STARCONN

產 品 承 認 書
APPROVAL SHEET

客戶名稱 Customer	華凌光電股份有限公司
Description	ZIF FPC PH0.5 H=2.0 33P穿孔式金G/F T&R 隔板本色 LCP 無鹵
使用機種 Your Model No.	
客戶料號 Your Part No.	CNO6231XXXXXXXXXXX00
慶良料號 Our Part No.	089H33-200000-G2-R
發行日期 Issued Date	2013/4/25
發行編號 Issued NO.	20130050

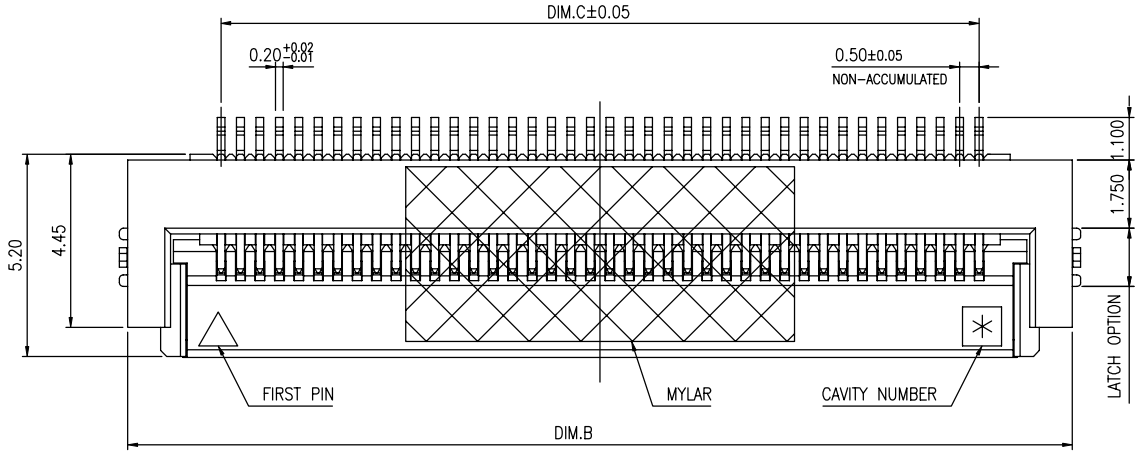
慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	客戶承認章 APPROVAL SEAL
文管中心 發文章 2013. 4. 25 慶良電子股份有限公司	

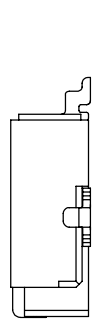
慶良電子股份有限公司
CHIEF LAND ELECTRONIC CO., LTD.
新北市五股區五權五路八號
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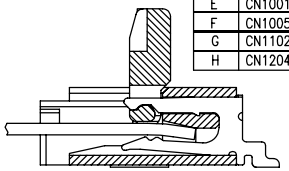
Represented by:
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FIRST Components srl Via Cavour 69, 21020 Buguggiate (VA)
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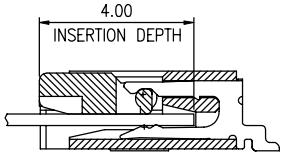
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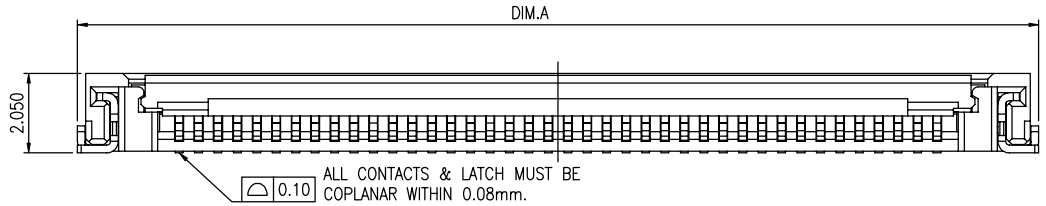
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I	CN12139	11-21-'12	B	CN7070	11-13-'07
			C	CN7118	12-05-'07
			D	CN8035	05-30-'08
			E	CN10013	06-25-'10
			F	CN10050	09-23-'10
			G	CN11021	04-20-'11
			H	CN12044	08-09-'12

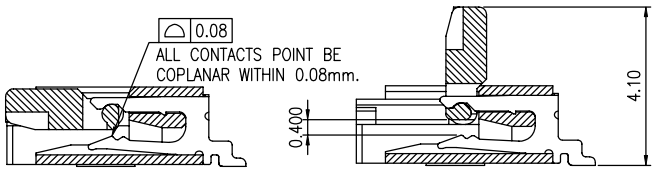


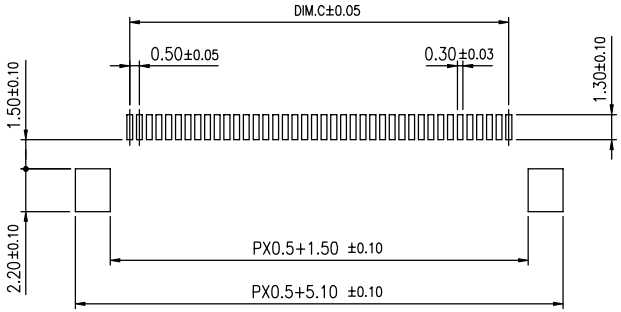




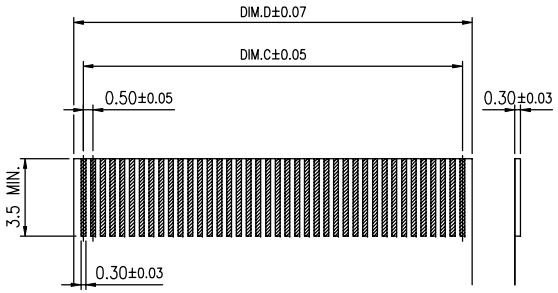








RECOMMENDED P.C. BOARD PATTERN LAYOUT
RECOMMENDED METAL MASK THICKNESS: T=0.15



FPC LAYOUT

NOTES:
1. UNLESS OTHERWISE SPECIFIED, ALL TOLERANCES FOLLOW DRAWING COMMON STANDARD.
2. MATERIAL OF COMPONENTS :
   INSULATOR .....LCP SERIES
   SPACER .....NYLON OR LCP SERIES
   CONTACT .....PHOSPHOR BRONZE C5191R-H
   HOLD DOWN .....BRASS C2680R-H

3. PRODUCT NO. DESCRIPTION :

0 8 9 H X X - X 0 X X X 0 - X X - R

POSITION NO. :
4~61 POS.

SPACER OPTION:
0..... LEFT FOR PIN#1
2..... MATERIAL LCP, LEFT FOR PIN#1

LATCH OPTION :
0..... 1.50mm
1..... 0.75mm
3..... 0.75mm L Type

SPACER COLOR :
0..... NATURAL
1..... BLACK
4..... BROWN

PACKAGE TYPE :
0..... TAPE REEL WITHOUT MYLAR
1..... TUBE
2..... TAPE REEL WITH MYLAR
(4~19 POS. 4.5mm*4mm, 20~61 POS. 4.5mm*10mm)

ROHS (NON HALOGEN)

PLATING :

	CONTACT
A2	CONTACT AREA SPOT GOLD PLATED, SOLDERING AREA TIN(MATTE) 80~160 μ" & OVER NICKEL 50~150 μ" UNDER-PLATING.
G1	GOLD PLATED OVER ALL & OVER NICKEL 50~150 μ" UNDER-PLATING.
G2	SPOT GOLD PLATED & OVER NICKEL 50~150 μ" UNDER-PLATING.
M1	MATTE-TIN 80~160 μ" OVER ALL 50~150 μ" UNDER-PLATING.

PROJECTION	TOLERANCE UNLESS OTHERWISE SPECIFIED		STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.		
	LINEAR	ANGLE			
UNITS MM[INCH]	.0 ± 0.35	X° REF ± 5°	TITLE		
	.00 ± 0.25	X° ± 2°	ZIF FPC PITCH 0.50mm, 2.0mm HIGH, BOARD MOUNT TYPE ASSEMBLY		
	.000± 0.15	X°X' ± 1°			
SCALE 8 : 1	DRAW	Tai Ho 01-23-'13	DWG NO.		REV.
	DESIGN	Tai Ho 01-23-'13	089HXX-XXXXXX-XX-R		2J
SIZE A3	CHKD	Jason Chou 01-23-'13	CAD NO.		SHEET
	APPD.	Jason Chou 01-23-'13	E08966-1		1/5

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web: www.first-components.com

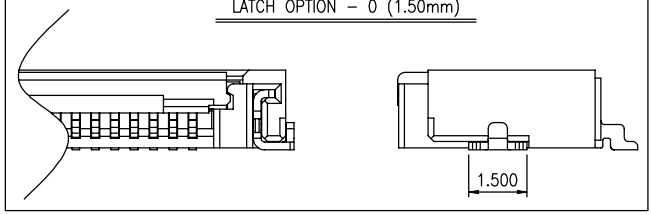
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REV.	ECN NO.	DATE
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C	CN7118	12-05-'07
D	CN10050	09-23-'10

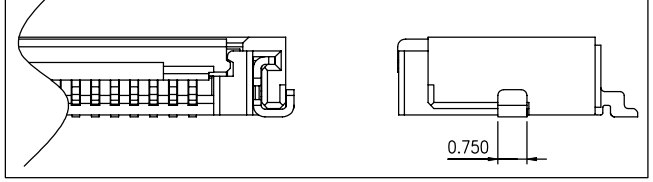
POS.	DIM.A	DIM.B	DIM.C	DIM.D
4	6.75	6.30	1.50	2.50
5	7.25	6.80	2.00	3.00
6	7.75	7.30	2.50	3.50
7	8.25	7.80	3.00	4.00
8	8.75	8.30	3.50	4.50
9	9.25	8.80	4.00	5.00
10	9.75	9.30	4.50	5.50
11	10.25	9.80	5.00	6.00
12	10.75	10.30	5.50	6.50
13	11.25	10.80	6.00	7.00
14	11.75	11.30	6.50	7.50
15	12.25	11.80	7.00	8.00
16	12.75	12.30	7.50	8.50
17	13.25	12.80	8.00	9.00
18	13.75	13.30	8.50	9.50
19	14.25	13.80	9.00	10.00
20	14.75	14.30	9.50	10.50
21	15.25	14.80	10.00	11.00
22	15.75	15.30	10.50	11.50
23	16.25	15.80	11.00	12.00
24	16.75	16.30	11.50	12.50
25	17.25	16.80	12.00	13.00
26	17.75	17.30	12.50	13.50
27	18.25	17.80	13.00	14.00
28	18.75	18.30	13.50	14.50
29	19.25	18.80	14.00	15.00
30	19.75	19.30	14.50	15.50
31	20.25	19.80	15.00	16.00
32	20.75	20.30	15.50	16.50
33	21.25	20.80	16.00	17.00
34	21.75	21.30	16.50	17.50
35	22.25	21.80	17.00	18.00
36	22.75	22.30	17.50	18.50

POS.	DIM.A	DIM.B	DIM.C	DIM.D
35	22.25	21.80	17.00	18.00
36	22.75	22.30	17.50	18.50
37	23.25	22.80	18.00	19.00
38	23.75	23.30	18.50	19.50
39	24.25	23.80	19.00	20.00
40	24.75	24.30	19.50	20.50
41	25.25	24.80	20.00	21.00
42	25.75	25.30	20.50	21.50
43	26.25	25.80	21.00	22.00
44	26.75	26.30	21.50	22.50
45	27.25	26.80	22.00	23.00
46	27.75	27.30	22.50	23.50
47	28.25	27.80	23.00	24.00
48	28.75	28.30	23.50	24.50
49	29.25	28.80	24.00	25.00
50	29.75	29.30	24.50	25.50
51	30.25	29.80	25.00	26.00
52	30.75	30.30	25.50	26.50
53	31.25	30.80	26.00	27.00
54	31.75	31.30	26.50	27.50
55	32.25	31.80	27.00	28.00
56	32.75	32.30	27.50	28.50
57	33.25	32.80	28.00	29.00
58	33.75	33.30	28.50	29.50
59	34.25	33.80	29.00	30.00
60	34.75	34.30	29.50	30.50
61	35.25	34.80	30.00	31.00

LATCH OPTION – 0 (1.50mm)

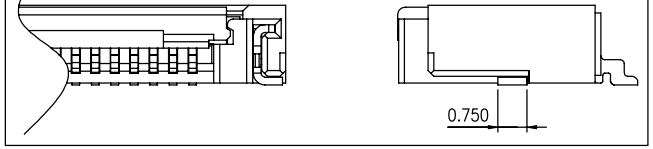


LATCH OPTION – 1 (0.75mm)



LATCH OPTION – 3 (0.75mm L Type)

DIM.A is not used in this option.



PROJECTION	TOLERANCE UNLESS OTHERWISE SPECIFIED		STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.
	LINEAR	ANGLE	
UNITS MM[INCH]	.0 ± 0.35	X° REF ± 5°	TITLE: ZIF FPC PITCH 0.50mm, 2.0mm HIGH, BOARD MOUNT TYPE ASSEMBLY
	.00 ± 0.25	X° ± 2°	
	.000± 0.15	X°X' ± 1°	
SCALE 5 : 1	DRAW Tai Ha 01-23-'13		DWG NO. 089HXX-XXXXXX-XX-R REV. 2E
	DESIGN Tai Ha 01-23-'13		
SIZE A3	CHKD Jason Chou 01-23-'13		CAD NO. E08966-2 SHEET 2/5
	APPD. Jason Chou 01-23-'13		

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STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE	PAGE 1 OF 11	REV N
	PRODUCT SPECIFICATION	PREPARED Tai Ho	DATE 01/16/'13
	NUMBER PRO-089H-329	APPROVED Jason Chou	DATE 01/16/'13
PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

PARAGRAPH	TITLE	PAGE
1.0	SCOPE	2
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2.0	APPLICABLE DOCUMENTS	2
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STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE	PAGE 2 OF 11	REV N
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PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

1.0 SCOPE

1.1 CONTENTS

THIS SPECIFICATION COVERS THE REQUIREMENTS FOR PRODUCT PERFORMANCE, TEST PROGRAM AND QUALITY ASSURANCE PROVISIONS OF ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR.

1.2 INITIAL ELECTRICAL AND MECHANICAL SPECIFICATION

1.2.1 INSULATOR MATERIAL：L.C.P. SERIES,UL94 V-0.(RoHS Compliant)

1.2.2 SPACE MATERIAL: NYLON SERIES or L.C.P. SERIES ,UL94 V-0.(RoHS Compliant)

1.2.3 CONTACT MATERIAL：PHOSPHOR BRONZE C5191R-H

1.2.4 HOLD DOWN MATERIAL：BRASS C2680R-H.

1.2.5 CURRENT RATING：0.5A DC/AC.

1.2.6 VOLTAGE RATING：50V DC/AC.

1.2.7 INSULATION RESISTANCE：500MΩ MIN. AT 100V DC.

1.2.8 CONTACT RESISTANCE：35mΩ MAX.

1.2.9 DIELECTRIC WITHSTANDING VOLTAGE：150V AC FOR 1 MINUTE.

1.2.10 APPLICABLE FPC : 0.5mm CENTER 0.30+/-0.03mm THICK WITH REINFORCEMENT.

1.2.11 FPC RETENTION FORCE: 0.4 X n N MIN.(n=NO. OF CONTACTS)

1.2.12 OPERATING TEMPERATURE：-30℃ TO 95℃.

1.2.13 STORAGE CONDITION:TEMPERATURE：10℃ TO +30℃；HUMIDITY 40-70 RH ；SIX MONTHS .

2.0 APPLICABLE DOCUMENTS

THE FOLLOWING DOCUMENTS OF THE ISSUE IN EFFECT ON THE DATE OF THE LATEST REVISION OF THIS SPECIFICATION, SHALL BE A PART OF THIS SPECIFICATION AND SPECIFICATIONS TO THE EXTENT.

2.1 MILITARY STANDARDS

EIA-364 TEST METHODS FOR ELECTRICAL AND ELECTRONIC COMPONENT PARTS.

2.2 FEDERAL SPECIFICATIONS

2.2.1 QQ-N-290：NICKEL PLATING (ELECTRODEPOSITED).

2.2.2 QQ-B-750：PHOSPHOR BRONZE ALLOY STRIP.

2.3 OTHER STANDARDS AND SPECIFICATIONS

2.3.1 UL-94：FLAMMABILITY.

2.3.2 ASTM B-103：PHOSPHOR BRONZE.

STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE PRODUCT SPECIFICATION	PAGE 3 OF 11	REV N
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PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

2.4 STARCONN SPECIFICATION

2.4.1 PRODUCT DRAWING 089H BY 089HXX-XXXXXX-11-C

2.4.2 PRODUCT DRAWING 089H BY 089HXX-XXXXXX-GX-C (RoHS Compliant)

2.4.3 PRODUCT DRAWING 089H BY 089HXX-XXXXXX-MX-C (RoHS Compliant)

2.4.4 PRODUCT DRAWING 089H BY 089HXX-XXXXXX-XX-R (RoHS Compliant/ NON HALOGEN)

3.0 REQUIREMENTS

THE SUBJECT PRODUCTS SHOULD BE OF THE DESIGN, CONSTRUCTION, AND MECHANICAL DIMENSIONS SPECIFIED IN THE APPLICABLE PRODUCT DRAWING.

3.1 MATERIAL

3.1.1 CONTACTS

THE BASE MATERIAL SHALL BE JIS C5191R-H, OR OTHER EQUIVALENT COPPER ALLOYS.

3.1.2 HOLD DOWN MATERIAL

THE BASE MATERIAL SHALL BE BRASS C2680R-H, OR OTHER EQUIVALENT COPPER ALLOYS.

3.1.3 INSULATOR

INSULATOR SHALL BE MOLDED OF L.C.P. SERIES(RoHS Compliant)OR OTHER HIGH PERFORMANCE RESINS, RATED 94V-0 IN ACCORDANCE WITH UL-94.

3.1.4 SPACE

SPACER SHALL BE MOLDED OF NYLON SERIES or L.C.P. SERIES ,UL94 V-0.(RoHS Compliant)OR OTHER HIGH PERFORMANCE RESINS, RATED 94V-0 IN ACCORDANCE WITH UL-94.

3.2 FINISH

3.2.1 CONTACTS SHALL BE PLATED SPOT GOLD FLASH (0.8μ"MIN.)OR 80~160μ" TIN/LEAD OR TIN(MATTE) NICKEL 50~150μ" UNDERPLTING.

3.2.2 MATAL HOLD DOWN BE PLATED GOLD FLASH OVER ALL(0.8μ"MIN.)OR 50~100μ" TIN/LEAD OR TIN(MATTE) NICKEL 50~150μ" UNDERPLTING.

3.3 DESIGN AND CONSTRUCTION

3.3.1 CONFIRMATION OF PRODUCT

THE ZIF FPC PITCH 0.5mm , 2.0mm HIGH THROUGH HOLE TYPE CONNECTOR SHALL BE UNIFORM IN QUALITY AND SHELL BE FREE OF BURRS, SCRATCHES, CRACKS, VOIDS, CHIPS,BLISTERS, PIN HOLES, SHARP EDGES, AND OTHER DEFECTS THAT WILL ADVERSELY AFFECT LIFE OR SERVICEABILITY

STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE	PAGE 4 OF 11	REV N
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	NUMBER PRO-089H-329	APPROVED Jason Chou	DATE 01/16/'13

PRODUCT ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR

4.0 ELECTRICAL REQUIREMENT

TEST ITEM		REQUIREMENT	PROCEDURE
4.1	Low Level Contact Resistance	35mΩ MAX.	Subject mated contacts assembled in housing to open circuit at 1mA Max. EIA-364-6B.
4.2	Dielectric withstanding Voltage	No creeping discharge or flashover shall occur.	150 VAC for 1minute Test between adjacent circuits of unmated connector. EIA-364-20B
4.3	Insulation Resistance	500 M Ohm MIN.	Impressed voltage 100 VDC. Test between adjacent circuits of unmated connector. EIA-364-21C.
4.4	Current/Temperature Rating	1. Current Rating: 0.5A AC (Per Pin) 2. Temperature Rating: △R 20℃ MAX.	EIA-364-70

5.0 MECHANICAL REQUIREMENT

TEST ITEM		REQUIREMENT	PROCEDURE
5.1	DURABILITY	After test 50 m Ohm MAX	Operation Speed：25.4mm/min. Durability Cycles：15 Cycles EIA-364-9C
5.2	VIBRATION	No electrical discontinuity of 1μs or more. Contact resistance 100 m Ohm MAX.	Subject mated connectors to 10 to55 Hz traversed in 1minutes at 0.75mm amplitude 3 Hours each of 3 mutually perpendicular planes. EIA-364-28D
5.3	MECHANICAL Shock	<a>No electrical discontinuity of 1μs. <b>Contact Resistace: 50mΩ MAX. <C>No damage,crack and looseness of parts.	981 m/s^2 , duration of pulse 6ms at 3 times in 3 directions.
5.4	FPC RETENTION FORCE	0.4 X n N MIN.(n=NO. OF CONTACTS).	Operation Speed：25.4mm/min.

STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE PRODUCT SPECIFICATION	PAGE 5 OF 11	REV N
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PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

TEST ITEM		REQUIREMENT	PROCEDURE
5.5	SOLDER ABILITY	THE INSPECTED AREA OF EACH LEAD MUST HAVE 95% SOLDER COVERAGE MINIMUM.	In accordance with method EIA-364-26 Soldering time: 3~5sec SOLDERING TEMPERATURE:235±5℃

6.0 ENVIRONMENTAL REQUIREMENTS

TEST ITEM		REQUIREMENT	PROCEDURE
6.1	Resistance to Reflow Soldering Heat	No physical damage shall occur. (Lead-Free)	<a>Reflow soldering peak tmp. 260+5/-2℃ for 10+5/-0 sec 2 cycles. <b>Soldering irons:tmp.380 ± 10 ℃ for 5 sec MAX. 2 cycles.
6.2	Thermal Shock	1.Contact Resistance 100 ohm MAX. 2.Withstanding Voltage 150VAC for 1minute	-55℃(30minutes), +95℃(30minutes) Perform this a cycle, repeat 5 cycles EIA-364-32C
6.3	Humidity	1.Contact Resistance 100 m Ohm MAX. 2.Withstanding Voltage 150VAC for 1minute	40±3℃ , 90~95% RH, 240 hours EIA-364-31B.
6.4	Temperature Life	1.Contact Resistance 100 m Ohm MAX. 2.Withstanding Voltage 150VAC for 1minute	105±2℃ , 96 hours, EIA-364-17B.
6.5	Salt Spray	No detrimental corrosion allowed in contact area and base metal exposed.	Subject mated connectors to 35±2 ℃ and 5±1% salt condition for 48hours. After test, rinse the sample with water and recondition the room temperature for 1 hour. EIA-364-26B.

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	NUMBER PRO-089H-329	APPROVED Jason Chou	DATE 01/16/'13
PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

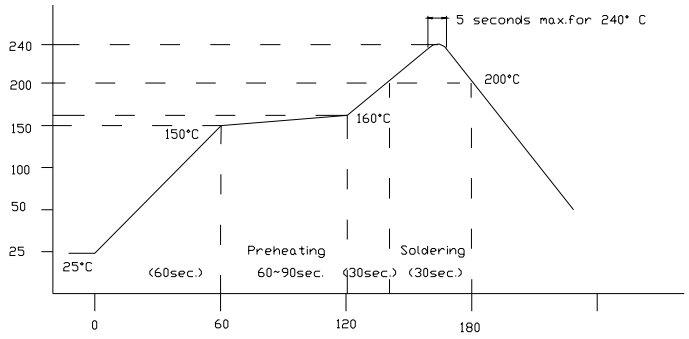
6.6 RESISTANCE TO SOLDERING HEAT:

<a> REFLOW SOLDERING PEAK TMP. 260+5/-2℃ FOR 10+5/-0 sec 2 CYCLES.

<b> SOLDERING IRONS：TMP.380±10℃ FOR 5 sec MAX. 2 CYCLES.

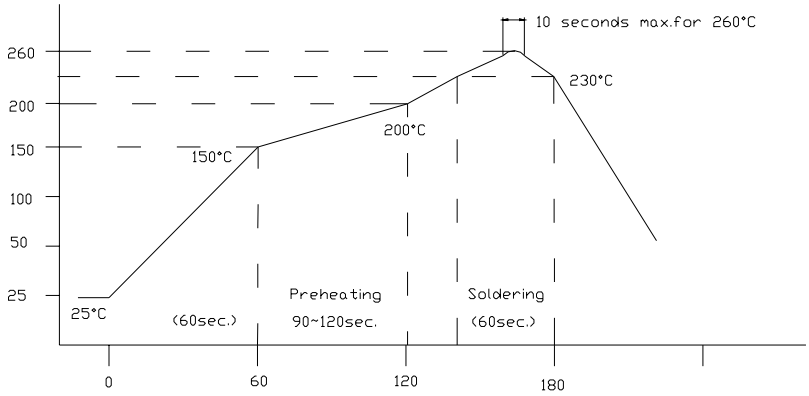
6.7 RECOMMENDED TEMPERATURE PROFILE:

●USING TYPICAL SOLDER PASTE



REFLOW TMP.240℃MAX. FOR 30 sec.PRE-HEAT 150~160℃ FOR 60~90 sec.

●USING LEAD-FREE SOLDER PASTE



REFLOW TMP.260℃MAX. FOR 60 sec.PRE-HEAT 150~200℃ FOR 90~120 sec.

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PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

7.0 QUALITY ASSURANCE PROVISIONS

7.1 EQUIPMENT CALIBRATION

ALL TEST EQUIPMENT AND INSPECTION FACILITIES USED IN THE PERFORMANCE OF ANY TEST SHALL BE MAINTAINED IN A CALIBRATION SYSTEM IN ACCORDANCE WITH MIL-C-45662.

7.2 INSPECTION CONDITIONS

UNLESS OTHERWISE SPECIFIED HEREIN, ALL INSPECTIONS SHALL BE PERFORMED UNDER THE FOLLOWING AMBIENT CONDITIONS：

<a> TEMPERATURE：25 ± 5 DEGREE C.

<b> RELATIVE HUMIDITY：30 TO 60%.

<c> BAROMETRIC PRESSURE：LOCAL AMBIENT.

7.3 QUALIFICATION TESTING

QUALIFICATION TESTING SHALL BE PERFORMED ON SAMPLE UNITS PRODUCED WITH EQUIPMENT AND PROCEDURES NORMALLY USED IN PRODUCTION. THE TEST SEQUENCE SHALL BE AS SHOWN IN TABLE I.

7.4 REQUALIFICATION TESTING

IF EITHER OF THE FOLLOWING CONDITIONS OCCUR, THE RESPONSIBLE PRODUCT ENGINEER SHALL INITIATE REQUALIFICATION TESTING OF REQUALIFICATION TEST IN RELATIONSHIP WITH THAT PRODUCT CHANGES IN ACCORDANCE WITH TEST MATRIX. IN TABLE I.

<a> A SIGNIFICANT CHANGE IS MADE TO THE EXISTING PRODUCT. A SIGNIFICANT CHANGE IN THE CONTACT MATERIAL COMPOSITION, CONTACT MATERIAL THICKNESS, CONTACT FORCE, CONTACT SURFACE GEOMETRY, INSULATOR DESIGN, OR CONTACT LUBRICATION REQUIREMENTS.

<b> A SIGNIFICANT CHANGE IS MADE TO THE MANUFACTURING PROCESS WHICH IMPACTS THE PRODUCT CONFIGURATION, FIT, OR FUNCTION.

<c> A SIGNIFICANT CHANGE EVENT OCCURS DURING PRODUCTION OR END USE REQUIRING CORRECTIVE ACTION TO BE TAKEN RELATIVE TO THE PRODUCT DESIGN OR MANUFACTURING PROCESS.

STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE PRODUCT SPECIFICATION	PAGE 8 OF 11	REV N
		PREPARED Tai Ho	DATE 01/16/'13
	NUMBER PRO-089H-329	APPROVED Jason Chou	DATE 01/16/'13
PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

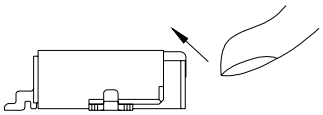
8.0 CONNECTOR OPERATING INSTRUCTIONS & PRECAUTIONS

8.1 OPERATING INSTRUCTION

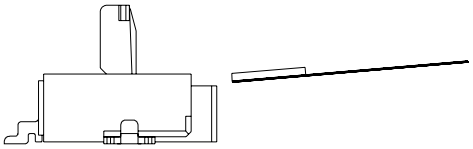
(1) LIFT UP LOCK LEVER.

(THE LOCK IS RELEASED.)

THE LOCK LEVER CAN BE SIMPLY OPERATED BY FLICKING IT UP WITH THE FINGERNAIL OF THE THUMB OR FOREFINGER.

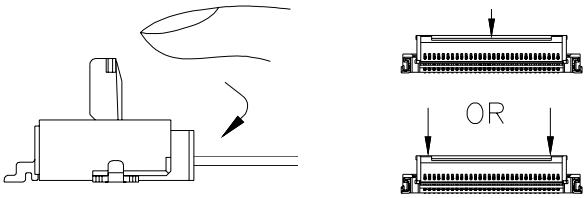


(2) INSERT THE FPC WITH THE CONDUCTIVE SURFACE FACING DOWN.INSERT THE FPC SO THAT IT IS PERPENDICULAR WITH RESPECT TO THE CONNECTOR.

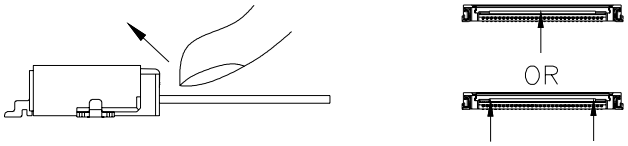


(3) PRESS DOWN THE LOCK LEVER

WHEN THE FPC IS PARTIALLY INSERTED OR THERE IS AN EXTREME INSERTION OFFSET , THE LOCK LEVEL WILL ENGAGE POORLY OR NOT AT ALL. SHOULD THIS HAPPEN , REMOVE THE FPC WITH THE REMOVAL METHOD OF (4) AND PERFORM THE OPERATION OF (2) AGAIN.



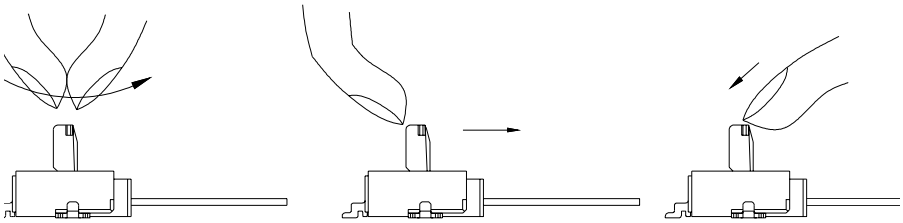
(4) LIFT UP THE LOCK LEVER AND PULL OUT THE FPC AFTER THE LOCK IS RELEASED.



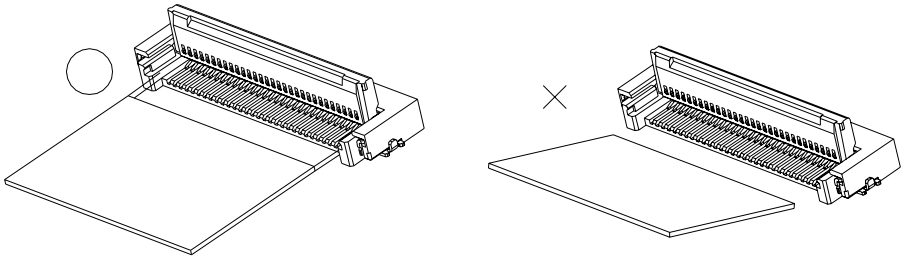
STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE PRODUCT SPECIFICATION	PAGE 9 OF 11	REV N
		PREPARED Tai Ho	DATE 01/16/'13
	NUMBER PRO-089H-329	APPROVED Jason Chou	DATE 01/16/'13
PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

8.2 PRECAUTIONS FOR USE

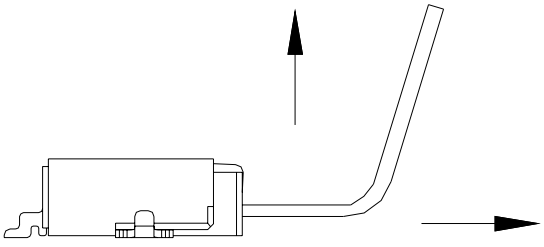
(1) AVOID GRASPING THE LOCK LEVER WITH YOUR FINGERS OR HOOKING OR PRESSING THE LEVER (ESPECIALLY WITH YOUR FINGERNAIL).THE PART IS SMALL AND THIN AND COULD BE DAMAGED.



(2) PLEASE ENSURE THAT THE FPC IS PROPERLY INSERTED INTO THE CONNECTOR INSERTION SLOT. FAILING TO INSERT THE FPC PROPERLY COULD CAUSE FPC BREAKAGE AND CONDUCTION FAULTS.



(3) DUE TO THE STRUCTURE OF THE CONNECTORS , THEY DO NOT HAVE STRONG RESISTANCE TO UPWARD PULLING ; THEREFORE,SUPPORT THE FPC WHEN A PULLING FRCE IS APPLIED TO IT.



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PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

TABLE I-QUALIFICATION TESTING

TEST / OPERATION

TEST GROUP	A	B	C	D	E	F	G	H	
NUMBER OF SAMPLE	4	4	4	4	4	4	4	4	PARAGRAPH
CONFIRMATION OF PRODUCTS	1,9	1,9	1,9	1,6	1,3	1,3	1,9	1,5	3.3.1
CONTACT RESISTANCE (LOW LEVEL)	2,6	2,6	2,6	2,5			2,6	2,4	4.1
INSULATION RESISTANCE	3,7	3,7	3,7				3,7		4.3
DIELECTRIC WITHSTANDING VOLTAGE	4,8	4,8	4,8				4,8		4.2
DURABILITY (15 CYCLES)								3	5.1
HUMIDITY	5								6.3
SALT SPRAY		5							6.5
TEMPERAURE LIFE			5						6.4
VIBRATION				3					5.2
SHOCK				4					5.3
SOLDERABILITY TEST					2				5.5
FPC RETENTION FORCE						2			5.4
THERMAL SHOCK							5		6.2

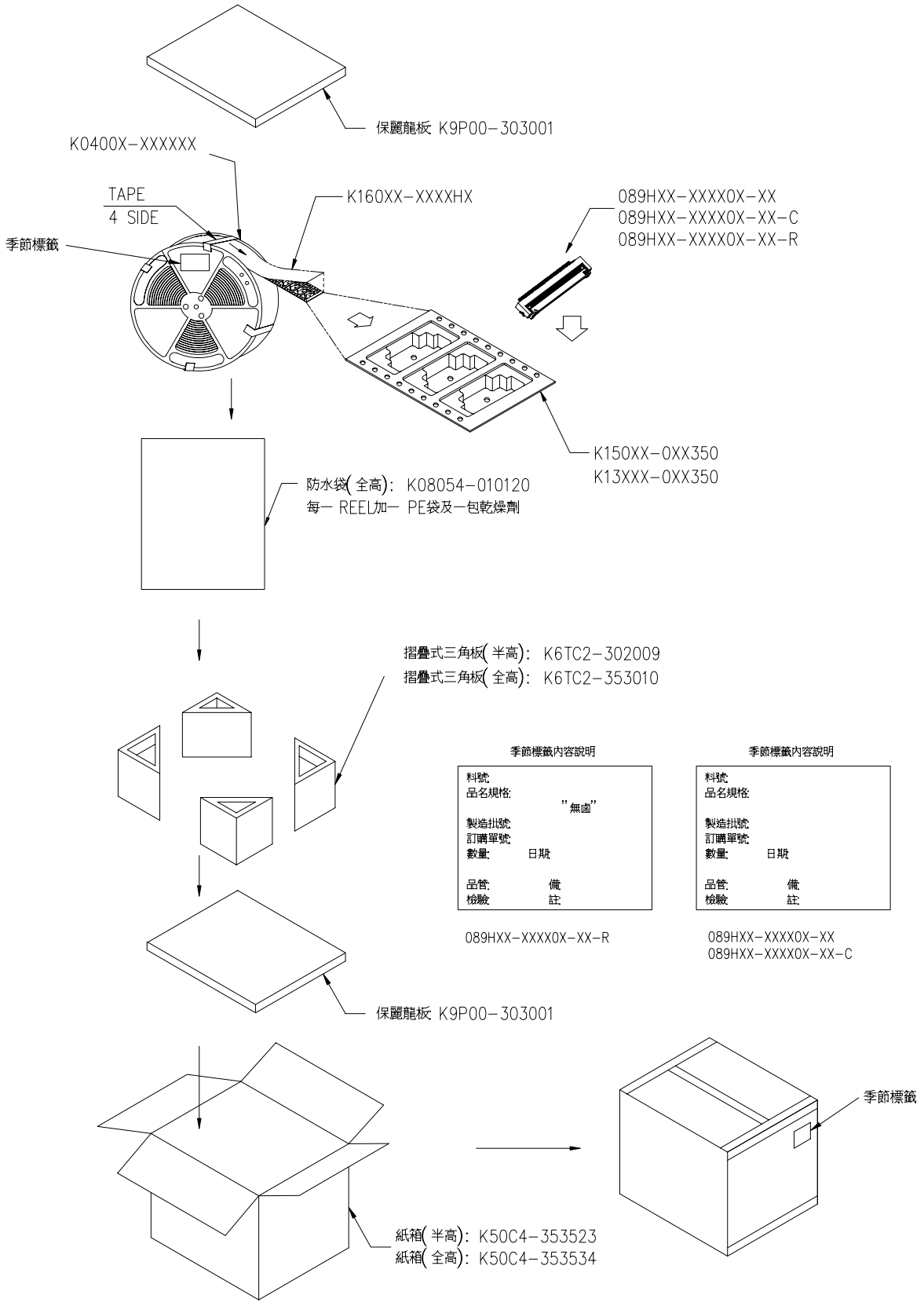
STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO., LTD.	TYPE PRODUCT SPECIFICATION	PAGE 11 OF 11	REV N
	NUMBER PRO-089H-329	PREPARED Tai Ho	DATE 01/16/'13
		APPROVED Jason Chou	DATE 01/16/'13
PRODUCT	ZIF FPC PITCH 0.5mm , 2.0mm HIGH CONNECTOR		

REVISION RECORD

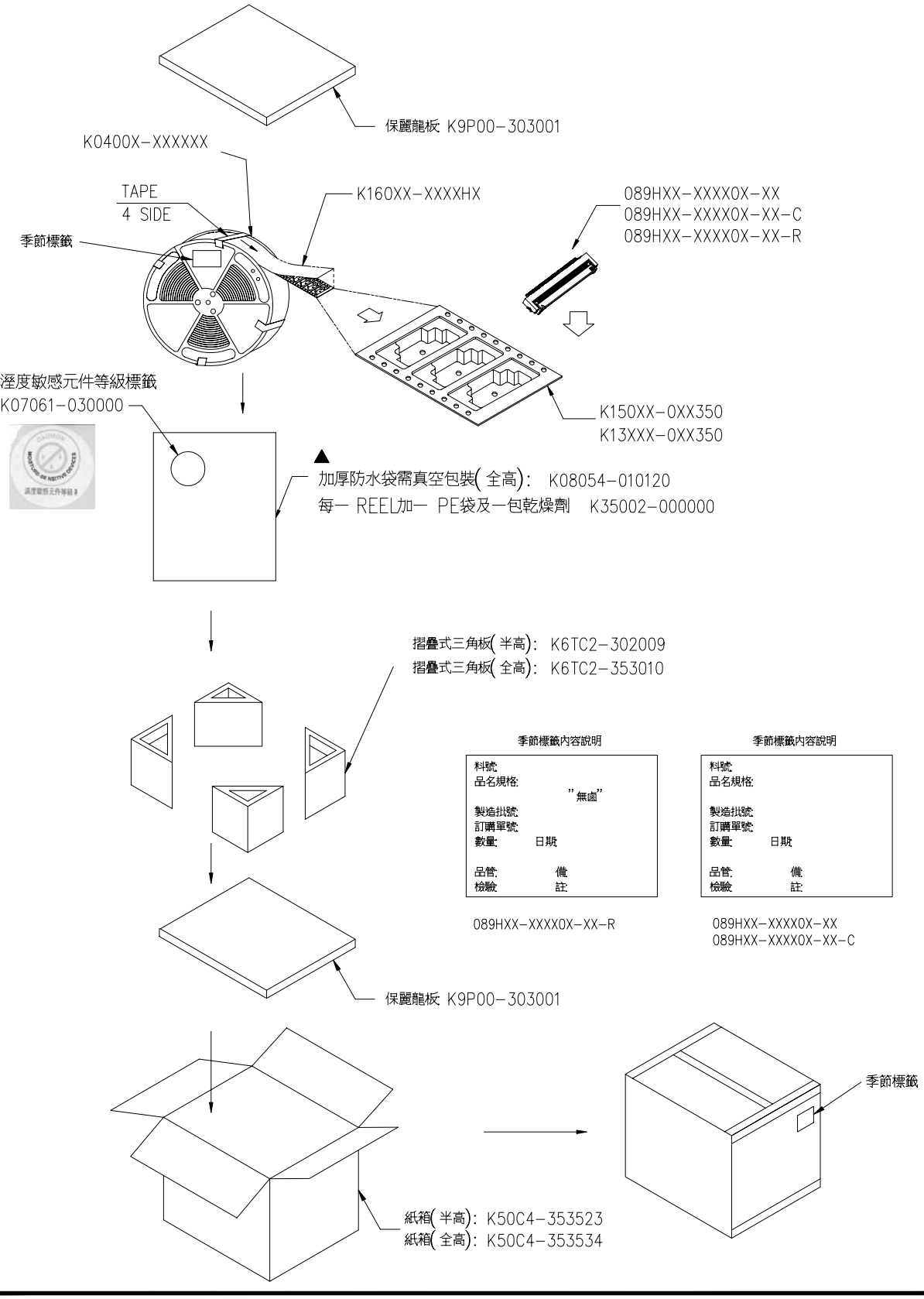
REV.	PAGE	DESCRIPTION	DATE
A	ALL	NEW RELEASE	01/26/'05
B	ALL	NEW RELEASE	03/10/'05
C	ALL	NEW RELEASE	03/23/'05
D	ALL	NEW RELEASE	10/24/'05
E	ALL	NEW RELEASE	01/26/'06
F	ALL	NEW RELEASE	05/23/'06
G	ALL	NEW RELEASE	04/24/'07
H	ALL	NEW RELEASE	08/03/'07
I	ALL	NEW RELEASE	09/10/'07
J	ALL	NEW RELEASE	03/20/'08
K	ALL	NEW RELEASE	04/15/'08
L	ALL	NEW RELEASE	08/14/'08
M	P.2 & 4 & 8 & 9 & 10	CORRECT DESCRIPTION TEST GROUP	08/24/'12
N	P.2 & 3	SPACE MATERIAL	01/16/'13

STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO.,LTD.	TYPE PACKAGING SPECIFICATION	PAGE 1/6	REV. AA
		PREPARED Tai Ho	DATE 02-04-'13
	NUMBER PAK-089H-196	APPROVED Jason.Chou	DATE 02-04-'13

PRODUCT PITCH 0.5mm FPC H=2.00mm BOARD MOUNT TYPE CONNECTOR (TAPE REEL)



STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO.,LTD.	TYPE PACKAGING SPECIFICATION	PAGE 3/6	REV. AA
		PREPARED Tai Ho	DATE 02-04-'13
	NUMBER PAK-089H-196	APPROVED Jason.Chou	DATE 02-04-'13
PRODUCT	PITCH 0.5mm FPC H=2.00mm BOARD MOUNT TYPE CONNECTOR (TAPE REEL) 台表專用		



STARCONN 慶良電子股份有限公司 CHIEF LAND ELECTRONIC CO.,LTD.	TYPE PACKAGING SPECIFICATION	PAGE 4/6	REV. AA
		PREPARED Tai Ho	DATE 02-04-'13
	NUMBER PAK-089H-196	APPROVED Jason.Chou	DATE 02-04-'13

PRODUCT PITCH 0.5mm FPC H=2.00mm BOARD MOUNT TYPE CONNECTOR (TAPE REEL)

PITCH 0.5mm : 089HXX-X0XXXX-XX-X or 089HXX-X1XXXX-XX-X

	NO. OF POS.	TAPE REEL	TAPE REEL 膠帶	TAPE REEL 塑膠盤	每盤數量	每箱數量 (半高盤數)	每箱數量 (全高盤數)
	04	K15250-016350	K16005-1213H0	K04002-216130	2000 PCS	16000PCS (8盤)	32000PCS (16盤)
	05	K13067-024350	K16005-1221H0	K04002-224132		10000PCS (5盤)	20000PCS (10盤)
	06	K15055-024350	K16005-1221H0	K04002-224130			
	08	K15086-024350	K16005-1221H0	K04002-224130			
		K13049-024350	K16005-1121H0	K04002-224132			
	09	K15245-024350	K16005-1221H0	K04002-224130			
	10	K15036-024350	K16005-1221H0	K04002-224130			
	12	K15028-024350	K16005-1221H0	K04002-224130			
	13	K15246-024350	K16005-1221H0	K04002-224130			
	14	K15124-024350	K16005-1221H0	K04002-224130			
	15	K15038-024350	K16005-1221H0	K04002-224130			
	16	K15135-024350	K16005-1221H0	K04002-224130			
	17	K15248-024350	K16005-1221H0	K04002-224130			
	18	K15032-024350	K16005-1221H0	K04002-224130			
	20	K15022-024350	K16005-1221H0	K04002-224130			
	21	K15249-032350	K16006-1225H0	K04002-232130		8000PCS (4盤)	16000PCS (8盤)
	22	K15037-032350	K16006-1225H0	K04002-232130			
	24	K15033-032350	K16006-1225H0	K04002-232130			
	25	K15247-032350	K16006-1225H0	K04002-232130			
	26	K15034-032350	K16006-1225H0	K04002-232130			
	28	K15035-032350	K16006-1225H0	K04002-232130			
	30	K13042-044350	K16007-1137H0	K04002-244132		6000PCS (3盤)	12000PCS (6盤)
		K15021-044350	K16007-1237H0	K04002-244130			
	32	K15031-044350	K16007-1237H0	K04002-244130			
	33	K15131-044350	K16007-1237H0	K04002-244130			
	34	K15084-044350	K16007-1237H0	K04002-244130			
	36	K15030-044350	K16007-1237H0	K04002-244130			
	40	K15024-044350	K16007-1237H0	K04002-244130			
▲	42	K15273-044350	K16007-1237H0	K04002-244130			
	45	K15023-044350	K16007-1237H0	K04002-244130			
		K13045-044350	K16007-1137H0	K04002-244132			
▲	48	K15274-044350	K16007-1237H0	K04002-244130			

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		PREPARED Tai Ho	DATE 02-04-'13
	NUMBER PAK-089H-196	APPROVED Jason.Chou	DATE 02-04-'13

PRODUCT PITCH 0.5mm FPC H=2.00mm BOARD MOUNT TYPE CONNECTOR (TAPE REEL)

PITCH 0.5mm : 089HXX-X0XXXX-XX-X or 089HXX-X1XXXX-XX-X

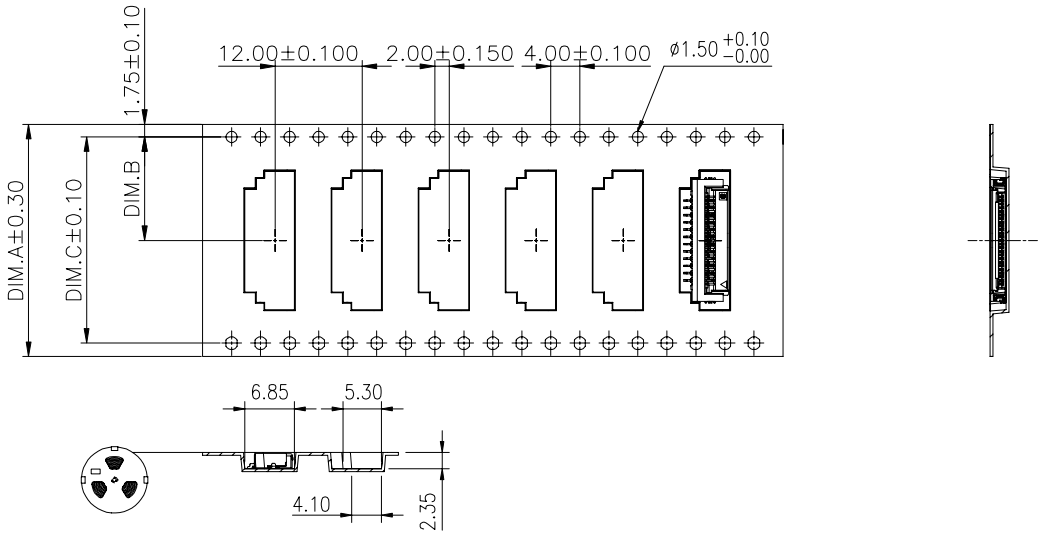
NO. OF POS.	TAPE REEL	TAPE REEL 膠帶	TAPE REEL 塑膠盤	每盤數量	每箱數量 (半高盤數)	每箱數量 (全高盤數)
50	K15020-056350	K16008-1249H0	K04003-256130	2000 PCS	4000PCS (2盤)	10000PCS (5盤)
	K13003-056350	K16008-1149H0	K04003-256132			
53	K15078-056350	K16008-1249H0	K04003-256130			
	K13048-056350	K16008-1149H0	K04003-256132			
54	K15079-056350	K16008-1249H0	K04003-256130			
	K13036-056350	K16008-1149H0	K04003-256132			
55	K15070-056350	K16008-1249H0	K04003-256130			
	K13019-056350	K16008-1149H0	K04003-256132			
56	K15097-056350	K16008-1249H0	K04003-256130			
61	K15255-056350	K16008-1249H0	K04003-256130			

PITCH 1.0mm : 089HXX-X2XXXX-XX-X

NO. OF POS.	TAPE REEL	TAPE REEL 膠帶	TAPE REEL 塑膠盤	每盤數量	每箱數量 (半高盤數)	每箱數量 (全高盤數)
04	K15245-024350	K16005-1221H0	K04002-224130	2000 PCS	10000PCS (5盤)	20000PCS (10盤)
06	K15246-024350	K16005-1221H0	K04002-224130			
08	K15248-024350	K16005-1221H0	K04002-224130			
10	K15249-032350	K16006-1225H0	K04002-232130		8000PCS (4盤)	16000PCS (8盤)
12	K15247-032350	K16006-1225H0	K04002-232130			
30	K15255-056350	K16008-1249H0	K04003-256130		4000PCS (2盤)	10000PCS (5盤)

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		PREPARED Tai Ho	DATE 02-04-'13
	NUMBER PAK-089H-196	APPROVED Jason Chou	DATE 02-04-'13

PRODUCT PITCH 0.5mm FPC H=2.00mm BOARD MOUNT TYPE CONNECTOR (TAPE REEL)



PITCH 0.5mm : 089HXX-X0XXXX-XX-X or 089HXX-X1XXXX-XX-X

POS.	DIM.A	DIM.B	DIM.C
4Pin	16.00	7.5	-
5pin~20Pin	24.00	11.5	-
21pin~28Pin	32.00	14.25	28.40
▲ 30pin~48Pin	44.00	20.20	40.40
50pin~61Pin	56.00	26.20	52.40

PITCH 1.0mm : 089HXX-X2XXXX-XX-X

POS.	DIM.A	DIM.B	DIM.C
4,6,8 Pin	24.00	11.5	-
10,12 Pin	32.00	14.25	28.40
30 Pin	56.00	26.20	52.40