

TEST CELL

WEDGE CELL

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《WEDGE CELL》

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TEST CELL

INDICATION: KS RO - 02 / A 2 11 P 1 N S S 05 X

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

① 【KS】 MEANS TEST CELL

② 【DIRECTION】 【ANGLE】

MARK	◆ DIRECTION	◇ ANGLE
RT	HORIZONTAL	LEFT 90°
RS	HORIZONTAL	RIGHT 90°
RP	HORIZONTAL	180°
RO	HORIZONTAL	360°
RI	HORIZONTAL	ONLY LOW
RZ	HORIZONTAL	NA
RX	HORIZONTAL	OPTIONAL
SZ	NA	NA
HH	VERTICAL	NA

◆ HORIZONTAL(POLYIMIDE)

-LX-1400 (HITACHI-KASEI)

-THICKNESS : WITHIN 200Å

◇ RUBBING ROLL

-FIBER : POLYESTER

-FIBER LENGTH : 8mm

-ROLL DIAMETER : 58mm

◆ VERTICAL(SURFACE-ACTIVE AGENT)

-CETYL-TRIMETHYL-AMMONIUM-BROMIDE

◇ RUBBING CONDITION

-ROTATIONAL SPEED : 600rpm

-STAGE SPEED : 30mm/sec

-ROUND TRIP FREQUENCY : 3 TIMES

◆ FILM METHOD

-SPIN COURT

◇ RUBBING DIRECTION

-REFERENCE PAGE 9~13

③ 【CELL GAP】

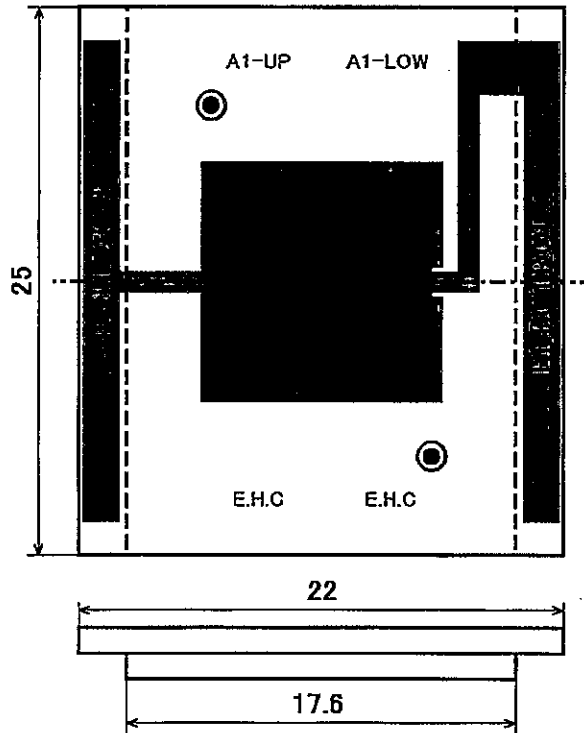
MARK	CELL GAP
02	2 μm
03	3 μm
04	4 μm
05	5 μm
06	6 μm
07	7 μm
08	8 μm
09	9 μm
10	10 μm
15	15 μm
25	25 μm
50	50 μm

TEST CELL

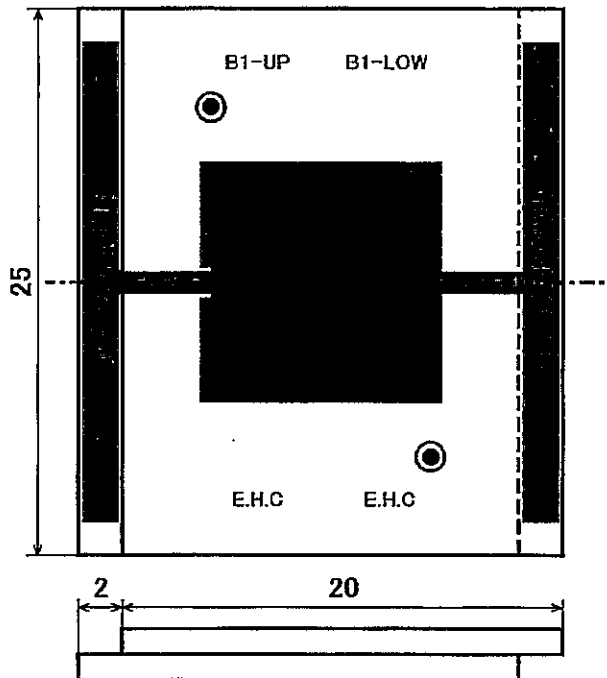
INDICATION: KS RO - 02 / A 2 11 P 1 N S S 05 X
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

④ 【CELL TYPE】

A-type



B-type

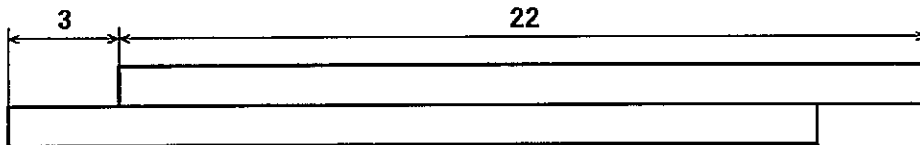
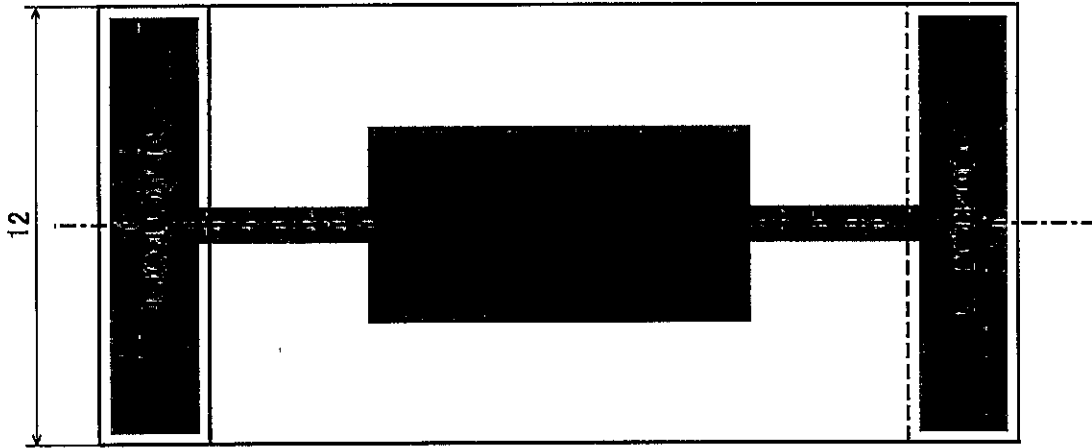


TEST CELL

INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

④ 【CELL TYPE】

D-type

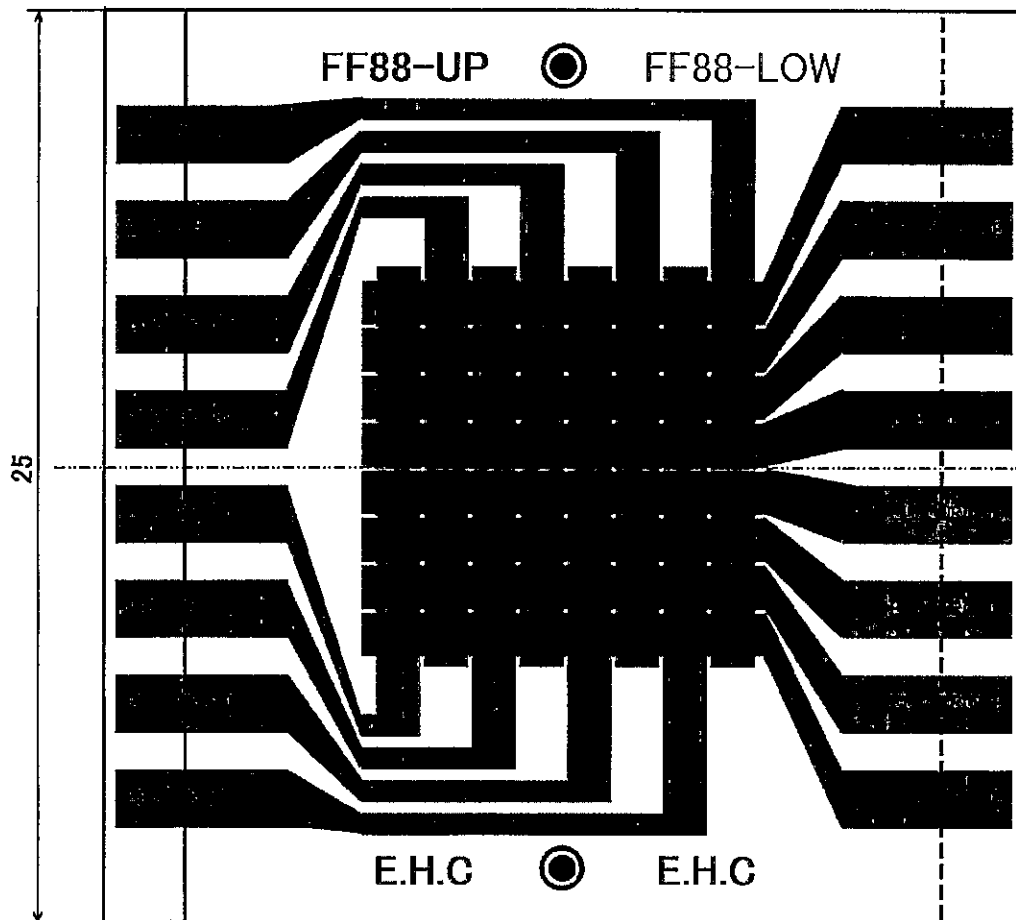


TEST CELL

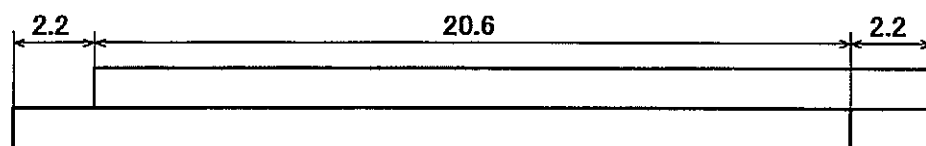
INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

④ 【CELL TYPE】

FF(88)-type



VIEWING AREA : LINE (1.2×8) + SPACE (0.05×7)

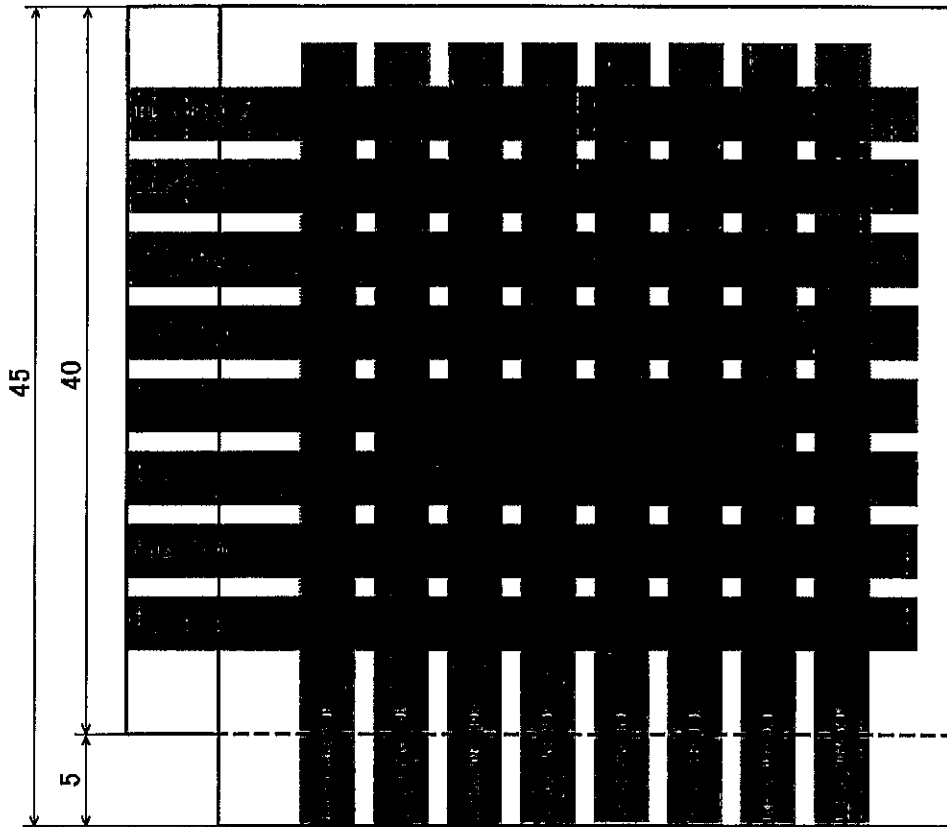


TEST CELL

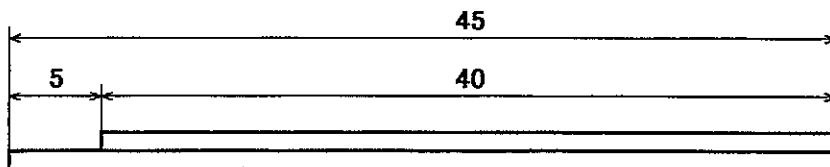
INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

④ 【CELL TYPE】

DM(88)-type



VIEWING AREA : LINE (3.0×8) + SPACE (1.0×7)



TEST CELL

INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

⑤ 【VIEWING AREA】

MARK	VIEWING AREA
1	10mm × 10mm
2	5mm × 5mm
3	4mm × 4mm
5	NA
6	10mm × 5mm

(NOTE) IF YOU SELECT "FF(88)" "DM(88)", THE ABOVE-MENTIONED ITEM IS NOT APPLIED.

(NOTE) ITEM 6 IS ONLY Dtype.

⑥ 【GLASS THICKNESS】

MARK	GLASS THICKNESS
07	0.7mm
11	1.1mm

⑦ 【GLASS MATERIAL】

MARK	GLASS MATERIAL
P	SODA LIME
M	BOROSILICATE

⑧ 【ITO RESISTIVITY】

MARK	ITO RESISTIVITY	THICKNESS
1	WITHIN 100Ω	200~400Å
6	WITHIN 10Ω	1000~1600Å
7	NOT ITO	NOT ITO

● FILM METHOD IS SPUTTERING.

⑨ 【N】 MEANS NO INSULATION.

TEST CELL

INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

⑩ 【SEALING FORM

MARK CELL	S	T	C
	OPEN	2 HOLE	1 HOLE
A type			
B type			
D type			
FF(88) type			
DM(88) type			

(NOTE) SEALING FORM MIGHT CHANGE WITHOUT A PRVIOUS

TEST CELL

INDICATION KS RO - 02 / A 2 11 P 1 N S S 05 X
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

⑪ 【SEAL MATERIAL】

MARK	SEAL MATERIAL
S	EPOXY RESIN

⑫ 【05】 MEANS CELL GAP ALLOWANCE $\pm 0.5 \mu m$.

CELL GAP	ALLOWANCE
2~4 μm	$\pm 0.5 \mu m$
5~10 μm	$\pm 0.5 \mu m$
	$\pm 1.5 \mu m$
15 μm	$\pm 3 \mu m$
25 μm	$\pm 5 \mu m$
50 μm	$\pm 10 \mu m$

(NOTE) 『05』 IS INDICATE. OTHERS IS NOT INDICATE.

(NOTE) IT IS APPLIED Atype, Btype, Dtype.

(NOTE) CELL GAP IS MEASURED BY IMPEDANCE MEASUREMENT METHOD.

⑬ 【X】 MEANS EXCEPT STANDARD.

● DIRECTION FILM

-PROVISION : CONTACT ABOUT COATING & BAKING CONDITION





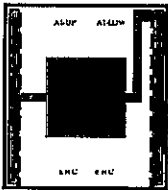













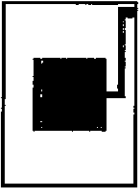



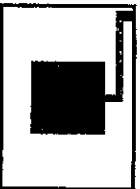

● RUBBING CONDITION

-CONDITION : ROTATIONAL-SPEED STAGE-SPEED ROUND-TRIP-FREQUENCY

-DIRECTION : ARBITRARY ANGLE

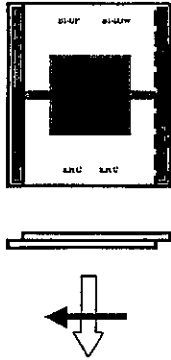
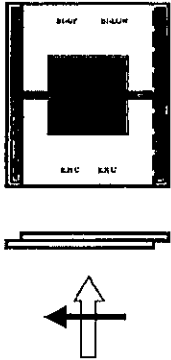
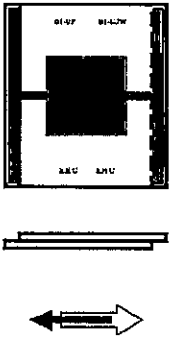
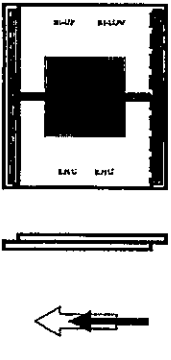
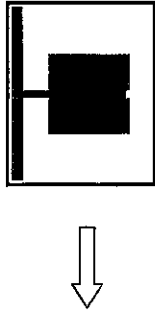
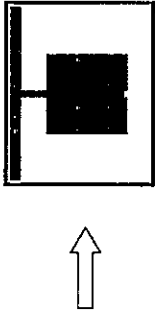
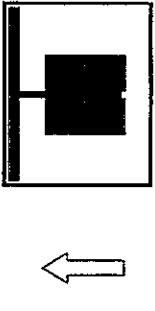
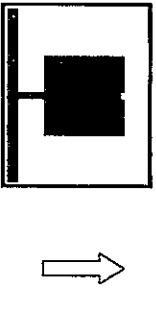

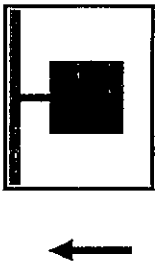
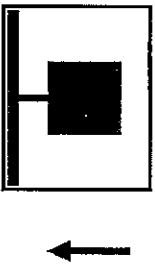
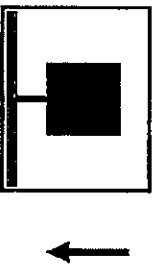
TEST CELL

DIRECTION CHART.....A-type

MARK	RT	RS	RP	RO
ANGLE	LEFT 90°	RIGHT 90°	180°	360°
UNIT	 	 	 	 
UP	 	 	 	 
LOW	 	 	 	 


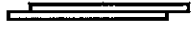






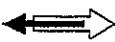

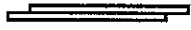

















TEST CELL

DIRECTION CHART.....B-type

MARK	RT	RS	RP	RO
ANGLE	LEFT 90°	RIGHT 90°	180°	360°
UNIT				
UP				
LOW				

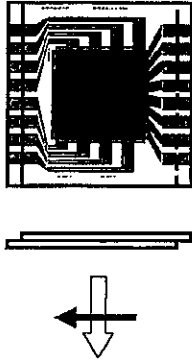
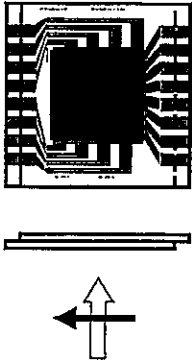
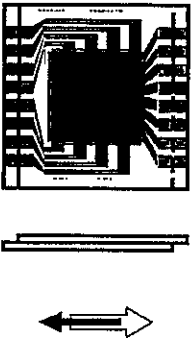
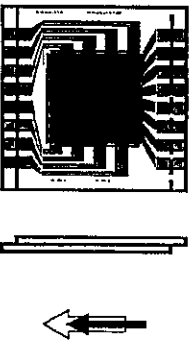
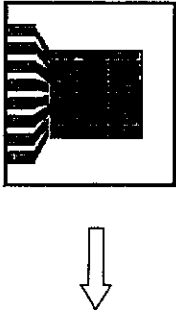
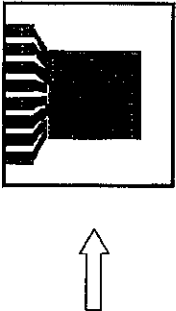
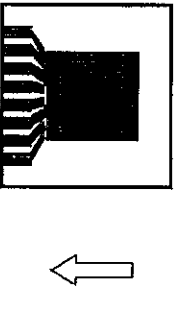
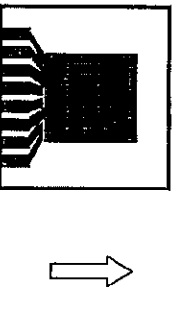
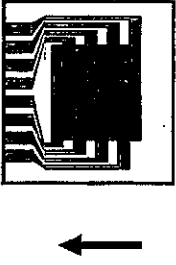
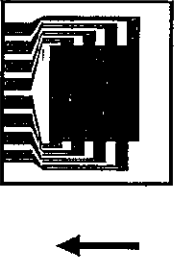
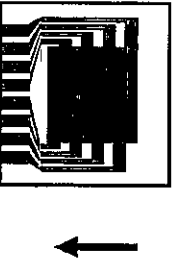

TEST CELL

DIRECTION CHART ····· D-type

MARK	RT	RS	RP	RO
ANGLE	LEFT 90°	RIGHT 90°	180°	360°
UNIT	  	  	  	  
UP	 	 	 	 
LOW	 	 	 	 


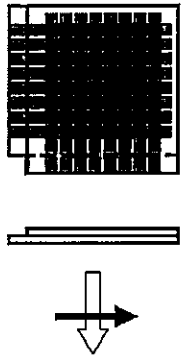
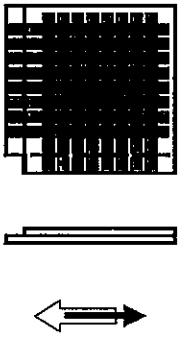
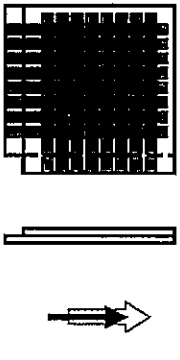
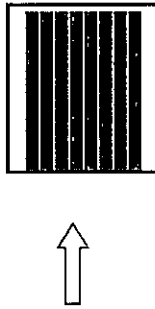




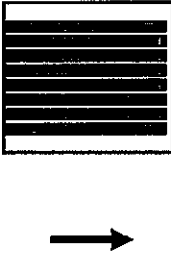

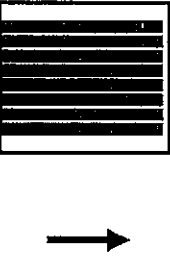
TEST CELL

DIRECTION CHART ····· FF(88)-type

MARK	RT	RS	RP	RO
ANGLE	LEFT 90°	RIGHT 90°	180°	360°
UNIT				
UP				
LOW				

TEST CELL

DIRECTION CHART ····· DM(88)-type

MARL	RT	RS	RP	RO
ANGLE	LEFT 90°	RIGHT 90°	180°	360°
UNIT				
UP				
LOW				

WEDGE CELL

INDICATION : KC RK - 07 X
 ① ② ③ ④

① [KC] MEANS WEDGE CELL

② [SIZE]

MARK	RK	RS
SIZE		

(NOTE) GLASS MATERIAL IS SODA LIME. THICKNESS IS

③ [SPACER THICKNESS]

MARK	THICKNESS	CLEARLY POINT
03	0.3mm	BLACK
05	0.5mm	BLUE
07	0.7mm	GREEN
11	1.1mm	RED

④ [X] MEANS EXCEPT STANDARD

● DIRECTION FILM

-PROVISION : CONTACT ABOUT COATING & BAKING CONDITION

● RUBBING CONDITION

-CONDITION : ROTATION-SPEED STAGE-SPEED ROUND-TRIP-FREQUENCY

-DIRECTION : ARBITRARY ANGLE

SPECIFICATION**DIRECTION FILM**

- ◆ POLYIMIDE
 - LX-1400(HITACHI-KASEI)

- ◆ FILM METHOD
 - SPIN COURT

RUBBING

- ◆ RUBBING ROLL
 - FIBER : POLYESTER
 - FIBER LENGTH : 8mm
 - ROLL DIAMETER : 58mm

- ◆ RUBBING CONDITION
 - ROTATIONAL SPEED : 600rpm
 - STAGE SPEED : 30mm/sec
 - ROUND TRIP FREQ. : 3 TIMES

- ◆ RUBBING DIRECTION
 - REFERENCE PAGE 19

SEAL MATERIAL

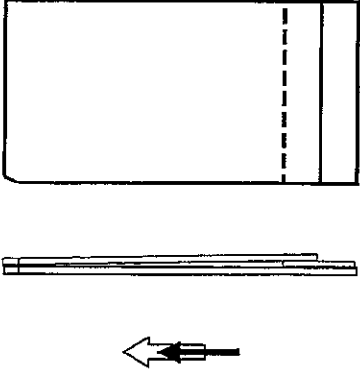
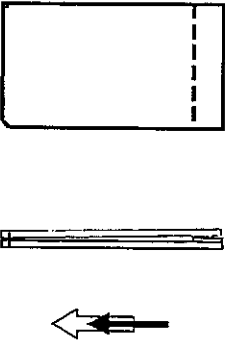
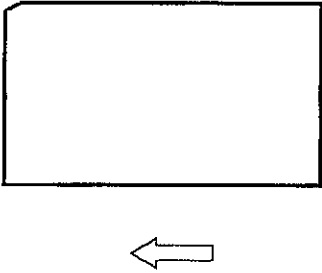
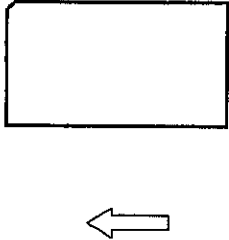
- ◆ UV RESIN (ACRYLIC)

tan θ

SPACER THICKNESS	KGRK	KGRS	ALLOWANCE (%)
0.3mm	0.0079	0.0115	+10
0.5mm	0.0131	0.0192	+8
0.7mm	0.0183	0.0269	+7
1.1mm	0.0288	0.0423	+5

WEDGE CELL

DIRECTION CHART

MARK	RK	RS
UNIT		
UP		
LOW	