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Autorisierter
Bauelemente
Distributor von

ALPS®

Date : Aug. 01, 1995

A t t e n t i o n :

Your ref. No:

Your Part. No: ET 5494

SPECIFICATIONS

ALPS :

MODEL RS6011266
(10k BX2)

Spec. No. :

Sample No. : F4517802M

RECEIPT STATUS

RECEIVED

By. Date

Signature

Name

Title

ALPS ELECTRIC CO., LTD.

HEAD OFFICE
1-7, YUKIGAYA-OH TSUKA-CHO,
OHTA-KU, TOKYO 145 JAPAN

DSG'D 14, Sugawara

APP'D *M. Satoh*

ENG. DEPT. DIVISION

Sales

SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RS6011266 POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

4S6028-402M
4S0008-45M
4S0001-200, 4S0001-201
S6028P623A

3. MARKING

· MARKING ON ALL UNITS
DATE CODE, RESIST. VALUE, TAPER, TRADE MARK

4. REMARKS

· NOTES

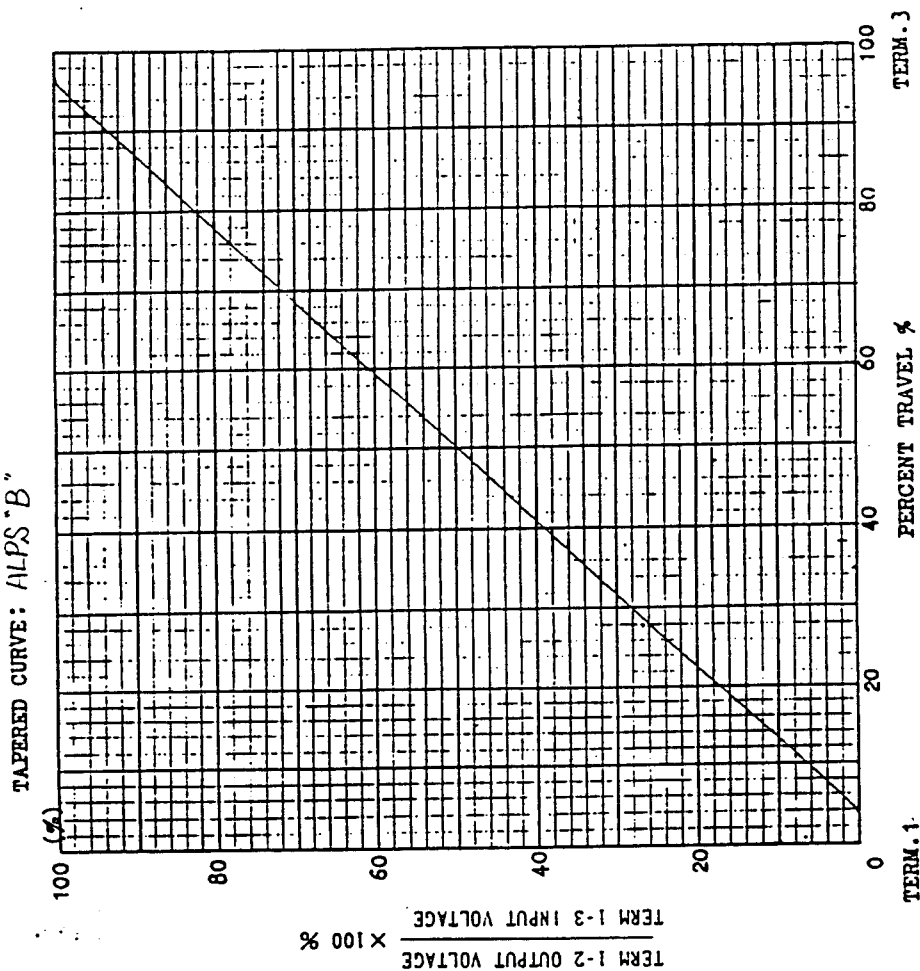
· Marking ⇒ in specifications shows standard and condition for application.

PRELIMINARY copy.

CLASS NO.	TITLE STANDARD TYPE POTENTIOMETER (SLA.)
ELECTRICAL	
1. Overall resistance : Overall resistance tolerances : $\pm 20\%$ Unit : K Ω	
5	10 20 50 100 200 250 500 1,000
2. Minimum resistance : Unit : Ω	
Overall resistance (K Ω)	5,10 20,50 100 200, 500 1000
Across term.1-2	30 50 100 200 300 500
Across term.2-3	50 70 120 220 320 500
3. Taper : ALPS "B" (SBS50)	
4. Rated power : 0.2 Watts.	
5. Rated voltage : Rated voltage = $\sqrt{P \cdot R}$ (V) P : rated power (W) R : nominal overall resistance (Ω) When the rated voltage exceeds the maximum operating voltage the maximum operating voltage shall be the rated voltage. Maximum operating voltage : A.C.200V , D.C. 10V	
6. Dielectric test : Units shall be designed to withstand 300 volts A.C. 50 Hz R.M.S. between resistance elements and case for a period of one minute without damage or arcing.	
7. Insulation resistance : Greater than 100 megohms between resistance elements and case when tested by a 250 volts D.C. insulation resistance meter.	
8. Tracking error : 2 dB at the point 50% travel	
9. Sliding lifetest : 15,000 cycles	
• Lever shall be operable with speed of 20 mm per sec.without noise by static electricity.	

ALPS ELECTRIC CO., LTD.	
APPD.	CHKD.
APPD.	CHKD.
DATE	DATE
DOCUMENT NO. 4S6028 - 402M	

USED ON	NAME
60 "M" TRAVEL TYPE ONE	RESISTANCE TAPER
ALPS ELECTRIC CO., LTD.	TITLE
1-7 YUKIGAYA OTSUKA-CHO	SPECIFICATIONS
OTA-KU TOKYO JAPAN	



NOTES: PERCENT VOLTAGE CHECK POINT
50% TRAVEL FROM TERM.1
TOLERANCE 40 - 60 %

SYMB	DATE	APPD.	CHKD.	DSGD.	NAME
					RESISTANCE TAPER
					DWG.NO. SBS50

MECHANICAL

- Travel : Specified in particular Figure.
- Operating force : 30~250 gf (Note 1)
- Starting force : Operating force + 100 gf max. (Note 1)
(Note 1) Measuring temperature : 5°C - 35°C

Measuring point :

- ➔ : 5 mm from lever end (Lever length > 6 mm)
: 1 mm from lever end (Lever length ≤ 6 mm)
- Sliding speed : 20 mm per sec.

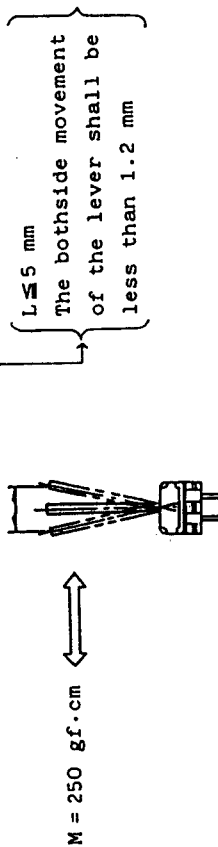
4. Stop strength :

- ➔ 5 kgf at a position 5 mm from mounting surface.
(Lever length > 6 mm)
- 5 kgf at a position 2 mm from mounting surface.
(Lever length ≤ 6 mm)

5. Lever lateral play :

When an alternating bending moment of 250 gf.cm is applied perpendicular to the direction of lever travel, the bothside movement of the lever shall be less than 2 (2 X L / 20) mm
L: Lever length on the measurement point from mtg. surface.
(Note 2) Exempt warping of insulated lever.

Lever lateral play



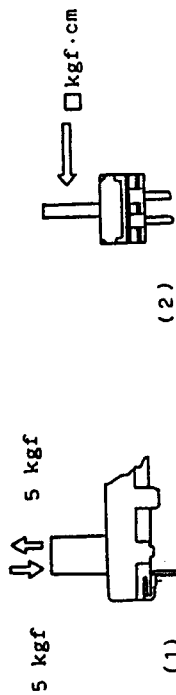
6. Lever strength :

- (1) To be resistant with 5 kgf static force of pull or push applied to lever in thrust direction for 10 seconds without damage.

CLASS.NO. _____		TITLE STANDARD TYPE POTENTIOMETER (SLIDE)	
APPS		ALPS ELECTRIC CO., LTD.	
DATE	APPD.	CHKD.	DSGD.
1981.10.10	10.10.10	10.10.10	10.10.10
SPECIFICATIONS		DOCUMENT NO.	
4 S 0 0 0 8 - 4 5 M		(1 / 2)	

- (2) To be resistant with following static force applied to lever in vertical direction to lever driving for 10 seconds without damage.

- ① 2 kgf.cm over : in case of pot., mounted to chassis with screws.
- ② 0.5 kgf.cm over : in case of pot., mounted to P.C.B. only with terminals.
- ③ 2 kgf.cm over : in case of pot., mounted to P.C.B. with both terminals and mounting plate.

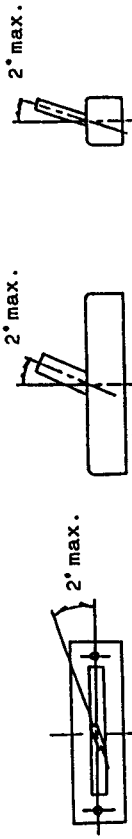


7. Lever inclination and twist :

Twist

Inclination

Inclination



8. Resistance to soldering heat : 3 sec. max. at 300°C

CLASS.NO. _____		TITLE STANDARD TYPE POTENTIOMETER (SLIDE)	
APPS		ALPS ELECTRIC CO., LTD.	
DATE	APPD.	CHKD.	DSGD.
1981.10.10	10.10.10	10.10.10	10.10.10
SPECIFICATIONS		DOCUMENT NO.	
4 S 0 0 0 8 - 4 5 M		(2 / 2)	

ご使用上の注意

PRECAUTION IN USE

1. 偏心ツマミをご使用になる場合

レハ-の中心より離れたところを作用点としてご使用になる場合、可能な限り
下図A寸法を短くしてご使用下さい。

If it will be used the operating point away from the center line of the lever, it should be shorter as possible.

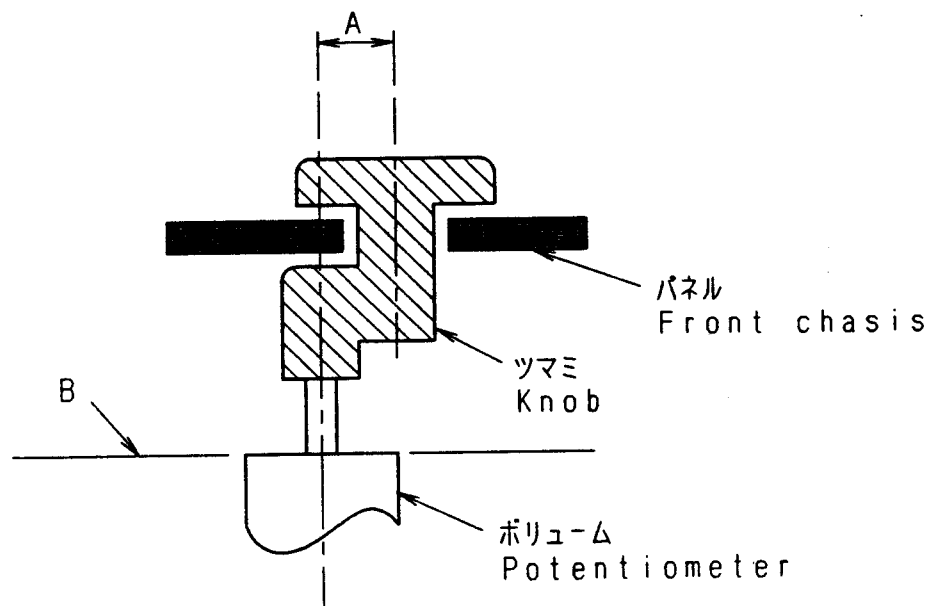
2. レハ-長さについて

レハ-長さについては、ツマミを含めて、下図B面より極力短いものをご使用願います。レハ-長さについては、作用点までの距離が短いほどしゅう動感触が良好となり、長いほど好ましくない感触になります。

About the length of lever

If conditions permit, it is advisable to use the shortest possible lever.

The longer the length up to operating point, the more unfavorable slide feeling will be given.



3. レハ-の駆動に関しては上記内容を考慮の上、セット実装を行い
あらかじめ異常のないことをご確認願います。

Regarding the operation of the lever, please consider the above mentioned, and make sure nothing is wrong with the operation under installing in your appliance that you plan to use our products actually.

4. ツマミ挿入及びレハ-操作は、ホ-リウムマウント基板に
ソリ(曲がり)のない状態で行って下さい。

Knob assembly on the lever and functioning the lever to be performed under the condition of P.C.B. without warp.

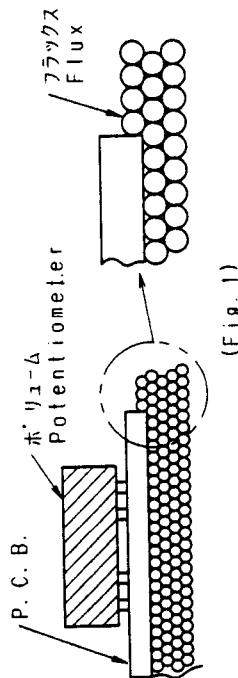
					ALPS ELECTRIC CO., LTD.			
					APPD.	CHKD.	DSGD.	TITLE
					PDI-ENGI	PDI-ENGI	PDI-ENGI	スライト・ホ-リウム 仕様書
					'95.7.24	'95.7.24	'95.7.24	SPECIFICATIONS
					YOSHIOKA	KIMURA	Y.SAITOH	DOCUMENT NO.
					4S0001-200			
ORIGINAL	91-7-3	Y-Y	K-N	S-A				
SYMB	DATE	APPD	CHKD	DSGD				

10 R1

はんだ付け条件

FOLLOW THE NEXT CONDITIONS FOR SOLDERING

- 1. はんだ SOLDER
JIS Z 3282に規定の63% Snはんだを使用
63% Sn solder specified in JIS Z 3282.
- 2. 使用基板 BOARD IN USE
両面スルーホール基板又は、片面銅箔積層板 板厚 $t=1.6\text{mm}$
Double-faces through-hole board or Single-face
copper laid laminate board.
Plate thickness (t) = 1.6mm
- 3. 自動はんだ<DIP条件>
 - (1) レバ、位置 センター付近に設定願います。
 - (2) フラックス比重 0.83 ± 0.01 (発泡式)
 - (3) フラックス高さ プリント基板の板厚の半分の位置にフラックスの上面が接するレベル (図1)
又、ホリウム挿入面への流れ込みのないこと。(フラックス上がり、気泡に注意)
 - (4) プリヒート温度 100°C max. 時間1分以内。(プリント基板のホリウム挿入側の温度)
 - (5) はんだ温度 260°C max. 時間5秒以内。 はんだ回数は1回までとする。
- IN THE CASE OF DIP SOLDERING
 - (1) State of potentiometer
Position a lever in the vicinity of center.
 - (2) Specific Gravity of Flux
 0.83 ± 0.01 (foaming type)
 - (3) Height of Flux face
A level of the upper face of flux for reaching
the position at a half of the plate thickness
of printed board. (Fig. 1)
Further, no flow of flux invading on the
surface of printed board on the side of
installing potentiometer is allowed.
 - (4) Preheat condition
 100°C max. within 1 minute
(Temperature on the side of installing printed
board is designated.)
 - (5) Soldering condition
Solder temperature: 260°C max.
Soldering period : within 5 seconds
Time of soldering : only one time is permitted

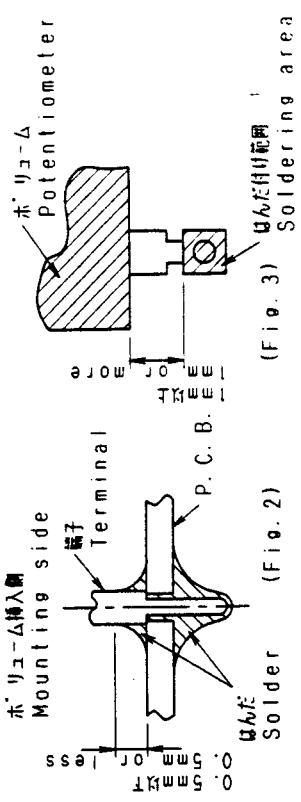


- 4. 手はんだ IN THE CASE OF MANUAL SOLDERING
はんだ温度 300°C max. 時間3秒以内 はんだ回数は1回までとする。
Solder temperature : 300°C max.
Soldering period : within 3 seconds
Time of soldering : only one time is permitted

APPS		ALPS ELECTRIC CO., LTD.	
APPR.	CHKD.	DSGD.	TITLE
95.7.24	95.7.24	95.7.24	スライド・ホリウム 仕様書
Y-Y	Y-Y	Y-Y	SPECIFICATIONS
41-9-3	41-9-3	41-9-3	1/2
DATE	DATE	DATE	DOCUMENT NO
			4S0001-201
SYMB	DATE	APPR	CHKD
			DSGD

5. 注意

- (1) はんだ付けの際に、端子にストレスを加えないで下さい。例えば、端子に熱を加えたまま製品を動かしますと、かしめが、タ及び電気的特性が劣化する恐れがあります。
 - (2) 両面スルーホール基板を使用する場合は、ホリウム挿入側の端子取り付けに、はんだランドがないようにご配慮願います。ホリウム挿入側の配線が必要な場合は端子取り付け穴からの直接取り出しを避けスルーホール配線の穴を設けるなどの配慮をお願いします。
 - (3) ホリウム挿入側へのはんだ上がりは、はんだ熱による端子接触不良の発生原因となりますので(図2)を参照願います。
 - (4) リード・配線の場合、ホリウム本体と、はんだ付け部の距離を1mm以上開けてはんだ付け願います。(図3)
 - (5) はんだ付けによるホリウムへの影響は、プリント基板の大きさ、ホリウムの取り付け位置、はんだ塗の大きさ、等により異なりますのであらかじめ実使用状態を模擬し、異常のないことを確認の上、はんだ付けて下さい。
- MATTERS TO BE NOTED
- (1) Do not add any stress on terminals in the case of soldering. For instance, forced movement of potentiometer with terminals being heated may probably deteriorate the electric features due to generation of looseness in connection between resistant board and terminals.
 - (2) Avoid use of double-faces through-hole board as much as possible. If it is necessary to use it, Do not apply through-hole plating to a hole in which a potentiometer is inserted, and install a land to which terminals are soldered only on a face opposite to the face on the side of installing potentiometer.
 - (3) Use caution to soldering process so as to prevent solder from rising up to the surface of printed board on the side of installing potentiometer, because defective contact may take place in terminal connecting part due to soldering heat. (Fig. 2)
 - (4) In the case of lead wiring, solder it so that a gap of 1 mm or more may be reserved between the potentiometer body and soldering part. (Fig. 3)
 - (5) The grade of influence of soldering exerted on the potentiometer depends upon the size of a printed board, installing position of the potentiometer, and the size of a solder bath etc. Therefore, make sure, in advance, of no abnormal state under the conditions of soldering to be carried out at present.



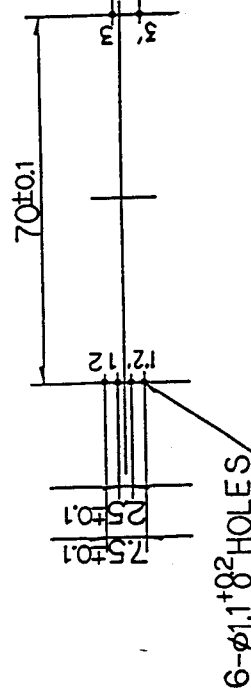
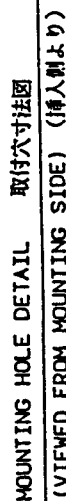
APPS		ALPS ELECTRIC CO., LTD.	
APPR.	CHKD.	DSGD.	TITLE
95.7.24	95.7.24	95.7.24	スライド・ホリウム 仕様書
Y-Y	Y-Y	Y-Y	SPECIFICATIONS
41-9-3	41-9-3	41-9-3	2/2
DATE	DATE	DATE	DOCUMENT NO
			4S0001-201
SYMB	DATE	APPR	CHKD
			DSGD

1. MOUNTING SCREW THREAD LENGTH IS CHASSIS THICKNESS + 2 吋 MAX.

取付用ネジの首下長さは、 $\text{シヤ一シ板厚} + 2$ 以下とする。

2. TOP SIDE OF KNOB SHALL BE MOUNTED TO LEVER WITHIN 30 mm LENGTH FROM LEVER M/G SURFACE.

L	NO CLICK クリックなし	PN 登録	WITH CENTER CLICK センタークリック付き	PN 登録
25	S6028P686A	70-3-12	S6028P687A	..
2C	S6028P654A	..	S6028P688A	..
15	S6028P623A	66-3-28	S6028P689A	..



許容差の指定なると寸法の公称	
TOLERANCES UNLESS OTHERWISE SPEC	
BASIC DIMENSIONS	TOLERANCE
$L \leq 10$	± 0.3
$10 < L \leq 100$	± 0.5
$100 \leq L$	± 0.8
ANGULAR DIMENSION	角度 $\pm 5^\circ$

ALPS ELECTRIC CO., LTD.

FIGURE: SLIDE POTENTIOMETER
60mm DUAL UNIT

DOCUMENT NO. C 7 A A

ENT NO. C6028-6311