奇揚網科股份有限公司
Awind inc.

承　認　書
APPROVAL SHEET

奇　揚　網		供　應　商	
料　號	305000000003	名稱	BRITO(昀陽科技)
		料號	WF04PC-2I070-4
品　名	Dipole RF Antenna Assembly, 2.40GHz~2.50GHz, Black Assembly 70.0mm φ=1.13mm , Antenna PCB LxW=25.0mm x 5.0 mm	名稱	以下空白
		料號	
		名稱	
		料號	

申請單位		會簽單位		
申請人	單位主管		PM	
張立文	奇揚網科股份有限公司 研發部 2009 承認章		業務	
			RD-電子	
		V	RD-機構	
		V	品管-QA	周坤儀
			其他需會簽單位	

Brito 昀陽科技有限公司
BRITO TECHNOLOGY

SPECIFICATION FOR APPROVAL

CUSTOMER : 奇揚網科股份有限公司

PART NAME : Dipole RF Antenna Assembly

PART NO. : WF04PC-2I070-4 REVISION :

	MANUFACTURER			CUSTOMER		
	SIGNATURE			SIGNATURE		
APPROVED :	核 準	審 核	承 辦	核 準	審 核	承辦
BY :	BRENDA	TRACY	KINA			
DATE :	2009/05/25					

BRITO TECHNOLOGY
昀陽科技有限公司

台北縣樹林市大安路501號2樓
電話：+886-2-26865912
傳真：+886-2-26862937
統編：28918122
網址：www.brito.com.tw

承認書目錄

客戶：	奇揚網科股份有限公司
品名：	**Dipole RF Antenna Assembly**

TECHNICAL DATA

ELECTRICAL ROPERTIES

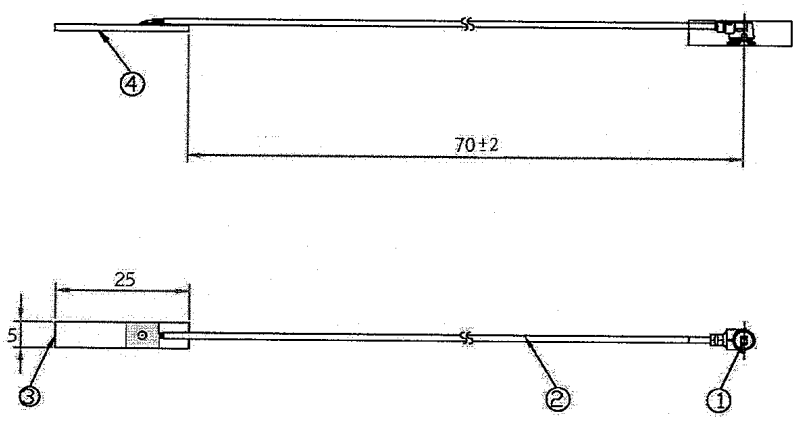
FREQUENCY RANGE	2.40 GHz ~ 2.50 GHz
IMPEDENCE	50 Ω
VSWR	≦2.0
TYPE	DIPOLE
RADIATION	Omni-Directional

MECHANICAL PROPERTIES

CONNECTOR	I-PEX
WIRE	OD1.13 或同級品
CABLE	BLACK
OPERATION TEMPERATURE	－20℃～＋ 60℃
STORAGE TEMPERATURE	－30℃～＋ 75℃

DRAW ID
CD

REVISION			
REV.	DESCRIPTION	APPROVAL	DATE
1.	TISSUE TAPE - 3M 9888T		09.05.18



ITEM		DESCRIPTION	Q'TY
4	TISSUE TAPE	3M 9888T	1PCS
3	PCB	FR-4 L:25*W:5.0*T:1.25mm , GP	1PCS
2	CABLE	ø1.13mm CABLE , BLACK	1PCS
1	CONN	I-PEX	1PCS

RoHS COMPLIANT

Brito 盼陽科技有限公司 BRITO TECHNOLOGY

CUST. P/N:		DRAW.:
TITTILE: DIPOLE RF ANTENNA ASSEMBLY		ENGIN.:
BRITO P/N:	WF04PC-2I070-4	CHECK:
UNITS: mm	DWG. NO.: RF-P-02	REV.: APPR.:

D C B A

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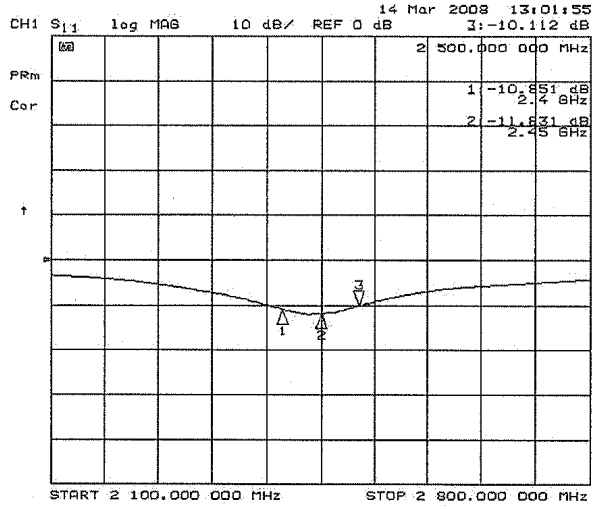
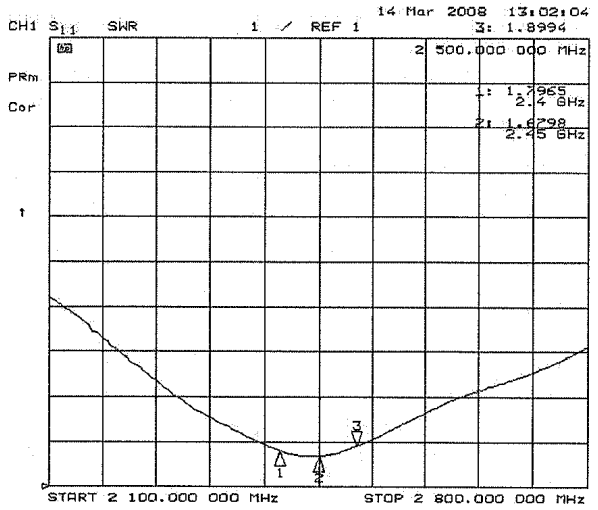
天線測報(空測)：

Ant1 Return Loss：



Ant1 Vswr：



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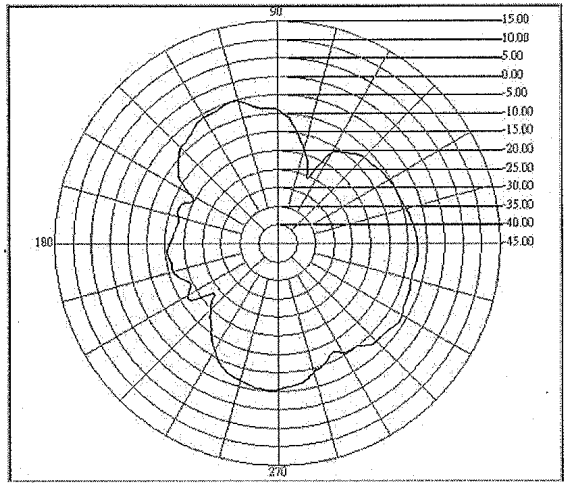
H-plane



Center freq.(MHz): 2400 Polarization : H Plane
Max gain(dBi):-4.90 Min gain(dBi):-25.99 Avg gain(dBi):-9.49

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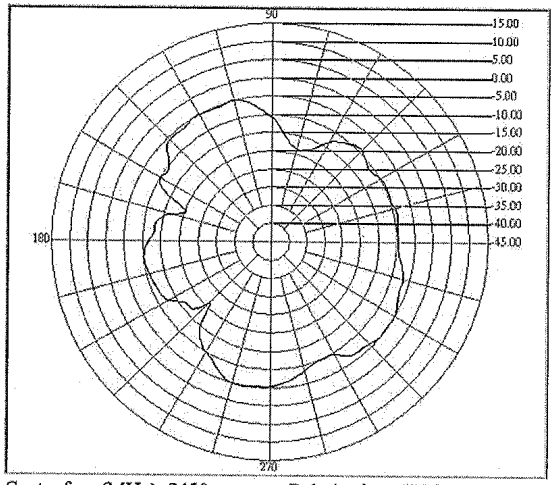
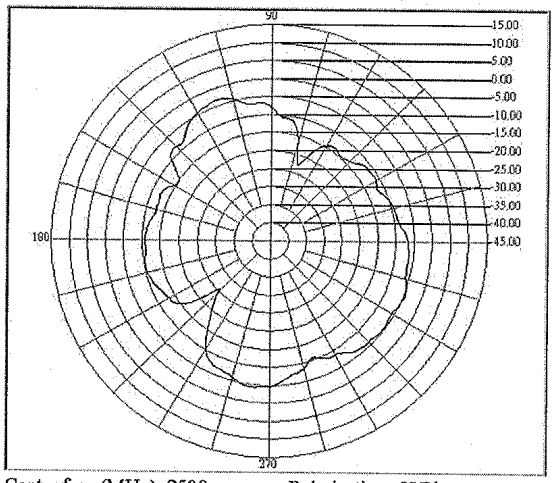


Center freq.(MHz): 2450 Polarization : H Plane
Max gain(dBi):-4.68 Min gain(dBi):-21.28 Avg gain(dBi):-8.42



Center freq.(MHz): 2500 Polarization : H Plane
Max gain(dBi):-3.31 Min gain(dBi):-25.74 Avg gain(dBi):-8.17

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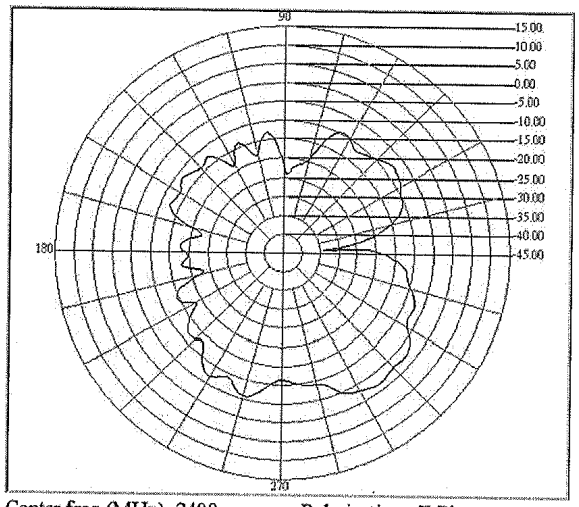
E-plane



Center freq.(MHz): 2400 Polarization : E Plane
Max gain(dBi):-1.70 Min gain(dBi):-34.19 Avg gain(dBi):-9.33

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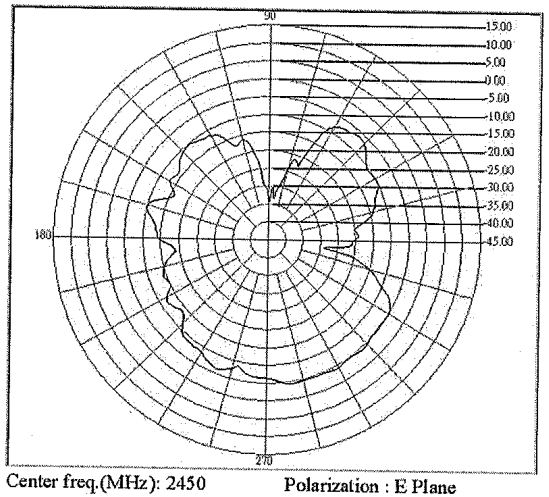
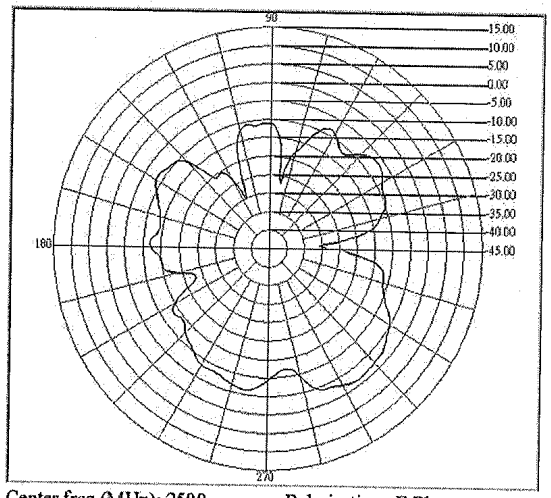
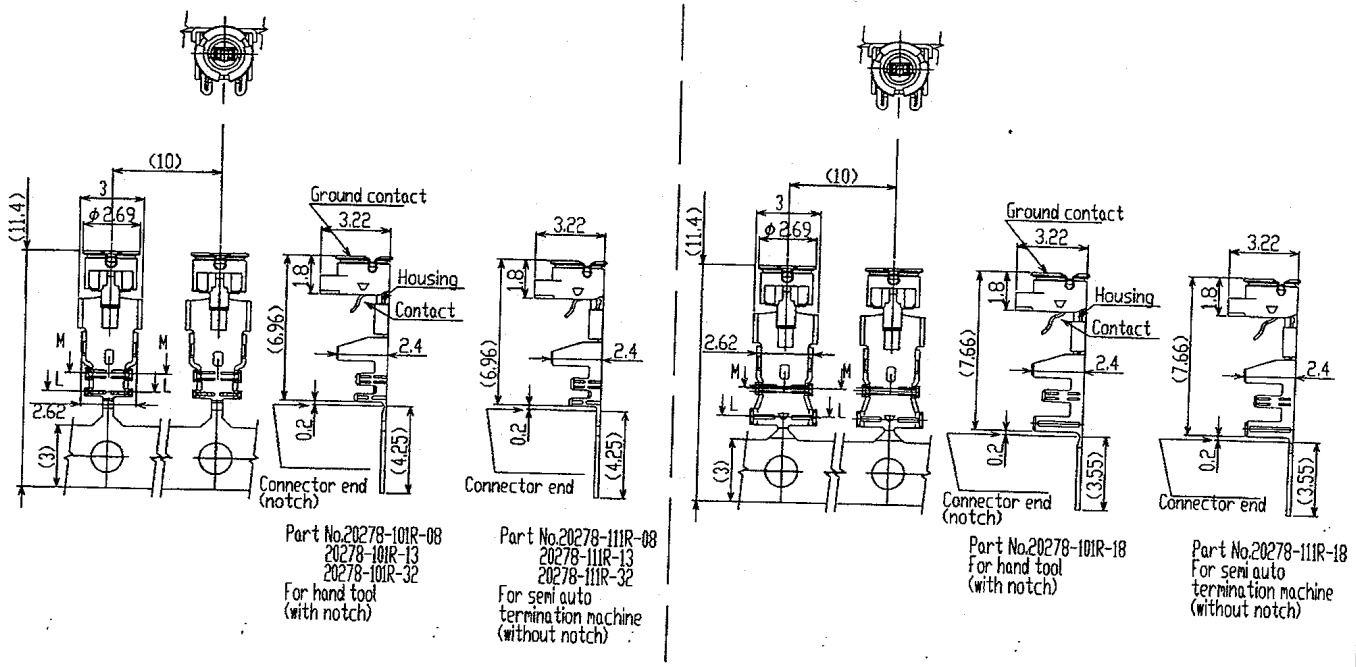


Center freq.(MHz): 2450 Polarization : E Plane
Max gain(dBi):-4.17 Min gain(dBi):-34.33 Avg gain(dBi):-9.21



Center freq.(MHz): 2500 Polarization : E Plane
Max gain(dBi):-1.44 Min gain(dBi):-30.76 Avg gain(dBi):-8.81

PART NO.
20278-**I1R-**



GENERAL TOLERANCE	
6 MAX.	±0.2
6 OVER MAX.30	±0.3
30 OVER MAX.120	±0.5
ANGLE	±2°

FORM REV.4

REV	ECN	BY	DATE	APP
11C	Z3041	K.O	Mar/24/03	K.K
10C	Z3014	K.O	JAN/31/03	K.K
9C	Z2239	K.O	NOV/15/02	K.K
8C	Z2224	K.O	OCT/17/02	K.K
7B	Z2180	K.O	JUL/29/02	K.K
6B	Z2146	K.O	JUN/24/02	K.K
5B	Z2117	A.H	MAY/17/02	K.K
4	Z2023	K.O	JAN/30/02	K.K
3	Z1256	K.O	NOV/14/01	K.K
2	Z1197	K.O	AUG/27/01	K.K
1	Z1118	K.O	JUN/26/01	K.K
0	Z1109	K.O	JUN/13/01	

REV.RECORD
SERIES No. 2814

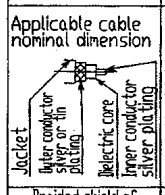
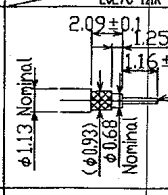
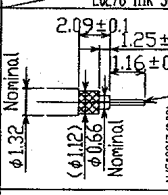
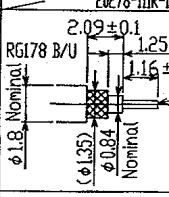
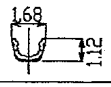
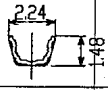
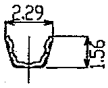
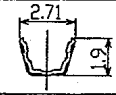
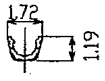
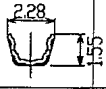
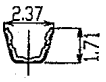
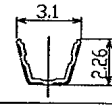
WAS T

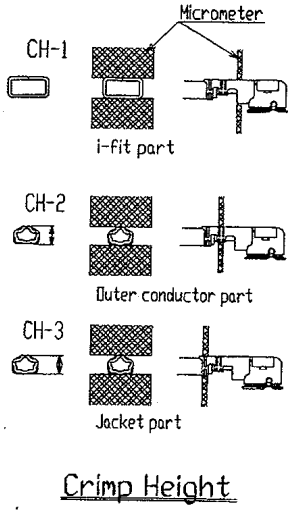
DESIGN'D BY	K.Onbayashi	DATE JUN/13/01
CHK'D BY		DATE
APP'D BY	K.Katabuchi	DATE JUN/13/01
CUSTOMER COPY		PROJECTION

I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN

TITLE: MHF series micro coaxial connector plug vertical (ground contact : gold plating)

SCALE	UNIT	DWG. No.	SHEET	REV
6/1	mm	20278	1/3	11C

Part No.	20278-101R-08 / 20278-111R-08	20278-101R-13 / 20278-111R-13	20278-101R-32 / 20278-111R-32	20278-101R-18 / 20278-111R-18
Applicable cable nominal dimension				
Braided shield of Outer conductor 外部導体の編組	Single / 1重編組	Single / 1重編組	Double / 2重編組	Single / 1重編組
P/N of hand Tool / P/N of semi auto termination machine	90187-008C / 90213-008C	90187-013C / 90213-013C	90187-032C / 90213-032C	90233-018 / 90232-018
Sect. M-M				
Sect. L-L				
Crimp Height CH-1	1.34~1.40	1.34~1.40	1.34~1.40	1.34~1.40
Crimp Height CH-2	0.76~0.84	1.06~1.14	1.20~1.30	1.41~1.49
Crimp Height CH-3	0.85~0.97	1.15~1.35	1.26~1.46	1.70~1.80



Crimp Height

GENERAL TOLERANCE	
6 MAX.	±0.2
6 OVER MAX.30	±0.3
30 OVER MAX.120	±0.5
ANGLE	±2°

FORM REV.4

WAS T

REVIECN	BY	DATE	APP
REV.RECORD			
SERIES No.	2814		

DESIGN'D BY DATE
CHK'D BY DATE
APP'D BY DATE
CUSTOMER COPY
PROJECTION

I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN

TITLE: MHF series micro coaxial connector plug vertical (ground contact : gold plating)

SCALE: -/- UNIT: m/m DWG. No. 20278 SHEET 2/3 REV. C

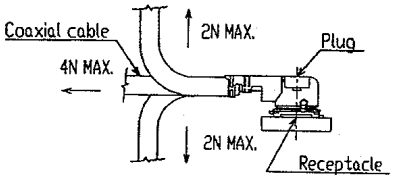
Notes

1.Material
(1) Housing : PBT , UL94V-0 , black
(2) Contact
phosphor bronze
gold plating
(3) Ground contact
phosphor bronze , gold plating
2.Packing : reel
3.Mating partner part No.
: 20279-001E-01

1. 材 料
(1) ハウジング : PBT, UL94V-0, 黒色
(2) コンタクト
:りん青銅
:金メッキ
(3) グランドコンタクト
:りん青銅, 金メッキ
2. 梱包 : リール
3. かん合相手 part No.
: 20279-001E-01

4. Permissible load of cable at mating

コネクタかん合後のケーブルに対する荷重

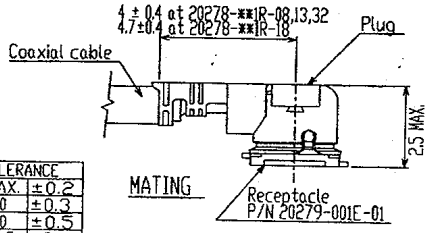


5. Suggestions for mating & unmating operation.

5-1 Mating.
Please mate the connector straightly to vertical direction as much as possible, adjusting the mating axis of plug and receptacle.
As excessive slant angle mating may break the connector , please don't do it.

5. コネクタかん合時および抜去時の注意

5-1 コネクタ挿入時
PlugとReceptacleのかん合軸を合わせ、できるだけ垂直に挿入して下さい。
極端な斜め挿入は行わないで下さい。
コネクタ破損の原因となりますので、過度なこじり挿抜は行わないで下さい。

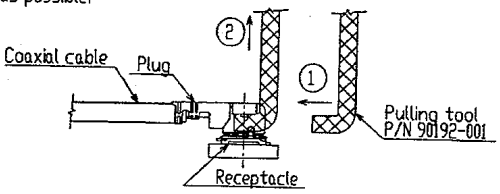


5-2 Unmating.

(1) In case of unmating by pulling tool.
Please use the pulling tool as the following drawing, and please pull plug to vertical direction as directly as possible.

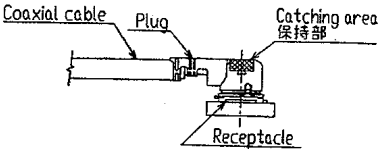
5-2 コネクタ抜去時

(1) 抜去ジグを用いる場合
下図のようにできるだけ垂直に引き抜いて下さい。



(2) In case of unmating directly by hand
Please catch the catching area of plug , and please pull plug to vertical direction as directly as possible.

(2) 手で直接引き抜く場合
下図の保持部をつかみ, できるだけ垂直に引き抜いて下さい。



GENERAL TOLERANCE	
6 MAX.	±0.2
6 OVER MAX.30	±0.3
30 OVER MAX.120	±0.5
ANGLE	±2°

FORM REV.4

REVISION	BY	DATE	APP
REV.RECORD			
SERIES No.	2814		

DESIGN'D BY DATE
CHK'D BY DATE
APP'D BY DATE
CUSTOMER COPY
PROJECTION
SCALE -/- UNIT mm
DWG. No. 20278
SHEET 3/3 REV. 11C

I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN

TITLE MHF series micro coaxial connector plug vertical (ground contact : gold plating)

WAST

SGS REPORT

SUBJECT: Survey for Environmental-Related Substances

I-PEX Co.,Ltd.Japan

This ia applied for the following products:

I-PEX Product Name	I-PEX Part Number
MHF PLUG Connector	20278-111R-08 20278-111R-13 20278-111R-32 20278-111R-18 20351-111R-37

Attachment:

Survey Form on Environmental Impact Substances Contained in Parts and Materials

SGS TEST REPORT for MHF PLUG connector

Please refer to the attached SGS REPORT.

Component name	SGS Report No.
HOUSING	CE_2008_31209
CONTACT	CE_2008_31217
GROUND CONTACT	CE_2008_31216

Remark:* The SGS Test Report can be applied to a component.

Test Report

No. : CE/2008/31209 Date : 2008/03/10 Page : 1 of 10

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description	:	MHF PLUG HOUSING
Style/Item No.	:	1844-013
Sample Receiving Date	:	2008/03/05
Testing Period	:	2008/03/05 TO 2008/03/10

==========

Test Result(s) : Please refer to next page(s).

Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

SGS TAIWAN LIMITED | NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
t(886-2) 22993939 f(886-2) 2299-3237 www.sgs.com.tw

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Result(s)

PART NAME NO.1 : WHITE PLASTIC

Test Item (s):	Unit	Method	MDL	Result No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	20
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.
Antimony (Sb)	mg/kg	With reference to US EPA Method 3050B for Antimony Content. Analysis was performed by ICP-AES.	2	42400
Antimony trioxide (Sb_2O_3)	mg/kg	With reference to US EPA Method 3050B for Antimony Content. Analysis was performed by ICP-AES. (See Note 7)	2.4	50757
PFOA	mg/kg	With reference to US EPA 3540C : 1996 method for PFOA Content. Analysis was performed by LC/MS.	1	n.d.

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Item (s):	Unit	Method	MDL	Result No.1
PFOS	mg/kg	With reference to US EPA 3540C : 1996 method for PFOS Content. Analysis was performed by LC/MS.	1	n.d.
Sum of PBBs	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of PBB and PBDE by GC/MS.	-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl			5	n.d.
Pentabromobiphenyl			5	n.d.
Hexabromobiphenyl			5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl			5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.
Sum of PBDEs (Mono to Nona) (Note 4)			-	n.d.
Monobromobiphenyl ether			5	n.d.
Dibromobiphenyl ether			5	n.d.
Tribromobiphenyl ether			5	n.d.
Tetrabromobiphenyl ether			5	n.d.
Pentabromobiphenyl ether			5	n.d.
Hexabromobiphenyl ether			5	n.d.
Heptabromobiphenyl ether			5	n.d.
Octabromobiphenyl ether			5	n.d.
Nonabromobiphenyl ether			5	n.d.
Decabromobiphenyl ether			5	n.d.
Sum of PBDEs (Mono to Deca)			-	n.d.

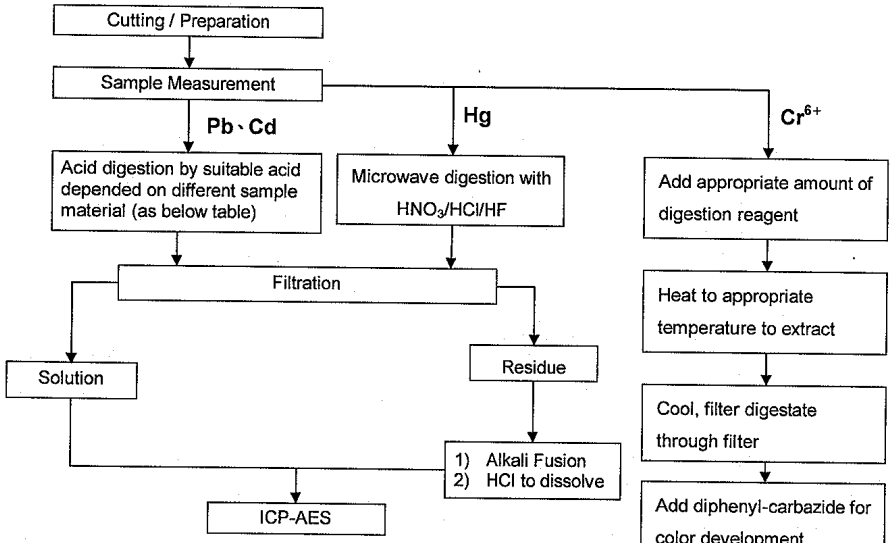
I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Item (s):	Unit	Method	MDL	Result No.1
Halogen	---	With reference to BS EN 14582:2007. Analysis was performed by IC method for F , Cl , Br, I content.	---	---
Halogen-Fluorine (F) (CAS No.: 007782-41-4)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Fluorine content.	50	1460
Halogen-Chlorine (Cl) (CAS No.: 007782-50-5)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Chlorine content.	50	n.d.
Halogen-Bromine (Br) (CAS No.: 007726-95-6)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Bromine content.	50	41400
Halogen-Iodine (I) (CAS No.: 007553-56-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC method for Iodine content.	50	n.d.

Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. According to 2005/717/EC DecaBDE is exempt.
5. "---" = Not Conducted
6. " - " = Not Regulated
7. Antimony trioxide(Sb_2O_3): Calculate from antimony content multiply 1.197 factor.

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

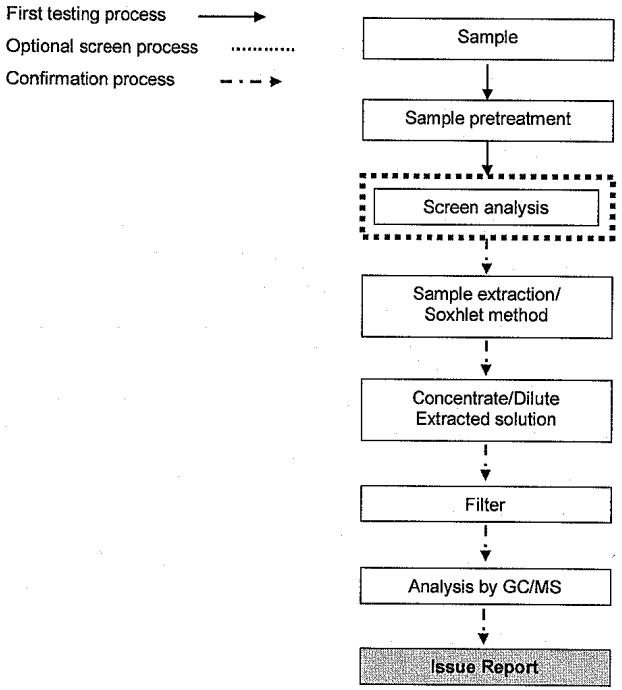
1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr^{6+} test method excluded)
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung



Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

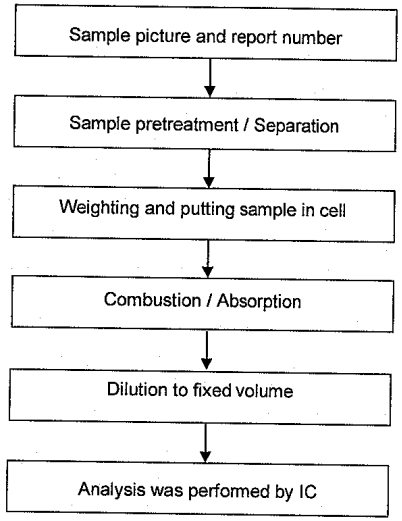
I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

PBB/PBDE analytical FLOW CHART



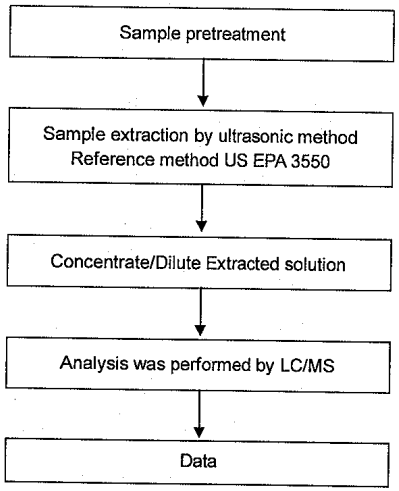
I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Analytical flow chart of halogen content



I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

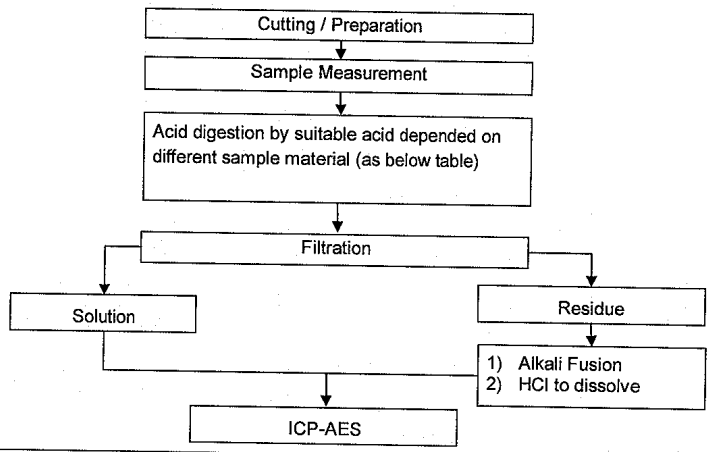
Analytical flow chart of PFOA/PFOS content



I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

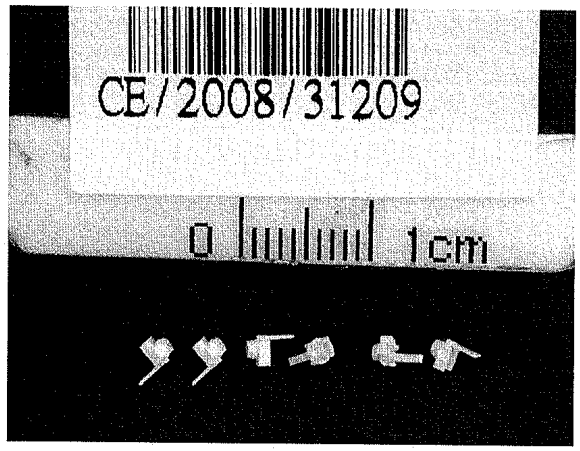
1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung

Flow Chart of Digestion for elements analysis



Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN



** End of Report **

Test Report

No. : CE/2008/31217 Date : 2008/03/10 Page : 1 of 5

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description	:	MHF PLUG CONTACT
Style/Item No.	:	1845-0**
Sample Receiving Date	:	2008/03/05
Testing Period	:	2008/03/05 TO 2008/03/10

==========

Test Result(s) : Please refer to next page(s).

Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Result(s)

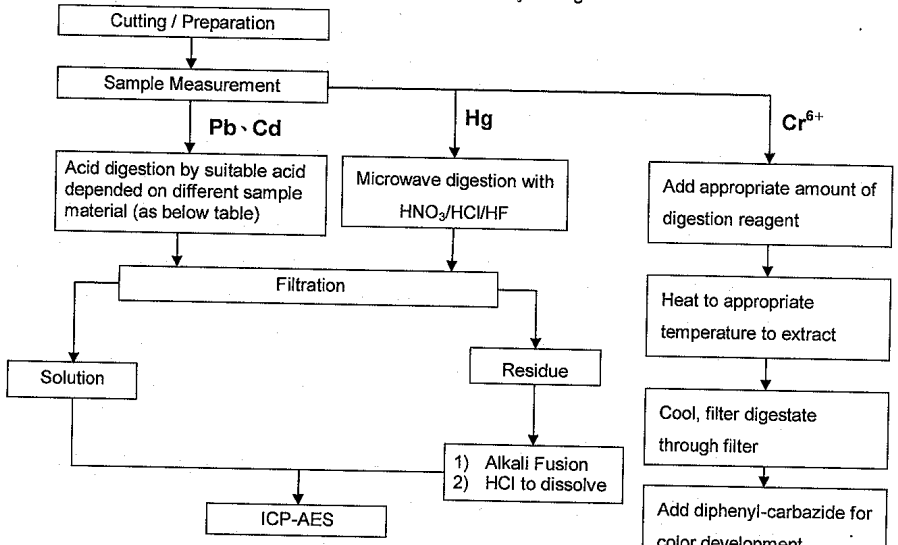
PART NAME NO.1 : GOLDEN COLORED METAL (INCLUDING THE PLATING LAYER)

Test Item (s):	Unit	Method	MDL	Result No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	20
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2	n.d.
Gold (Au)	mg/kg	With reference to US EPA Method 3050B for Gold Content. Analysis was performed by ICP-AES.	2	6390
Nickel (Ni)	mg/kg	With reference to US EPA Method 3050B for Nickel Content. Analysis was performed by ICP-AES.	2	47400

Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr6+ test method excluded)
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung

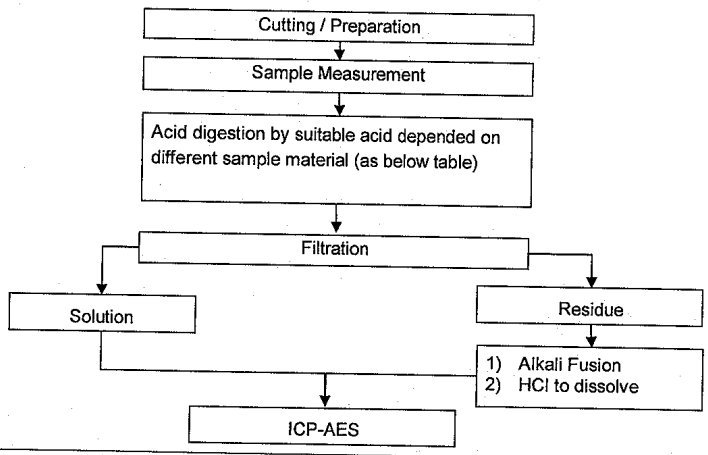


Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

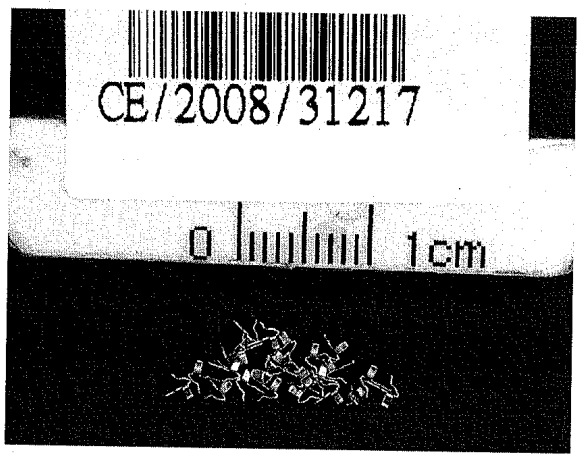
1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung

Flow Chart of Digestion for elements analysis



Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN



** End of Report **

Test Report

No. : CE/2008/31216 Date : 2008/03/10 Page : 1 of 5

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description	:	MHF PLUG GROUND CONTACT
Style/Item No.	:	1846-0**
Sample Receiving Date	:	2008/03/05
Testing Period	:	2008/03/05 TO 2008/03/10

==========

Test Result(s) : Please refer to next page(s).

Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

Test Result(s)

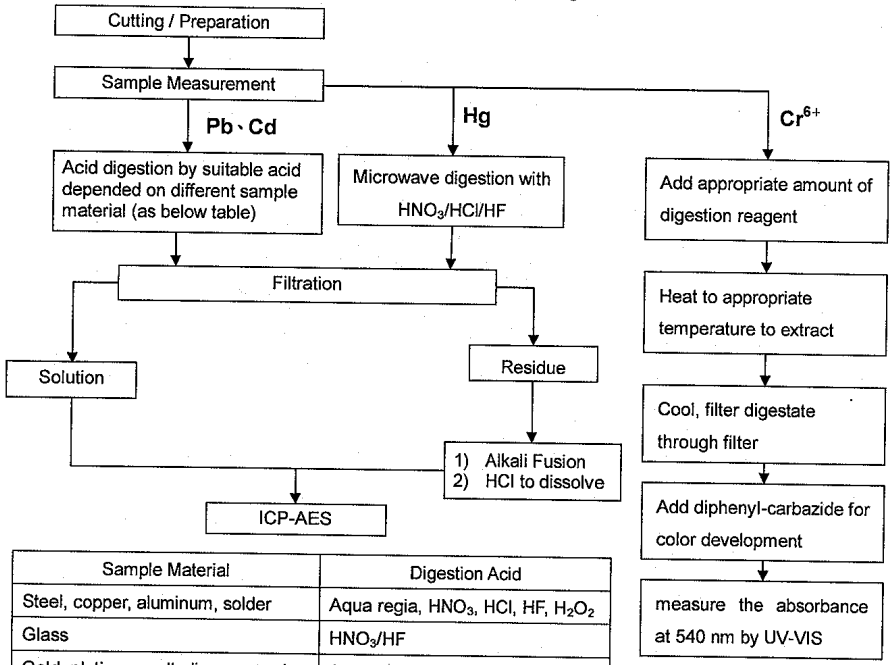
PART NAME NO.1 : GOLDEN COLORED METAL (INCLUDING THE PLATING LAYER)

Test Item (s):	Unit	Method	MDL	Result No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	17
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2	n.d.
Gold (Au)	mg/kg	With reference to US EPA Method 3050B for Gold Content. Analysis was performed by ICP-AES.	2	2070
Nickel (Ni)	mg/kg	With reference to US EPA Method 3050B for Nickel Content. Analysis was performed by ICP-AES.	2	20600

Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr6+ test method excluded)
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung

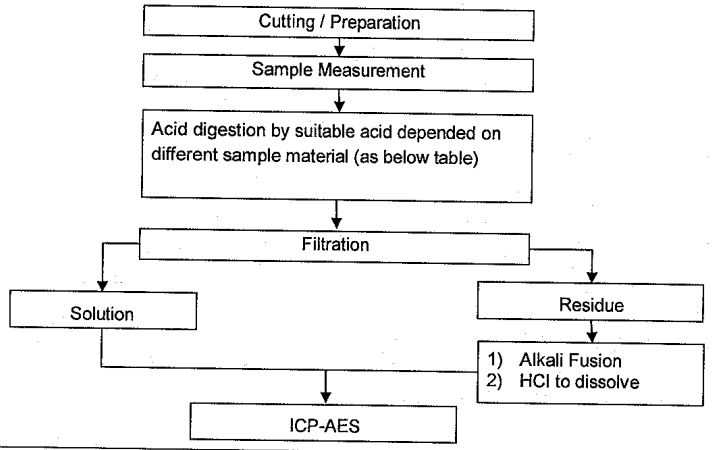


Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN

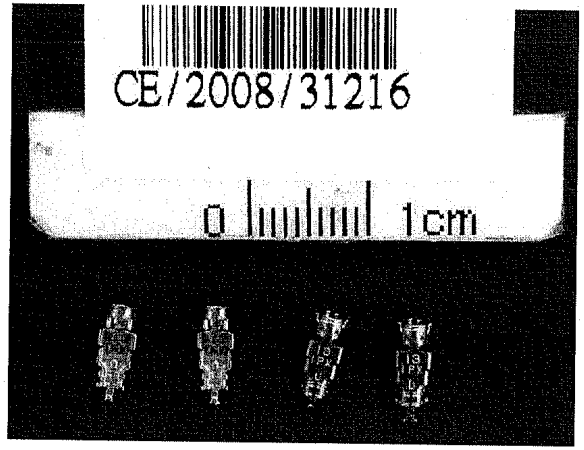
1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Chenyu Kung

Flow Chart of Digestion for elements analysis



Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-0013 JAPAN



** End of Report **

SPECIFICATION FOR APPROVAL

DOCUMENT: A3132TS001

STYLE : COAXIAL CABLE
105℃ 30V

SIZE: 32AWG×1C
BRAID : TS

RECOGNIZED: UL 1979

WONDERFUL HI-TECH CO.,LTD.

OFFICE : 72WU KONG 6TH ROAD,
WU KU IND. DISTRICT
TAIPEI HSIEN,TAIWAN

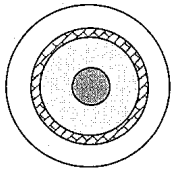
TEL : (02)22988033
FAX : (02)22988031-2

FACTORY : 17 PEI YUAN ROAD,
CHUNG-LI IND. PARK
TAIWAN, R.O.C.

TEL : (03)4527777
FAX : (03)4517214

WONDERFUL HI-TECH CO., LTD.
SPECIFICATION

STYLE	105℃ 30V UL 1979	DOCUMENT NO : A3132TS001
SIZE	32AWG	ESTABLISHED DATE: 2007/11/07
STANDARD :		

Conductor	Size	AWG	32
	Material	----	Silver Cover Copper
	Conductors No.	----	7
	Conductors Size	mm	0.080
	O.D.	mm	0.24
Insulation	Average Thickness	mm	0.22
	Diameter	mm	0.68 ± 0.02
	Material	----	FEP
	Color	----	Clear
Braid	Material	----	Tinned Copper
	Construction	mm	16 / 4 / 0.050
	Coverage	%	90
Jacket	Average Thickness	mm	0.13
	Diameter	mm	1.13 ± 0.05
	Material	----	FEP
	Color	----	According to custom
Marking	Non		
Drawing			

MAKER : H. C. KUO CONFIRM : C.Y. Chen APPROVAL : W.J. Wang

WONDERFUL HI-TECH CO., LTD.
SPECIFICATION

Electrical & Physical Properties						
Item			32AWG			
Rating Temp Voltage			105℃ 30V			
Conductor Resistance			545 OHM/KM/20℃ MAX.			
Insulation Resistance			1000 MEGA OHM-KM MIN.			
Dielectric Strength			AC 500 V/Minute			
Spark Test			2.5 KV			
Insulation	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / mm²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN. 75%(168HRS×232℃)			
		Elongation	UNAGED MIN. 75%(168HRS×232℃)			
Jacket	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / mm²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN.75%(168HRS×232℃)			
		Elongation	UNAGED MIN.75%(168HRS×232℃)			
Nom. Impedance			50 ± 3 Ohms			
Nom. Capacitance			96 ± 3 pF/m			
Nom. Vel. of Prop.			69%			
VSWR Test (0 – 6 GHZ)			Max 1.3			
Flame Test			VW-1 OK			
Attenuation (dB/1m)	2.0GHZ		2.4GHZ	2.5GHZ	5.0GHZ	6.0 GHZ
	2.80		3.10	3.15	4.85	5.20

MAKER : H. C. KUO CONFIRM : C.Y. Chen APPROVAL : W.J. Wang

SGS

測試報告
Test Report

號碼(No.) : CE/2008/73379 日期(Date) : 2008/07/16 頁數(Page) : 1 of 4

萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
桃園縣中壢市北園路17號
NO. 17, PEI-YUAN ROAD, CHUNG-LI IND., PARK, TAOYUAN TAIWAN, R. O. C.

以下測試樣品係由客户送樣，且由客户聲稱並經客户確認如下 (The following samples was/were submitted and identified by/on behalf of the client as) :

樣品名稱(Sample Description)	:	RF COAXIAL CABLE, RG-178B/U, RG-179/U, RG-316/U, MINI 0.8MM & 1.13MM & 1.32MM & 1.37MM & 1.48MM, RF405A
樣品型號(Style/Item No.)	:	SILVER-COATED COPPER, TINNED COPPER
收件日期(Sample Receiving Date)	:	2008/07/10
測試期間(Testing Period)	:	2008/07/10 TO 2008/07/16

==========

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).

Shin-Jyh Chen
Shinjyh Chen / Asst. Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司
No. 33 Wu Chyuan Road, Wuku Industrial Zone, Taipei County, Taiwan / 台北縣五股工業區五權路33號
t (886-2) 2299-3939 f (886-2) 2299-3237 www.tw.sgs.com
Member of the SGS Group

SGS

測試報告
Test Report

萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
桃園縣中壢市北園路17號
NO. 17, PEI-YUAN ROAD, CHUNG-LI IND., PARK, TAOYUAN TAIWAN, R. O. C.

測試結果(Test Results)

測試部位(PART NAME) NO.1 : 銀色金屬（含鍍層）(SILVER COLORED METAL (INCLUDING THE PLATING LAYER))
測試部位(PART NAME) NO.2 : 鐵灰色金屬（含鍍層）(IRON-GRAY METAL (INCLUDING THE PLATING LAYER))

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測極限值 (MDL)	結果 (Result)	
				NO.1	NO.2
全氟辛磺酸 / PFOS	mg/kg	參考US EPA 3540C : 1996方法，以液相層析質譜儀檢測全氟辛磺酸含量. / With reference to US EPA 3540C : 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.	n.d.

備註(Note)：
1. mg/kg = ppm
2. n.d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量.
(The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
桃園縣中壢市北園路17號
NO. 17, PEI-YUAN ROAD, CHUNG-LI IND., PARK, TAOYUAN TAIWAN, R. O. C.

全氟辛酸(鹽)/全氟辛磺酸分析流程圖 /
Analytical flow chart of PFOA/PFOS content

1) 測試人員：劉家瑗 / Name of the person who made measurement: Carrie Liu
2) 測試負責人：陳新智 / Name of the person in charge of measurement: Shinjyh Chen