

Customer: ALGE GERMAN DISTRIBUTER

No. KK-2005-9689

Date: Aug. 01, 2005

Attention:

Your ref. No.:

Your Part No.: ALBS 402178

SPECIFICATIONS

ALPS';

MODEL: RK2711220A0F
(50kBX2)

Spec. No.:

Sample No.: F 2 5 1 6 7 8 7 M

RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

ALPS
ALPS ELECTRIC CO., LTD.

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Phone, +81(3)3726-1211

DSG'D

APP'D

ENG. DEPT. DIVISION

Sales

24678

Q1003#03A (EA)

SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RK2711220A0F POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.

5K272A 76

K272A0A0G

4K-1

3. MARKING

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

4. REMARKS

- FURNISH PACKAGE
NUT:1 WASHER:1

• NOTES

- Please be careful not to soak this pot in H₂S gas, or not to exist such materials (e.g. rubber parts) as make H₂S gas emerge because the silver of this resistive element is not coated over.

• CAUTION

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

50 k Ω

Nominal total resistance $\pm 20\%$

(Total resistance range: $10\text{k}\Omega \leq R \leq 500\text{k}\Omega$)

2. Rated voltage

30V A.C.

This potentiometer is designed for A.C. voltage only.

3. Resistance taper:

B (H5B01)

4. Residual resistance
between terminals:

1&2, 2&3 : 3 Ω max.

1&2, 2&3 : 3 Ω 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 M Ω at 500V D.C.

7. Dielectric strength :

Units shall be designed to withstand 500V A.C.

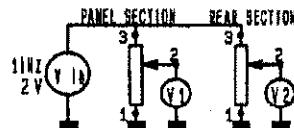
50Hz R.M.S. between resistance element and case

for a period of 1 minute without damage or arcing.

8. Gang error :

Measure between
(R1&R2)

2 dB max. at Click position



MECHANICAL

1. Total rotational angle

$300^\circ \pm 3^\circ$

2. Rotational torque

6-35mN·m (Rotational speed 60°/sec., at 20°C)

3. Stopper strength

No damage with an application of 0.9 N·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 N·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 $\pm (5-30)\text{mN}\cdot\text{m}$



ENDURANCE

1. Rotational life :

15,000 cycles min.

NOTES

1. The items except above mentioned items shall meet or exceed JIS C 6443.

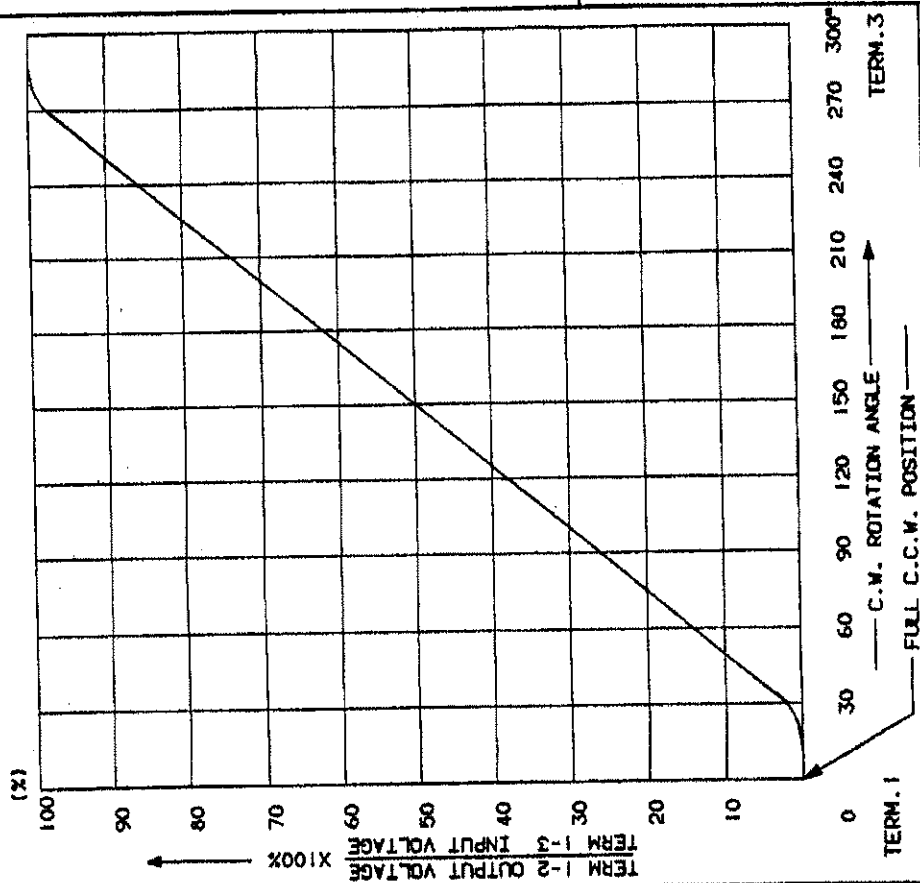
2. Operating temperature: -10°C to $+70^\circ\text{C}$

3. Storage temperature: -20°C to $+80^\circ\text{C}$

					ALPS ELECTRIC CO., LTD.			
					APPD.	CHKD.	DSGD.	TITLE
					DESIGN 05.8.-2 ALZAWA	DESIGN 05.8.02 Y.SAITO	DESIGN 05.8.-1 Y.OHYA	DOCUMENT NO.
								5K272A-76
SYMB	DATE	APPD	CHKD	DSGD				

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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.

DESIGN	SCALE	TITLE
80-09-13	1:1	RESISTANCE TAPER
DATE	UNIT	DOCUMENT NO.
80-09-13	mm	H S B 01
APPRO. CHANGED	APPRO. CHANGED	APPRO. CHANGED
Y. O.	Y. O.	Y. O.
APPRO.	APPRO.	APPRO.
80-09-13	80-09-13	80-09-13
DATE	DATE	DATE

TONE

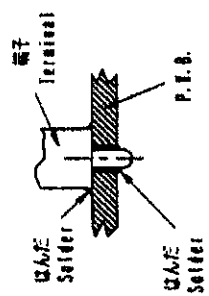
FOR

< 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

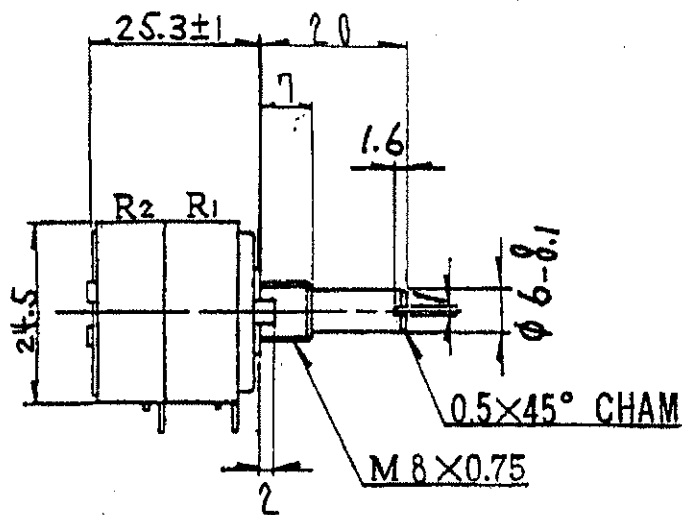
Please avoid soldering on upper surface of P.W.B. as shown



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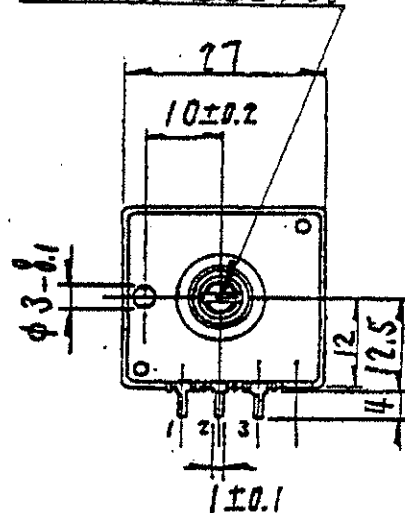
DESIGN	SCALE	TITLE
80-09-13	1:1	RESISTANCE TAPER
DATE	UNIT	DOCUMENT NO.
80-09-13	mm	4K-1
APPRO. CHANGED	APPRO. CHANGED	APPRO. CHANGED
Y. O.	Y. O.	Y. O.
APPRO.	APPRO.	APPRO.
80-09-13	80-09-13	80-09-13
DATE	DATE	DATE

FOR



SHAFT SLOT IS OPTIONAL ANGLE

スリ割角度は任意とする。



P.W.B. MOUNTING DETAIL

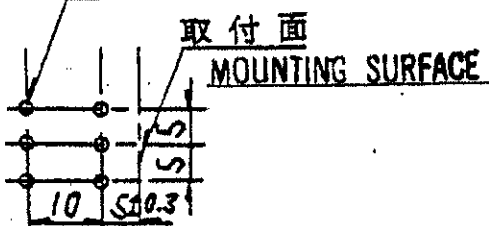
TOLERANCE ±0.1

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}₋₀ 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°

								300°±3°
部	番	名	称	材	料	規	格	処
								23.2g
				三角法	単位 mm	尺度	150° CLICK	
				承認	照査	設計	図名	
				承認	照査	設計	1軸2速小型デイトントVR組立図	
FORM REV	3.2.1	相沢	佐藤	大矢	承認	照査	図番	
記号	年月日	承認	用度	設計	承認	照査	K272A0A0G	