

Customer : ALPS ELECTRIC EUROPA GmbH

No. F3861186M

Date : _____

Attention: _____

Your ref. No: _____

Your Part. No.: _____

SPECIFICATIONS

STÜCK ANGEBOTSMUSTER BEIGEFÜGT
PIECES QUOTATION SAMPLE(S) ATTACHED

ALPS :

MODEL RK27112A0
(50kAX2)

Spec. No. : _____

Sample No. : F3861186M

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 *Y. Saitoh*

APP'D *M. Saitoh*

ENG. DEPT. DIVISION

Sales _____

SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RK27112A0 POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

4K272A-200
K272A000F

3. MARKING

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

2

4. REMARKS

·FURNISH PACKAGE
NUT: 1, WASHER: 1
·NOTES

·Silver printed patterns are coated with carbon as a protection against sulphur-
ation.
·Marking ⇒ in specifications shows standard and condition for application.

CLASS NO	TITLE
	SPECIFICATIONS
ELECTRICAL 50 kΩ (10kΩR±2MΩ)	
1. Total resistance tolerance: Nominal ±20%	
2. Rated voltage: 30V A.C. This potentiometer is designed for A.C. voltage only.	
3. Resistance taper: See taper figure	
4. Maximum attenuation level on full C.C.W. position:	
Nominal total resistance value	Max. att. level
R ≥ 100 kΩ	100dB min.
100 kΩ > R ≥ 50 kΩ	90dB min.
50 kΩ > R ≥ 10 kΩ	80dB min.
5. Insertion loss on full C.W. position: 0.1dB max.	
6. Slider noise: less than 47mV (by method of JIS C 6443)	
7. Insulation resistance: 100MΩ min. at 500V D.C.	
8. Dielectric strength: Units shall be designed to withstand 500V A.C. minute without damage or arcing	
9. Gang error:	
Nominal total resistance value	Gang error
R ≥ 50 kΩ	3 dB max. between -70 less than -80 dB 2 dB max. between -60 ~ 0 dB
50 kΩ > R ≥ 20 kΩ	3 dB max. between -60 less than -40 dB 2 dB max. between -40 ~ 0 dB
20 kΩ > R ≥ 10 kΩ	3 dB max. between -60 ~ 0 dB

Measure between R1&R2

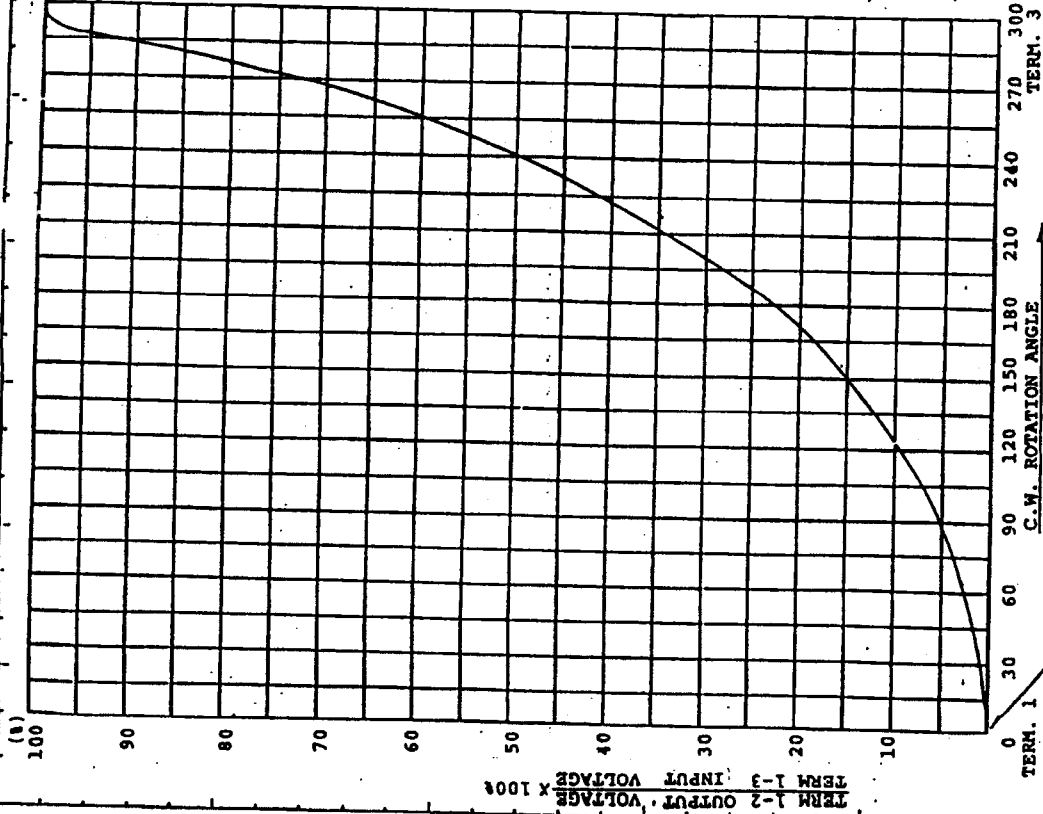
$$\left(\frac{\text{term 1-2}}{\text{output V}} \right) - \left(\frac{\text{term 1-3}}{\text{in out V}} \right)$$

CLASS NO	TITLE
	SPECIFICATIONS
MECHANICAL	
1. Total rotation angle: 300° ±3°	
2. Operation torque: 80~350gf-cm (Rotational speed at 60°/sec., at 20°C)	
3. Shaft end stop strength: 9kgf-cm min.	
4. Resistance to soldering heat: After soldering (less than 350°C and quicker than 5 seconds) there shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of the test	
5. Bushing nut tightening strength: Tightening torque to be no greater than 15 kgf-cm. *Pay attention otherwise the strength may not be assured.	
6. Shaft push / pull strength: No damages with an application of push or pull force 10kgf for 10 seconds	
ENDURANCE	
1. Rotational life: 15,000 cycles min.	
NOTE	
1. The items except above mentioned items shall meet or exceed JIS C 6443.	

ALPS ELECTRIC CO., LTD.

APPD	CHKD	DSGD	TITLE
Dec. 2 '83	Dec. 1 '83	Nov. 19 '83	
DATE	DATE	DATE	DOCUMENT NO.
1983.12.2	1983.12.1	1983.11.19	4K272A-200
DATE	DATE	DATE	DOCUMENT NO.
1983.12.2	1983.12.1	1983.11.19	4K272A-200

A



At 180° C.W shaft rotation from full C.C.W position voltage percent shall fall within the limits of 15~30 percent.

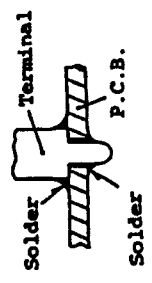
DATE	APPR.	CHKD.	DSGD.	NAME
2008.03.31	M.I.	I.K.	S.S.	RESISTANCE TAPER
				HSA02

CLASSNO.

TITLE

Caution for soldering

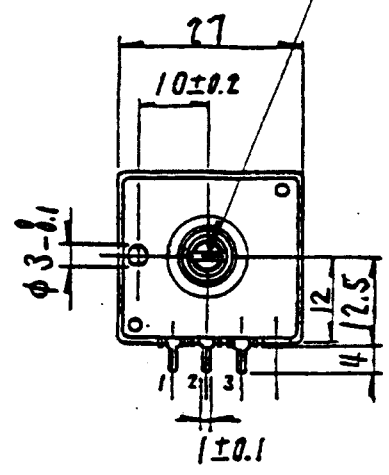
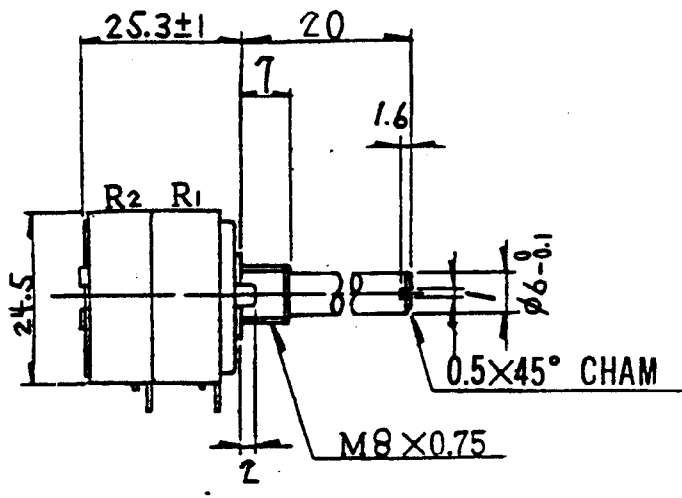
Please avoid soldering on upper surface of P.C.B. as shown.



DATE	APPR.	CHKD.	DSGD.	TITLE
				ALPS ELECTRIC CO., LTD.
				DOCUMENT NO.

SHAFT SLOT IS OPTIONAL ANGLE

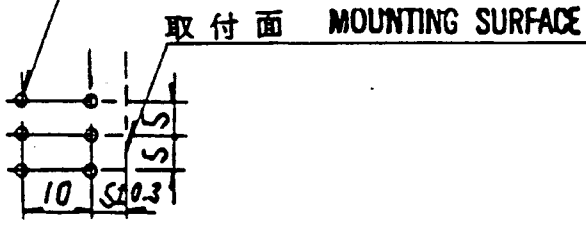
スリ割角度は任意とする。



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-φ1.2^{+0.2} HOLES



許容差の指定なき寸法の公差	
TOLERANCES UNLESS OTHERWISE SPEC	
BASIC DIMENSIONS	TOLERANCE
L ≤ 10	± 0.3
10 < L < 100	± 0.5
100 ≤ L	± 0.8
角度, ANGULAR DIMENSION	± 5°

部	番	名	称	材	料	規	格	処	理	22.6g	3H21A4
				三角法	単位 mm	R度					
				承認	照査	設計		図名			
				56.4.22	56.4.22	56.4.21		1軸2連 小型 デイテント VR組立図			
				天谷	天谷	佐々木		図番			
								-K272A000H			

ALPS アルプス電気株式会社

(A4・図面用紙)

0049 A 4 54.7. 10 0000

