Customer: ALPS EUROPE DISTRIBUTION

No. KX-2008-9007

Date: Jun. 05, 2008

Attention:

Your ref. No.:

Your Part No.: RK09K1130C94

SPECIFICATIONS

ALPS' ;

MODEL: RK09K1130C94
(100kB)

Spec. No.:

Sample No.: F 6 0 2 5 6 2 1 M

RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

ALPS
ALPS ELECTRIC CO., LTD.

DSG'D K. Abe

APP'D S. Sato

ENG. DEPT. DIVISION

Sales

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B6523

Q1003#03A (EA)

No. KX-2008-9007

SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RK09K1130C94 POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.
   F6025621M
   K091C0Z4G

3. MARKING
   • MARKING ON ALL UNITS
   DATE CODE, RESIST. VALUE, TAPER

   • NOTES
   ·This unit uses polycarbonate. To be careful for using this unit in such violent gas atmospheric condition as ammonia, amine, alkaline aqueous solution, aromatic hydrocarbon, keton, ester, alkyl hydrocarbon, etc.

• 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.

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 protectve circuits and redundancy circuits and reconfirm if safety is being duly preserved.

This product has been designed and manufactured for general electronic devices, visual devices, home electronics, information devices and communication devices. In case this product is used for more sophisticated equipment requiring higher safety and reliability, such as life support system, space & aviation devices, disaster prevention & security system, please make verification of conformity or check on us for the details.
It is prohibited to use this product for flight control purposes in avionics 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.

<Storage>
1) Store the products as delivered, at a normal temperature and humidity, without direct sunshine and corrosive gas ambient.
   Use them at an earliest possible timing, not later than six months upon receipt.
2) After breaking the seal, keep the products in a plastic bag to shut out ambient air, store them in the same environment as above, and use them up as soon as possible.
3) Do not stack too many cartons.

SPECIFICATIONS

ELECTRICAL

1. Total resistance : 100kΩ ±20%
2. Rated power : 0.05 W
3. Rated voltage :

The rated voltage shall be the voltage of D.C. or A.C. (commercial frequency, effective value) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following, however, the maximum working voltage of the following shall be the rated voltage.

$$E = \sqrt{P \cdot R} \ (V)$$

Where E : Rated voltage (V)
P : Rated power(dissipation) (W)
R : Nominal total resistance (Ω)

Maximum working voltage : 50 V A.C. , 20 V D.C.

4. Residual resistance between terminals
between term. 1&2, term. 2&3 : 300Ω max.
5. Sliding noise : Less than 100 mV measured by method of JIS C 6443.
6. Insulation resistance : Greater than 100 MΩ measured by D.C. 250V.
7. Withstand voltage: More than 1 minute with an application of A.C. 250 V.
8. Taper : B

MECHANICAL

1. Overall rotational angle : 280°±5°
2. Operation torque : 1~8mN·m (Rotational speed 60°/sec.)
3. Shaft end stop strength : No damage with an application of 0.3N·m.
4. Starting torque : 10mN·m MAX.
5. Resistance to soldering heat :
After soldering (Less than 350°C and quicker than 3 seconds) there shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of the test.
6. Play of shaft :
The resistor shall be mounted by soldering the mounting legs on the panel. Then a side thrust of 25mN·m at the end of the shaft shall be applied, then the total play of the shaft shall not exceed 0.5 × L / 20 mm p-p.
(L:Shaft length)
7. Inclination of shaft :
The eccentricity of the root of shaft shall not exceed 0.35mm against the center of the mounting position.
8. Eccentricity of shaft :
The inclination of shaft shall be within 0.35mm to the center of shaft, which is parallel to the mounting surface.
9. Robustness of shaft against end thrust :
The shaft shall withstand against end thrust of 50N for 3 seconds.
10. Robustness of shaft against side thrust :
The shaft shall withstand against side thrust of 40N for 3 seconds on the end of the shaft at right angles to the axis of the shaft after mounting the resistor by soldering.

ENDURANCE

1. Rotational life : 5,000 cycles min.

NOTE

1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature :-10°C~+70°C. 3. Storage temperature :-30°C~+70°C.

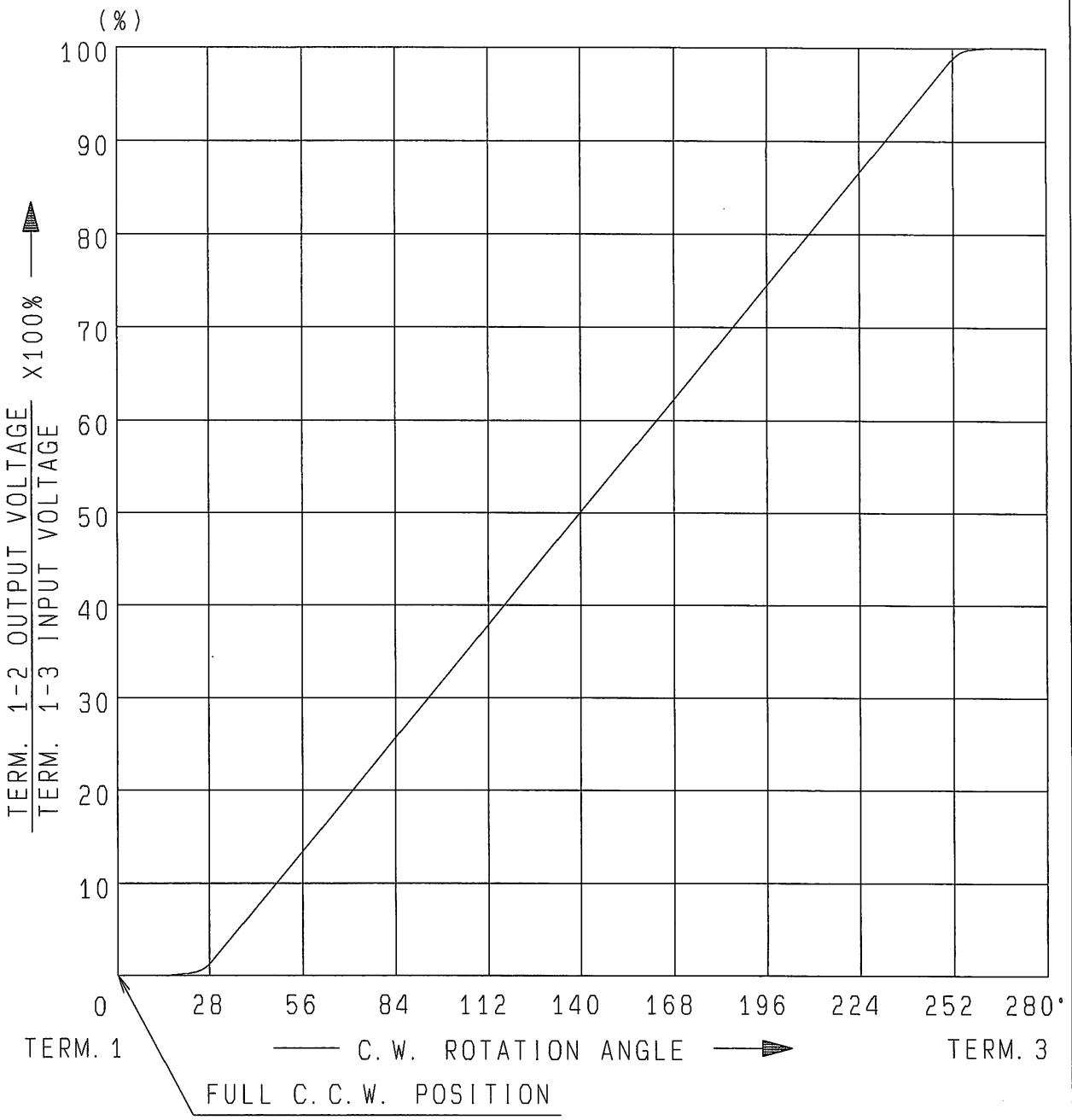
SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
Sep. 13, '96	Sep. 13, '96	Sep. 13, '96	
S. Aizawa	M. Satoh	Y. Saitoh	DOCUMENT NO. F6025621M

KX

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

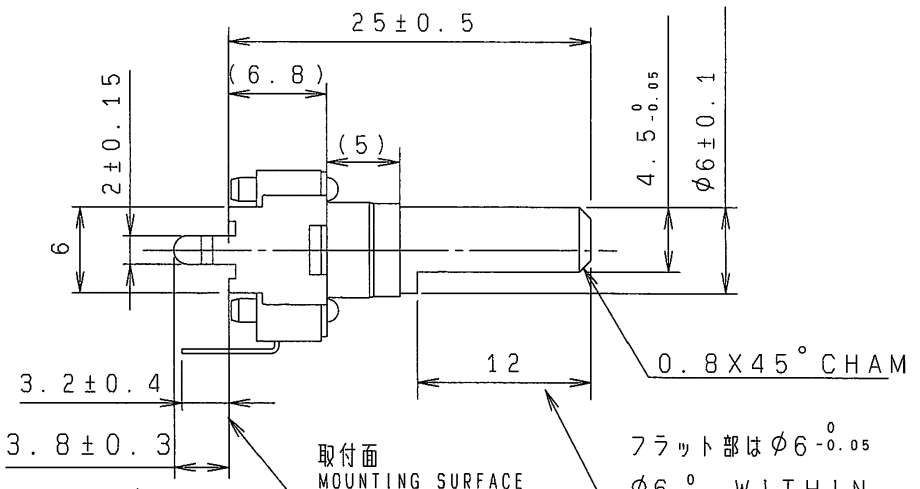


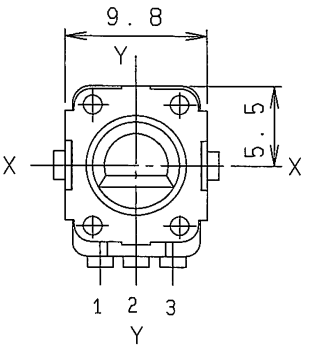
AT 140° C.W. SHAFT ROTATION FROM FULL C.C.W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40~60 PERCENT.

SYMB	DATE	APPD	CHKD	DSGD	APPD.	CHKD.	DSGD.	NAME
					Jul. 13, '93	Jul. 13, '93	Jul. 13 '93	RESISTANCE TAPER (B)
					K. Magami	K. Sasaki	K. Suzuki	DOCUMENT NO. F6025621M

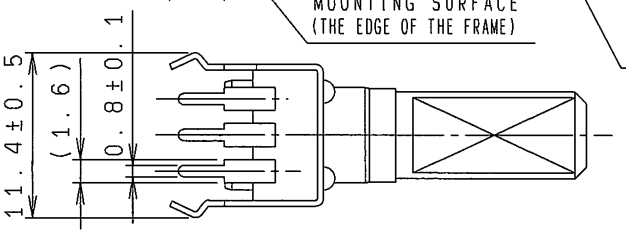
KX09

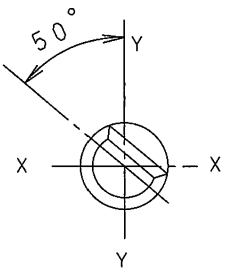
Format by S. Sakai

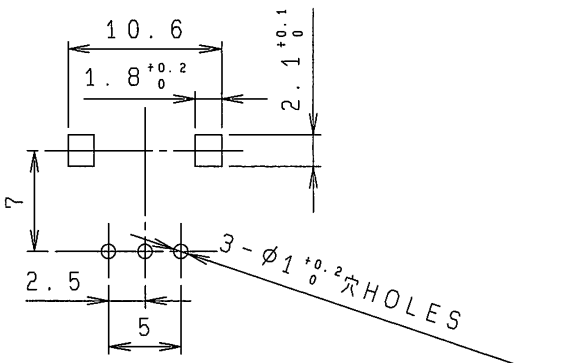




軸はセンター位置を示す。
SHAFT SHOWN IN
CENTER POSITION.







端子取付穴寸法図（挿入側より見た図）
（許容差±0.1）
MOUNTING HOLE DETAIL
(TOLERANCE±0.1)
VIWED FROM MOUNTING SIDE

軸は反時計方向に回し切った状態を示す。
SHAFT SHOWN IN
FULL C.C.W. POSITION.

回路図
CIRCUIT

製品質量：1.8 g
NET WEIGHT

指定なき部分の許容差 TOLERANCES UNLESS OTHERWISE SPEC	
L≦10	±0.3
10＜L＜100	±0.5
100≦L	±0.8
角度 ANGULAR DIMENSION	±5°

PART NO.	NAME	MATERIAL NAME / CODE	FINISH
———	———	———	SHAFT COLOR : BLACK(B)

ALPS ELECTRIC CO., LTD.

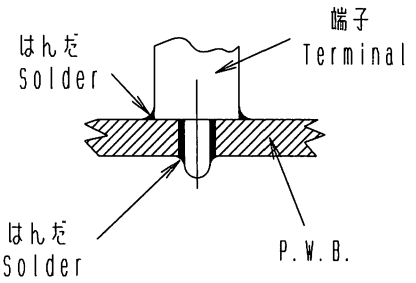
SYMB	DATE	APPD	CHKD	DSGD			
					DSGD. 1-設計1課 Y. Saitoh 96-09-13	SCALE 2 : 1	NO. F6025621M
					CHKD. Y. Satoh 96-09-13		TITLE 9形1軸単連絶縁軸VR
					APPD. S. Aizawa 96-09-13	UNIT mm	DOCUMENT NO. F18 K091C0Z4G

< はんだ付け時のご注意事項 >

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



SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
Apr. 14, '93	Apr. 14, '93	Apr. 14, '93	F6025621M
S. Aizawa	M. Satoh	Y. Saitoh	DOCUMENT NO.