Customer: AEE-DS

No. TX-98-0900

Date: Sep. 10, 1998

Attention:

Your ref. No:

Your Part. No: 401736

SPECIFICATIONS

ALPS';

MODEL RK10J12R0 -K3 -SMD (50 kA X2)

Spec. No. :

Sample No. : G3180262M

RECEIPT STATUS

RECEIVED

By. Date

Signature

Name

Title

ALPS ELECTRIC CO., LTD.

HEAD OFFICE
1-7, YUKIGAYA-OHTSUKA-CHO,
OHTA-KU, TOKYO 145-8501 JAPAN

DSG'D M. Sato

APP'D M. Sato

Sales

No. TX-98-0900

SPECIFICATIONS

1.THIS SPECIFICATIONS APPLY TO RK10J12R0 POTENTIOMETERS.

2.CONTENTS OF THIS SPECIFICATIONS.

G3180262M
K102R0Z0V

3.MARKING

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

SPECIFICATIONS

ELECTRICAL

1. Total resistance : 50 kΩ ±30%
2. Rated power : 0.03 W
3. Rated voltage :

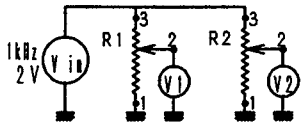
The rated voltage shall be the voltage of A.C. (commercial frequency, effective value) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following, however, the maximum working voltage 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.
This potentiometer is desgined for A.C. voltage only
D.C. shall not used.

4. Resistance taper : A
5. Maximun attenuation level: 80 dB min. Insertion loss 0.1dB max.
6. Sliding noise : Less than 100 mV. (Measured by JIS C 6443)
7. Insulation resistance : More than 100 MΩ at 100V D.C.
8. Withstand voltage: 100V A.C. for one mimute.
9. Gang error :
   3 dB max. at -40 to 0dB



MECHANICAL

1. Total rotational angle : 270±10°
2. Rotational torque : 5~100 gf·cm (Rotational speed 60°/sec.)
3. Shaft end stop strength : 0.7 kgf·cm min.
4. Knob rolling : Fix dial gauge loaded max. 100 gf to the position 6 mm from knob center and then rotate the knob in range of total 270° angle so as to measure axial run-out of knob.
   The axial run-out must not be greater than 0.4 mmP-P.
5. Push pull strength of knob : 500 gf min.

ENDURANCE

1. Rotational life : 10,000 cycles min.

NOTE

1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature : -10°C ~ +60°C
3. Storage temperature : -30°C ~ +70°C

SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

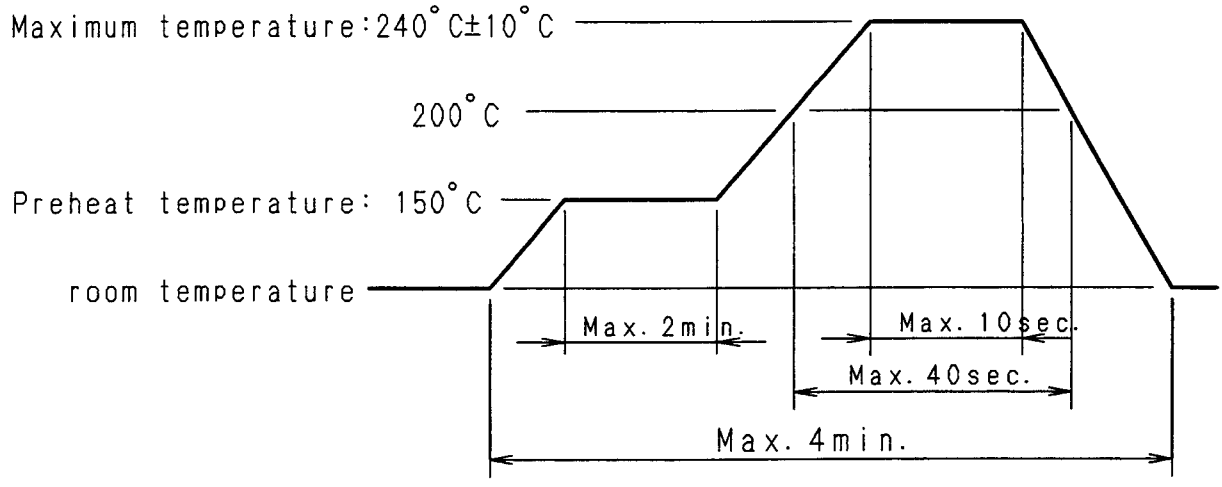
APPD.	CHKD.	DSGD.	TITLE
Sep. 01, '92	Sep. 01, '92	Sep. 01, '92	
S. Aizawa	T. Taniguwa	S. Inoue	DOCUMENT NO. G3180262M

TX

5. RESISTANCE TO SOLDERING HEAT

1. Condition of reflow soldering
   Profile as shown below is the maximum terminal temperature of potentiometer soldered with reflow soldering by hot wird blasting.

   1) Reflow soldering



   ·Washing ·····No washing.
   ·Solder to be used···Use creamy solder with rosin flux 10-15wt%.
   *Comment : Soldering is no sufficient only by reflow furnance of infrated rays, so use reflow furnance by hot wind blasting or reflow furnance of infrated rays with hot wind blasting.

2. Soldering iron method.
   After soldering (Less than 350°C and quicker than 3 seconds) there shall be no evidance of poor contact between resistance element and terminals, or any physical damages as a result of the test.

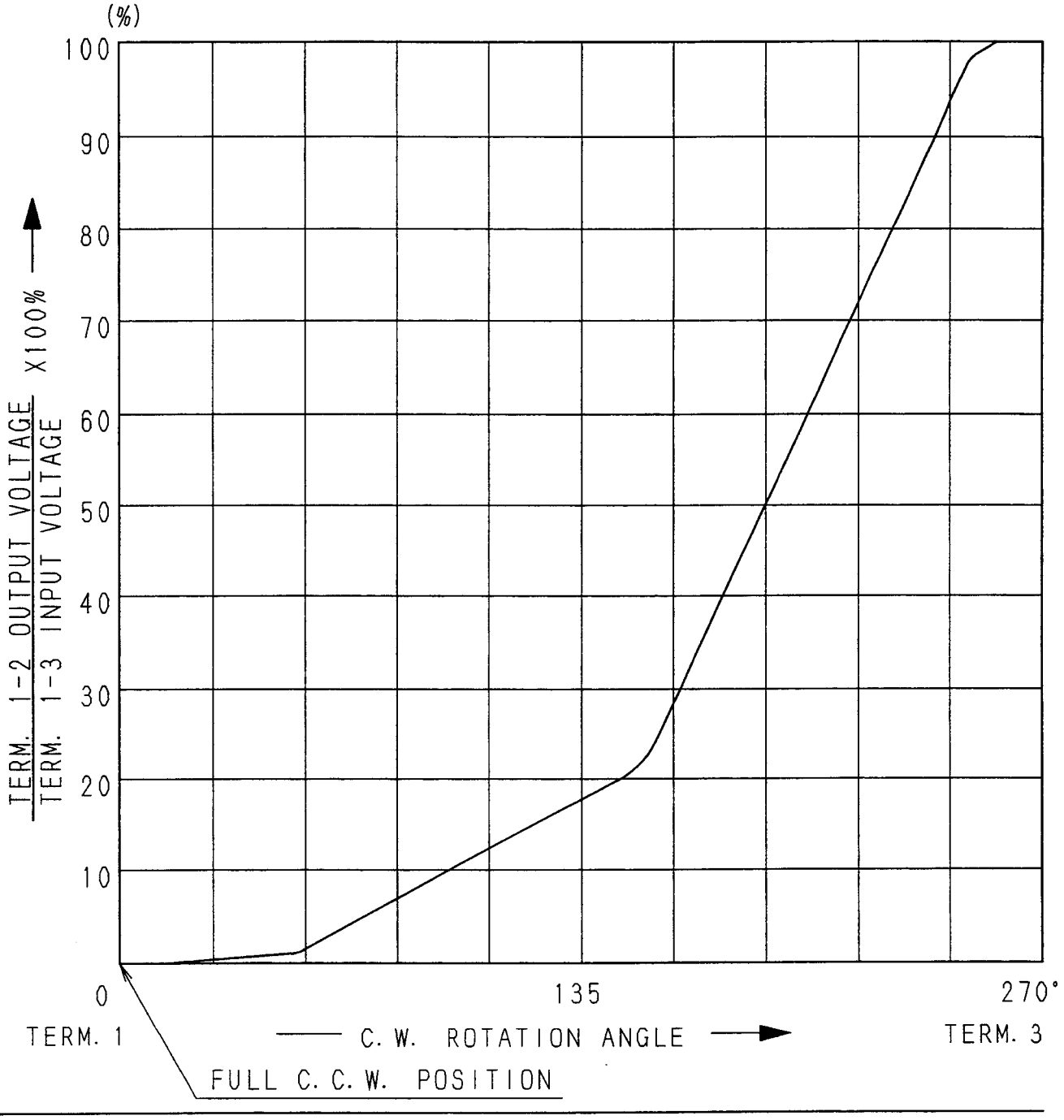
SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
Jul. 01, '97	Jul. 01, '97	Jul. 01, '97	
M. Satoh	Y. Ohya	Y. Saitoh	DOCUMENT NO. G3180262M

By O. T

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

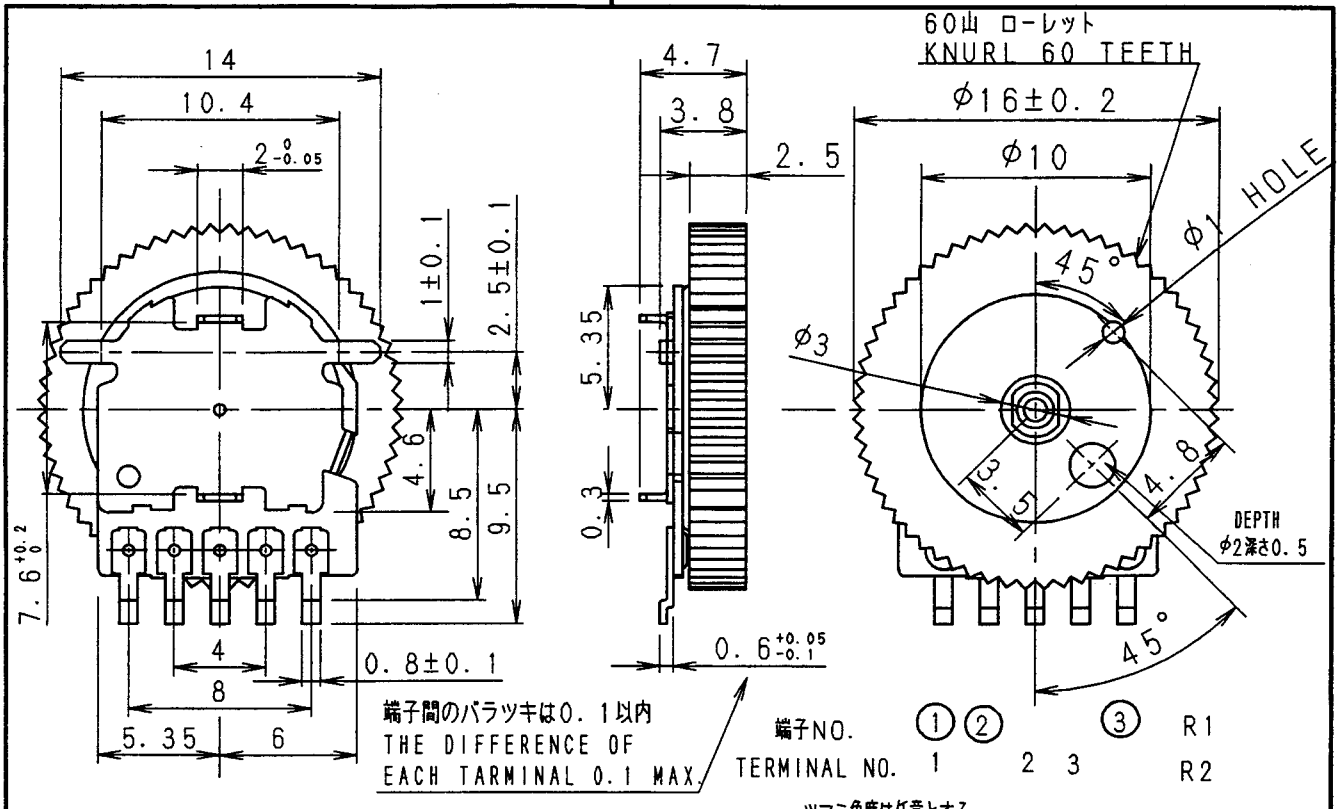


AT 135° C. W. SHAFT ROTATION FROM FULL C. C. W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 10~25 PERCENT.

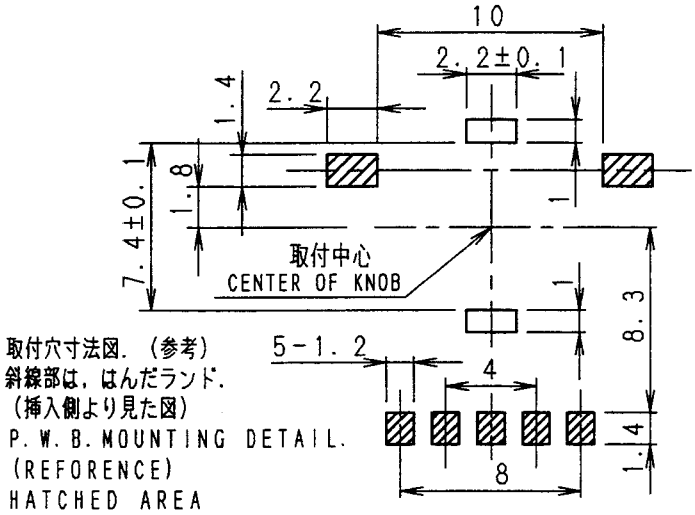
SYMB	DATE	APPD	CHKD	DSGD

APPD.	CHKD.	DSGD.
Aug. 28, '92 M. Inoue		Aug. 28, '92 S. Sasaki

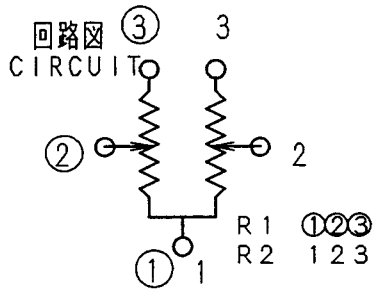
NAME A
RESISTANCE TAPER
DOCUMENT NO.
G3180262M



ツマミ角度は任意とする。
KNOB ANGLE IS OPTIONAL.



取付穴寸法図. (参考)
斜線部は, はんだランド.
(挿入側より見た図)
P.W.B. MOUNTING DETAIL.
(REFERENCE)
HATCHED AREA
SHOWS SOIDERING LAND.
VIEWED FROM MOUNTING SIDE.



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	
—	—	—	—	1T COM

SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

DSGN. セッケイ1 Y, SAITOH '97-08-01	SCALE 3/1	G3180262M
CHKD. Y, OHYA '97-08-01		TITLE FIGURE 10形ツマミ付2連ボリューム
APPD. M, SATOH '97-08-01	UNIT mm	DOCUMENT NO. TXRMA K102ROZOV

6 The tape package specification

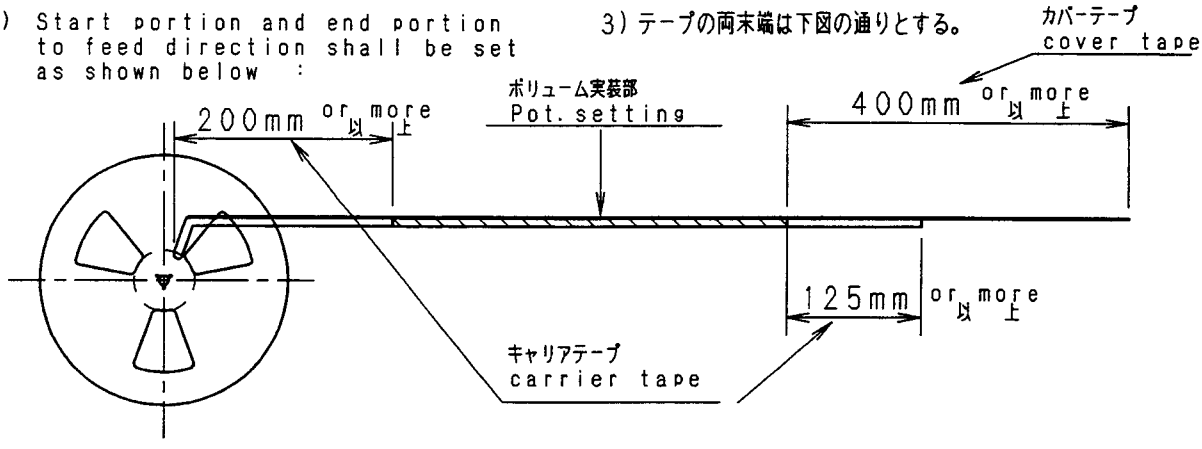
6-1 Size refer to a drawing (3/3)

6-2 Reeling of tape package

1) When carrier tape is reeled in, feed round holes shall be set right side to feed difection.

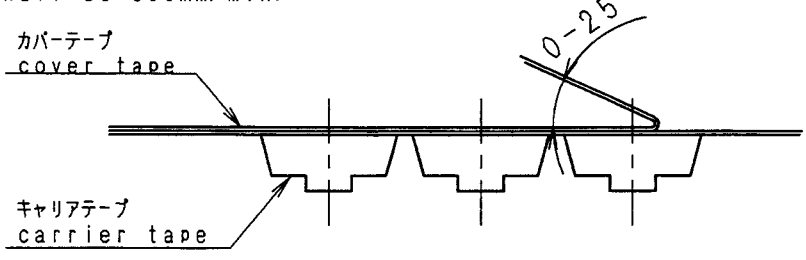
2) Cover tape shall not hide the feed round holes more than 0.5mm, and it shall not jut out sidewards of carrier tape.

3) Start portion and end portion to feed direction shall be set as shown below :



4) End portion of cover tape shall be stick to reel by adherent tape (80-120mm)

5) Peeling force of cover tape from carrier tape;155 to 180°
- Peeling back force of cover tape shall be 10-70 gf.
- Peeling speed of cover tape shall be 300mm/min.



6) Standard quantity is 500pcs 1000pcs. one reel.
(Except fractional quantity)

7) Marking on reel side
Below items be marked on reel surface. Marking shall be discrimminated clearly and shall not be erased easily.
Marking requirement;
Your part No.
Our product No.
Quantity
Date code
Trade mark

6 テーピング仕様

6-1 キャリアテープ外形寸法図 (3/3) による。

6-2 テーピング方法

1) テープは右巻き (テープの端を手前に取り出した時、送り穴が右側になる) とする。

2) カバーテープはキャビティテープの送り穴に0.5mmをこえてかからないこと。
又、キャビティテープからはみださない事

3) テープの両末端は下図の通りとする。

4) テープの巻き終わりは接着テープ (80~120mm) でカバーテープのリーダ部をリールに貼り付ること。

5) カバーテープの反転引きはがし角度は155~180°
- 反転引きはがし強度は10~70gfとする。
- 反転引きはがし速度は300mm/分とする。

6) ボリュームは端数を除いて1リール500又は1000個収納とする。

7) リール側面に、御社部品番号, 当社部品番号, 数量, 製造密番, 当社商標, を記入する。

SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
Jul. 01. '97	Jul. 01. '97	Jul. 01. '97	テーピング仕様書
M. Satoh	Y. Ohya	Y. Saitoh	DOCUMENT NO. G3180262M (1/3)

6-3 Resistance of cover tape to atmoaphere:
Following exposure for 500Hr to 90-95% R.H. and 40±2°, in condition avoid the direct rays of the sun, cover tape shall not be peeled from carrier tape.

6-3 カバーテープの耐候性

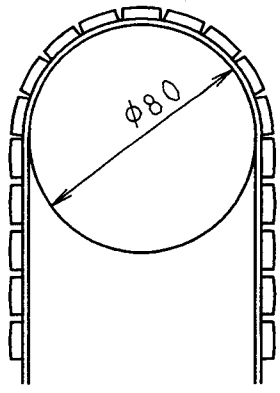
温度40±2℃，相対湿度90～95%，直射日光に当てない状態で500時間放置した場合、テープ強度、剥離強度等が変化し部品の脱落等の性能劣化がないこと。
又、カバーテープのキャリアテープからの剥離がないこと。

6-4 Minimum bending radius:
a) Minimum bending radius shall be 40mm and nopotentiometer dropping or no damage when carrier tape is bended to round rod by φ80mm. (See Fig.1)
Such bending is limited one time.
Bending side is both face and back.

6-4 テーピング最小曲げ半径

a) テーピングの最小曲げ半径は、40mmとし、Fig. 1の様にφ80mmの丸棒へキャリアテープを巻き試験し、ポリユームの脱落やテーピングの折傷のないこと。
尚、最小曲げは、1回を限度とする。又、キャリアテープの裏表は問わない。

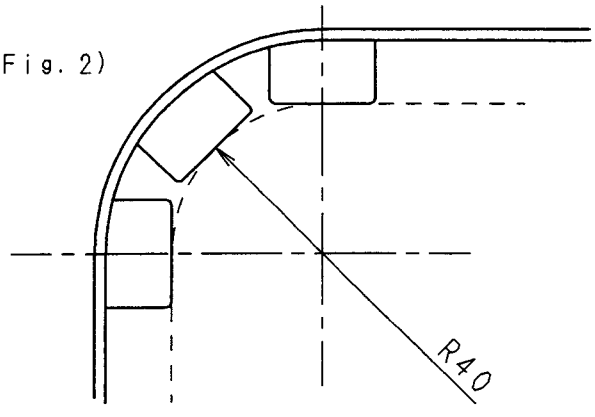
(Fig. 1)



b) Cavity of carrier tape must not contact each other, when carrier tape is bended by 40mm radius. (See Fig. 2)

b) Fig. 2の様にR40にキャリアテープを曲げた時、キャビティ同志の当りがないこと。

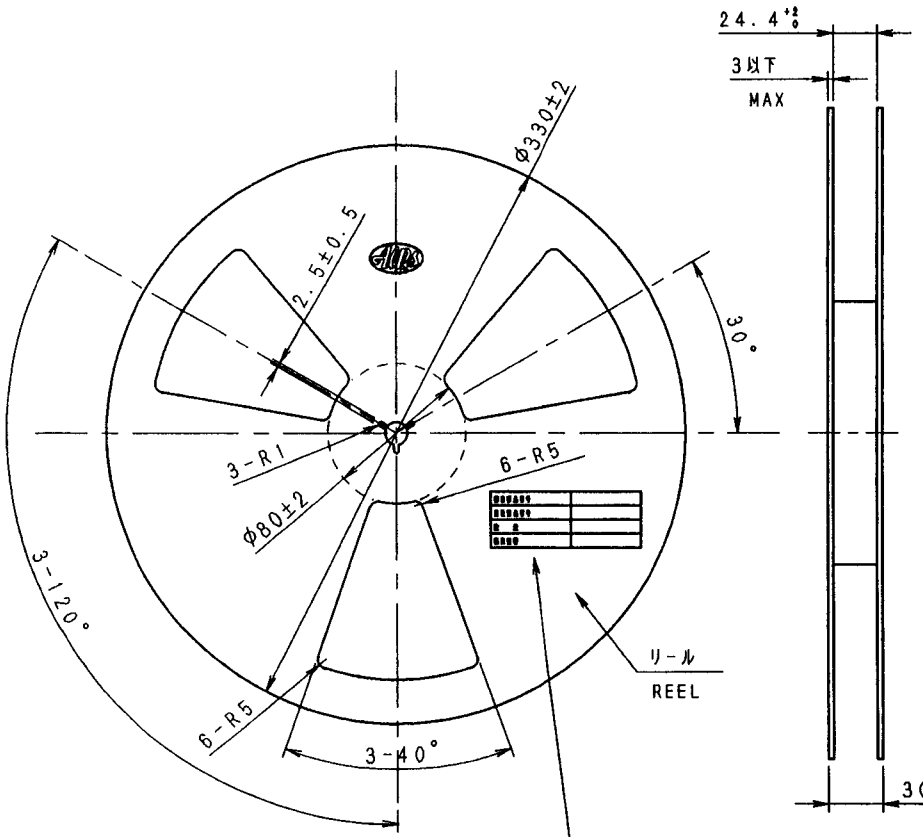
(Fig. 2)

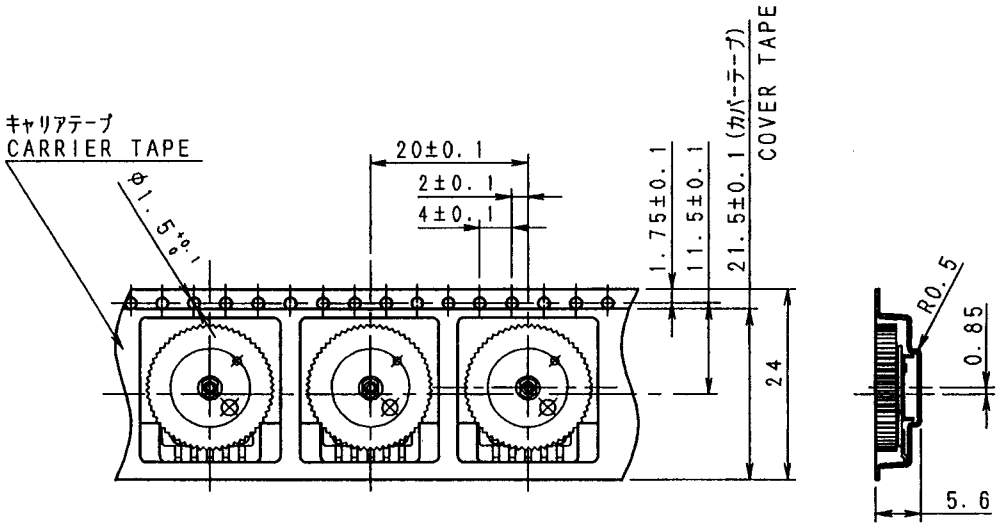


SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

APPD.	CHKD.	DSGD.	TITLE
Jul. 01. '97	Jul. 01. '97	Jul. 01. '97	テーピング仕様書
M. Satoh	Y. Ohya	Y. Saitoh	DOCUMENT NO. G3180262M (2/3)





御社部品番号	<---CUSTOMER P/N
当社部品番号	<---ALPS P/N
数　量	<---QUANTITY
製造密番	<---DATE CODE

注記 NOTES

1. 材質 MATERIAL
   リール：ダンボール，表面は白色
   REEL：CORRUGATED BOARD, SURFACE：WHITE
   キャリアテープ：エンビ系プラスチックシート
   CARRIER TAPE：PCV
2. 1巻の数量500PCS（基準数）
   QUANTITY：500PCS/REEL (STANDARD)

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	ツマミφ16 厚さ2.5mm

ZONE	SYMB	DATE	APPD	CHKD	DSGD

ALPS ELECTRIC CO., LTD.

DSGD. ヒツケイ1-800051 T. TANIGAWA 92-07-30	SCALE	NO. 2A693133
CHKD.		TITLE THE TAPE PACKEGE SPE.
APPD. S. AIZAWA 92-07-31	UNIT mm	DOCUMENT NO. テーピング仕様書

G31802G2M