

Customer: ALPS EUROPE DISTRIBUTION

No. KK-2009-8622

Date: Nov 19, 2009

Attention:

Your ref. No.:

Your Part No.: RK09K1130AH1

SPECIFICATIONS

ALPS';

MODEL: RK09K1130AH1
(10kB)

Spec. No.:

Sample No.: F 8 9 6 1 0 0 6 M

RECEIPT STATUS

RECEIVED

By Date

Signature

Name

Title

ALPS
ALPS ELECTRIC CO., LTD.

DSG'D

Lu.Lin

YM

APP'D

S. Sato

ENG. DEPT.

Sales

Head Office

1-7, Yukigaya-otsuka-machi, Ota-ku, Tokyo, 145-8501 Japan

Phone, +81(3)3726-1211

B6523

01003#03A (EA)

S P E C I F I C A T I O N S

1. THIS SPECIFICATIONS APPLY TO RK09K1130AH1 POTENTIOMETER.

2. CONTENTS OF THIS SPECIFICATIONS.

F8961006M

K091C0Z06

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.

1. For the export of products which are controlled items subject to foreign and domestic export laws and regulations, you must obtain approval and/or follow the formalities of such laws and regulations.

2. Products must not be used for military and/or antisocial purposes such as terrorism, and shall not be supplied to any party intending to use the products for such purposes.

3. Unless provided otherwise, the products have been designed and manufactured for application to equipment and devices which are sold to end-users in the market, such as AV (audio visual) equipment, home electric equipment, office and commercial electronic equipment, information and communication equipment or amusement equipment. The products are not intended for use in, and must not be used for, any application of nuclear equipment, driving control equipment for aerospace or any other unauthorized use.

With the exception of the above mentioned banned applications, for applications involving high levels of safety and liability such as medical equipment, burglar alarm equipment, disaster prevention equipment and undersea equipment, please contact an Alps sales representative and/or evaluate the total system on the applicability. Also, implement a fail-safe design, protection circuit, redundant circuit, malfunction protection and/or fire protection into the complete system for safety and reliability of the total system.

4. Before using products which were not specifically designed for use in automotive applications, please contact an Alps sales representative.

5. The products shall be stored in the original packaging and kept at room temperature and humidity, out of direct sunlight, and away from any and all corrosive gas. The products shall be completely used as soon as possible, but no later than 6 months from the date of delivery.

Once product packaging is opened, the complete quantity of such products shall be promptly used.

SPECIFICATIONS

ELECTRICAL

1. Total resistance : $10k \pm 20\%$
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.

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

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 : 300 Ω max.
5. Sliding noise : Less than 100 mV measured by method of JIS C 6443.
6. Insulation resistance : Greater than 100 M Ω 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 : $280^\circ \pm 5^\circ$
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 $0.8 \times L / 20$ 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.

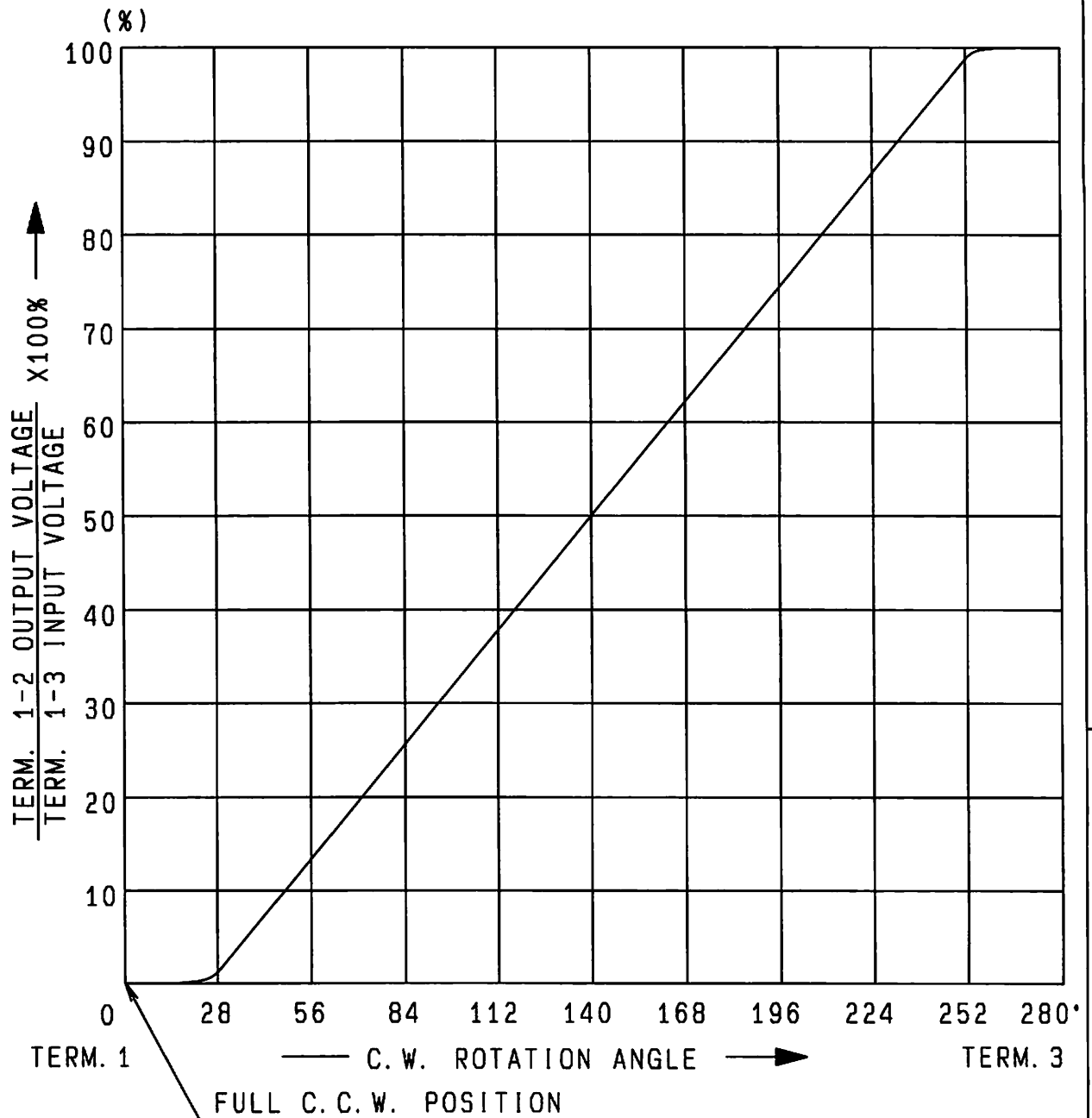
NOTE

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.

					ALPS ELECTRIC CO., LTD.			
					APPD.	CHKD.	DSGD.	TITLE
					Sep. 13, '96	Sep. 13, '96	Sep. 13, '96	
					S. Aizawa	M. Satoh	Y. Saltoh	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD				F8961006M

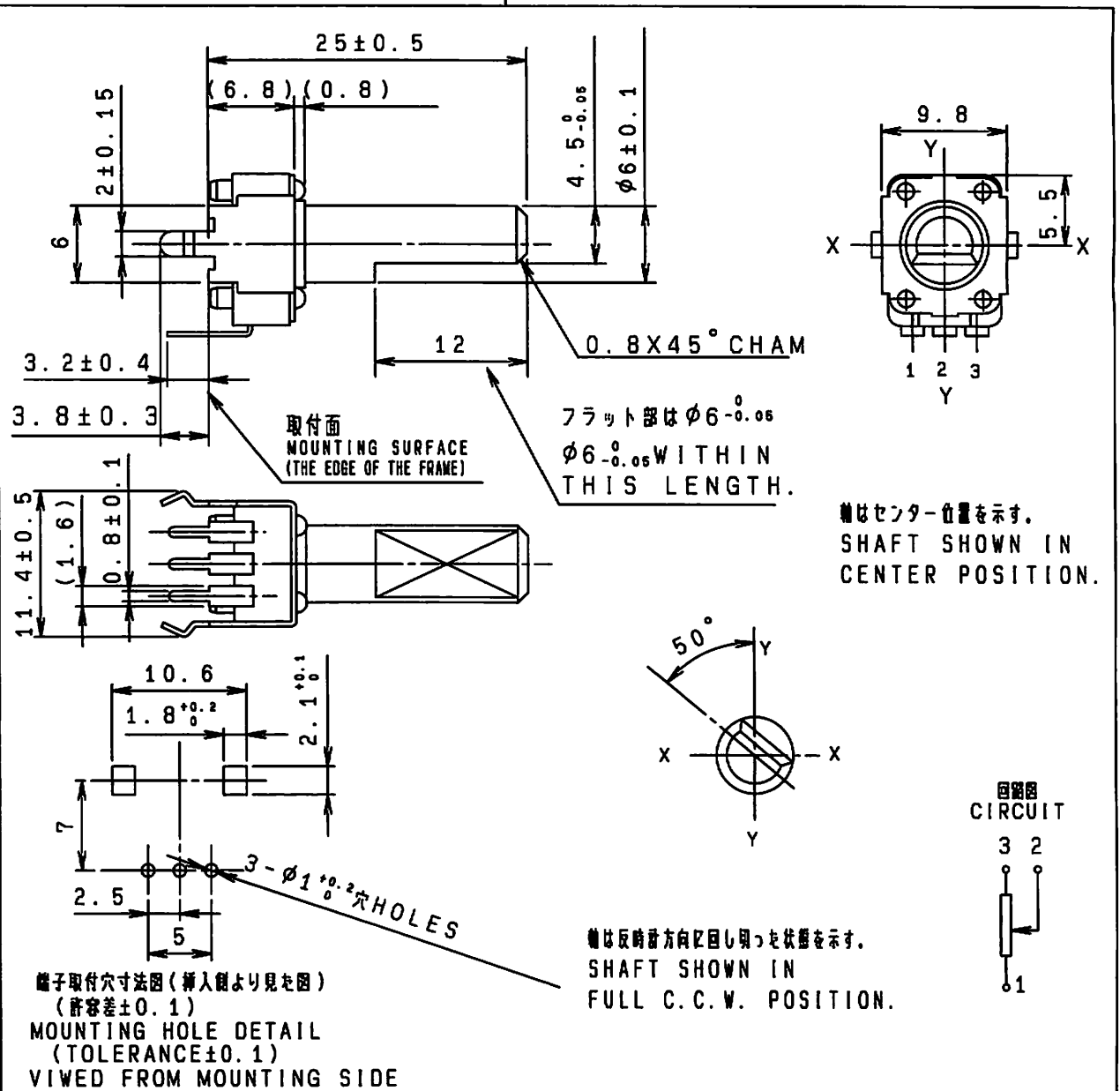


ALPS ELECTRIC CO., LTD
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN



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

					APPD.	CHKD.	DSGD.	NAME
					Jul. 13. '93	Jul. 13. '93	Jul. 13 '93	RESISTANCE TAPER (B)
					K. Magami	K. Sasaki	K. Suzuki	DOCUMENT NO.
SYMB	DATE	APPD	CHKD	DSGD				F8961006M



製品質量: 1.8 g
NET WEIGHT

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

		SHAFT COLOR : BLACK(B)	
PART NO.	NAME	MATERIAL NAME / CODE	FINISH
ALPS ELECTRIC CO., LTD.			
		DSGD. 1-設計1番 Y. Satoh 96-09-13	SCALE 2 : 1
		CHKD. Y. Satoh 96-09-13	NO. F8961006M
		APPD. S. AIZAWA 96-09-13	TITLE 9形1軸単連絶縁軸VR
SYMB	DATE	APPD	UNIT mm
		CHKD	DOCUMENT NO. F01
		DSGD	K091C0Z06

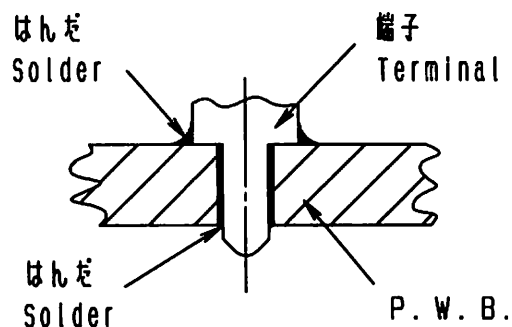
CLASS NO. _____	TITLE _____	
--------------------	----------------	--

<はんだ付け時の注意事項>

Caution for soldering

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。

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



基板に挿入される金属足ははんだ付けしてご使用願います。

Solder all metal inserted fixing including terminals & metal lugs into a substrate.

					ALPS ELECTRIC CO., LTD.			
					APPD. DSG1	CHKD. DSG1	DSGD. DSG1	TITLE
					Y. YOSHIOKA	Y. SATO	Y. OYA	DOCUMENT NO.
					1996/01/11	1996/01/11	1996/01/11	F8961006M (1/1)
SYMB	DATE	APPD	CHKD	DSGD				