

Customer: ALGE GERMAN DISTRIBUTER

No. KK-2005-9689

Date: Aug. 01, 2005

Attention:

Your ref. No.:

Your Part No.:

# 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.

Head Office  
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DSG'D *Y. Okiya*

APP'D *Y. Saito*  
ENG. DEPT. DIVISION

Sales

# 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 H<sub>2</sub>S gas, or not to exist such materials (e.g. rubber parts) as make H<sub>2</sub>S 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.

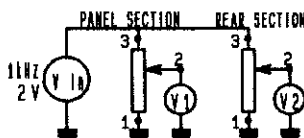
Products being introduced in the specifications have been designed and manufactured for applications to ordinary electronic equipment and devices such as the AV equipment, electric home appliances, office machines and communications equipment. Consequently, when employing these products for applications 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

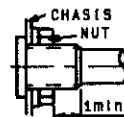
## ELECTRICAL

- |  |   |
|--|---|
| 1. Total resistance                        | <u>50</u> k $\Omega$  |
|  | Nominal total resistance $\pm 20\%$<br>(Total resistance range: $10k\Omega \leq R \leq 500k\Omega$ )  |
| 2. Rated voltage                           | 30V A.C.<br>This potentiometer is designed for A.C. voltage only.   |
| 3. Resistance taper:                       | <b>B</b> (HSB01)  |
| 4. Residual resistance between terminals:  | 1&2, 2&3 : 3 $\Omega$ max.<br>1&2, 2&3 : 3 $\Omega$ max.  |
| 5. Sliding noise :                         | Less than 47mV (Measured by JIS C 6443)<br>( 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 $\Omega$ 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 :<br>Measure between (R1&R2) | 2 dB max. at Click position   |



## MECHANICAL

- |                                    |  |
|------------------------------------|--|
| 1. Total rotational angle          | 300° $\pm 3^\circ$   |
| 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.<br>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.<br>*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° $\pm 3^\circ$   |
| 8. Click torque:                   | Rotational torque + (5-30)mN·m   |



## ENDURANCE

- |                      |                    |
|----------------------|--------------------|
| 1. Rotational life : | 15,000 cycles min. |
|----------------------|--------------------|

## NOTES

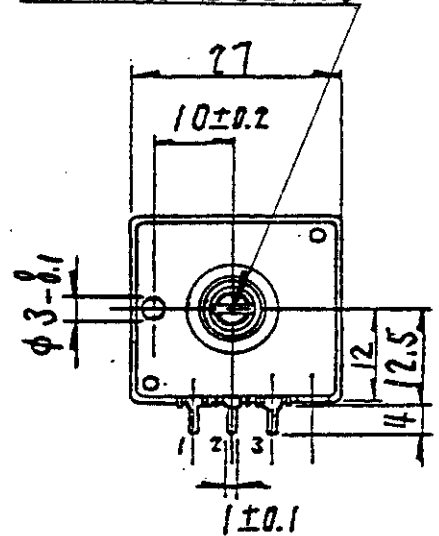
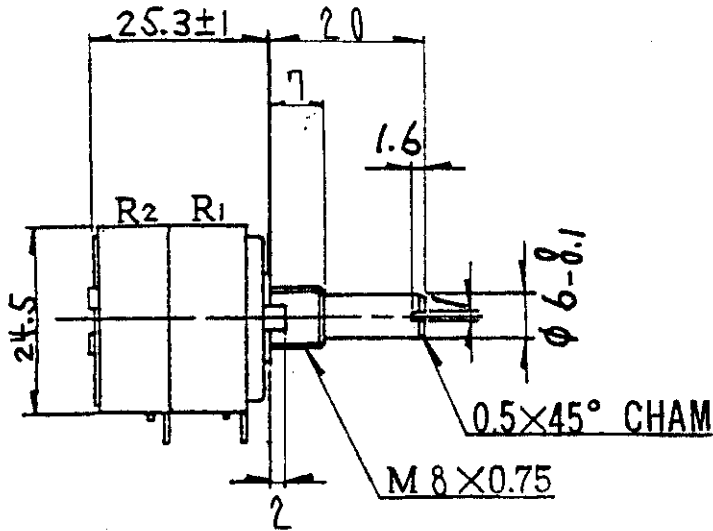
1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature: -10 °C to +70 °C
3. Storage temperature: -20 °C to +80 °C

<b>ALPS ELECTRIC CO., LTD.</b>				
	APPD. <b>DESIGN</b> 05.8.-2 AIZAWA	CHKD. <b>DESIGN</b> 05.8.02 Y.SAITO	DSGD. <b>DESIGN</b> 05.8.-1 Y.OHYA	TITLE _____
SYMB	DATE	APPD	CHKD	DSGD
			DOCUMENT NO. 5K272A-76	



SHAFT SLOT IS OPTIONAL ANGLE

スリ割角度は任意とする。



P.W.B.MOUNTING DETAIL

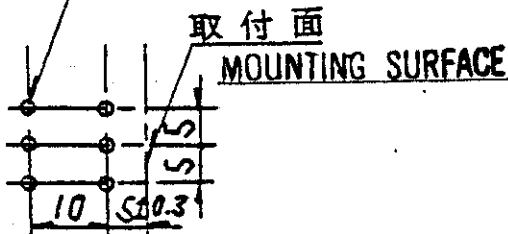
TOLERANCE ±0.1

VIEWED FROM MOUNTING SIDE

取付穴寸法図

許容差±0.1(挿入側より)

6-φ1.2<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°

							3.00 ± 3°		
部	番	名	称	材	料	規	格	処	理
									23.2g
				三角法	単位 mm	尺度	150° CLICK		
				承認	照査	設計	図名		
				W生技課 57.9.7 大谷	W生技課 57.9.-6 佐々木	W生技課 57.9.08 大和	1軸2連 小型 デイテントVR組立図		
FORM REV	342-1	相沢	佐藤	大夫			図番		
記号	年月日	承認	用印	設計			K272A0A0G		59.1.20