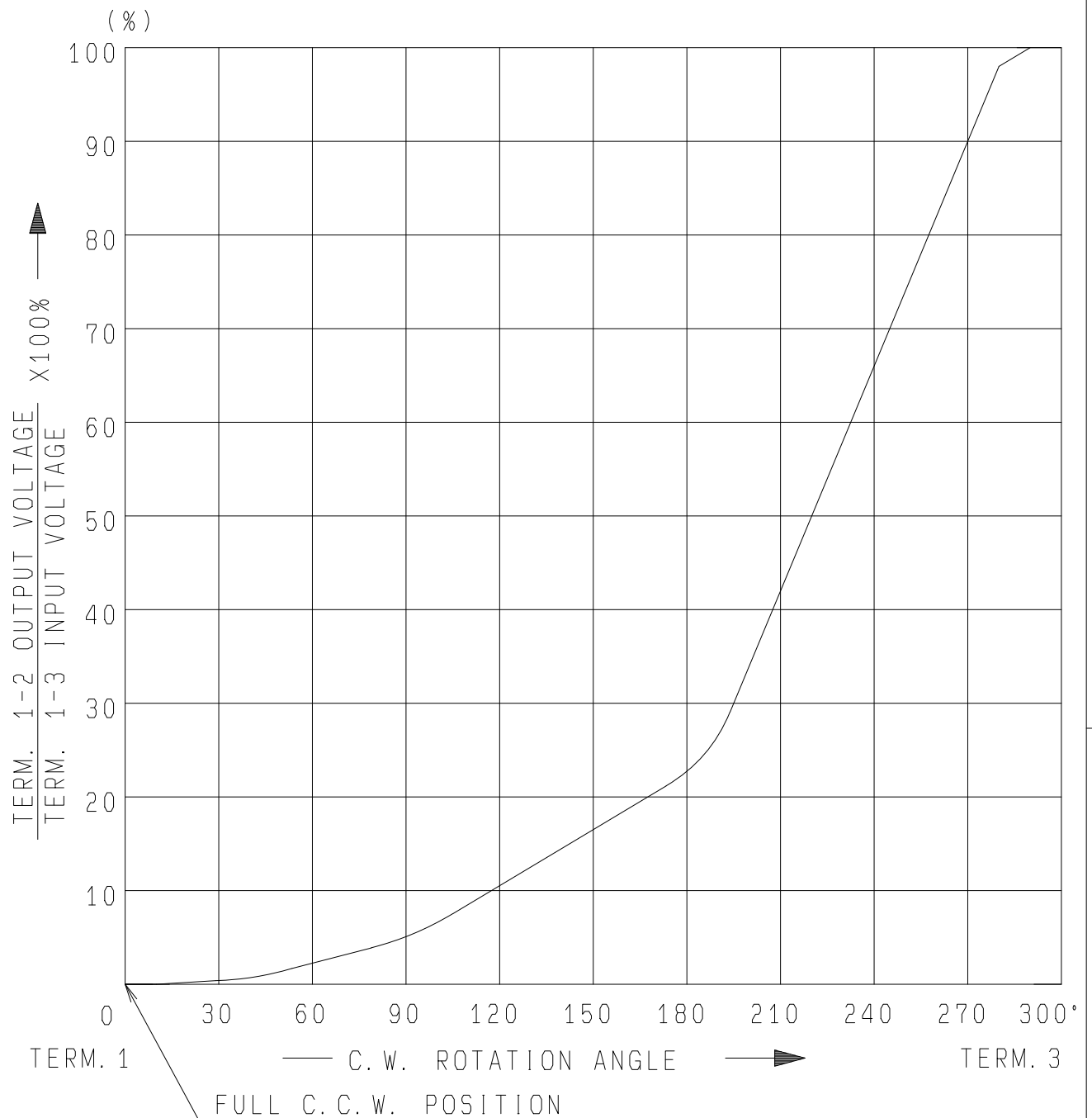
## NOTE

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>					TITLE	
					F 9 7 5 4 1 7 9 M	
					DOCUMENT NO.	
SYMB	DATE	APPD	CHKD	DSGD	APPD.	CHKD.
					Nov. 22, '96	Nov. 22, '96
					Y. Yoshioka	M. Satoh
						Y. Saitoh

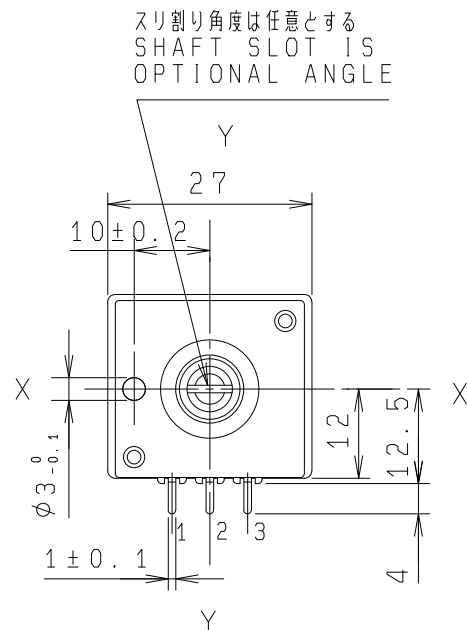
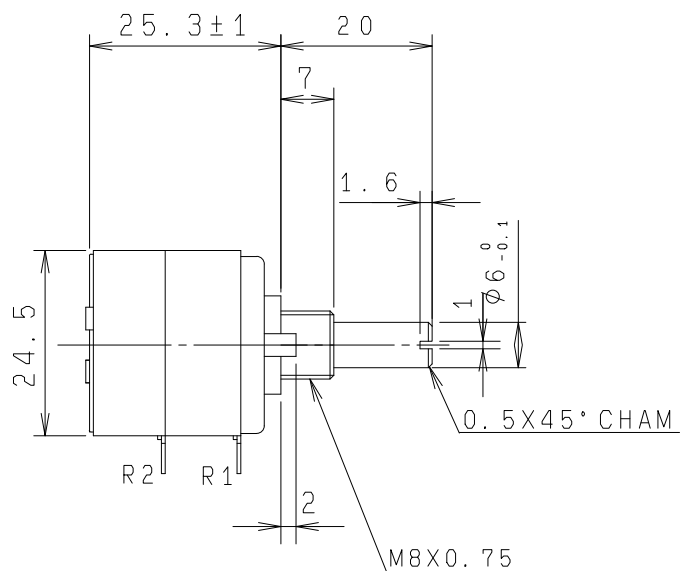


ALPS ELECTRIC CO., LTD  
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN



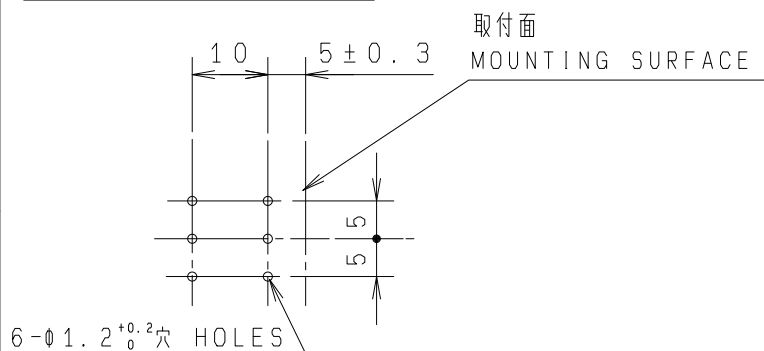
AT 180° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 15-30 PERCENT.

					APPD.	CHKD.	DSGD.	NAME
					Nov. 15, '96		Nov. 15, '96	RESISTANCE TAPER ( A )
					S. Sasaki		K. Tuounan	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD				F 9 7 5 4 1 7 9 M

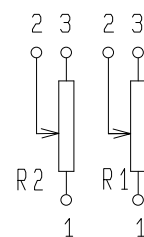


取付穴寸法図 許容差±0.1  
(挿入側から見た図)

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 Y. SAITOH 96-12-10		SCALE 1 : 1	NO. F9754179M	
					CHKD. Y. OHYA 96-12-10			TITLE 27形1軸2連VR組立図	
					APPD. M. SATOH 96-12-10		UNIT mm	DOCUMENT NO. K272A000F	
SYMB	DATE	APPD	CHKD	DSGD					

CLASS No.

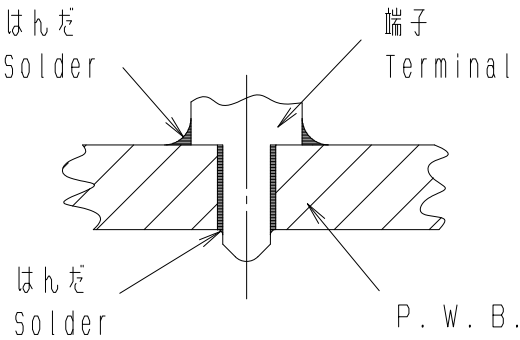
TITLE

<はんだ付け時の注意事項>

Caution for soldering

図のようにP.W.B.の上にはんだ付けをする配線は避け下さい。

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



基板に挿入される金属足ははんだ付けしてご使用願います。

Solder all metal inserted fixing including terminals & metal lugs into a substrate.

**ALPS ELECTRIC CO., LTD.**

					APPD. DSG1	CHKD. DSG1	DSGD. DSG1	TITLE
					Y. YOSHIOKA	Y. SATO	Y. OYA	DOCUMENT NO.
					1996/01/11	1996/01/11	1996/01/11	F 9 7 5 4 1 7 9 M (   /   )
① 1	'09-01-27	Y, K	Y, K	H, M				
SYMB	DATE	APPD	CHKD	DSGD				