

NOTE:

1.MATERIAL:

HOUSING:LCP(UL94V-0)  
 ACTUATOR:LCP(UL94V-0)  
 TERMINAL:PHOSPHOR BRONZE  
 LEG:PHOSPHOR BRONZE

3.RATING:

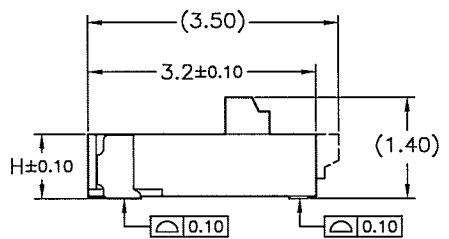
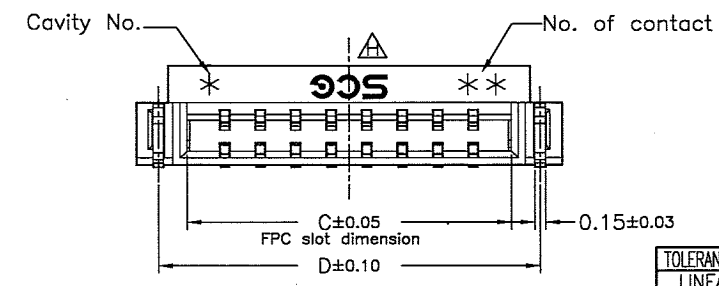
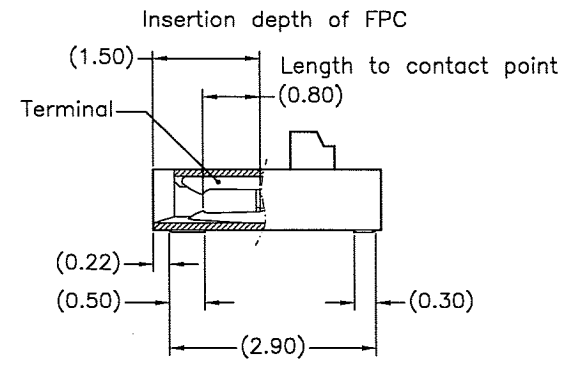
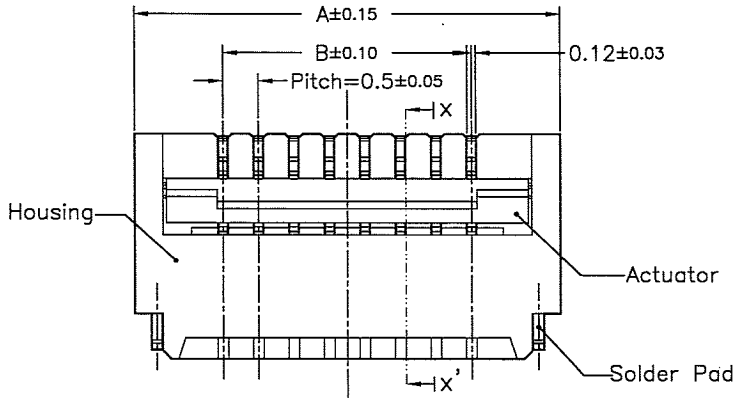
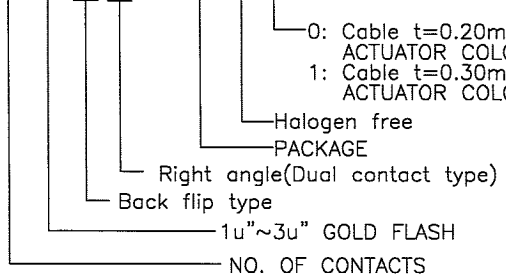
OPERATING VOLTAGE:50Vrms AC  
 CURRENT RATING:0.5A  
 OPERATING TEMPERATURE:-55°C ~ +85°C  
 OPERATING HUMIDITY RANGE:RELATIVE HUMIDITY 90% MAX  
 (NO CONDENSATION)  
 STORAGE TEMPERATURE RANGE:-10°C ~ +50°C  
 STORAGE HUMIDITY RANGE:RELATIVE HUMIDITY 90% MAX  
 (NO CONDENSATION)

2.PART NO.:

BL509-xx G 3 1 - TA H x

SERIES

0: Cable t=0.20mm  
 ACTUATOR COLOR: BLUE  
 1: Cable t=0.30mm  
 ACTUATOR COLOR: BLACK  $\Delta$



REV.	ECO NO.	DATE	SIGN	DESCRIPTION
G	ECN100805	20100827	Eason	Modify PCB Layout dim.
H	ECO101001	20101006	Rory	Modify Actuator appearance
I	ECO11001	20110103	Anson	Modify DIM.H

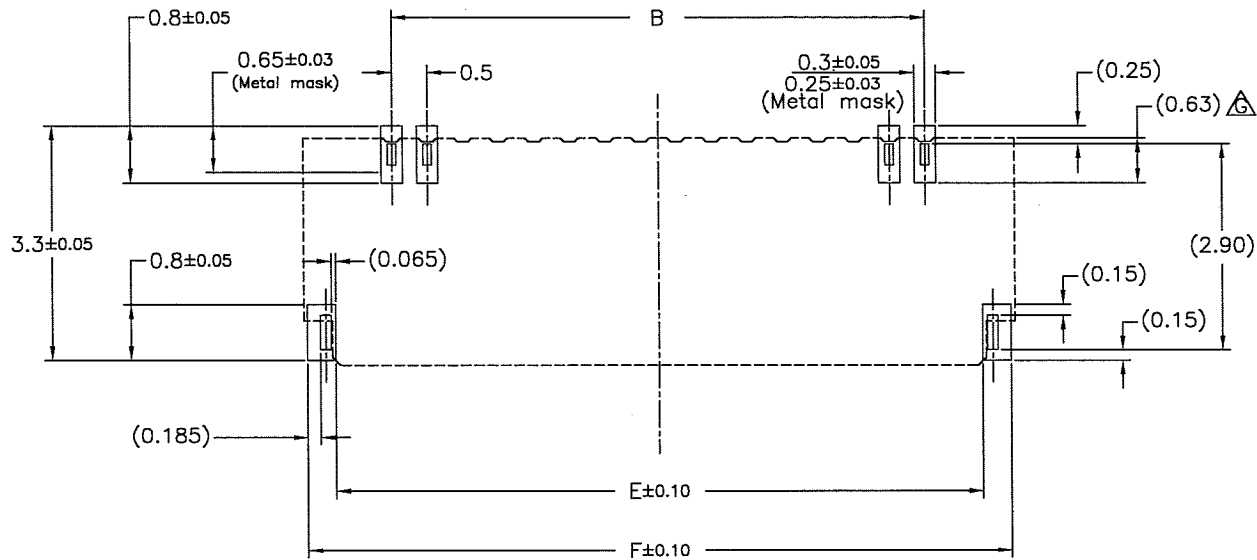
No.of Contacts	Part Number	DIM. A	DIM. B	DIM. C	DIM. D	DIM. H
04	BL509-04G31	4.0	1.5	2.57	3.38	0.9
05	BL509-05G31	4.5	2.0	3.07	3.88	0.9
06	BL509-06G31	5.0	2.5	3.57	4.38	0.9
07	BL509-07G31	5.5	3.0	4.07	4.88	0.9
08	BL509-08G31	6.0	3.5	4.57	5.38	0.9
09	BL509-09G31	6.5	4.0	5.07	5.88	0.9
10	BL509-10G31	7.0	4.5	5.57	6.38	0.9
11	BL509-11G31	7.5	5.0	6.07	6.88	0.9
12	BL509-12G31	8.0	5.5	6.57	7.38	0.9
13	BL509-13G31	8.5	6.0	7.07	7.88	0.9
14	BL509-14G31	9.0	6.5	7.57	8.38	0.9
15	BL509-15G31	9.5	7.0	8.07	8.88	0.9
16	BL509-16G31	10.0	7.5	8.57	9.38	0.9
17	BL509-17G31	10.5	8.0	9.07	9.88	0.9
18	BL509-18G31	11.0	8.5	9.57	10.38	0.9
19	BL509-19G31	11.5	9.0	10.07	10.88	0.9
20	BL509-20G31	12.0	9.5	10.57	11.38	0.9
21	BL509-21G31	12.5	10.0	11.07	11.88	0.9
22	BL509-22G31	13.0	10.5	11.57	12.38	0.9
23	BL509-23G31	13.5	11.0	12.07	12.88	0.9
24	BL509-24G31	14.0	11.5	12.57	13.38	0.9
25	BL509-25G31	14.5	12.0	13.07	13.88	0.9
26	BL509-26G31	15.0	12.5	13.57	14.38	0.95
27	BL509-27G31	15.5	13.0	14.07	14.88	0.95
28	BL509-28G31	16.0	13.5	14.57	15.38	0.95
29	BL509-29G31	16.5	14.0	15.07	15.88	0.95
30	BL509-30G31	17.0	14.5	15.57	16.38	0.95
31	BL509-31G31	17.5	15.0	16.07	16.88	0.95
32	BL509-32G31	18.0	15.5	16.57	17.38	0.95
33	BL509-33G31	18.5	16.0	17.07	17.88	0.95
34	BL509-34G31	19.0	16.5	17.57	18.38	0.95
35	BL509-35G31	19.5	17.0	18.07	18.88	0.95
36	BL509-36G31	20.0	17.5	18.57	19.38	0.95
37	BL509-37G31	20.5	18.0	19.07	19.88	0.95
38	BL509-38G31	21.0	18.5	19.57	20.38	0.95
39	BL509-39G31	21.5	19.0	20.07	20.88	0.95
40	BL509-40G31	22.0	19.5	20.57	21.38	0.95
41	BL509-41G31	22.5	20.0	21.07	21.88	0.95
42	BL509-42G31	23.0	20.5	21.57	22.38	0.95
43	BL509-43G31	23.5	21.0	22.07	22.88	0.95
44	BL509-44G31	24.0	21.5	22.57	23.38	0.95
45	BL509-45G31	24.5	22.0	23.07	23.88	0.95
46	BL509-46G31	25.0	22.5	23.57	24.38	0.95
47	BL509-47G31	25.5	23.0	24.07	24.88	0.95
48	BL509-48G31	26.0	23.5	24.57	25.38	0.95
49	BL509-49G31	26.5	24.0	25.07	25.88	0.95
50	BL509-50G31	27.0	24.5	25.57	26.38	0.95

TOLERANCE UNLESS SPECIFIED		SHEET 1/5	DR. BY 陳志祥	MATERIAL See Note 1.
LINEAR	ANGLE	SCALE 10/1	CHK. BY 陳珍麟	FINISH See Note 2.
XXXXX	XX XX	UNIT mm	APP. BY 陳珍麟	PART NO. See Note 2.

<b>SCG</b> TAIWAN SUNCAGEY INDUSTRIAL CO., LTD.	
TITLE	0.5 Pitch,H=0.9mm FPC Conn.
DWG NO.	BL509-xxG31-TAHx

REV.	ECO NO.	DATE	SIGN	DESCRIPTION
G	ECN100805	20100827	Eason	Modify PCB Layout dim.
H	ECO101001	20101006	Rory	Modify Actuator appearance
I	ECO11001	20110103	Anson	Modify DIM.H

Recommended metal mask thickness:  $t=0.1\text{mm}$



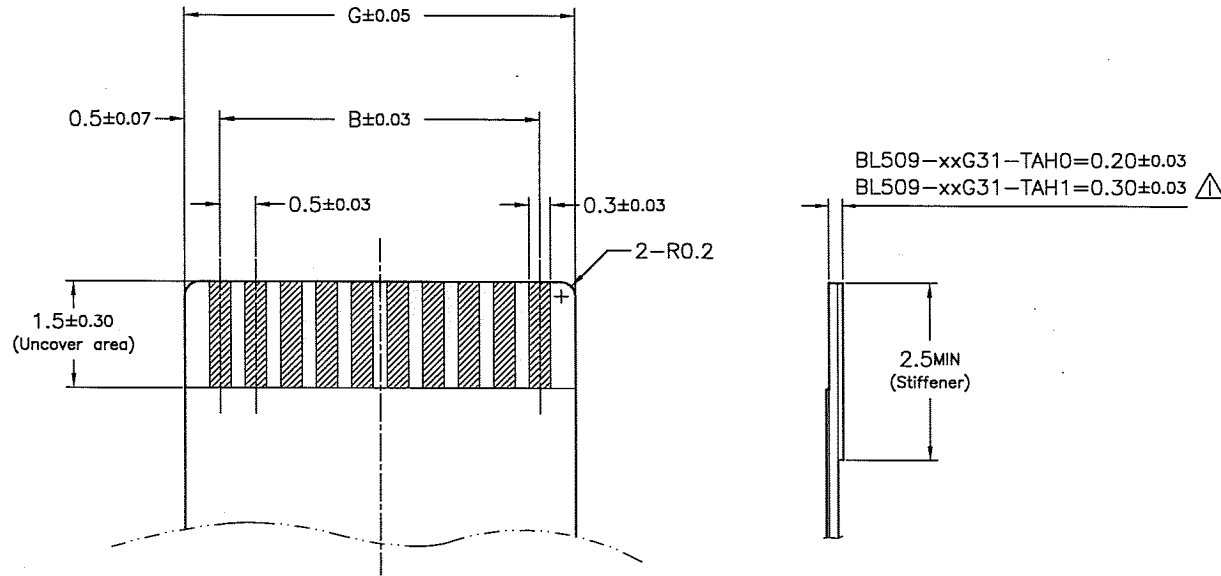
↑  
FPC/FFC INSERT DIRECTION  
PCB Layout

No. of Contacts	Part Number	DIM. B	DIM. E	DIM. F
04	BL509-04G31	1.5	3.1	3.9
05	BL509-05G31	2.0	3.6	4.4
06	BL509-06G31	2.5	4.1	4.9
07	BL509-07G31	3.0	4.6	5.4
08	BL509-08G31	3.5	5.1	5.9
09	BL509-09G31	4.0	5.6	6.4
10	BL509-10G31	4.5	6.1	6.9
11	BL509-11G31	5.0	6.6	7.4
12	BL509-12G31	5.5	7.1	7.9
13	BL509-13G31	6.0	7.6	8.4
14	BL509-14G31	6.5	8.1	8.9
15	BL509-15G31	7.0	8.6	9.4
16	BL509-16G31	7.5	9.1	9.9
17	BL509-17G31	8.0	9.6	10.4
18	BL509-18G31	8.5	10.1	10.9
19	BL509-19G31	9.0	10.6	11.4
20	BL509-20G31	9.5	11.1	11.9
21	BL509-21G31	10.0	11.6	12.4
22	BL509-22G31	10.5	12.1	12.9
23	BL509-23G31	11.0	12.6	13.4
24	BL509-24G31	11.5	13.1	13.9
25	BL509-25G31	12.0	13.6	14.4
26	BL509-26G31	12.5	14.1	14.9
27	BL509-27G31	13.0	14.6	15.4
28	BL509-28G31	13.5	15.1	15.9
29	BL509-29G31	14.0	15.6	16.4
30	BL509-30G31	14.5	16.1	16.9
31	BL509-31G31	15.0	16.6	17.4
32	BL509-32G31	15.5	17.1	17.9
33	BL509-33G31	16.0	17.6	18.4
34	BL509-34G31	16.5	18.1	18.9
35	BL509-35G31	17.0	18.6	19.4
36	BL509-36G31	17.5	19.1	19.9
37	BL509-37G31	18.0	19.6	20.4
38	BL509-38G31	18.5	20.1	20.9
39	BL509-39G31	19.0	20.6	21.4
40	BL509-40G31	19.5	21.1	21.9
41	BL509-41G31	20.0	21.6	22.4
42	BL509-42G31	20.5	22.1	22.9
43	BL509-43G31	21.0	22.6	23.4
44	BL509-44G31	21.5	23.1	23.9
45	BL509-45G31	22.0	23.6	24.4
46	BL509-46G31	22.5	24.1	24.9
47	BL509-47G31	23.0	24.6	25.4
48	BL509-48G31	23.5	25.1	25.9
49	BL509-49G31	24.0	25.6	26.4
50	BL509-50G31	24.5	26.1	26.9

TOLERANCE UNLESS SPECIFIED		SHEET 2/5	DR. BY 陳志祥 1/4"	MATERIAL See Note 1.
LINEAR	ANGLE			
X XX	X XX	SCALE 10/1	CHK. BY 陳彥麟 1/4"	FINISH See Note 2.
XX XX	X XX	UNIT mm	APP. BY 陳彥麟 1/4"	PART NO. See Note 2.
XXXXX	XX XX			

<b>SCG</b> TAIWAN SUNCAGEY INDUSTRIAL CO., LTD.	
TITLE	0.5 Pitch, H=0.9mm FPC Conn.
DWG NO.	BL509-xxG31-TAHx

REV.	ECO NO.	DATE	SIGN	DESCRIPTION
G	ECN100805	20100827	Eason	Modify PCB Layout dim.
H	ECO101001	20101006	Rory	Modify Actuator appearance
I	ECO11001	20110103	Anson	Modify DIM.H



No. of Contacts	Part Number	DIM. B	DIM. G
04	BL509-04G31	1.5	2.5
05	BL509-05G31	2.0	3.0
06	BL509-06G31	2.5	3.5
07	BL509-07G31	3.0	4.0
08	BL509-08G31	3.5	4.5
09	BL509-09G31	4.0	5.0
10	BL509-10G31	4.5	5.5
11	BL509-11G31	5.0	6.0
12	BL509-12G31	5.5	6.5
13	BL509-13G31	6.0	7.0
14	BL509-14G31	6.5	7.5
15	BL509-15G31	7.0	8.0
16	BL509-16G31	7.5	8.5
17	BL509-17G31	8.0	9.0
18	BL509-18G31	8.5	9.5
19	BL509-19G31	9.0	10.0
20	BL509-20G31	9.5	10.5
21	BL509-21G31	10.0	11.0
22	BL509-22G31	10.5	11.5
23	BL509-23G31	11.0	12.0
24	BL509-24G31	11.5	12.5
25	BL509-25G31	12.0	13.0
26	BL509-26G31	12.5	13.5
27	BL509-27G31	13.0	14.0
28	BL509-28G31	13.5	14.5
29	BL509-29G31	14.0	15.0
30	BL509-30G31	14.5	15.5
31	BL509-31G31	15.0	16.0
32	BL509-32G31	15.5	16.5
33	BL509-33G31	16.0	17.0
34	BL509-34G31	16.5	17.5
35	BL509-35G31	17.0	18.0
36	BL509-36G31	17.5	18.5
37	BL509-37G31	18.0	19.0
38	BL509-38G31	18.5	19.5
39	BL509-39G31	19.0	20.0
40	BL509-40G31	19.5	20.5
41	BL509-41G31	20.0	21.0
42	BL509-42G31	20.5	21.5
43	BL509-43G31	21.0	22.0
44	BL509-44G31	21.5	22.5
45	BL509-45G31	22.0	23.0
46	BL509-46G31	22.5	23.5
47	BL509-47G31	23.0	24.0
48	BL509-48G31	23.5	24.5
49	BL509-49G31	24.0	25.0
50	BL509-50G31	24.5	25.5

TOLERANCE UNLESS SPECIFIED		SHEET 3/5	DR. BY 陳志祥	MATERIAL See Note 1.
LINEAR	ANGLE			
X XX	X XX			
XX XX	X XX			
XXXX	XX XX	SCALE 10/1	CHK. BY 陳彥麟	FINISH See Note 2.
		UNIT mm	APP. BY 陳彥麟	PART NO. See Note 2.

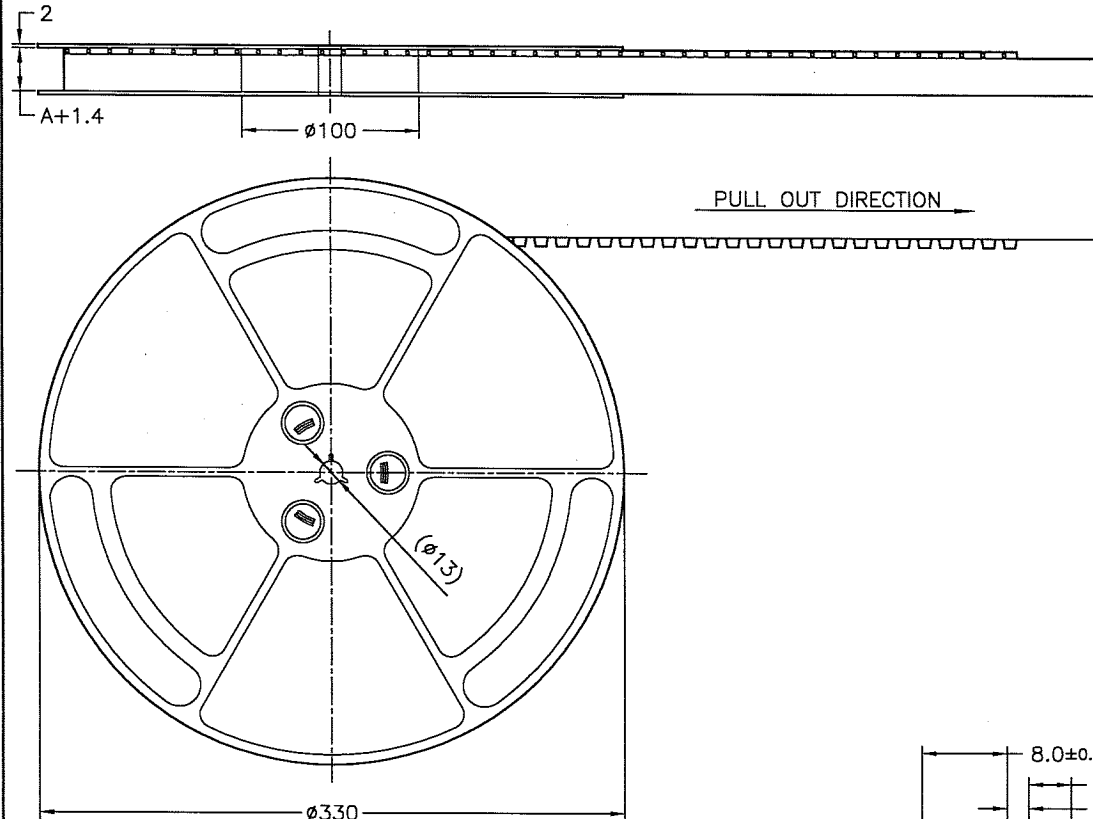
<b>SCG</b> TAIWAN SUNCAGEY INDUSTRIAL CO., LTD.	
TITLE	0.5 Pitch, H=0.9mm FPC Conn.
DWG NO.	BL509-xxG31-TAHx

本部品不含有環境管理物質規定之有害物質

[MANAGEMENT REGULATIONS FOR THE RESTRICTIVELY-USED SUBSTANCES INCLUDED IN PARTS AND DEVICES]

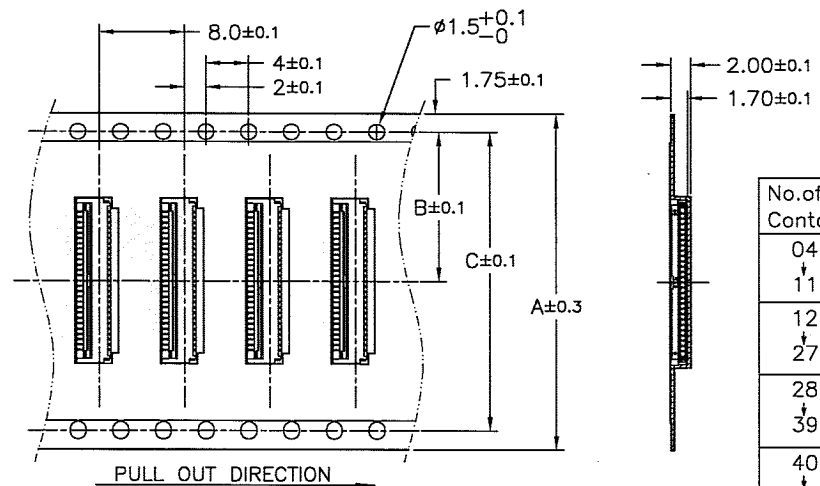
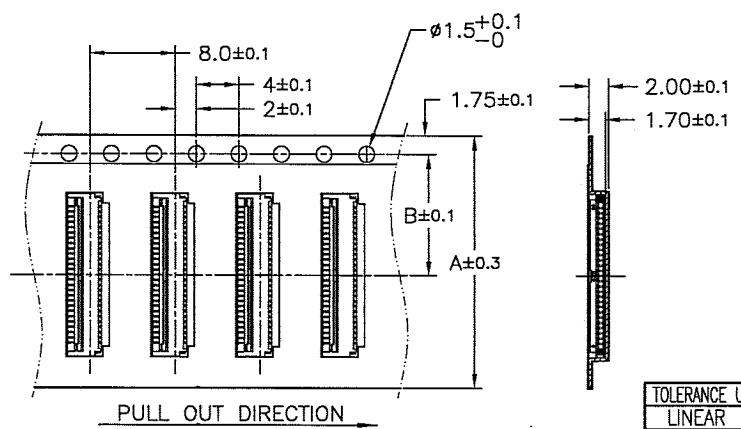
# EMBOSSED TAPE PACKING BL509 SERIES RIGHT ANGLE TYPE

REV.	ECO NO.	DATE	SIGN	DESCRIPTION
G	ECN100805	20100827	Eason	Modify PCB Layout dim.
H	ECO101001	20101006	Rory	Modify Actuator appearance
I	ECO11001	20110103	Anson	Modify DIM.H



**Note:**

1. 10 sprocket hole pitch cumulative tolerance  $\pm 0.2$
2. Carrier camber is within 1 mm in 250mm.
3. Material : Black Conductive Polystyrene Alloy.
4. All dimensions meet EIA-481-C requirements.
5. Thickness :  $0.3 \pm 0.05$ mm.
6. Component load per 13" reel : 4500pcs.  $\triangle$
7. For tape width (dimension A) 16 and 24mm a pilot hole is provided on one side.  
For tape width (dimension A) 32 and 44mm pilot holes are provided on both sides.



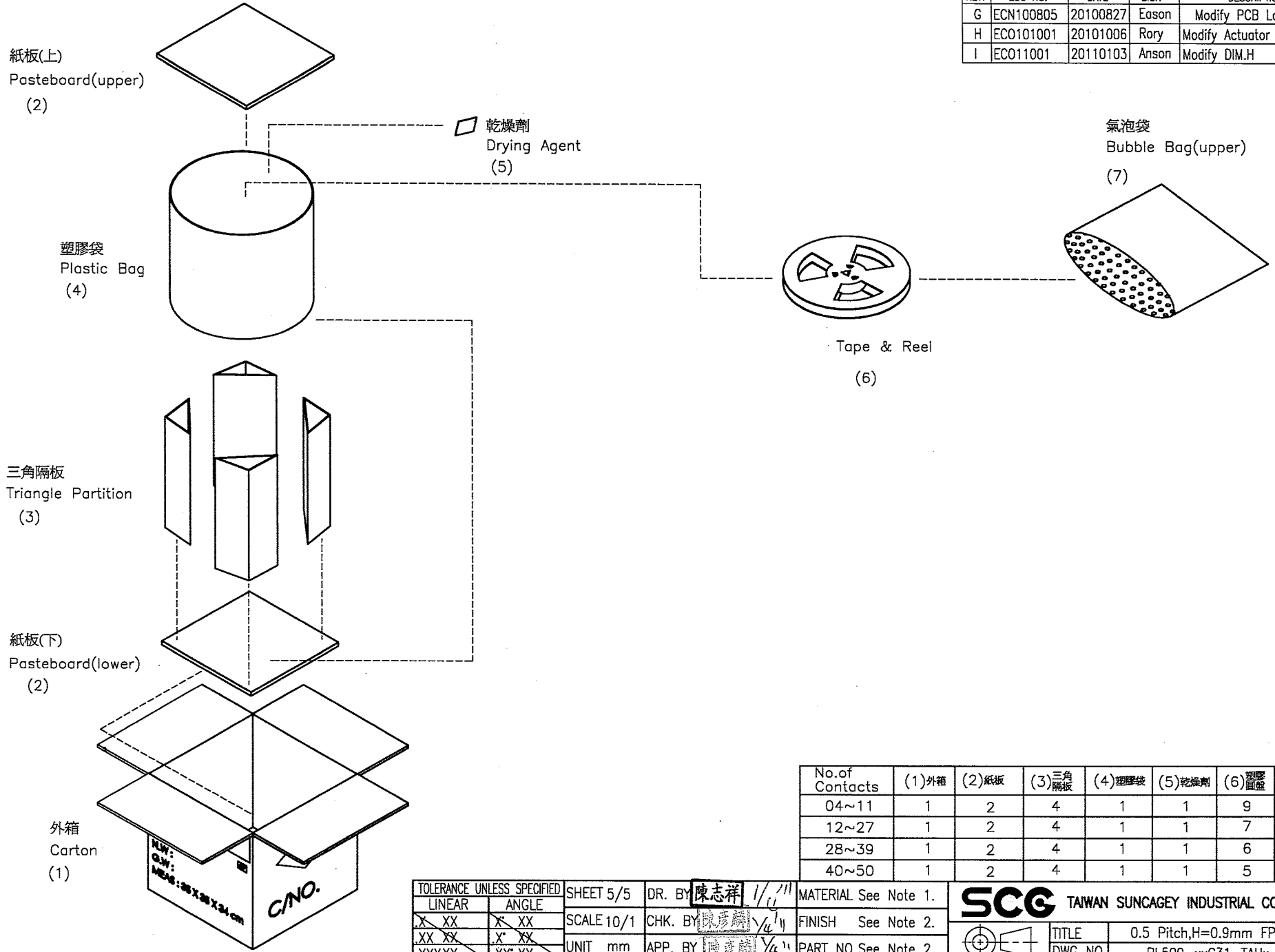
No. of Contacts	No. of Contacts	DIM. A	DIM. B	DIM. C
04	BL509-04G31	16	7.5	—
↓ 11	BL509-11G31			
12	BL509-12G31	24	11.5	—
↓ 27	BL509-27G31			
28	BL509-28G31	32	14.2	28.4
↓ 39	BL509-39G31			
40	BL509-40G31	44	20.2	40.4
↓ 50	BL509-50G31			

TOLERANCE UNLESS SPECIFIED		SHEET 4/5	DR. BY 陳志祥 1/4/11	MATERIAL See Note 1.
LINEAR	ANGLE	SCALE 10/1	CHK. BY 陳志祥 1/4/11	FINISH See Note 2.
<del>XX</del>	<del>X' XX</del>	UNIT mm	APP. BY 陳志祥 1/4/11	PART NO. See Note 2.
<del>XX XX</del>	<del>X' XX</del>			
<del>XXXXX</del>	<del>XX' XX</del>			

**SCG** TAIWAN SUNCAGEY INDUSTRIAL CO., LTD.

TITLE	0.5 Pitch, H=0.9mm FPC Conn.
DWG NO.	BL509-xxG31-TAHx

REV.	ECO NO.	DATE	SIGN	DESCRIPTION
G	ECN100805	20100827	Eason	Modify PCB Layout dim.
H	ECO101001	20101006	Rory	Modify Actuator appearance
I	ECO11001	20110103	Anson	Modify DIM.H



No. of Contacts	(1)外箱	(2)紙板	(3)三角隔板	(4)塑膠袋	(5)乾燥劑	(6)膠盤	(7)氣泡袋
04~11	1	2	4	1	1	9	9
12~27	1	2	4	1	1	7	7
28~39	1	2	4	1	1	6	6
40~50	1	2	4	1	1	5	5

TOLERANCE UNLESS SPECIFIED		SHEET 5/5	DR. BY 陳志祥 1/4"	MATERIAL See Note 1.
LINEAR	ANGLE	SCALE 10/1	CHK. BY 陳彥麟 1/4"	FINISH See Note 2.
<del>XX</del> XX	<del>X</del> XX	UNIT mm	APP. BY 陳彥麟 1/4"	PART NO. See Note 2.
XXXXX	XX XX			

**SCG** TAIWAN SUNCAGEY INDUSTRIAL CO., LTD.

TITLE 0.5 Pitch, H=0.9mm FPC Conn.

DWG NO. BL509-xxG31-TAHx

