

No. \_\_\_\_\_

Date : \_\_\_\_\_

\_\_\_\_\_  
Attention :

\_\_\_\_\_  
Your ref. No. :

\_\_\_\_\_  
Your Part No. :

# SPECIFICATIONS

ALPS' :

RK27112A0

MODEL: (10KAX2)



**ALPS ELECTRIC CO., LTD.**

HEAD OFFICE

1-7, YUKIGAYA-OHTSUKA-CHO,  
OHTA-KU, TOKYO 145 JAPAN

DSG'D

S. Sugawara

APP'D

K. Sato

ENG. DEPT. WAKUYA DIVISION

CLASS. NO. TITLE SPECIFICATIONS

**ELECTRICAL**  
 Δ(10KΩRS2MΩ)  
 1. Total resistance tolerance: Nominal ± 20% (at 20°C)  
 2. Maximum operating voltage: 30V A.C.  
 3. Resistance taper: See taper figure  
 4. Maximum attenuation level on full C.V. position:  

Nominal total resistance value	Max. att. level
Ra ≥ 100kΩ	100dB min.
100kΩ > Ra ≥ 50kΩ	90dB min.
50kΩ > Ra ≥ 10kΩ	80dB min.

 5. Insertion loss on full C.V. 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. 50Hz R.H.S. between resistance element and case for a period of one minute without damage or arcing  
 9. Tracking error:

Nominal total resistance value	Tracking error
Δ 50kΩ > R ≥ 50kΩ	3 dB max. between -70 less than -60 dB 2 dB max. between -60 ~ 0 dB
50kΩ > R ≥ 20kΩ	3 dB max. between -60 less than -40 dB 2 dB max. between -40 ~ 0 dB
20kΩ > R ≥ 10kΩ	3 dB max. between -60 ~ 0 dB
Δ 10kΩ > R ≥ 10kΩ	3 dB max. between -60 ~ 0 dB

Measures between R1&R2  
 ( term 1-2 output V  
 term 1-3 input V )

ALPS ELECTRIC CO., LTD.  
 (INCORPORATED IN JAPAN)  
 W709 A1  
 APPROV. CHKD. DISGR. TITLE  
 7/6/88 7/6/88  
 DOCUMENT NO. 4K272A-200 (1/2)  
 DATE APPROV. CHKD. DISGR. TITLE  
 7/6/88 7/6/88  
 X. Sato

CLASS. NO. TITLE SPECIFICATIONS

**MECHANICAL**  
 1. Total rotation angle: 300° ± 3°  
 2. Operation torque: 80 ~ 350gf·cm (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. Nut tightening strength: 15kgf·cm min. (Pay attention as following 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

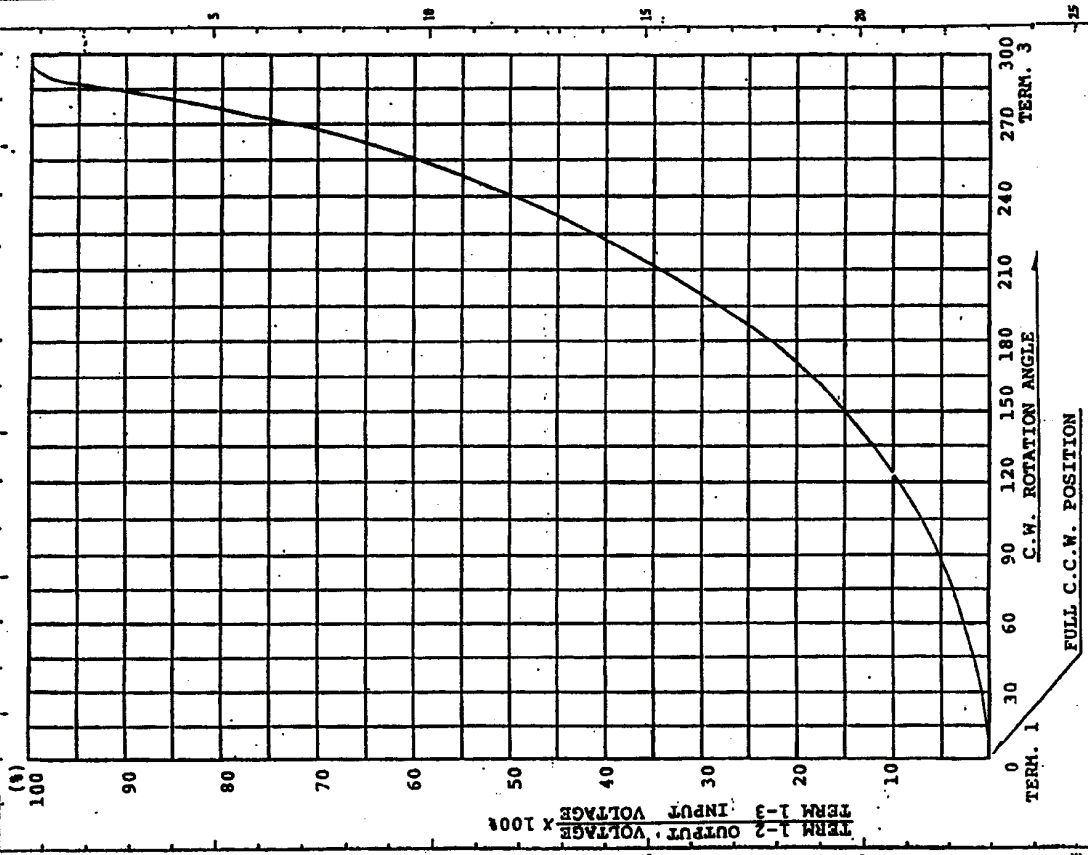
**DURABILITY PERFORMANCE**

1. Rotation life: 15000 cycles min.  
 NOTE:  
 1. Other performance characteristics shall conform to JIS C 6443. Variable Carbon Resistors for General Use.

ALPS ELECTRIC CO., LTD.  
 (INCORPORATED IN JAPAN)  
 W709 A1  
 APPROV. CHKD. DISGR. TITLE  
 7/6/88 7/6/88  
 DOCUMENT NO. 4K272A-200 (3/2)  
 DATE APPROV. CHKD. DISGR. TITLE  
 7/6/88 7/6/88  
 X. Sato



ALPS ELECTRIC CO. OF JAPAN  
1-1, YUKIYAMA 5TH AREA - CHUO-KU, TOKYO, JAPAN

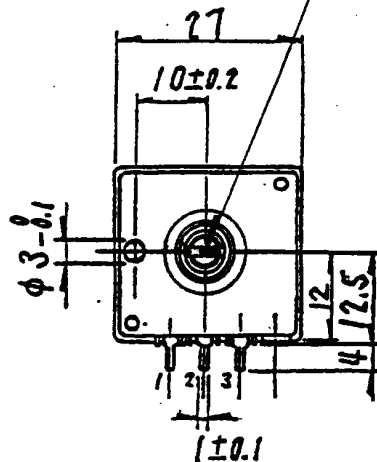
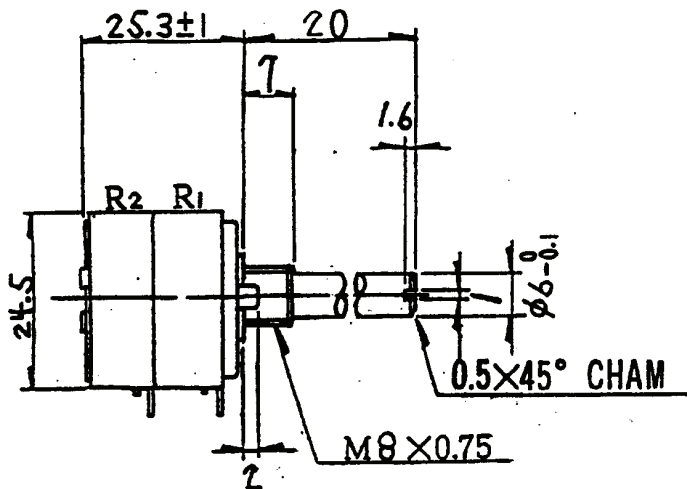


At 180° C.W shaft rotation from full C.C.W position voltage percent shall fall within the limits of 15~30 percent.

SYMB.	DATE	APPR.	CHKD.	DISCD.	NAME
Aug 31 '85	31	M.L.I.	I.K.	S.S.	RESISTANCE TAPER
					HSA 02

SHAFT SLOT IS OPTIONAL ANGLE

スリ割角度は任意とする。



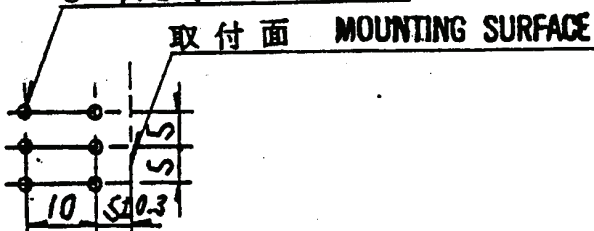
P.W.B. MOUNTING DETAIL

TOLERANCE ± 0.1  
VIEWED FROM MOUNTING SIDE

取付穴寸法図

許容差±0.1

6-φ1.2<sup>+0.2</sup> 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
				三角法	単位 mm	尺度			
				承認	原案	設計	図名		
				W設1 58.4.22 大谷	W設1 58.4.22 野村	W技検 58.4.21 佐々木	1軸2連小型デイトントVR組立図		
							図番		
							-K272A000F		
記号	年月日	承認	原案	設計					59.1.20