

To: **CNSBG**

Specification For Approval

DESCRIPTION:RF HEADER

CUSTOMER PROD. NO.: N/A

REV.: N/A

FOXCONN PROD. NO.: KK12011-02-7H

REV.:B

APPROVAL SHEET NO.: SAF-H1361-0910

REV.: A

**PLEASE RETURN TO US ONE COPY OF “SPECIFICATION
FOR APPROVAL”WITH YOUR APPROVED SIGNATURES.**

APPROVED SIGNATURES			



FOXCONN®

Hon Hai Precision Industry Co., Ltd

APPROVED By:

CHECKED By:

Prepared By:

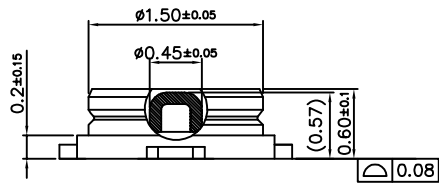
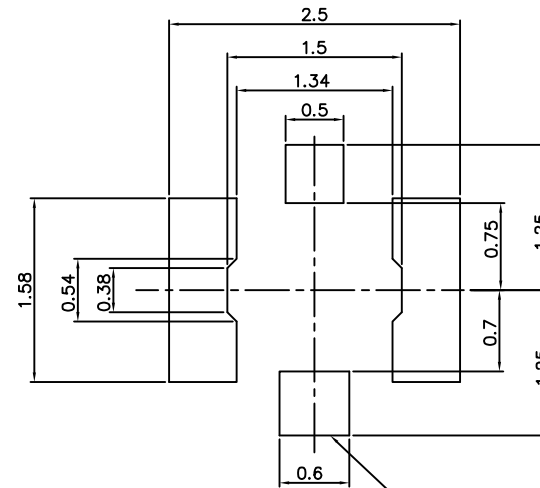
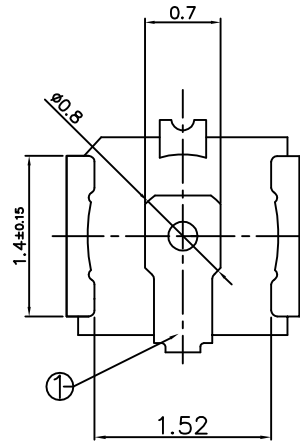
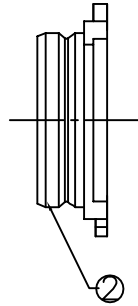
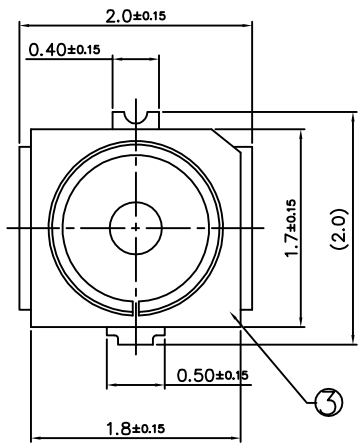
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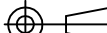
NOTES: UNLESS OTHERWISE SPECIFIED

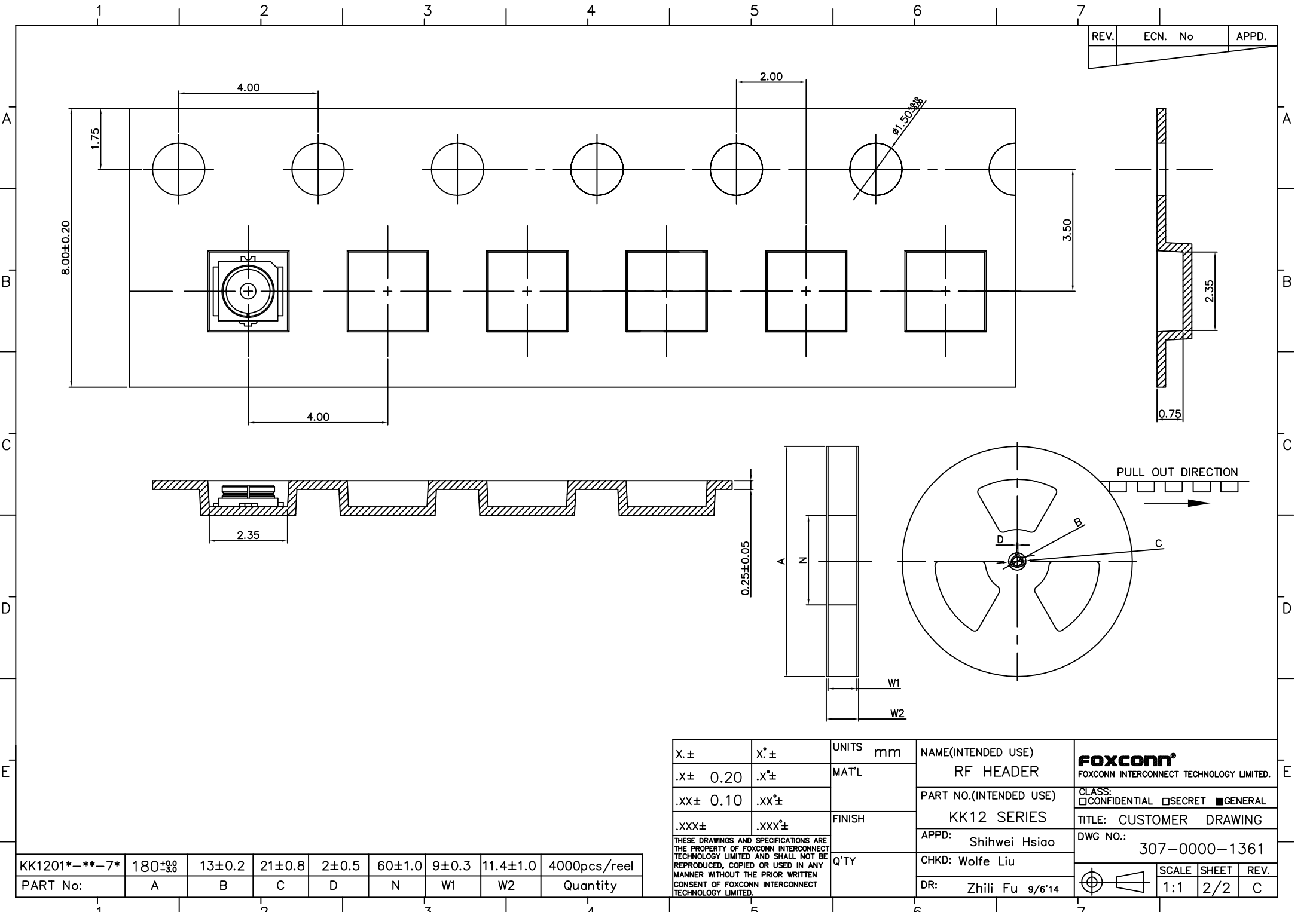
1. DIMENSIONS SHALL BE INTERPRETED PER ASME Y14.5-2009.
2. HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC. NO. "EPI12".
3. PLEASE CONTACT FOXCONN SALES REPRESENTATIVE TO VERIFY PRODUCT DETAILS&AVAILABILITY.

REV.	ECN. No	APPD.
A	BC-07-7063888	Yihsin Chen
B	BC-11-0130287	Yihsin Chen
C	BC-14-0050297	Shihwei Hsiao



③	HOUSING	LCP
②	SHELL	SELECTIVITY PLATING
①	SIGNAL PIN	GOLD PLATING
ITEMS	DECRPTION	

X.±	X°.±	UNITS	mm	NAME(INTENDED USE)	FOXCONN® FOXCONN INTERCONNECT TECHNOLOGY LIMITED.			
.X± 0.20	.X°.±	MAT'L		RF HEADER	CLASS: ☐ CONFIDENTIAL ☐ SECRET ☒ GENERAL			
.XX± 0.10	.XX°.±			PART NO.(INTENDED USE)	TITLE: CUSTOMER DRAWING			
.XXX±	.XXX°.±	FINISH		KK12 SERIES	DWG NO.: 307-0000-1361			
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF FOXCONN INTERCONNECT TECHNOLOGY LIMITED AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF FOXCONN INTERCONNECT TECHNOLOGY LIMITED.				APPD: Shihwei Hsiao	 SCALE SHEET REV. 1:1 1/2 C			
				CHKD: Wolfe Liu				
				Q'TY		DR: Zhili Fu	9/6'14	



REV.	ECN.	No	APPD.

X.±	X°.±	UNITS	mm	NAME(INTENDED USE)	FOXCONN® FOXCONN INTERCONNECT TECHNOLOGY LIMITED.
.X± 0.20	.X°.±	MAT'L		PART NO.(INTENDED USE)	
.XX± 0.10	.XX°.±			KK12 SERIES	
.XXX±	.XXX°.±	FINISH		APPD: Shihwei Hsiao	
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF FOXCONN INTERCONNECT TECHNOLOGY LIMITED AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF FOXCONN INTERCONNECT TECHNOLOGY LIMITED.				CHKD: Wolfe Liu	DWG NO.: 307-0000-1361
				DR: Zhili Fu 9/6'14	SCALE SHEET REV. 1:1 2/2 C

KK1201*-**-7*	180±9.8	13±0.2	21±0.8	2±0.5	60±1.0	9±0.3	11.4±1.0	4000pcs/reel
PART No:	A	B	C	D	N	W1	W2	Quantity

PRODUCT SPECIFICATIONS :

1. MATERIAL AND FINISH :

1-1. HOUSING :

LCP , UL 94V-0 , COLOR BLACK

1-2. CONTACT :

COPPER ALLOY,NICKEL PLATING OVER ALL,THICKNESS 50u" MIN.
GOLD PLATING WITH RoHS COMPLIANCE OVER NICKEL

1-3. METAL SHELL :

COPPER ALLOY,Ni PLATING OVER ALL, THICKNESS 50u" MIN.
100u" MIN MATTE Sn PLATING OVER Ni FOR KK12011-*1-7*.
OR GOLD FLASH(2u" Min) PLATING OVER Ni FOR KK1201*-*2-7*.
OR 100u" MIN SILVER PLATING OVER 30u" min Ni PLATING FOR KK1201*-*3-7*.

2. RATINGS :

2-1. VOLTAGE RATING :250V r.m.s. maximum
2-2. CURRENT RATING :1 Amp MAX.

3. ELECTRICAL :

3-1 .NOMINAL IMPEDANCE:50Ω
3-2. FREQUENCY RANGE:1-3GHz(VSWR 1.3MAX.),3-6GHz(VSWR 1.45MAX.)
3-3. CONTACT RESISTANCE:
CENTER CONTACT:20mΩ MAX. INITIAL; 25mΩ MAX. AFTER LIFE TEST.
OUTER CONTACT:20mΩ MAX. INITIAL; 25mΩ MAX. AFTER LIFE TEST.
3-4. INSULATION RESISTANCE : 500 MEGOHMS MIN. INITIAL.
3-5. WITHSTANDING VOLTAGE:AC 300V+/-20V r.m.s. for 1 min,
No evidence of breakdown

4. MECHANICAL:

4-1. CONTACT RETENTION FORCE: 20g MIN.
4-2. NMATING FORCE 30N MAX.
UNNMATING FORCE: 3N MIN. 20N MAX.
4-3. DURABILITY: 30 CYCLES

5. ENVIRONMENTAL:

5-1. OPERATING TEMPERATURE : -40°C TO +105°C.
5-2. HARMFUL MATERIAL PLEASE FOLLOW DOC. NO."EPI12".

6. THE CONCENTRATIONS OF Br&Cl CAN SATISFY THE REQUIREMENTS OF HALOGEN-FREE IN DOCUMENT EPI12.

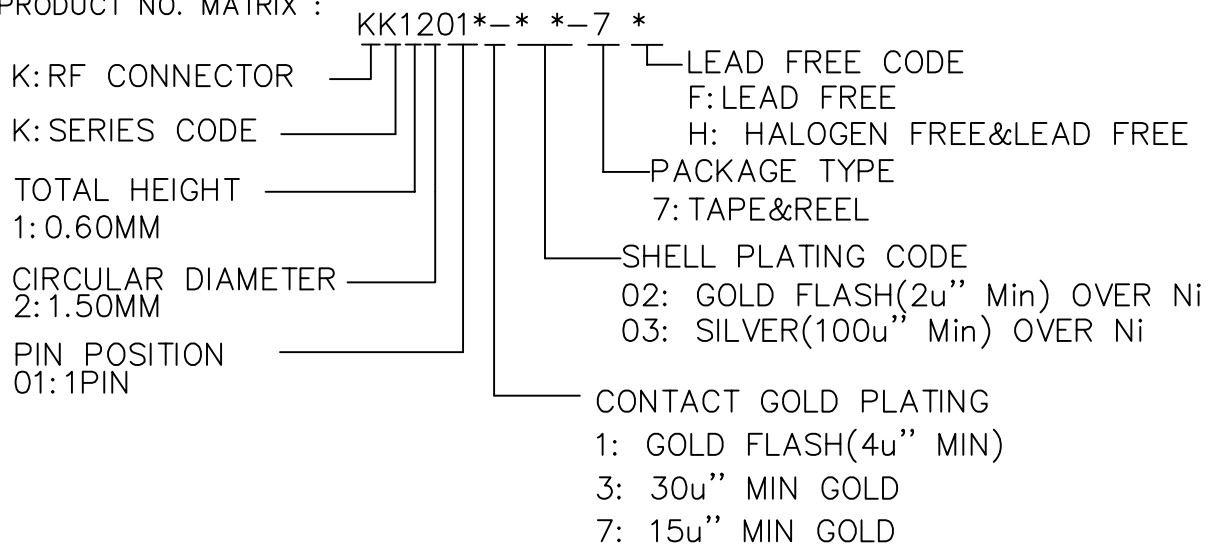
B	BC-11-0130327	Yihsin Chen
A	BC077086325	Yusan
REV.	ECN NO	APPD.

FOXCONN[®] FOXCONN INTERCONNECT TECHNOLOGY LIMITED.		
APPD. : Yihsin Chen	CLASS: ☐ CONFIDENTIAL ☐ SECRET ☒ GENERAL	
CHKD. : Yu-san Hsiao	TITLE : SPECIFICATION,	
DR. : Zhili Fu 10/6'14	PROD. SERIES : KK12* SERIES	
	DWG. NO : 307-0300-1361	
	REV. : B	SHEET : 1/1

ITEM	DESCRIPTION	Q'TY	MATERIAL	TREATMENT	REMARK
①	HOUSING	1	LCP UL94 V-0	MOLDED BLACK COLOR	
②	CONTACT	1	COPPER ALLOY	A) NICKEL PLATING OVER ALL THICKNESS : 50 u" MIN. B) GOLD PLATING SEE NOTES BELOW	
③	SHELL	1	COPPER ALLOY	A) SELECT PLATING SEE NOTES BELOW	

NOTES:

1. PRODUCT NO. MATRIX :



- HARMFUL MATERIAL PLEASE FOLLOWING FOXCONN DOC. NO. "EPI12".
- PLEASE CONTACT FOXCONN SALES REPRESENTATIVE TO VERIFY PRODUCT DETAILS & AVAILABILITY.
- THE CONCENTRATIONS OF Br&Cl CAN SATISFY THE REQUIREMENTS OF HALOGEN-FREE IN DOCUMENT EPI12.

C	BC-14-0051656	Shih-wei Hsiao
B	BC-11-0130337	Yihsin Chen
A	BC077086233	Yusan
REV.	ECN NO	APPD.

FOXCONN® FOXCONN INTERCONNECT TECHNOLOGY LIMITED.	
APPD. : Shih-wei Hsiao	CLASS: ☐ CONFIDENTIAL ☐ SECRET ☒ GENERAL
CHKD. : Wolfe Liu	TITLE : MATERIAL SHEET
DR. : Zhili Fu 9/17'14	PROD. SERIES : KK12* SERIES
	DWG. NO : 307-0500-1361
	REV. : C SHEET : 1/1

KK12011-02-7H BOM list & RoHS report

BOM Item	Part Number	Description(受測物應以 成品拆開分類)	Material	Treatment	3rd Party	3rd Party Test Report No	File name
1	030-0002-576	HOUSING	LCP	N/A	SGS	CE/2012/54879	901-0140-016 SGS
2	023-001F-7051	SHELL	C5191R-H PH/BR	Au + Ni plated	SGS	SHAEC1211193314	904-0000-087 SGS
3	052-000F-2798	CONTACT	Brass	Au + Ni plated	SGS	SHAEC1211193316	904-0000-175 SGS
4	Gold Plating	Au	Au	Au	SGS	CANEC1112283702	Gold Plating
5	Nickel plating	Ni	Ni	Ni	SGS	CANEC1112283703	Nickel plating

Production weight	
Part Number	Production weight
KK12011-02-7H	0.00434g

Remark:

工作溫度：-40~105度

儲存溫度: 不大於30度

儲存有效期: 1年

humidity：小於60% RH

File no: E93750 Volume: 1

Dear MAY TAN:

Thank you for your request for a quotation for services from Underwriters Laboratories Inc. ("UL").

Quote Date: Monday, November 26, 2007

Quote Number: 843039 - Quote Valid Until: Sunday, February 24, 2008

**Product Service Description: UL CONNECTOR, MODEL
HH, LN, LD, HS, KK, 3V, DZ, ZD, 2F, HM, SS, LM SERIES**

Product Description: ECBT2 - Connector

Estimated Price: USD 16,150.00

Estimated Turnaround Time: Project completion date will be provided once the project is scoped.

Acceptance Instructions:

- 1) To accept this Quote please add the word "ACCEPT" in the subject line and reply to sender.
- 2) Please enter a Purchase Order (PO) number if required by your company:

Our engineering staff will contact you after the quote acceptance has been received.

If your request requires UL employees to travel in order to complete the associated work, this quote does not include the costs or fees associated with travel, lodging, meals, third party laboratory charges, etc.

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or an authorized licensee of UL.

ASSUMPTIONS

File Number E93750, Volume 1

Quote Number 843039

Product Service Description: UL CONNECTOR, MODEL
HH, LN, LD, HS, KK, 3V, DZ, ZD, 2F, HM, SS, LM SERIES

Assumptions: If any assumptions change or are found to be incorrect, the price and turnaround time may be modified by UL.

- 1) All Safety Critical Components are UL Listed or Recognized and used within their specified ratings.
- 2) Product (ECBT2 - Connector) is able to be certified under the current scope and construction requirements of the latest edition of the applicable Standard(s).

3) The scope of the project is: UL CONNECTOR, MODEL
HH, LN, LD, HS, KK, 3V, DZ, ZD, 2F, HM, SS, LM SERIES

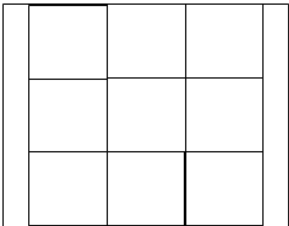
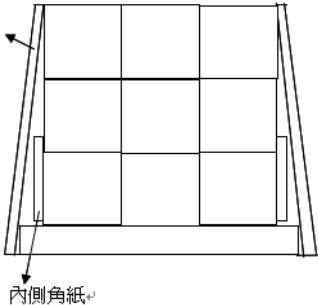
The following information provides a detailed description of the selections made to generate the quote:

Certification - The performance of tests and the evaluation of construction criteria by examination (including establishment of criteria, if none exists) to determine the acceptability of a product for Listing (or other), and the establishment of Follow-Up Service.

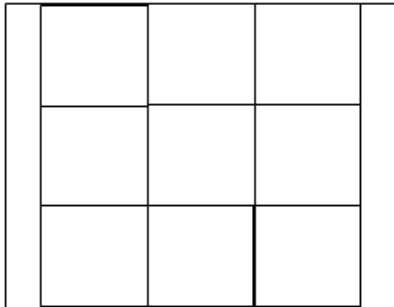
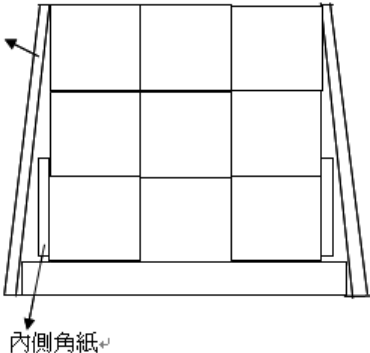
UL - Products Certified for US Services evaluated to the appropriate US Standard(s).

New Product, More than One Model - Submittal of Products with more than one discrete single model identifier or making a physical change (or a ratings change) to existing products and adding a new model identifiers to your nomenclature.

包裝作業規範
PACKAGING SPECIFICATION

				保密等級 Class	☐ 機密 Confidential	☐ 密 Secret	☒ 一般 General
規範編號 Spec. No.		EB9-APKK-001		PAGE	3/7	REV.	B
適用客戶 Applicable Customer	一般 Normal C/P	適用產品 Applicable Product	HEADER, RF PLUG, R/A, SMT, LOW PROFILE (KK12*)	包裝類別 Packaging Category	TAPE & REEL		
包裝作業圖示及說明 Packing Operation Diagram & Instruction				備	注	Remark	
1. 出貨非內交客戶包裝外箱堆放棧格作業圖示及說明 (A) 棧板料號:080-0003-569 棧板尺寸:1200mm X 1000mm (B) 每個棧板可堆放包裝數量: 每個棧板可堆疊18個箱子: 3層 x 每層6個箱子 每層箱子上下交錯堆放方式如圖示:, 棧板堆疊方式示意圖:  VIEW.  VIEW.5				堆高要求: 1. 包裝出貨Intel 之貨物堆疊高度小于等于1.2m. 2. 包裝空運出貨貨物堆疊高度小于等于1.5m. 3. 包裝海運出貨貨物堆疊高度小于等于2.0m. 4. 零箱包裝依据"成品出貨零箱堆放作業規定"作業.			

包裝作業規範
PACKAGING SPECIFICATION

				保密等級 Class	☐ 機密 Confidential	☐ 密 Secret	☒ 一般 General
規範編號 Spec. No.		EB9-APKK-001		PAGE	6/7	REV.	B
適用客戶 Applicable Customer	一般 Normal C/P	適用產品 Applicable Product	HEADER, RF PLUG, R/A, SMT, LOW PROFILE (KK12*)		包裝類別 Packaging Category	TAPE & REEL	
包裝作業圖示及說明 Packing Operation Diagram & Instruction					備	注	Remark
2. 出貨非內交客戶包裝外箱堆放棧格作業圖示及說明 (A) 棧板料號:080-0003-569 棧板尺寸:1200mm X 1000mm (B) 每個棧板可堆放包裝數量: 每個棧板可堆疊18個箱子: 3層 x 每層6個箱子 每層箱子上下交錯堆放方式如圖示:, 棧板堆疊方式示意圖:  VIEW.4  VIEW.5					堆高要求: 1. 包裝出貨Intel 之貨物堆疊高度小 于等于1.2m. 2. 包裝空運出貨貨物堆疊高度小于等 于1.5m. 3. 包裝海運出貨貨物堆疊高度小于等 于2.0m. 4. 零箱包裝依据"成品出貨零箱堆放作 業規定"作業.		

包 裝 作 業 規 範
PACKAGING SPECIFICATION

								保密等級 Class		☐ 機密 Confidential		☐ 密 Secret		☒ 一般 General	
規範編號 Spec. No.		EB9-APKK-001						PAGE	7/7		REV.		B		
適用客戶 Applicable Customer				產品型號 Product No.	包 裝 容 量 Packing Capacity			重 量 (Kg) Weight (Kg)							
材料名稱 Name	料號 Part No.	淨重 N.W.	用量 Qty		最內層包裝產品數量 PCS/Inner Packaging	每箱最內層包裝數 PCS/Inner Packaging	每箱包裝產品總數量 PCS/BOX	每PCS淨重 N.W./PC	每箱淨重 N.W./BOX	每箱毛重 G.W./BOX					
外箱 Carton	080-01J9-320	0.82	1	KK1201*-**-**	4000	10	40000	0.0000054	0.1735	1.14					
防水袋Water-proof bag	080-0015-038	0.09	1												
舒服多 EPE	081-0094-005	0.006	2												
三角柱 Triangle Columns	081-0002-534	0.024	4												
成品包裝標籤 Ass'y Packaging	080-1011-319	---	19												
REEL	081-0B08-468 (081-1001-5674)	0.25	23 (10)												
COVER TAPE	081-A108-507 (081-1108-507)		23*18M (10*18M)												
CARRIER TAPE	084-0001-5674 (081-0002-5674)		23*18M (10*18M)												
備注: Remark: 1.外箱尺寸 (INNER SIZE OF CARTON): 333 ×333 ×325mm 2.舒服多尺寸 (SIZE OF EPE): 330 ×330 ×10mm, 防水袋 (WATER PROOF BAG): 460 ×320 ×650mm(080-0002-038) 3.REEL尺寸 (SIZE OF REEL): 180mmX62mmX9.4mm.(330mm*9.2mm)															

說明:包裝箱/袋上的安規標示要求需在包裝作業規範上注明,如張貼安規標籤,需注明張貼標籤類型/數量/張貼位置。
Note: The requirement of safety remark on box/bag should be standardized in the packaging specification, if there's safety label required, the label type/qty/ location should also be remarked.

81664471621

SUMITOMO CHEMICAL

10/August/2007

HON HAI PRECISION INDUSTRY CO., LTD.

Certificate of AnalysisSumitomo Chemical Co., Ltd.
EHIME WORKS

Grade	SUMIKASUPER E6808UHF B Z	Quantity	1500 kg
Lot No.	07805KR1	Date	10/August/2007

	ITEM	UNIT	Value	Specification	
				Lower Limit	Upper Limit
1	S.G.	-	1.73	1.69	1.75
2	Tensile Strength	MPa	97	85	≤
3	Tensile Elongation	%	6.6	2.5	10.0
4	Flexural Strength	MPa	114	100	150
5	Flexural Modulus	GPa	8.5	8.5	15.0
6	Izod Impact Strength	J/m	470	200	800
7	DTUL(1.82MPa)	°C	243	230	270
Note	No.OEP-1178-4				
Judgement	PASS				

SK070812

INVOICE NO. : OEI - 9647
 B/L DATE : AUG / 14 / 2007
 P/O NO. : P3K-770014-9-1
 PART NO. : 901-0240-016

西田 健一郎

Kilchiro NISHIDA

Customer: 鴻海精密工業股份有限公司

Commodity: C 2680 R BRASS STRIP (0)

Applied Standard: CNS 4383 Brass Sheets, Plates and Strips

Chemical Analysis Test

Work No.	Size of Product			Cu(%)	Fe(%)	Pb(%)	Zn(%)	
	Thickness (mm)	Width (mm)	Length (mm)					
	Standard							
				64.00 - 68.00	max. 0.050	max. 0.014	REM.	
6AA257A	0.150	9.000		65.338	0.008	0.002	REM.	

Mechanical & Physical Test

Work No.	Size of Product			Dimension Test		Tension Test		
	Thickness (mm)	Width (mm)	Length (mm)	Thickness (mm)	Width (mm)	Tensile Strength (kgf/mm ²)	Elongation (%)	
	Standard			-	(-) 0.10 - (+) 0.00	min. 28	min. 40	
6AA257A	0.150	9.000		0.149	8.950	34.63	51.00	

QC Supervisor

鄭建益

A820202

MINCHALI METAL

11, Pei Yuan Road, Chun

Tel : (03)4526141-5 (03)4

Fax : (03)4529112 (03)46

Tito 東莞優賢金屬材料有限公司

廣東省東莞市黃江鎮刁朗村東進路 28 號

E-mail: tito_gd@163.com

TEL: +86-769-3600791/2

FAX: +86-769-3600796

Report of Material Test

Order No.

P2H-780888

Standard Specification

: JIS C5191R-H

Purchaser

: Hon Hai Precision Industry Co.,Ltd.

Product

: PHOSPHOR BRONZE STRIP

Item No.	Lot No.	Alloy	Quantity and Unit	Width tolerance (+0/-0.1mm)	Thickness tolerance (+/- 0.01mm)	Hon Hai Material Number
1	M-11	C5191	0.3*24*124.4kgs	23.94-23.95mm	0.301-0.304mm	904-0152-087

Mechanical & Physical Test								
Chemical Composition				Tension Test				
Item #	Cu +Sn+ P%	P %	Sn %	Temper	Vickers Hardness HVN	Tensile Strength (kgf/mm ²)	Elongation (%)	Electric Conductivity (%)
	Min. 99.5	0.030-0.350	5.500-7.000		190-210	60 ~ 70		
1	99.96	0.0812	5.6573	Hard	195	62.1	20.8	14

Surface : OK

QC Supervisor 王炎飞

Issue Date.Oct.10.2007

New Component Information

Component Description : KK12011-02-7H (RF Connector, L2.0xW2.0xH0.60mm)

A. Lead-free component :

- Lead-free
- Halogen Free

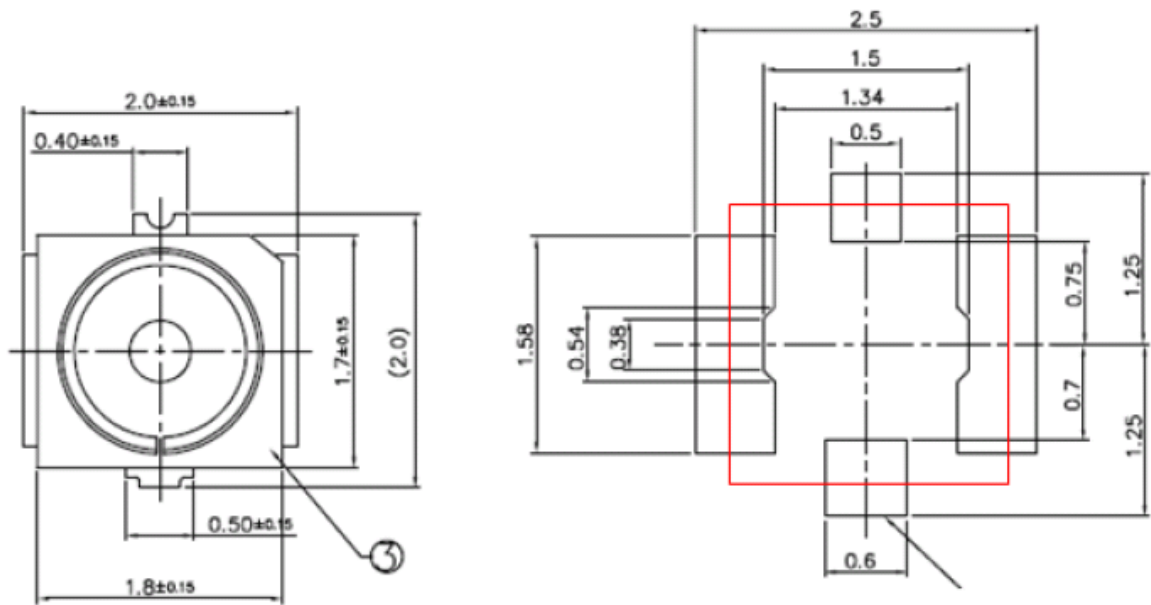
B. Temperature resistance (For SMT Process) :

1> for Peak Temperature 260±5 °C degree 5 sec (For example : 260±5 °C, 30 sec)

2>for Above 217 Temperature >90 sec (For example : 217°C, >90 sec)

C. Weight : 0.00434 g (or 4.34 mg)

D. Recommended pad design :

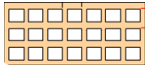
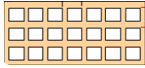
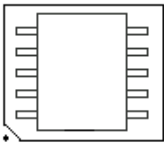
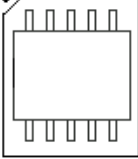
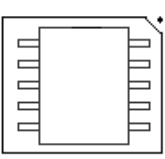
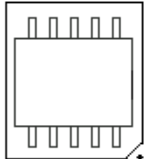
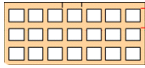


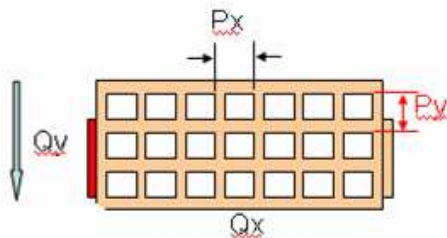
E. Packing information :

○ Tray

Angle Work	STD	STD+90	STD+180	STD+270	Tray 方向
SOP/SSOP TSOPII/TSSOP					 Tray 缺口方向
TSOP/TSSOP					 Tray 缺口方向
QFP/PLCC/					

HON HAI PRECISION IND. CO.,LTD.

QFN/MLFP					  Tray 缺口方向
BGA/CSP	 	 	 	 	  Tray 缺口方向
XFMR					  Tray 缺口方向



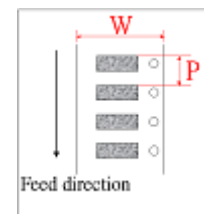
Quantity	Qx	Qy
Pitch	Px	Py

● Reel

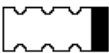
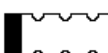
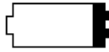
Reel width : W= 8 mm

Parts pitch : P= 4 mm

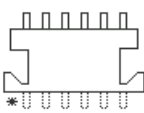
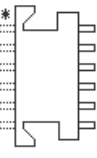
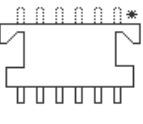
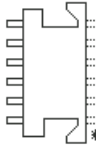
Reel material : ○ Paper ● Plastic

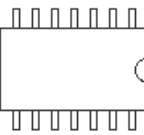
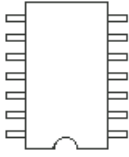
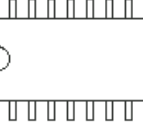
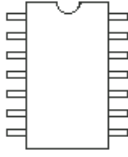
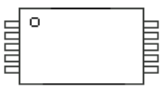
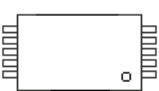
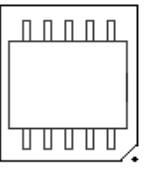
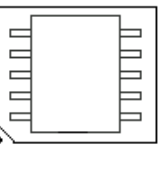
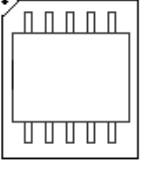
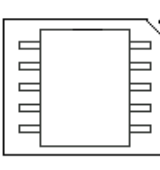


Angle		STD	STD+90	STD+180	STD+270	料帶方向
Work	Capacitor					
	Resistor, Filter					
	XTL , Coil, (rectangular part)					
	Resistor networks					

								
Tantalum Capacitor, Diode								
								
Transistor 3-pin								
								
Transistor 4 、 6-pin								
								
Transistor 5-pin								
								
Power transistor								
								
Aluminum								
								
Diode 2-pin								
								

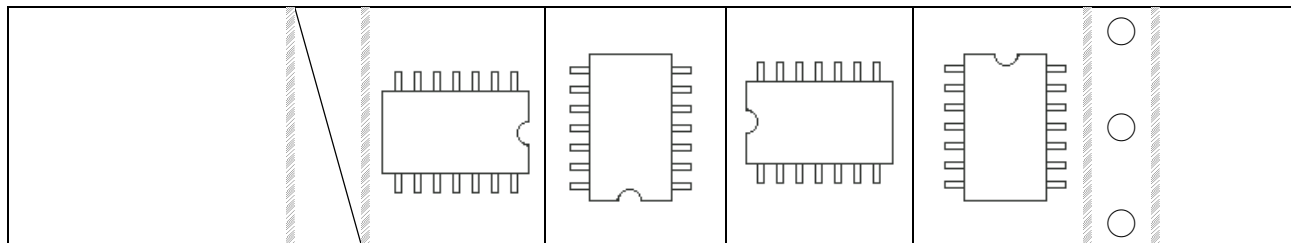
料帶方向

Glass-tube diode					   
					
Connector					   
					

SOP/SSOP TSOPII/TSSOP					   
					
TSOP/TSSOP					   
					
QFP/PLCC/QFN/ MLFP					   
					
BGA/CSP					   
					
Transformer					   
					
Transformer					

料帶方向





- ☐ Tube
☐ Taping(DIP)
☐ In Bulk(散裝)

F. Moisture sensitivity level :

Select	Level	T&H Cond. (C/ %RH)	Floor Life Time after Unpack
	1	85/85, 168 HRS	Unlimited
V	2	85/60, 168 HRS	1 Year
	2a	30/60, 696HRS	4 Week
	3	30/60, 192 HRS	168 HRS (1 Week)
	4	30/60, 96 HRS	72 HRS (3 Days)
	5	30/60, 72 HRS	48 HRS (2 Days)
	5a	30/60, 48 HRS	24HRS
	6	30/60, 6 HRS	6 HRS

G. 零件防靜電等級 (ESD Level)

HBM: Human Body Model(must):

CDM: Charged Device Model(option):

MM :Machine Model(option):

Company Stamp



Signature : Zhili Fu

Date : 2014/5/23

HON HAI PRECISION IND. CO.,LTD.

測試報告

Test Report

臺北檢測實驗室

物性測試中心

報告編號

Report Number

MTQB1413MT80999

產品名稱

Product Name

RF receptacle connector

委託單位

Requested By

MTQB14

委託單位地址

Requester Address

台北縣土城市土城工業區自由街 2 號

測試日期

Date of Test

2013/8/22~2013/9/18

1. This test report is valid only for sample(s) received by the Laboratory.
2. Reproduce of this report in part is not permitted without the written consent of the Laboratory.

實驗室主管

Laboratory head

謝子龍

2013-10-03

報告簽署人

Approval signatory

沈祥輝

2013-10-03

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

(1) SCOPE

1.1 APPLICANT: MTQB14

1.2 TESTED SAMPLES: 75

1.3 PURPOSE

This test report contains the quality requirements, test procedures and test results of a qualification test program on the Foxconn's RF receptacle connector (KK1201*-02-7*) mated with ϕ 0.81 mm RF plug cable.

(2) APPLICABLE DOCUMENTS

2.1 EIA-364

2.2 Test report of FOXCONN : MTQB1413MT80999

(3) TEST SEQUENCE

3.1 TEST CONDITIONS :

Unless otherwise specified, tests and examinations were conducted under conditions within the following ranges:

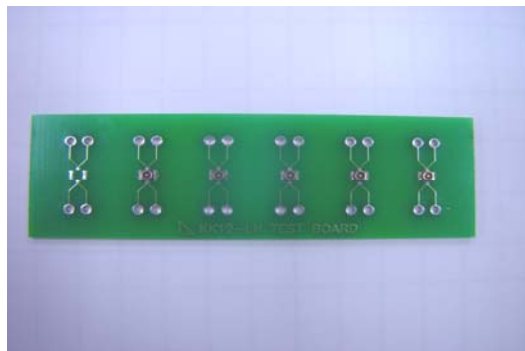
Temperature: 15 ~35°C

Atmospheric Pressure: 650 to 800 millimeters (25.6 to 31.5 inches) of Mercury

Relative Humidity: 20% to 80%

3.2 OPERATOR : 7889

3.3 TEST SAMPLE :



Test sample (KK1201*-02-7*)



Mating Parts (ϕ 0.81mm)

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

3.4 QUALIFICATION TEST SEQUENCE– continued

ITEM	TEST DESCRIPTION	TEST SEQUENCE					TEST METHOD
		A	B	C	D	E	
1	Mating/Unmating Force	1 4					4-1
2	Low Level Contact Resistance	2 5	4 7 9	2 4	2 4	2 4	4-2
3	Durability	3					4-3
4	Visual Inspection		1 6 12	1 5	1 5	1 5	4-4
5	Insulation Resistance		2 10				4-5
6	Dielectric Withstanding Voltage		3 11				4-6
7	Thermal Shock (Temperature Cycling)		5				4-7
8	Humidity		8				4-8
9	Temperature Humidity Cycling						4-9
10	Temperature Life (Dry Heat)			3			4-10
11	Cold Endurance				3		4-11
12	Salt Spray					3	4-12
13	Sine-Sweep Vibration with electrical discontinuity						4-13
14	Mechanical Shock (Half-Sine with electrical discontinuity)						4-14
15	Resistance to Solder Temperature (SMT)						4-15
16	Contact Retention Force						4-16
17	Evaluation of Solder Joint						4-17
18	Solvent Resistance						4-18
19	Adhesion (Electrode Peeling Strength)						4-19
20	Pull Force Test						4-20
SAMPLE SIZE PER TEST GROUP		5	5	5	5	5	

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

3.4 QUALIFICATION TEST SEQUENCE– continued

ITEM	TEST DESCRIPTION	TEST SEQUENCE				TEST METHOD
		G	H	I-1	I-2	
1	Mating/Unmating Force					4-1
2	Low Level Contact Resistance	2 5	2 4 6			4-2
3	Durability	3				4-3
4	Visual Inspection	1 6	1 7	1 3	1 3	4-4
5	Insulation Resistance					4-5
6	Dielectric Withstanding Voltage					4-6
7	Thermal Shock (Temperature Cycling)					4-7
8	Humidity					4-8
9	Temperature Humidity Cycling	4				4-9
10	Temperature Life (Dry Heat)					4-10
11	Cold Endurance					4-11
12	Salt Spray					4-12
13	Sine-Sweep Vibration with electrical discontinuity		3			4-13
14	Mechanical Shock (Half-Sine with electrical discontinuity)		5			4-14
15	Resistance to Solder Temperature (SMT)			2	2	4-15
16	Contact Retention Force			4		4-16
17	Evaluation of Solder Joint					4-17
18	Solvent Resistance					4-18
19	Adhesion (Electrode Peeling Strength)					4-19
20	Pull Force Test					4-20
SAMPLE SIZE PER TEST GROUP		5	5	5	5	

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

3.4 QUALIFICATION TEST SEQUENCE

ITEM	TEST DESCRIPTION	TEST SEQUENCE				TEST METHOD
		J	K	M	N	
1	Mating/Unmating Force					4-1
2	Low Level Contact Resistance					4-2
3	Durability					4-3
4	Visual Inspection		1 3	1 3	1 3	4-4
5	Insulation Resistance					4-5
6	Dielectric Withstanding Voltage					4-6
7	Thermal Shock (Temperature Cycling)					4-7
8	Humidity					4-8
9	Temperature Humidity Cycling					4-9
10	Temperature Life (Dry Heat)					4-10
11	Cold Endurance					4-11
12	Salt Spray					4-12
13	Sine-Sweep Vibration with electrical discontinuity					4-13
14	Mechanical Shock (Half-Sine with electrical discontinuity)					4-14
15	Resistance to Solder Temperature (SMT)					4-15
16	Contact Retention Force					4-16
17	Evaluation of Solder Joint	1				4-17
18	Solvent Resistance		2			4-18
19	Adhesion (Electrode Peeling Strength)					4-19
20	Pull Force Test				2	4-20
SAMPLE SIZE PER TEST GROUP		10	5	5	10	

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

(4) TEST METHOD OF INSPECTION

4-1 Mating/Unmating Force

The test was performed in accordance with EIA-364-13D. The mating force was the peak force measured while the plug and receptacle samples were mated normally. The unmating force was the peak force measured while the plug and receptacle samples were separated from the mated position.

4-2 Low Level Contact Resistance

The test was performed in accordance with EIA-364-23C. Open circuit voltage is 20 mV maximum and test current is 100 mA maximum. Initial level contact resistance requirement is 20 milliohms for center pin and 10 milliohms for ground pin (resistance of termination wires shall be deducted from the reading). 40 milliohms maximum for center contact and 20 mohms maximum for ground contact of environmentally stressed samples.

4-3 Durability

The test was performed in accordance with EIA-364-09C. Test samples were subjected to fully mating and unmating for a predetermined number of 30 cycles.

4-4 Visual Inspection

Visual inspection and dimensional examination in compliance with applicable specifications and documents were performed. The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.

4-5 Insulation Resistance

Insulation resistance was measured between adjacent contacts after applying 100 VDC for 1 minute. The test was performed in accordance with EIA-364-21D. Minimum insulation resistance requirement is 500 megohms for test samples.

4-6 Dielectric Withstanding Voltage

A 200 VAC was applied between two adjacent contacts of the test samples for 1 minute. While applying the voltage, the leakage current was monitored and shall be less than 1.0 mA. The test was performed in accordance with EIA-364-20D.

文件名稱 DOCUMENT NAME:
TEST REPORT主題 SUBJECT:
RF receptacle connector
(KK1201*-02-7*)文件編號 DOCUMENT NO:
MTQB1413MT80999
REV A**4-7 Thermal Shock (Temperature Cycling)**

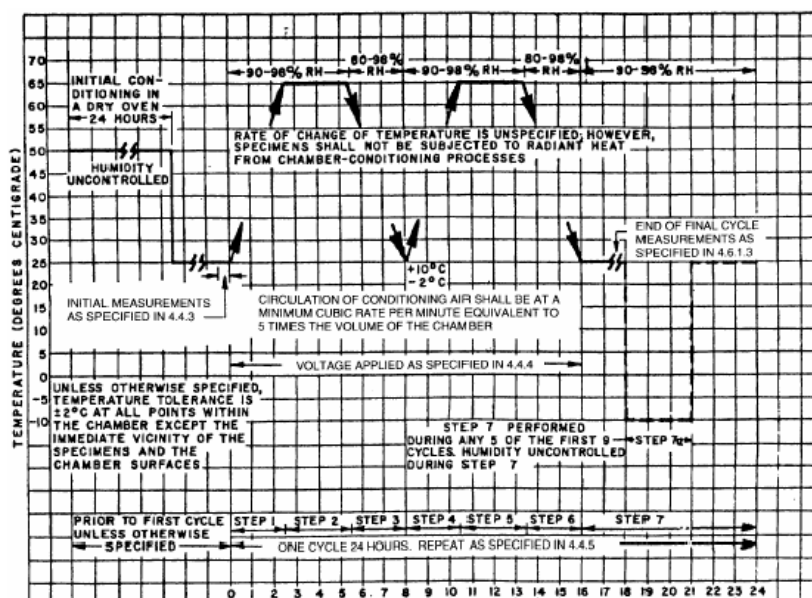
The test was performed in accordance with EIA-364-32E. Mated connectors were subjected to 5 thermal shock cycles. During each cycle temperature was varied from -55°C to $+105^{\circ}\text{C}$ for a duration of 30 minutes at each limit, and the transition time was 5 minutes maximum between extreme temperatures.

4-8 Humidity

The test was performed in accordance with EIA-364-31B. The mated connectors were subjected to temperature 40°C and 95% relative humidity for 96 hours. Upon completion of the test, samples shall pass the requirement of specific electrical test(s).

4-9 Temperature Humidity Cycling

The test was performed in accordance with EIA-364-31C, method IV. Specimens shall be subjected to 10 continuous cycles, each as show below, unless otherwise specified in the referencing document. This sub cycle shall be performed during any five of the first nine cycles. Specimens shall be condition in a dry oven at a temperature of 50°C for 24 hours. Prior to step 1 of the first cycle, the specified initial measurements shall be made at room ambient conditions, or as specified in the referencing document. Upon completion of step 6 of the final cycle, the specimens shall be removed from the chamber and conditioned at room ambient for a period of five hours, unless otherwise specified after that the required measurements shall be performed at room ambient conditions.



文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
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4-10 Temperature Life (Dry Heat)

Mated samples were exposed to 105°C temperature for 96 hours. Upon completion of the test, there shall be no evidence of physical damage, and samples shall pass the requirement of specific electrical test(s).

4-11 Cold Endurance

Test samples were exposed to temperature range of -40°C±2°C for 16 hours. Upon completion of the test, there shall be no evidence of physical damage, and samples shall pass the requirement of electrical test(s).

4-12 Salt Spray

Test samples were subjected to a fine mist of salt solution. The test was performed in accordance with EIA-364-26B. The salt solution was made of 5% salt and 95% distilled water by weight. Test samples were exposed to the mist of salt solution maintained at temperature 35°C, +1.1°C, -1.7°C, for 48 hours. After the exposure, the samples were washed or dipped in running water of temperature lower than 37.8°C, and then air dried at 38±3°C for 12 hours.

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999
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4-13 Sine-Sweep Vibration with electrical discontinuity

The test was performed in accordance with EIA-364-28E, table 1, test condition I. Mated samples were subjected to vibration test per axis. Test duration for each axis was 2 hours (total of 6 hours). The test current was 100 mA for all contacts, which were wired in series and attached to an electrical discontinuity monitor. Throughout the test, electrical discontinuity of 1 microsecond or longer shall not be allowed.

4-14 Mechanical Shock (Half-Sine with electrical discontinuity)

The test was performed in accordance with EIA-364-27B, table 1, test condition A. Mated samples were subjected to 6 shocks per axis (total of 18 shocks) complied with half-sine waveform which had a 50G peak level and a normal duration of 11 ms. The test current was 100 mA for all contacts, which were wired in series and attached to an electrical discontinuity monitor. Throughout the test, electrical discontinuity of 1 microsecond or longer shall not be allowed.

4-15 Resistance to Solder Temperature (SMT)

This test is performed in accordance with specified document no.SB-L7946 of Sony. Specimens shall be condition in a dry oven at a temperature of 105°C for 96 hours and a specific humidity test. Completion of the pre-condition test, test samples were subjected to the resistance-to-soldering-temperature test with the temperature profile shown in 'fig. 2'. Upon completion of the test, there shall be no evidence of physical damage.

4-16 Contact Retention Force

The contact retention force was the peak force measured while the contact of connector was pulled out from the insulator housing of the connector perpendicularly. Upon completion of the test, the contact retention force shall exceed 0.15 N.

4-17 Evaluation of Solder Joint

Test samples were subjected to a temperature cycling with a temperature from -40°C to +105°C for a duration of 15 minutes at each limit for 1000 cycles. After application of temperature cycle, robustness should be 50% or more of initial strength.

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999
		REV A

4-18 Solvent Resistance

The test was performed in accordance with EIA-364-11 by using the solvent of isopropyl alcohol for 90 seconds. Upon completion of the test, there shall be no cracking, crazing, pitting, or bleeding out of foreign matter of test samples. Also all the marking still be legible

4-19 Adhesion (Electrode Peeling Strength)

A static load of 10N is applied on the core of the component and in the axial direction and held for 10s. Upon completion of the test, there shall be no damage to the sample.

4-20 Pull Force Test

RF receptacle connector mated with $\phi 0.81$ mm RF plug cable and tilt cable by 0/30 degree and applied a pull force at the cable in toward arrowhead direction until the plug dislodged for mated position then recorded the peak force.

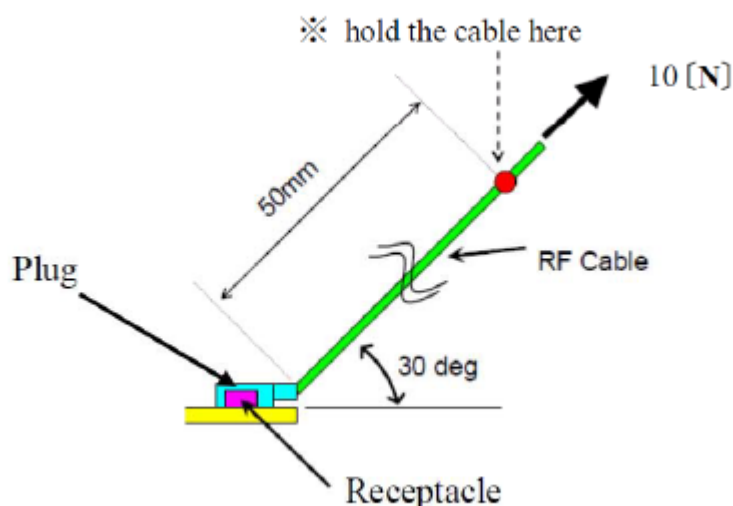


Fig.1 Cable Axial Pull Test

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

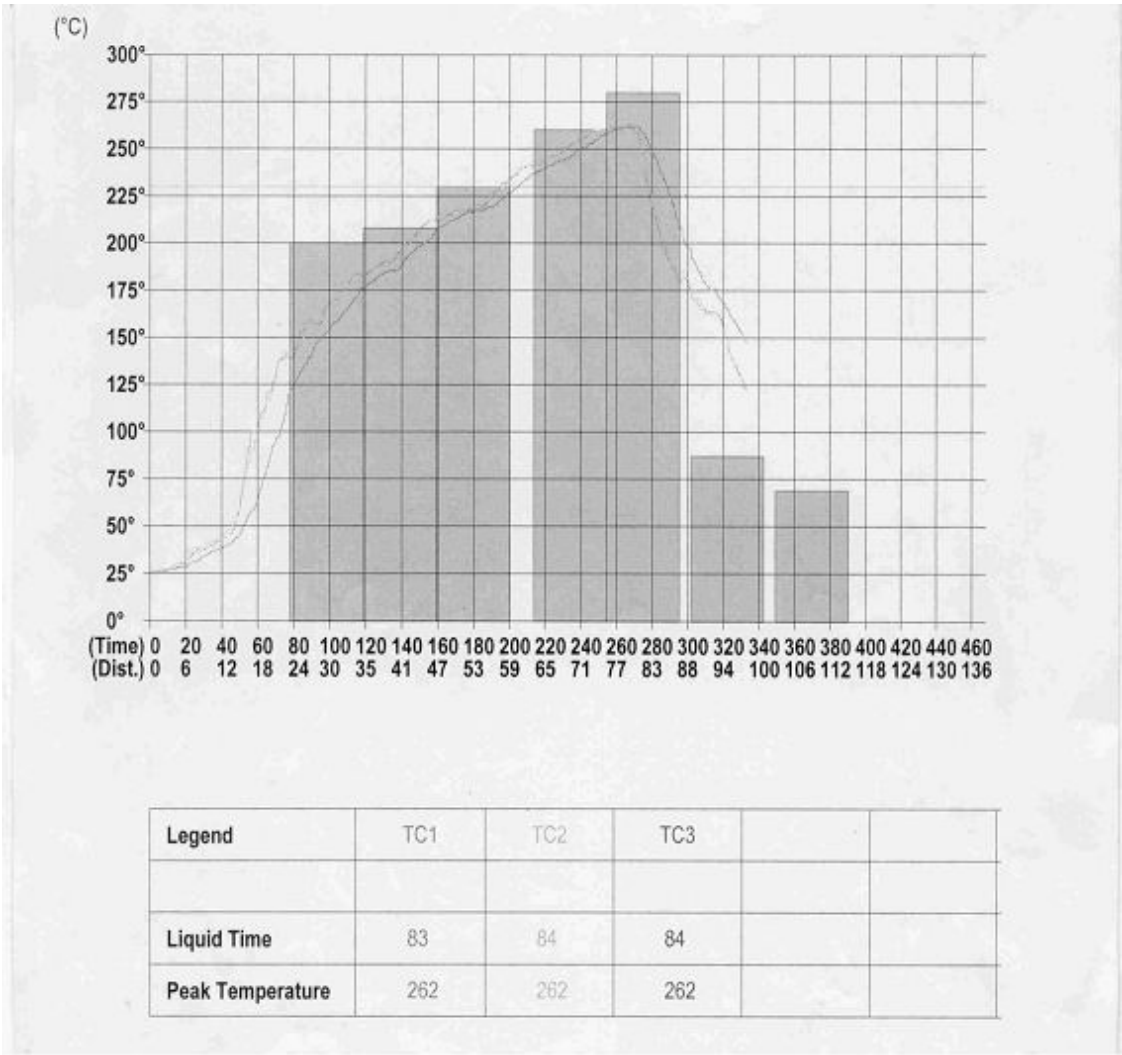


Fig.2 Temperature Profile of SMT Process

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999 REV A
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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS – continued

I. GROUP "A"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Mating/Unmating Force	Mating: 40N maximum. Unmating: 3~25N	Mating force	PASS
		MIN MAX AVG	
		7.35 14.78 11.85	
		Un-mating Force	
		MIN MAX AVG	
		7.45 11.07 9.45	
		Unit : N	
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		6.01 11.23 9.41	
		Ground	
		MIN MAX AVG	
		4.40 4.90 4.67	
		Unit: milliohm	
3. Durability	After 30 cycles of durability test, the samples shall pass the requirements of following test item(s).	See next item.	PASS
4. Mating/Unmating Force	Mating: 40N maximum. Unmating: 3~25N	Mating force	PASS
		MIN MAX AVG	
		3.26 6.05 5.33	
		Un-mating Force	
		MIN MAX AVG	
		3.92 7.01 5.76	
		Unit : N	
5. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		6.58 18.99 11.71	
		Ground	
		MIN MAX AVG	
		3.60 4.79 4.26	
		Unit: milliohm	

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999
		REV A

(5) THE SUMMARY OF QUALIFICATION TEST RESULTS – continued

II. GROUP "B"

TEST DESCRIPTION	REQUIREMENTS	RESULTS			RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.			PASS
2. Insulation Resistance	A 100 VDC is applied for 1 minute. Minimum insulation resistance requirement is 500 megaohms for test samples.	MIN	MAX	AVG	PASS
		8.17E+05	1.46E+06	1.07E+06	
		Unit: megaohm			
3. Dielectric Withstanding Voltage	A200 VAC is applied for 1minute. There shall be no evidence of arcing or breakdown.	Passed the specified requirement.			PASS
4. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center			PASS
		MIN	MAX	AVG	
		5.73	10.60	9.11	
		Ground			
		MIN	MAX	AVG	
		3.93	4.67	4.19	
Unit: milliohm					
5. Thermal Shock (Temperature Cycling)	Mated samples were exposed: high temperature:105℃ low temperature:-55℃ dwell time: 30 minutes. Cycle number: 5 times transition time: 5 minutes maximum. Upon completion of the test, there shall be no physical damage to the samples.	No physical damage to the samples.			PASS
6. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.			PASS

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

7. Low Level Contact Resistance	Center: 40 milliohms maximum.	Center			PASS
	Ground: 20 milliohms maximum.	MIN	MAX	AVG	
		6.27	12.75	9.51	
		Ground			
		MIN	MAX	AVG	
		3.96	4.80	4.43	
Unit: milliohm					
8. Humidity	Mated samples were exposed to temperature 40℃ and 95% R.H. for 96 hours. Upon completion of the test, samples shall pass the requirement of specific electrical test(s).	No physical damage to the samples.			PASS
9. Low Level Contact Resistance	Center: 40 milliohms maximum.	Center			PASS
	Ground: 20 milliohms maximum.	MIN	MAX	AVG	
		6.14	13.57	9.74	
		Ground			
		MIN	MAX	AVG	
		4.15	4.94	4.48	
Unit: milliohm					
10. Insulation Resistance	A 100 VDC is applied for 1 minute. Minimum insulation resistance requirement is 500 megaohms for test samples.	MIN	MAX	AVG	PASS
		5.21E+05	9.50E+05	7.28E+05	
		Unit: megaohm			
11. Dielectric Withstanding Voltage	A200 VAC is applied for 1minute. There shall be no evidence of arcing or breakdown.	Passed the specified requirement.			PASS
12. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.			PASS

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS – continued

III. GROUP "C"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		5.10 10.21 7.19	
		Ground	
		MIN MAX AVG	
3. Temperature Life (Dry Heat)	Mated samples were exposed to 105°C temperature for 96 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
4. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		10.56 14.71 11.79	
		Ground	
		MIN MAX AVG	
5. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS - continued**IV. GROUP "D"**

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		4.82 12.72 7.19	
		Ground	
		MIN MAX AVG 3.94 4.36 4.15	
3. Cold Endurance	Mated samples were exposed to -40°C temperature for 16 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
4. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		3.31 10.84 6.76	
		Ground	
		MIN MAX AVG 4.14 4.64 4.39	
5. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS - continued

V. GROUP "E"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		4.45 10.43 8.28	
		Ground	
		MIN MAX AVG	
3. Salt Spray	The salt solution was made of 5% salt and 95% distilled water by weight. Test samples were exposed for 48 hours. Upon completion of the test, the samples shall show no gross corrosion.	No gross corrosion to the samples.	PASS
4. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		5.92 10.59 8.53	
		Ground	
		MIN MAX AVG	
5. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

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		REV	A

(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued

VI. GROUP "G"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		5.02 8.64 7.04	
		Ground	
		MIN MAX AVG	
3. Durability	After 30 cycles of durability test, the samples shall pass the requirements of following test item(s).	See next item.	PASS
4. Temperature Humidity Cycling	Mated samples were exposed to temperature -10℃ / 65℃ and 95% R.H. for 240 hours. Upon completion of the test, samples shall pass the requirement of specific electrical test(s).	No physical damage to the samples.	PASS
5. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		4.79 14.77 8.96	
		Ground	
		MIN MAX AVG	
6. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued

VII. GROUP "H"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Low Level Contact Resistance	Center: 20 milliohms maximum. Ground: 10 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		10.09 15.83 13.31	
		Ground	
		MIN MAX AVG	
3. Sine-Sweep Vibration with electrical discontinuity	Throughout the sine-sweep vibration test of EIA-364-28E ; Test condition I. Test duration for each axis was 2 hours. There shall be no loosened parts or electrical discontinuity greater than 1 microsecond during the test.	No loosened parts or electrical discontinuity.	PASS
4. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center	PASS
		MIN MAX AVG	
		7.72 14.77 11.03	
		Ground	
		MIN MAX AVG	
5. Mechanical Shock (Half-Sine with electrical discontinuity)	Mated samples were subjected to 6 shocks per axis (total of 18 shocks) complied with half-sine waveform, which had a 50 G peak level and a normal duration of 11 ms. Throughout the test, electrical discontinuity of 1 microsecond or longer shall not be allowed.	No loosened parts or electrical discontinuity.	PASS

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6. Low Level Contact Resistance	Center: 40 milliohms maximum. Ground: 20 milliohms maximum.	Center			PASS
		MIN	MAX	AVG	
		6.95	12.91	10.17	
		Ground			
		MIN	MAX	AVG	
		4.01	4.62	4.32	
		Unit: milliohm			
7. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.			PASS

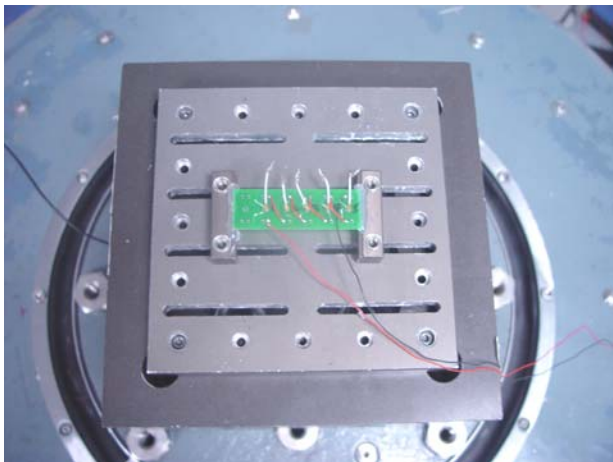


Fig.3 Z-AXIS

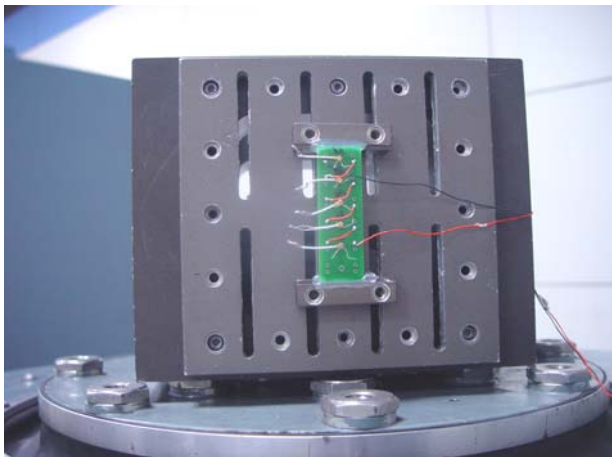


Fig.4 Y-AXIS



Fig.5 X-AXIS

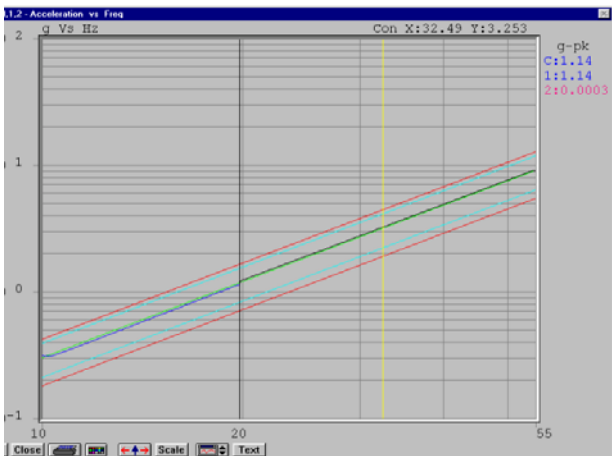


Fig.6 Test Condition of Vibration

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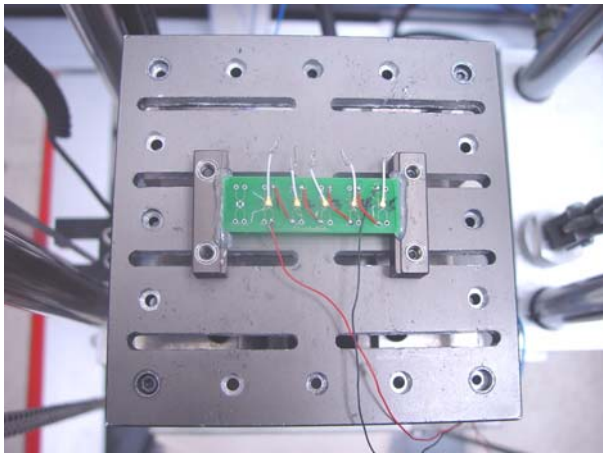


Fig.7 Mechanical Shock +Z axis

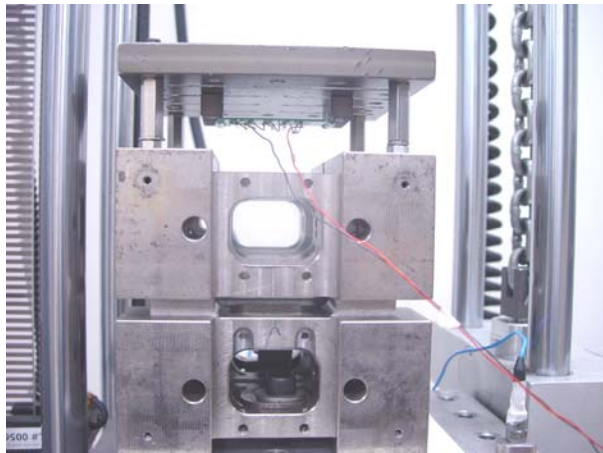


Fig.8 Mechanical Shock -Z axis

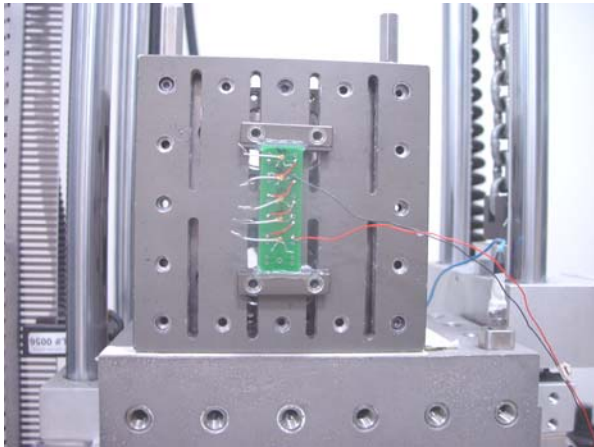


Fig.9 Mechanical Shock +Y axis

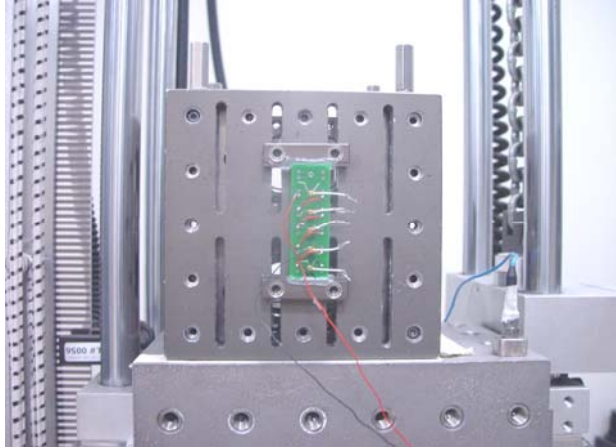


Fig.10 Mechanical Shock -Y axis

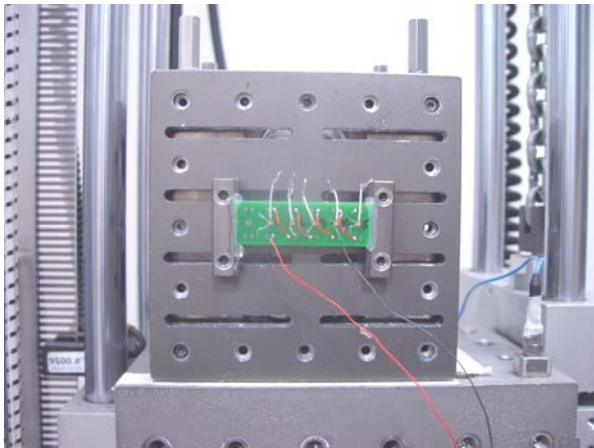


Fig.11 Mechanical Shock +X axis

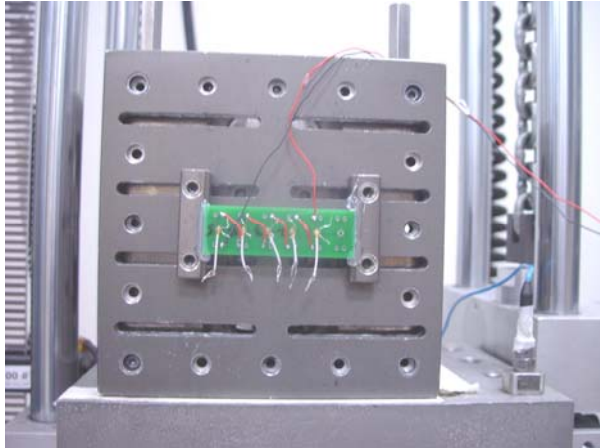


Fig.12 Mechanical Shock -X axis

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued**VIII. GROUP "I-1"**

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2-1 Precondition (temperature life)	Mated samples were exposed to 105°C temperature for 96 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
2-2 Precondition (1 st humidity-b)	Mated samples were exposed to temperature 30°C and 70% R.H. for 96 hours. Upon completion of the test, samples shall pass the requirement of specific electrical test(s).	No physical damage to the samples.	PASS
2-3 Resistance to Solder Temperature (see fig. 2)	There shall be no damage to the samples, such as looseness of termination or softening of insulator.	No physical damage to the samples.	PASS
2-4 Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2-5 Precondition (2 nd humidity-b)	Mated samples were exposed to temperature 30°C and 70% R.H. for 96 hours. Upon completion of the test, samples shall pass the requirement of specific electrical test(s).	No physical damage to the samples.	PASS
2-6 Resistance to Solder Temperature (see fig. 2)	There shall be no damage to the samples, such as looseness of termination or softening of insulator.	No physical damage to the samples.	PASS

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TEST DESCRIPTION	REQUIREMENTS	RESULTS			RATE
3. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.			PASS
4. Contact Retention Force	0.15N minimum.	MIN	MAX	AVG	PASS
		6.66	10.90	8.87	
		Unit : N			

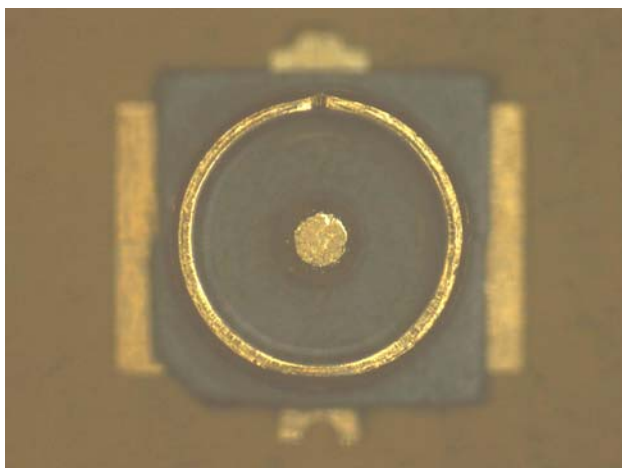


Fig.13 initial

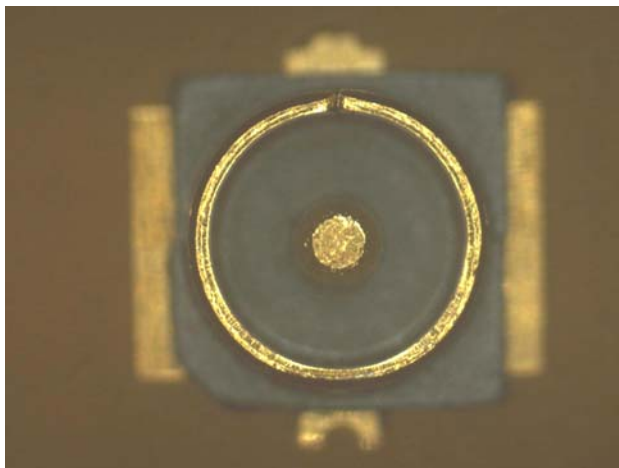


Fig.14 After Humidity

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued**IX. GROUP "I-2"**

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2-1 Precondition (temperature life)	Mated samples were exposed to 105°C temperature for 96 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
2-2 Precondition (1 st humidity-e)	Mated samples were exposed to temperature 85°C and 85% R.H. for 168 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
2-3 Resistance to Solder Temperature (SMT)	There shall be no damage to the samples, such as looseness of termination or softening of insulator.	No physical damage to the samples.	PASS
2-4 Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2-5 Precondition (2 nd humidity-e)	Mated samples were exposed to temperature 85°C and 65% R.H. for 24 hours. Upon completion of the test, samples shall pass the requirements of following test item(s).	No physical damage to the samples.	PASS
2-6 Resistance to Solder Temperature (SMT)	There shall be no damage to the samples, such as looseness of termination or softening of insulator.	No physical damage to the samples.	PASS

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3. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
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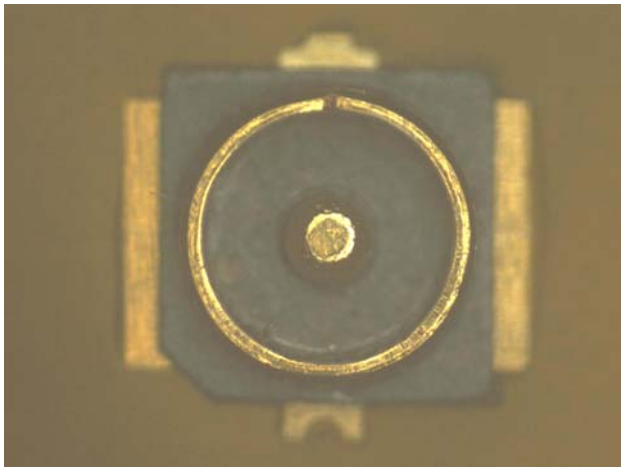


Fig.15 initial

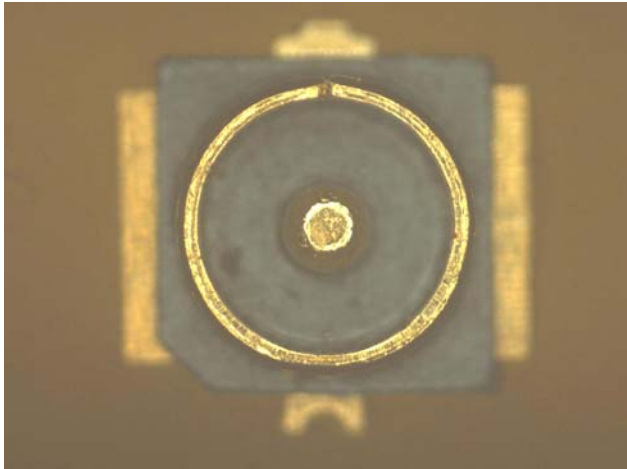


Fig.16 After Humidity

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued

X. GROUP "J"

TEST DESCRIPTION	REQUIREMENTS	RESULTS			RATE
1. Evaluation of Solder Joint	robustness should be 50% or more of initial strength	See next item.			_____
2-1 Peeling Force	Recorded	MIN	MAX	AVG	_____
		21.60	34.90	29.90	
		Unit: N			
2-2 Thermal Shock (Temperature Cycling)	Mated samples were exposed: high temperature:105℃ low temperature:-40℃ dwell time: 15 minutes. Cycle number: 1000 times transition time: 5 minutes maximum.	No physical damage to the samples.			PASS
2-3 Peeling Force	robustness should be 50% or more of initial strength	MIN	MAX	AVG	PASS
		21.40	36.10	28.58	
		Unit: N			



Fig.17 Peeling Force

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS- continued**XI. GROUP "K"**

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Solvent Resistance	No evidence of degradation or deformation under 10 X magnifications.	Passed the specified requirement.	PASS
3. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

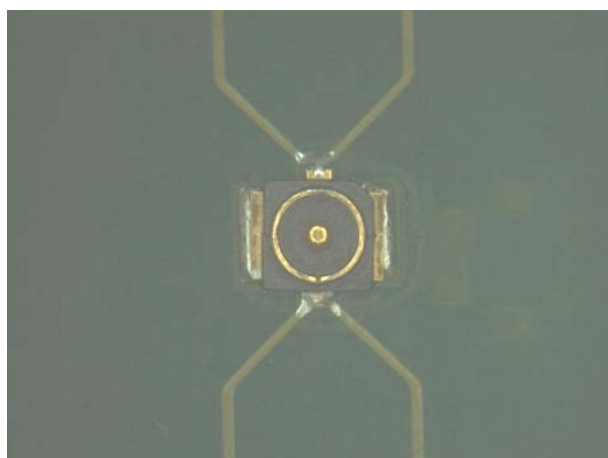


Fig.18 Initial

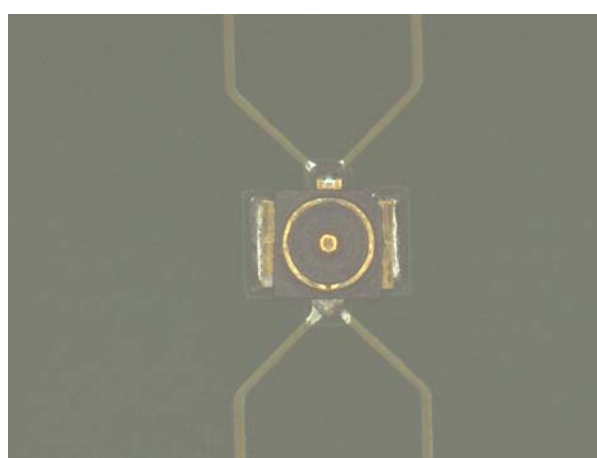


Fig.19 After Solvent Resistance

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS

XIII.GROUP "M"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Adhesion (Electrode Peeling Strength)	A static load of 10N is applied on the core of the component and in the axial direction and held for 10s. Upon completion of the test, There shall be no physical damage to the samples.	No physical damage to the samples.	PASS
3. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

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(5) THE SUMMARY OF QUALIFICATION TEST RESULTS

X III.GROUP "N"

TEST DESCRIPTION	REQUIREMENTS	RESULTS	RATE
1. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS
2. Pull Force Test	Recorded	Please refer to Table 1 & Table 2	_____
3. Visual Inspection	The test samples shall be free from defects such as damage, creep, deformation, blister and burrs that are detrimental to the functions and appearances of test samples.	Passed the specified requirement.	PASS

Table 1.Raw Data of Pull Force

SAMPLE NO.	PULL FORCE	RESULTS
I001 (30 Degree)	7.00	The wire was pulled out from the crimping position of test samples. Please refer to Fig. 21 Dislodged (Please refer to Fig. 20)
I002 (30 Degree)	5.87	
I003 (30 Degree)	5.27	
I004 (30 Degree)	4.71	
I005 (30 Degree)	5.86	
MIN	4.71	
MAX	7.00	
AVG	5.74	

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Table 2.Raw Data of Pull Force

SAMPLE NO.	PULL FORCE	RESULTS
I006 (0 Degree)	6.70	The wire was pulled out from the crimping position of test samples. Please refer to Fig. 22
I007 (0 Degree)	8.70	
I008 (0 Degree)	9.20	
I009 (0 Degree)	7.20	
I010 (0 Degree)	7.80	
MIN	6.70	
MAX	9.20	
AVG	7.92	

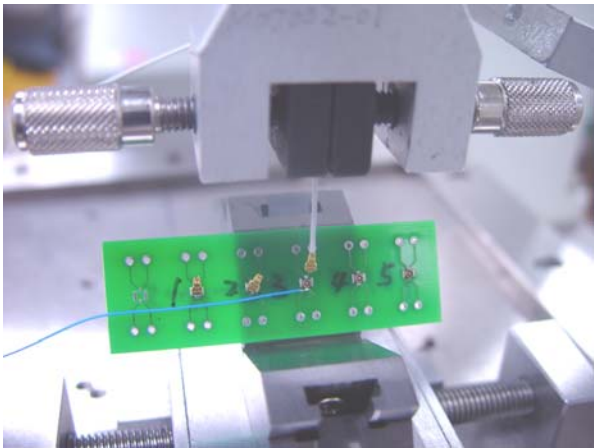


Fig.20. Dislodged

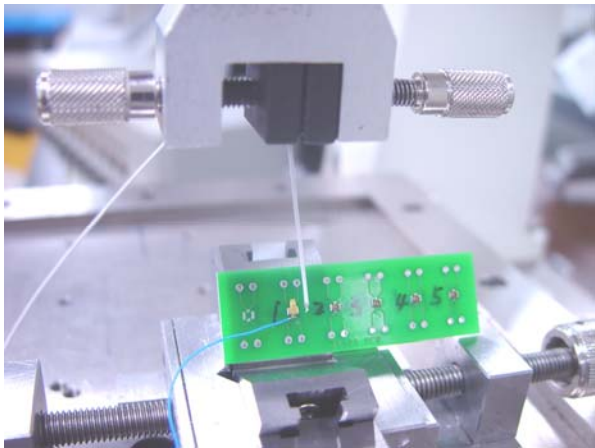


Fig.21. 30 Degree

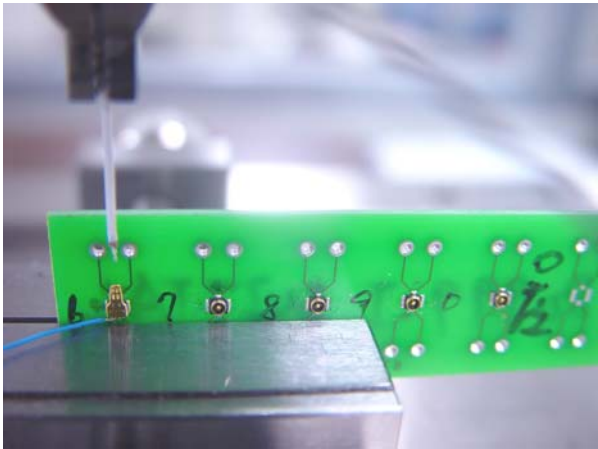


Fig.22. 0 Degree

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

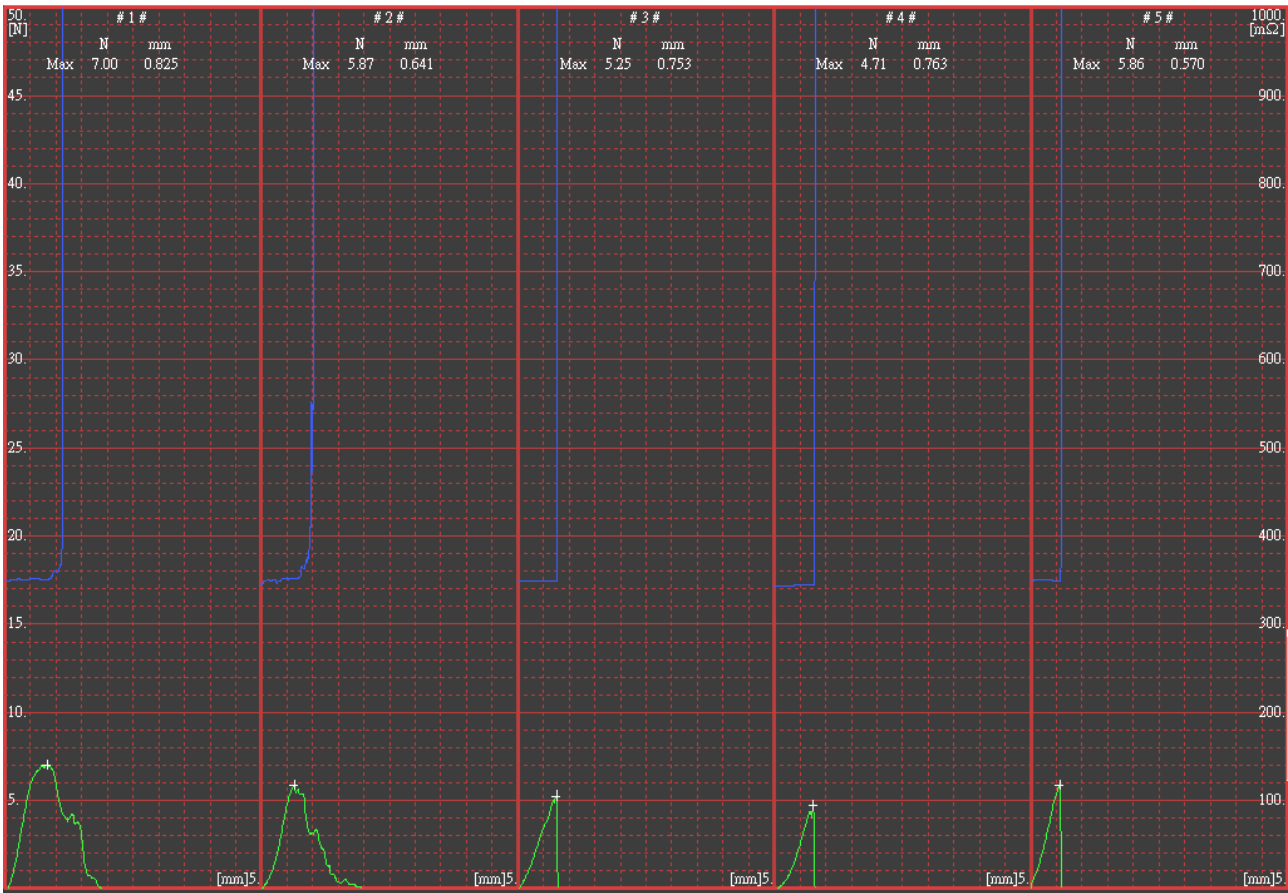


Fig.23 Pull Force Test (30 Degree) I001~I005

文件名稱 DOCUMENT NAME: TEST REPORT	主題 SUBJECT: RF receptacle connector (KK1201*-02-7*)	文件編號 DOCUMENT NO: MTQB1413MT80999	
		REV	A

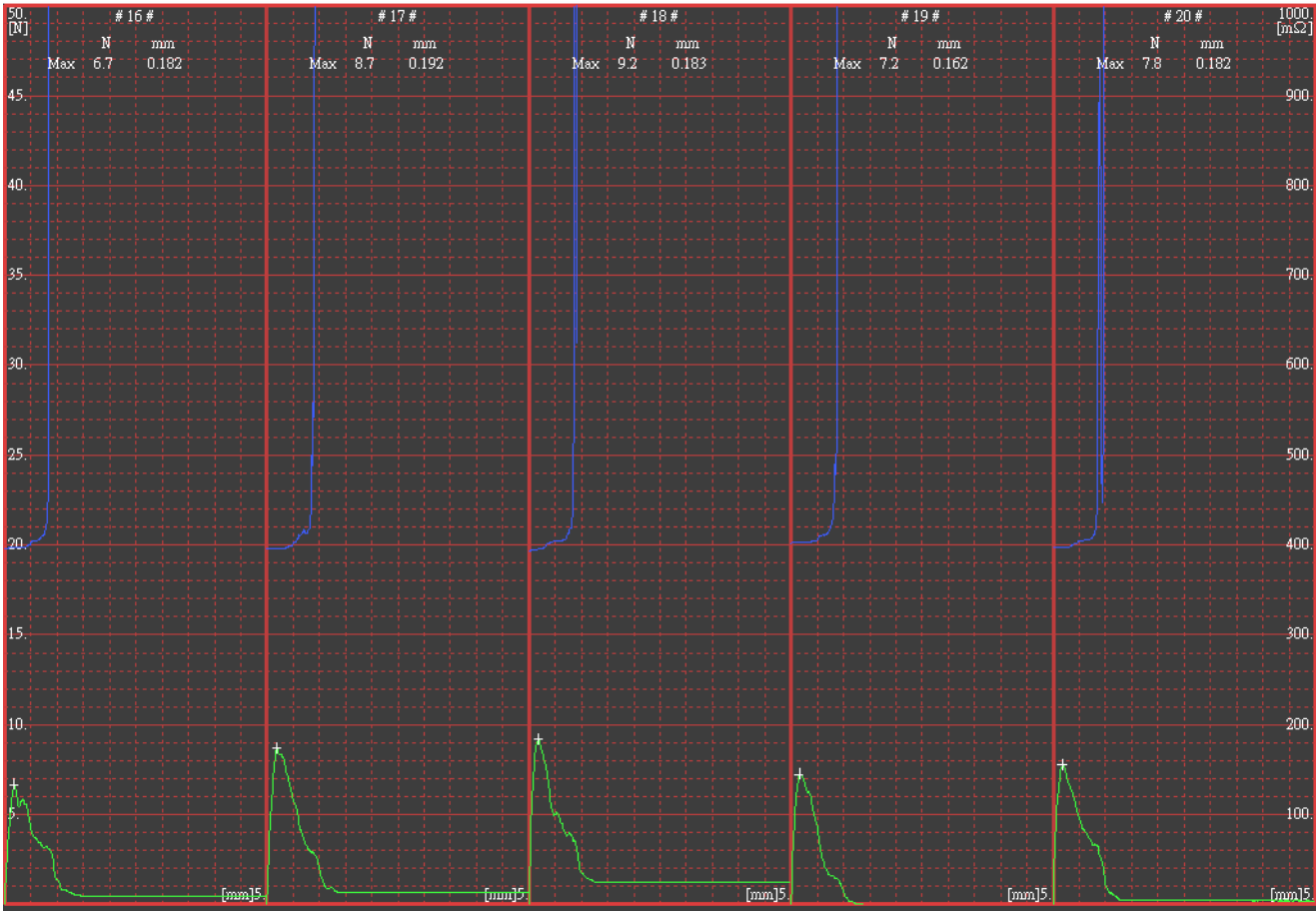


Fig.24 Pull Force Test (0 Degree) I006~I010