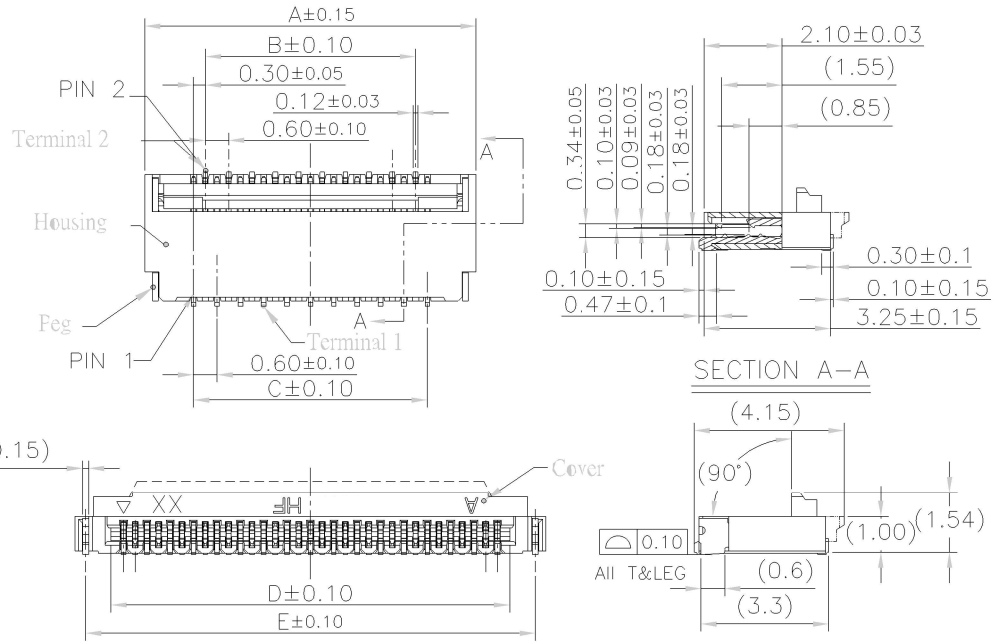
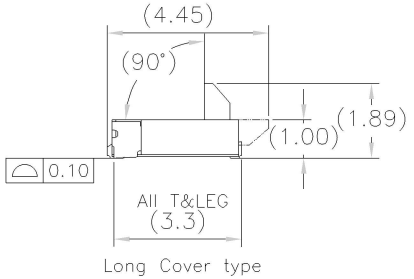
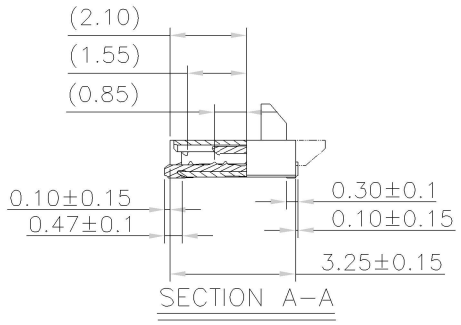
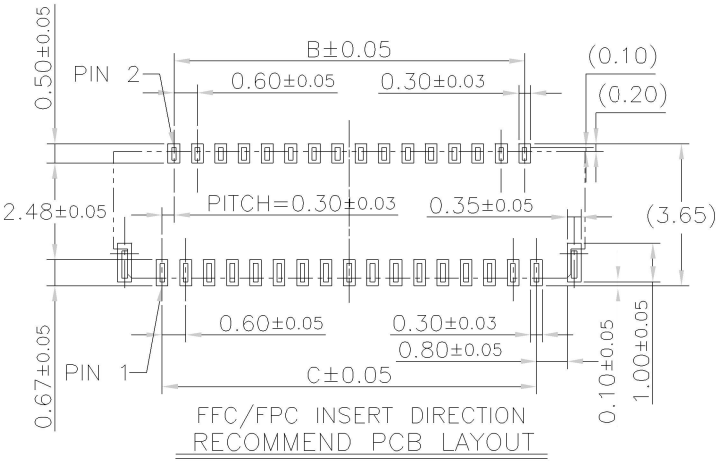
HSF COMPLIANT

REV	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGNED
A5		1 A5	增加7pin系列图	12/7'20	Hank
A6		1 A6	修正每箱包装REEL数量	08/23'21	Hank









NOTES:

1. MATERIAL:
   - HOUSING: HIGHT–TEMP PLASTIC,UL 94V–0,COLOR:NATURE;
   - COVER: HIGHT–TEMP PLASTIC,UL 94V–0,COLOR:BLACK;
   - TERMINAL: COPPER ALLOY;
   - PEG: ALLOY;
2. PLATING:
   - TERMINAL: SEE PART NO.
   - PEG: TIN PLATED ON NICKEL OVERALL.
3. RATING:
   - CURRENT RATING: 0.3A AC/DC
   - VOLTAGE RATING: 30V AC/DC
   - TEMPERATURE RANGE: –55°C~+85°C;
4. PART NO.(P/N.):

FPC SERIES

PIN NO.

TYPE:
0–NORMAL(WITH JXT MARK)
1–WITHOUT JXT MARK

PACKAGING
1–TAPE&REEL

G–GOLD(1u"Min) FLASH OVER NICKEL
T–GOLD(3u"Min) OVER NICKEL
S–MATTE TIN OVER NICKEL

DIM	TOL
X.	±––
X.X	±0.25
X.XX	±0.15
X.XXX	±0.05

HSF STD	
GP	HF
DEC	TOL
X.°	±2°
X.X°	±2°
X.XX°	±––
X.XXX°	±––

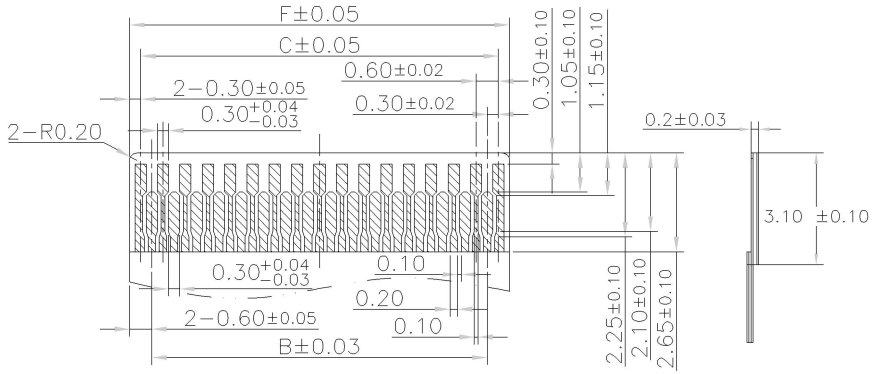
WFDCONN 深圳市旺富达电子有限公司 SHEN ZHEN WFD ELECTRONICS CO.LTD

DRWN:	PART NO.: CFPC0309-xxR-TAG
CHKD:	TITLE: 0.3P 1.0H FPC W/COVER BACK–LOCK –CUST.
APPD:	DRAWING NO.:

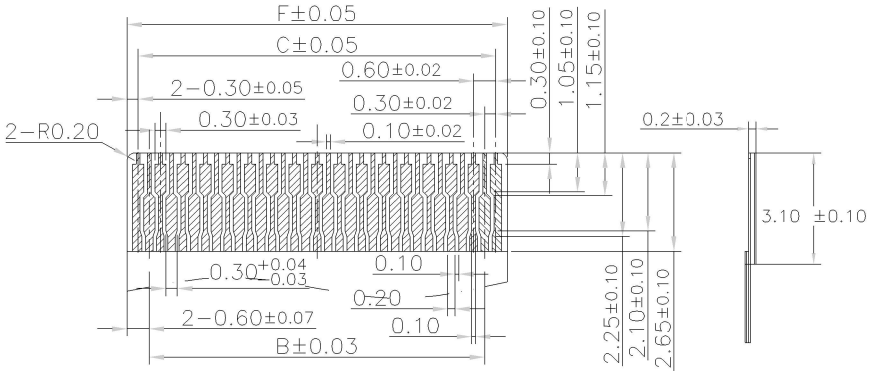
SHEET:	UNIT	SCALE	SIZE	REV
1/2	mm	N/A	A4	A0

HSF COMPLIANT

REV	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGNED
A5			增加7pin系列图	12/7'20	Hank
A6		1 A6	修正每箱包装REEL数量	08/23'21	Hank



APPLICABLE FFC/FPC
FFC/FPC THICKNESS=0.20±0.03



APPLICABLE FFC/FPC
FFC/FPC THICKNESS=0.20±0.03

PIN NO.(N)	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	NOTES
07	4.30	1.20	1.80	2.43	3.75	2.40	1 A5
09	4.90	1.80	2.40	3.03	4.35	3.00	
11	5.50	2.40	3.00	3.63	4.95	3.60	
13	6.10	3.00	3.60	4.23	5.55	4.20	
15	6.70	3.60	4.20	4.83	6.15	4.80	
17	7.30	4.20	4.80	5.43	6.75	5.40	
19	7.90	4.80	5.40	6.03	7.35	6.00	
21	8.50	5.40	6.00	6.63	7.95	6.60	
23	9.10	6.00	6.60	7.23	8.55	7.20	
25	9.70	6.60	7.20	7.83	9.15	7.80	
27	10.30	7.20	7.80	8.43	9.75	8.40	
29	10.90	7.80	8.40	9.03	10.35	9.00	
31	11.50	8.40	9.00	9.63	10.95	9.60	
33	12.10	9.00	9.60	10.23	11.55	10.20	
35	12.70	9.60	10.20	10.83	12.15	10.80	
37	13.30	10.20	10.80	11.43	12.75	11.40	
39	13.90	10.80	11.40	12.03	13.35	12.00	Long Cover type
41	14.50	11.40	12.00	12.63	13.95	12.60	
43	15.10	12.00	12.60	13.23	14.55	13.20	
45	15.70	12.60	13.20	13.83	15.15	13.80	
47	16.30	13.20	13.80	14.43	15.75	14.40	
49	16.90	13.80	14.40	15.03	16.35	15.00	
51	17.50	14.40	15.00	15.63	16.95	15.60	

DIM	TOL
X.	±−−
X.X	±0.25
X.XX	±0.15
X.XXX	±0.05

HSF STD	
GP	*HF*
DEC	TOL
X.°	±2°
X.X°	±2°
X.XX°	±−−
X.XXX°	±−−

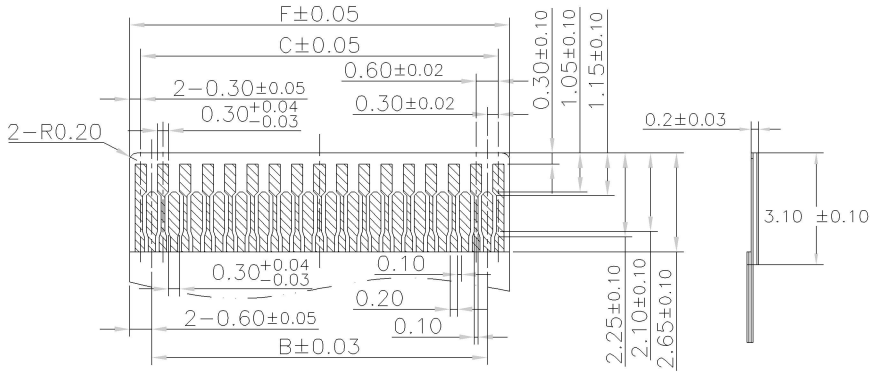
WFD CONN 深圳市旺富达电子有限公司
SHEN ZHEN WFD ELECTRONICS CO., LTD

DRWN:	PART NO.: CFPC0309-xxR-TAG
CHKD:	TITLE: 0.3P 1.0H FPC W/COVER BACK-LOCK -CUST.
APPD:	DRAWING NO.:

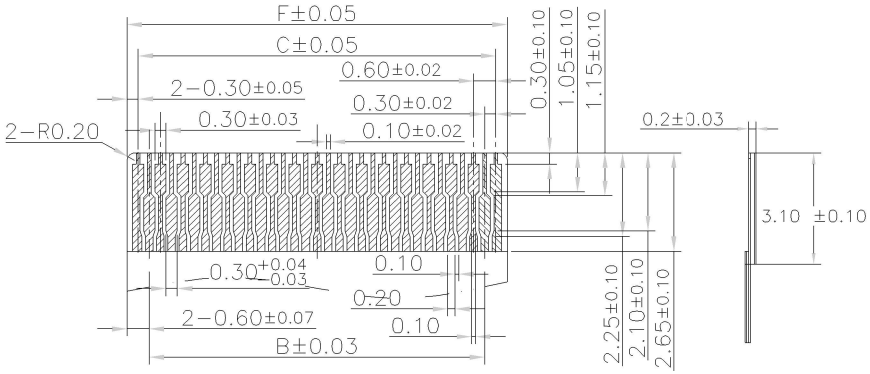
SHEET:	UNIT	SCALE	SIZE	REV
2/3	mm	N/A	A4	A6

HSF COMPLIANT

REV	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGNED
A5			增加7pin系列图	12/7'20	Hank
A6		1 A6	修正每箱包装REEL数量	08/23'21	Hank



APPLICABLE FFC/FPC
FFC/FPC THICKNESS=0.20±0.03



APPLICABLE FFC/FPC
FFC/FPC THICKNESS=0.20±0.03

PIN NO.(N)	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	NOTES
07	4.30	1.20	1.80	2.43	3.75	2.40	1 A5
09	4.90	1.80	2.40	3.03	4.35	3.00	
11	5.50	2.40	3.00	3.63	4.95	3.60	
13	6.10	3.00	3.60	4.23	5.55	4.20	
15	6.70	3.60	4.20	4.83	6.15	4.80	
17	7.30	4.20	4.80	5.43	6.75	5.40	
19	7.90	4.80	5.40	6.03	7.35	6.00	
21	8.50	5.40	6.00	6.63	7.95	6.60	
23	9.10	6.00	6.60	7.23	8.55	7.20	
25	9.70	6.60	7.20	7.83	9.15	7.80	
27	10.30	7.20	7.80	8.43	9.75	8.40	
29	10.90	7.80	8.40	9.03	10.35	9.00	
31	11.50	8.40	9.00	9.63	10.95	9.60	
33	12.10	9.00	9.60	10.23	11.55	10.20	
35	12.70	9.60	10.20	10.83	12.15	10.80	
37	13.30	10.20	10.80	11.43	12.75	11.40	
39	13.90	10.80	11.40	12.03	13.35	12.00	Long Cover type
41	14.50	11.40	12.00	12.63	13.95	12.60	
43	15.10	12.00	12.60	13.23	14.55	13.20	
45	15.70	12.60	13.20	13.83	15.15	13.80	
47	16.30	13.20	13.80	14.43	15.75	14.40	
49	16.90	13.80	14.40	15.03	16.35	15.00	
51	17.50	14.40	15.00	15.63	16.95	15.60	

DIM	TOL
X.	±−−
X.X	±0.25
X.XX	±0.15
X.XXX	±0.05

HSF STD	
GP	*HF*
DEC	TOL
X.°	±2°
X.X°	±2°
X.XX°	±−−
X.XXX°	±−−

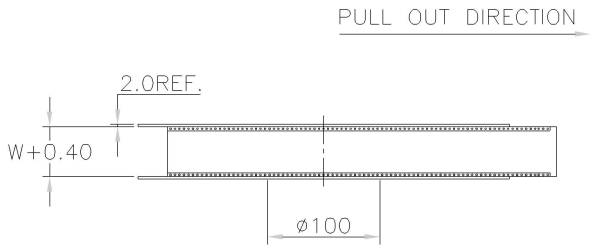
WFD CONN 深圳市旺富达电子有限公司
SHEN ZHEN WFD ELECTRONICS CO., LTD

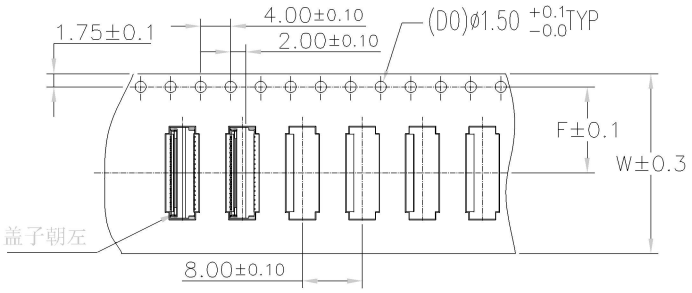
DRWN:	PART NO.: CFPC0309-xxR-TAG
CHKD:	TITLE: 0.3P 1.0H FPC W/COVER BACK-LOCK -CUST.
APPD:	DRAWING NO.:

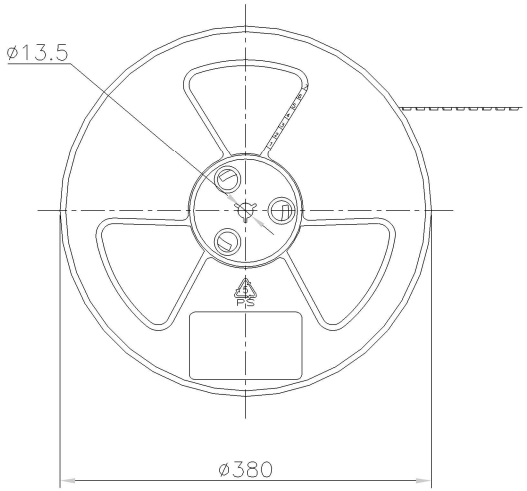
SHEET:	UNIT	SCALE	SIZE	REV
2/3	mm	N/A	A4	A6

HSF COMPLIANT

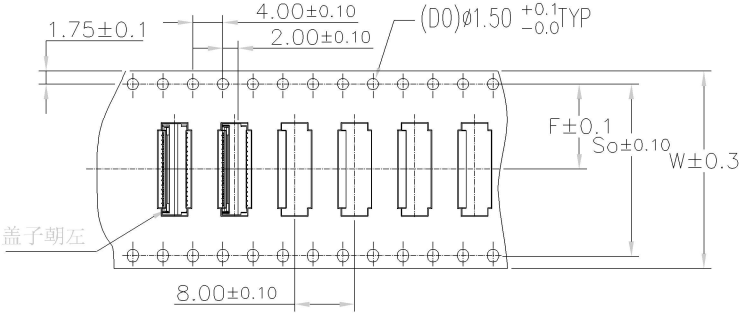
REV	ECN NO.	LOCATIONS	DESCRIPTION	DATE	DESIGNED
A5			增加7pin系列图	12/7'20	Hank
A6		1 A6	修正每箱包装REEL数量	08/23'21	Hank

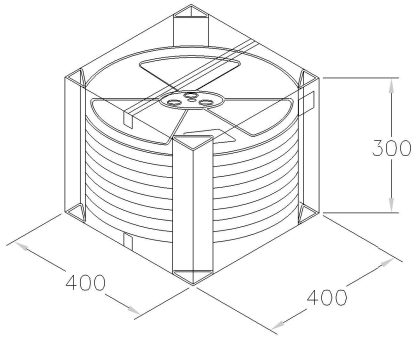




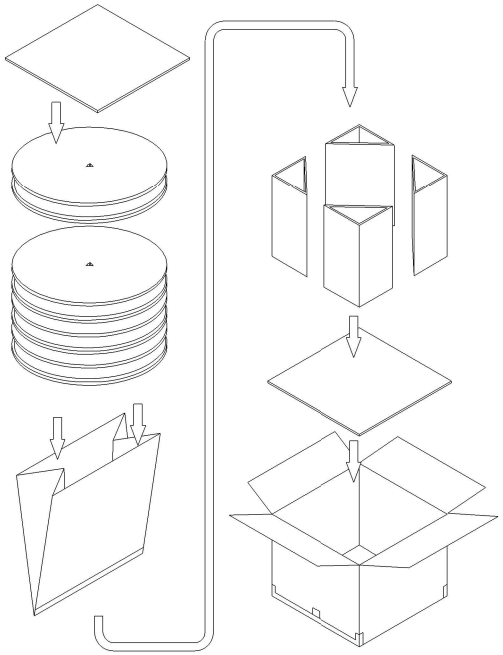


SCALE 3:20





NOTES:
1. ALL DIMENSION MEET EIA-481-3 REQIREMENTS;
2. CARRRIER MATERIAL: PS, BLACK;
3. PACKING QULITY: 5000PCS/REEL;



PACKING DISCRIPTION: 1 A6

PIN No.	09~39	41~51
REEL WIDTH	24.4	32.4
PCS/REEL	5000	5000
REEL/BOX	10	8
BOX/PCS	50K	40K
CTN. SIZE	400*400*300	

PIN NO.	DIM W	DIM F	DIM So
09~39	24.0	11.50±0.10	--
41~51	32.0	14.20±0.10	28.4

DIM	TOL
X.	±--
X.X	±0.25
X.XX	±0.15
X.XXX	±0.10

HSF STD		
	GP	*HF*
DEC		TOL
X.°		±2°
X.X°		±2°
X.XX°		±--
X.XXX°		±--

WFD CONN 深圳市旺富达电子有限公司
SHEN ZHEN WFD ELECTRONICS CO., LTD

DRWN:	PART NO.: CFPC0309-xxR-TAG
CHKD:	TITLE: 0.3P 1.0H FPC W/COVER BACK-LOCK SMT TYPE. -PACKING
APPD:	DRAWING NO.:
SHEET: 3/3	UNIT: mm / SCALE: N/A / SIZE: A4 / REV: A6

APPROVAL SHEET CHECKLIST

Part Number:

Description: 0.3P 1.0H FPC W/COVER BACK-LOCK SMT TYPE. ASS'Y.

This "FA(First Article) Package" is a checklist covering items required by IPO for "FA approval" of Supplier's new product submission:
新產品承認必須提供"FA(First Article) Package"所列的文件資料,以電子檔方式提供.

ITEM 項次	DESCRIPTION 說明	檔案格式	Check/Remark 檢查/註記
1	Customer Drawing+Packing Drawing(客户图+包装图)	**PDF**	[redacted]
2	Product Specification(产品规格书)	**PDF**	[redacted]
3	Inspection data of All dimension & requirements indicated inProduct Drawing FAI报告	**PDF**	[redacted]
4	塑材物性表	**PDF**	[redacted]
5	塑材MSDS (Material Safety Data Sheet)	**PDF**	[redacted]
6	塑材ICP報告	**PDF**	[redacted]
7	銅材材质证明(REPORT OF MATERIAL TEST)	**PDF**	[redacted]
8	銅材物質安全資料表MSDS(Material Safety Data Sheet)	**PDF**	[redacted]
9	铜材ICP報告	**PDF**	[redacted]
10	電鍍ICP報告 (镍，锡，金)	**PDF**	[redacted]

復核人(Reviewed By): JOHNSON 確認人(Checked By): LUKE

Product Specification

0.3P 1.0H FPC W/COVER BACK-LOCK SMT TYPE.

Approved By	Checked By	Prepared By
JOHNSON	RUANJUN	LUKE

1. SCOPE

This specification covers the performance, tests and quality requirements for the0.3mmPITCH 1.0H FPC W/COVER BACK-LOCK SMT TYPE.When tests are performed on the subject product line, the procedures specified specifications shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

2. REQUIREMENTS

2.1 PRODUCT DIMMENTIONS and APPLICABLE FFC/FPC&PCBLAYOUT

Product shall be of the design, construction and physical dimensions specified on the applicable Product Drawing.

See attached Product Drawing.

2.2 MATERIALS

ITEM	DISCRIPTION
Housing(主体)	High-Temp Plastic，UL 94V-0， Halogen Free
Cover(盖子)	High-Temp Plastic，UL 94V-0， Halogen Free
Terminal(端子)	Copper Alloy
Peg(接地片)	Copper Alloy
Terminal Plated(端子电镀)	See Product Drawing Plating Information
Peg Plated(接地片电镀)	

2.3 RATINGS

ITEM	STANDARD
Operating Voltage (Max.)	30V AC
Current Rating (Max.)	0.3A DC
Operating Temperature	-55°C~+85° (Including terminal temperature rise)
Operating Humidity range	Relative humidity 90%Max.
Storage temperature range	-10°C ~ +50°C
Storage Humidity range	Relative humidity 90%Max.

3. Test Requirements and Procedures Summary

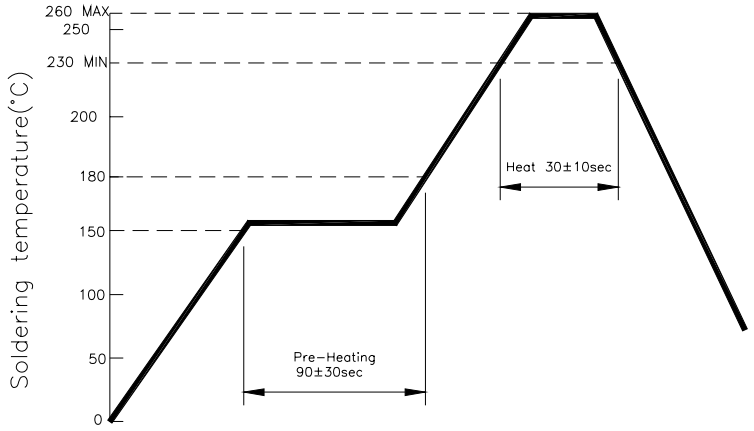
测试项目(Test Item)		规格(Requirement)		测试方式/条件(Test Condition)
1	外观检查 Examination of Product	符合图面外观，无任何损坏异状 No physical damage.		目视 Visual inspection.
电气特性(Electrical Requirement)				
2	接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.		将样品与适合之 FFC/FPC 连接，测试电压 20mV，限电流 10mA 下进行阻抗测试。 Mate applicable FPC and measure by dry circuit, 20mV Max,10mA. (EIA-364-6B)
3	绝缘阻抗 Insulation Resistance	[50] MΩ 以上. [50] MΩ Min.		将样品与适合之 FFC/FPC 连接，提供相邻端子间测试电压 500V DC 进行绝缘阻抗测试。 Mate applicable FPC and apply 500V DC between adjacent terminal and ground. (EIA-364-20B /MIL-STD-202 Method 302)
4	耐电压 Dielectric withstanding Voltage	目视外观无任何损坏异状 No Breakdown		将样品与适合之 FFC/FPC 连接，提供相邻端子间测试电压 500V DC 进行绝缘阻抗测试。 Mate applicable FPC and apply 500V DC between adjacent terminal and ground. (EIA-364-21C /MIL-STD-202 Method 302)
机械特性(Mechanical Requirement)				
5	FFC/FPC 保持力 FFC/FPC Retention Force	Pos. x 0.015Kgf {0.15N} 以上 Pos. x .015Kgf {0.15N} Min.		将盖子盖上与 FFC/FPC 连接，以操作速度每分钟位移 25±3mm 进行 FFC/FPC 保持力测试。 Insert the Cover; pull the FFC/FPC at a rate of 25±3mm per minute (EIA-364-13B).
6	盖子往返操作耐久测试 Repeated Actuator Insertion/ Withdrawal Durability Test	接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	将盖子与 FFC/FPC 反复连接，以每分钟小于 10 cycles 连续操作 10 次。 Insert and withdraw cover up to 10 cycles at the speed rate of less than 10 Cycles/Minute. (EIA-364-9C).
7	耐振性 Vibration	外观 Appearance	目视外观无任何 损坏异状 No Damage	通过 DC 电流 1mA，位移相对距离 1.5mm，振动周期 10～55～10 Hz 在 1 分钟内，持续 2 小时，方向在 X,Y,Z 轴做测试。 Mate connectors and subject to the following vibration conditions, for period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1mA during the test. Amplitude : 1.5mm P-P Frequency : 10～55～10 Hz in 1 minute. (EIA-364-28D, Condition Ⅰ /MIL-STD-202 Method 201)
		接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	
		瞬间断电 Discontinuity	1 μ sec 以下. 1 μ sec Max.	
8	耐冲击性 Mechanical Shock	外观 Appearance	目视外观无任何 损坏异状 No Damage	Duration: 2 hours in each of X, Y, Z axes. 将样品与适合之 FFC/FPC 连接，通过 DC 1mA 测试条件，连续测试 3 次。在 X、Y、Z 3 轴 6 个垂直方向施予重力加速度.490m/s2 {50G} 冲击。 Mate applicable FFC/FPC and subject to the following shock conditions. 3 times of shocks shall be applied for ach 6 directions along 3 mutually perpendicular axes, passing DC 1 mA current during the test. (EIA-364-27B, Method A /MIL-STD-202 Method 108)
		接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	
		瞬间断电 Discontinuity	1 μ sec 以下. 1 μ sec Max.	

测试项目(Test Item)		规格(Requirement)		测试方式/条件(Test Condition)
环境特性及其他性能(Environment Performance and Others)				
9	耐湿性 Humidity	接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	将样品与适合之 FFC/FPC 连接，置于环境温 60±2°C，相对湿度 90～95%，测试时间 96 小时再置放于室温下 1～2 小时。 Mate applicable FFC/FPC and expose to 60 ± 2°C, relative humidity 90 to 95% for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be
		耐电压 Dielectric Strength	需能符合耐电压测试 No Breakdown	

		绝缘阻抗 Insulation Resistance	[50] MΩ 以上. [50] MΩ Min.	performed. (EIA-364-31B /MIL-STD-202 Method 103)
10	冷热冲击 Temperature Cycling	外观 Appearance	目视外观无任何损坏异状 No Damage	将样品与适合之 FFC/FPC 连接，承受 5 cycles 冷热冲击后,置放于室温下 1～2 小时. 1 cycle time 如下:a) -55±3°C,30 分钟 b) +85±3°C,30 分钟 Mate applicable FFC/FPC and subject to the following conditions for 5 cycles. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed 1 cycle a) -55±3°C,30minutes b) +85±3°C,30minutes (Transit time shall be within 3 minutes) (EIA-364-17B)
		接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	
11	盐水喷雾 Salt Spray	外观 Appearance	目视外观无任何损坏异状 No Damage	将样品与适合之 FFC/FPC 连接，使用 5±1%浓度盐水，测试温度 35±2°C，测试时间 48±4 小时,后于室温下使用清水 冲洗后再干燥。 (JIS C0023 / MIL-STD-202 Method 101) Mate applicable FPC and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified NaCl solution Concentration: 5 ± 1% Spray time:48 ± 4 hours Ambient temperature: 35 ± 2°C (EIA-364-26B, Condition B /MIL-STD-202 Method 101)
		接触阻抗 Contact Resistance	[100] mΩ 以下. [100] mΩ Max.	
12	焊锡性 Solder ability	润湿性 Solder Wetting	润湿面积 95%以上,并不得有漏焊 针孔现象 95% of immersed area must show no voids, pin holes.	锡温 245±5°C，将导电端子浸入锡炉液面至 Housing 距离锡面 0.1mm 位置,焊锡时间 3~5 秒。 Tip of solder tails and fitting nails into the molten solder (held at 245±5°C) up to 0.1mm from the bottom of the housing for 3~5 seconds. (JESD22-B102D, Condition C)
13	温升 Temperature Rising	30℃ Max. Under loaded rating current		Contact series-wired, apply test current of loaded rating current to the circuit, and measure the temperature rising by probing on soldered areas of contacts, after the temperature becomes stabilized deduct ambient temperature from the measured value.

测试项目(Test Item)		规格(Requirement)		测试方式/条件(Test Condition)
环境特性及其他性能(Environment Performance and Others)				
14	焊锡耐热性 Resistance to Soldering Heat	外观 Appearance	目视外观无任何损坏异状 No Damage	使用红外线回焊时请参考第 4 点 When reflowing…Refer to paragraph 4.
				使用烙铁手焊时须可符合下述焊锡条件 Soldering iron method 0.2mm from terminal tip and fitting nail tip. Soldering time: 5 seconds Max. Solder temperature : 370~400°C

4. Resistance to flow solder heat



NOTE: Please check the re-flow soldering condition by your own devices beforehand.
Because the condition changes by the soldering devices, p.c. boards, and so on.

5.Qualification and Requalification Test

Test or Examination	Test Group								
	A	B	C	D	E	F	G	H	I
	Test Sequence								
Examination of Product	1,9	1,4	1,5	1,5	1, 5	1,5	1,3	1,3	1,3
Contact Resistance	2,6		2,4	2,4	2, 4	2,4			
Dielectric withstanding Voltage	3,7								
Insulation Resistance	4,8								
FPC/FFC Retention Force		2							
Durability		3							
Vibration			3						
Mechanical Shock				3					
Humidity	5								
Temperature Rising									2
Temperature Cycling					3				
Salt Spray						3			
Solder ability							2		
Resistance to Soldering Heat								2	

6.Packing Specification

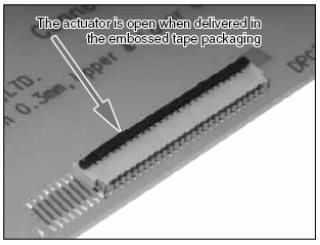
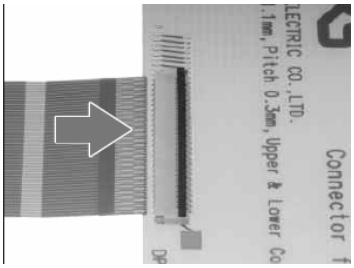
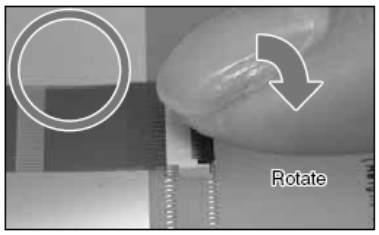
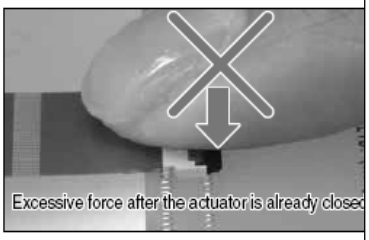
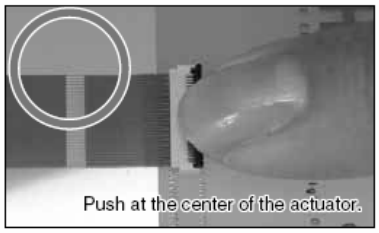
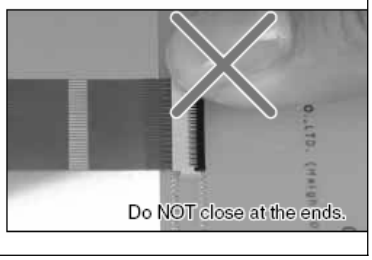
6.1Tape and Reel Dimensions：

See attached Packing drawings.

6.2Packing Specification

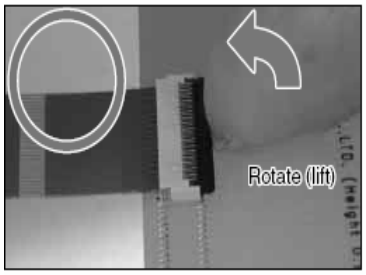
See attached Packing drawings.

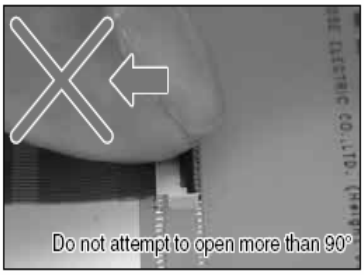
7.Instruction Upon Usage(操作说明)

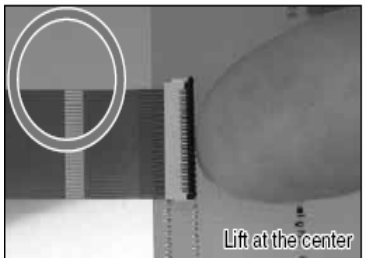
1. As delivered Delivered with the actuator open.There is no need to operate the actuator prior to the insertion of the FPC.	
2. FPC insertion Align the FPC perpendicular with the connector and insert it firmly all the way.	
3. Locking After FPC/FFC insertion,rotate the actuator down to a full stop,pushing it at the center.	   

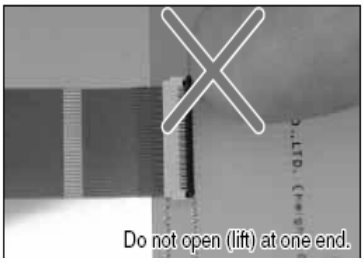
4. FPC removal(Lock release)

Carefully rotate the actuator up to 90°,lifting it at the center.









5. Warning!!

The roughness of PCB board must be in 0.1mm max.

