

承 認 書
SPECIFICATION FOR APPROVAL

客 戶
CUSTOMER

環隆電氣股份有限公司

日 期
DATE

2005 / 09 / 26

品 名
DESCRIPTION

Mini 1.13 Cable Assembly (L203.2)
With RP-SMA Bulkhead Jack & MHF

客 戶 料 號
CUSTOMER P/N

54-200340-02

成 品 編 號
Part NO.

MFW1341A1



萬旭電業股份有限公司

WANSHIH ELECTRONIC CO., LTD.

台北縣五股鄉五工六路 72 號 3 樓

3F 72 WU KONG 6TH RD., WU KU INDUSTRIAL DISTRICT

TAIPEI HSIEN, TAIWAN, R.O.C.

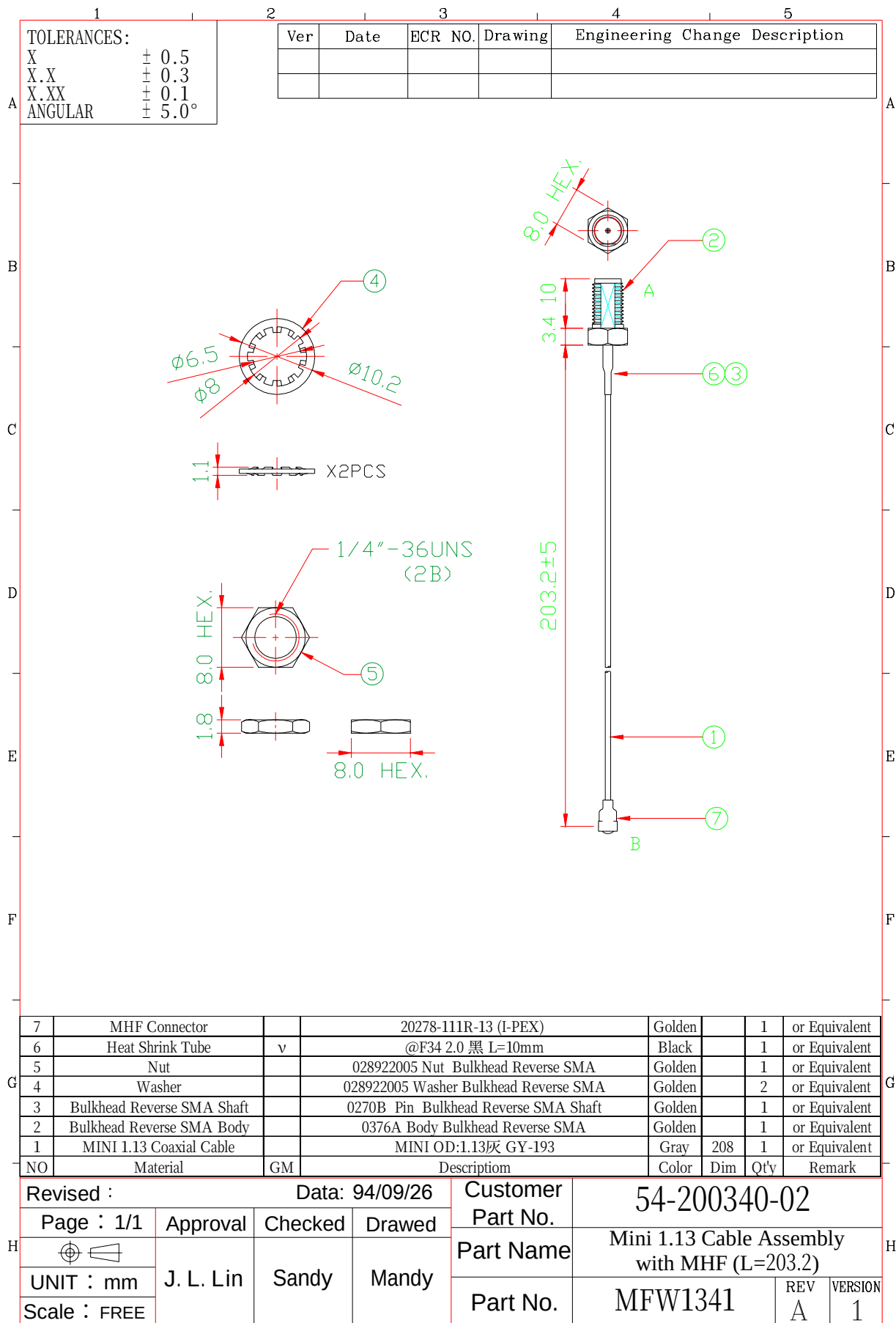
TEL : (02) 22988066 (5 LINE) FAX : (02)22981102

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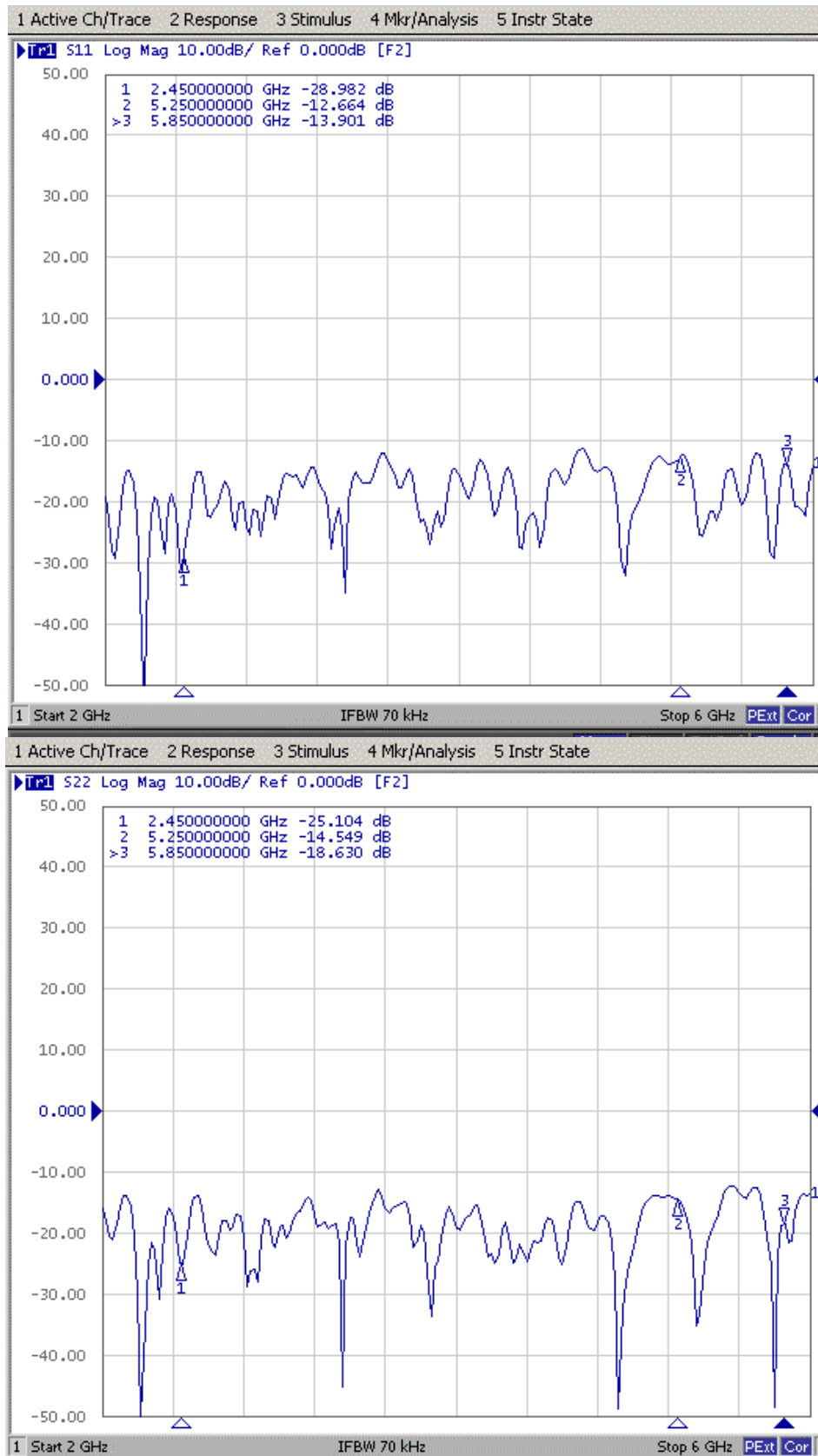
SPECIFICATION

1.	Description	: Mini 1.13 Cable Assembly with RP-SMA Bulkhead Jack & MHF
2.	Customer	: 環隆電氣股份有限公司
3.	Part No.	: MFW1341A1
4.	Coaxial Length	: 203.2 mm (see Drawing)
5.	Electrical Characteristics	
	Operating Frequency	: 1~6 GHz
	Impedance	: 50 Ohm nominal
	Insertion Loss.	: <1.1 dB below 2.45GHz
	.	: <1.8dB below 5.85GHz
	Return Loss	: <-24dB below 2.45GHz
	.	: <-13dB below 5.85GHz
6.	Mechanical Characteristics	
	Connector	: RP-SMA Bulkhead Jack
		: MHF
7.	Raw Material	
	Coaxial Cable	: Mini 1.13
	Core	: N/A



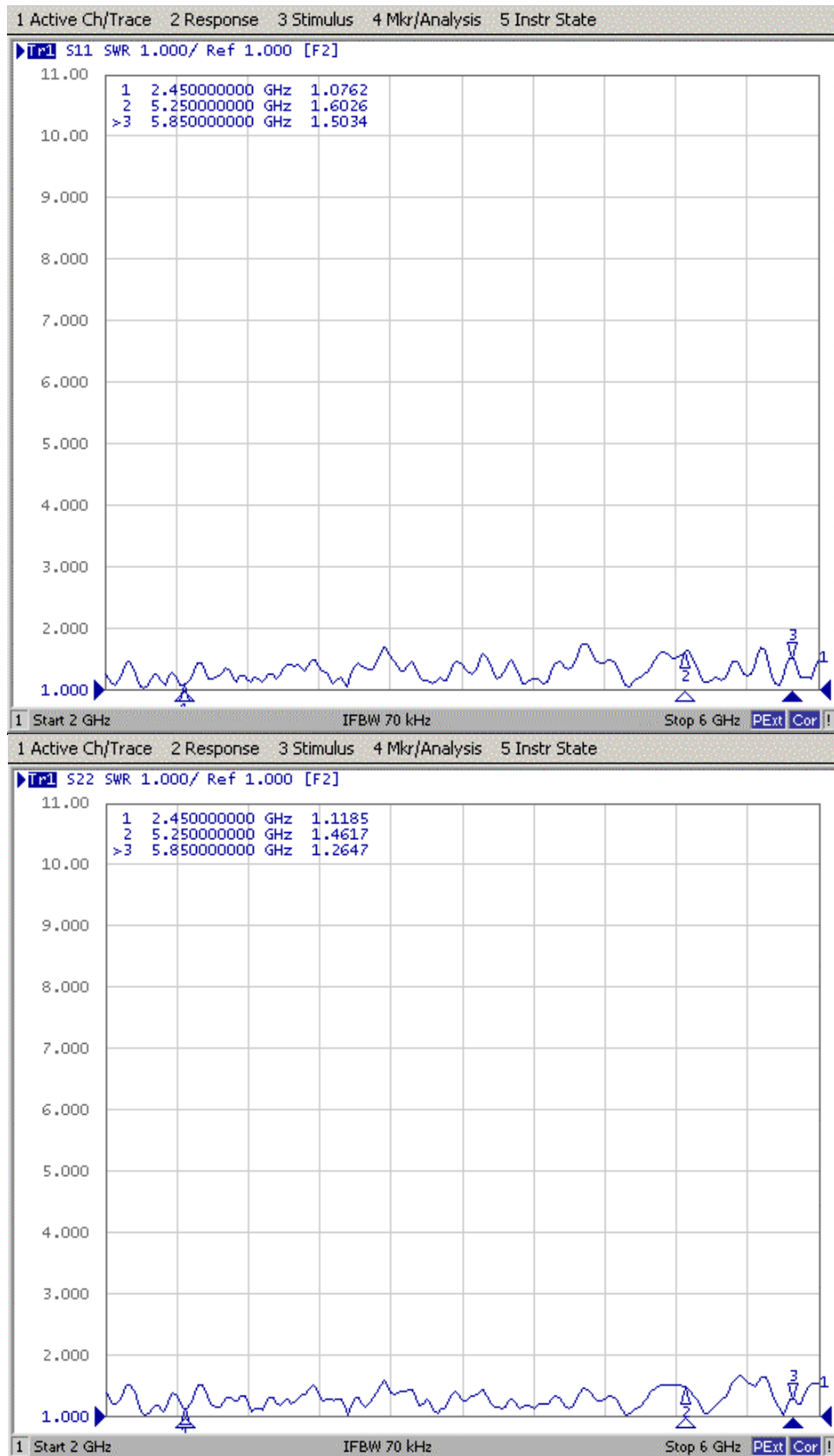
Electrical Characteristic

Return Loss



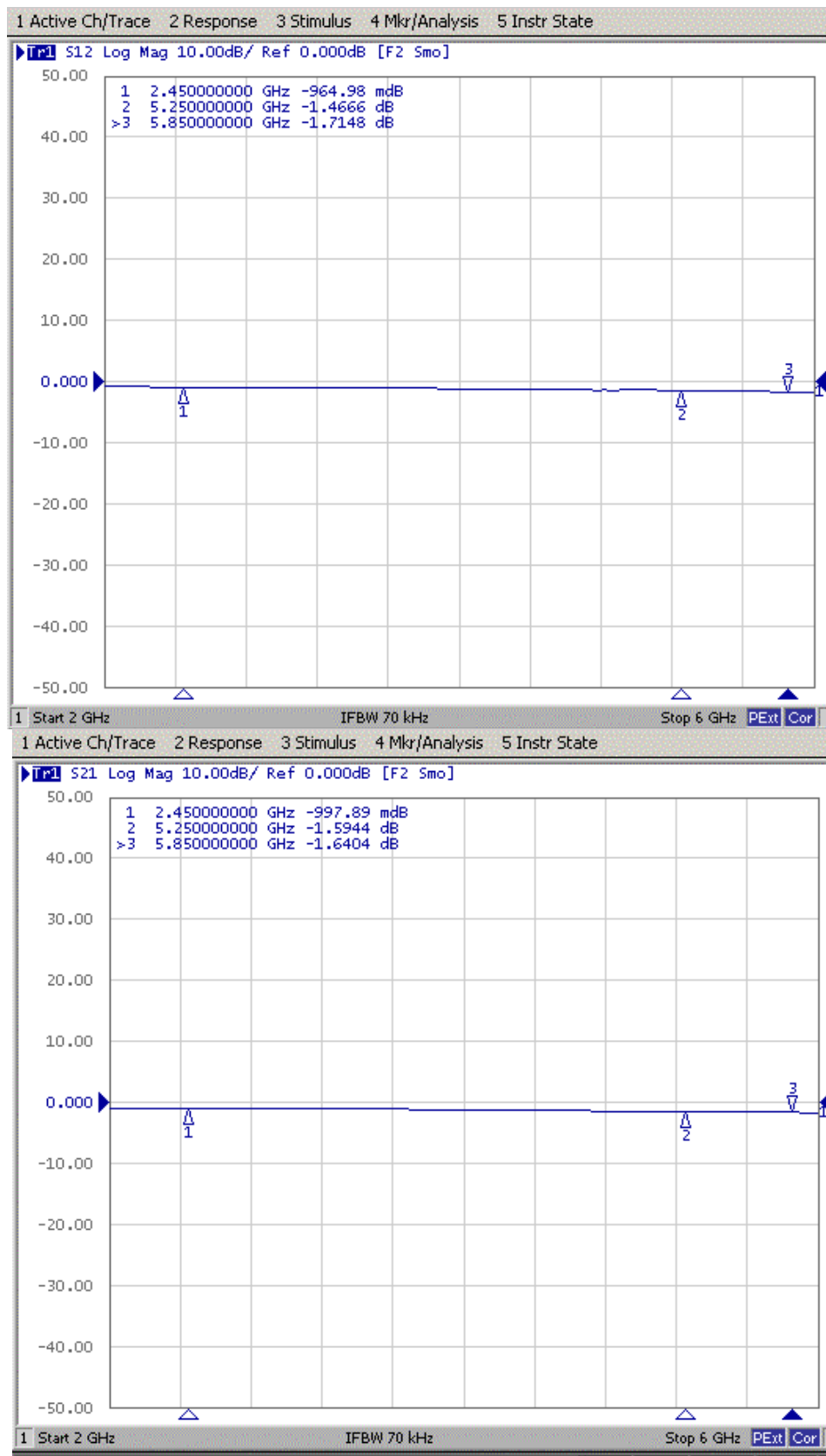
Electrical Characteristic

V.S.W.R



Electrical Characteristic

Attenuation



Material Data Sheet

Mini-1.13 Coaxial Cable

SPECIFICATION FOR APPROVAL

DOCUMENT: A3132SP001

STYLE : 200°C 30V

SIZE: 32AWG×1C
SP 7/0.080 1.13 mm

RECOGNIZED:

WONDERFUL HI-TECH CO.,LTD.

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

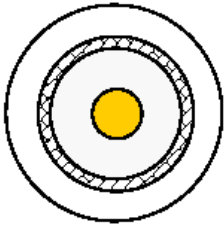
TEL : (02)22988033
FAX : (02)22988031-2

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	200°C 30V COAXIAL	DOCUMENT NO : A3132SP001
SIZE	32AWG	ESTABLISHED DATE: 2003/01/16
STANDARD :		
Conductor	Size	AWG 32
	Material	---- Silver-Coated Copper
	Conductors No.	---- 7
	Conductors Size	mm 0.080
	O.D.	mm 0.240
Insulation	Average Thickness	mm 0.22
	Diameter	mm 0.68 ± 0.02
	Material	---- FEP
	Color	---- Clear
Braid	Material	---- Silver-Coated Copper
	Construction	mm 16 / 4 / 0.050
	Cross No.	---- 20
	Coverage	% 90
Jacket	Average Thickness	mm 0.13
	Diameter	mm 1.13 ±0.05
	Material	---- FEP
	Color	---- According to custom
Marking	NON	
Drawing		

AK001/210X297/1.0

EDITION : 1.1

MAKER :

CONFIRM :

REVISED DATE :

APPROVAL :

PAGE : 1

WONDERFUL HI-TECH CO., LTD.

SPECIFICATION

Electrical & Physical Properties						
Item			32AWG			
Rating Temp Voltage			200°C 30V			
Conductor Resistance			545 OHM/KM/20°C MAX.			
Insulation Resistance			100 MEGA OHM/KM MIN.			
Dielectric Strength			AC 1.0 KV/Minute			
Spark Test			0.5 KV			
Insulation	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / m m ²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN. 75%(168HRS×232°C)			
		Elongation	UNAGED MIN. 75%(168HRS×232°C)			
Jacket	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / m m ²)			
		Elongation	200% MIN.			
	Aged	Tensile Strength	UNAGED MIN.75%(168HRS×232°C)			
		Elongation	UNAGED MIN.75%(168HRS×232°C)			
Nom. Impedance			50 ± 3 Ohms			
Nom. Capacitance			96 ± 3 pF/m			
Nom. Vel. of Prop.			69%			
VSWR Test (0 – 6 GHZ)			Less 1.3			
Flame Test			VW-1 OK			
Attenuation (dB/1m)		100MHZ	400MHZ	1.8GHZ	2.4GHZ	5.2GHZ
		0.60	1.25	2.23	2.70	4.15

AK001/210X297/1.0

PAGE : 2

EDITION : 1.1

REVISED DATE :

MAKER :

CONFIRM :

APPROVAL :

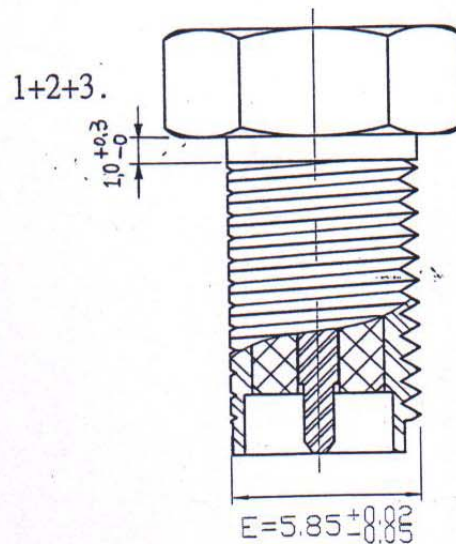
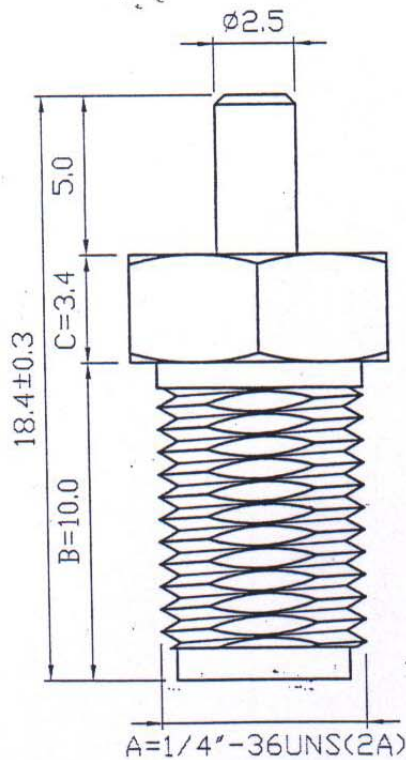
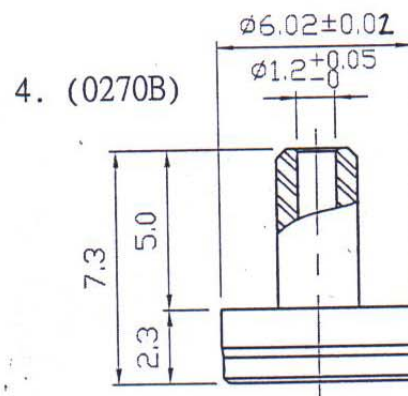
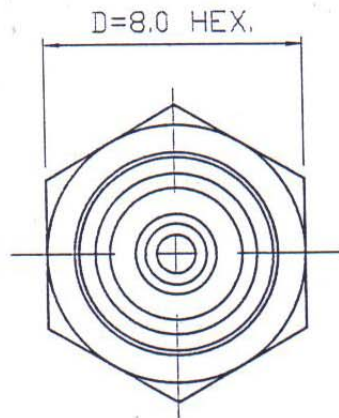
Material Data Sheet

RP-SMA Bulkhead Jack

圖號 0376A

主件品名材質一覽表

項次	品名	材質	處理
1	本體	銅	鍍金
2	PIN	銅	鍍金
3	絕緣	鐵氟龍	白色
4	連接軸	銅	鍍金

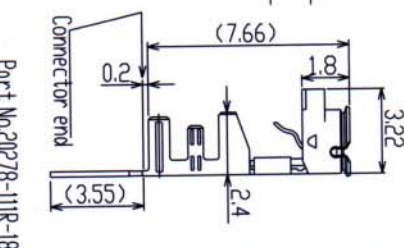
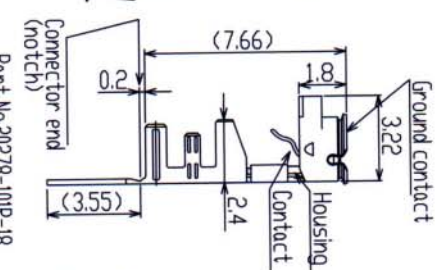
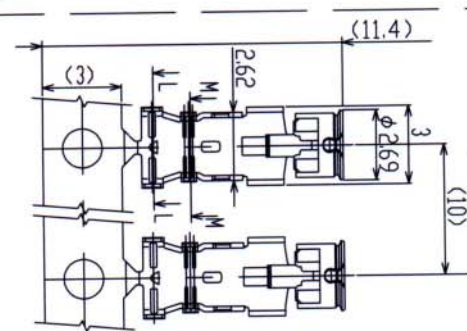
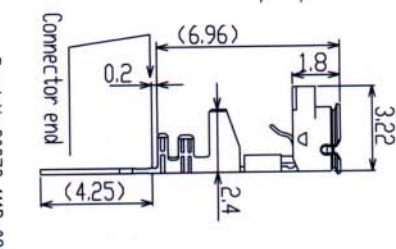
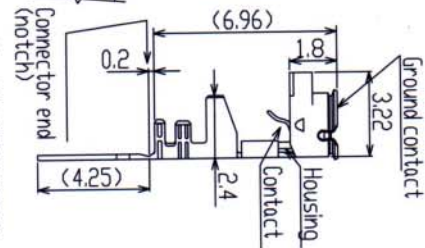
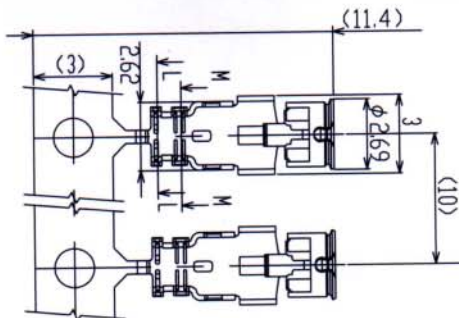
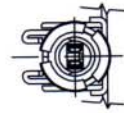


REV DESCRIPTION	UNIT: MM	MATERIAL:	NAME: RP-SMA Bulkhead Jack-10L For 1.13
△x	SCALE: 5/1	FINISH:	PART NO: 0376A-承認書圖
△x	TOLERANCES:	DRAWN:	DATE: 06.21.2004
△x	X ±0.15	DESIGN:	REV: 01
△x	X.X ±0.1	APPROVE:	
△x	X.XX ±0.05		
△x	ANGULAR ±1.0°		

Material Data Sheet

MHF Connector

PART NO.
20278-11R-11



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

FORM REV.4

11C 73041 K.D. Mgr./24/03 K.K.	4 72023 K.D. JAN/30/02 E.K.
10C 73014 K.D. JAN/31/03 K.K.	3 71256 K.D. NOV/14/01 K.K.
9C 72239 K.D. NOV/15/02 K.K.	2 71197 K.D. AUG/27/01 K.K.
8C 72224 K.D. OCT/17/02 K.K.	1 71118 K.D. JUN/26/01 K.K.
7B 72180 K.D. JUL/29/02 K.K.	0 71109 K.D. JUN/13/01 K.K.
6B 72146 K.D. JUN/24/02 K.K.	REV. E.C.N. BY DATE APP.
5B 72117 A.H. MAY/17/02 K.K.	REV. RECORD
REV. E.C.N. BY DATE	APP. SERIES NO. 2814

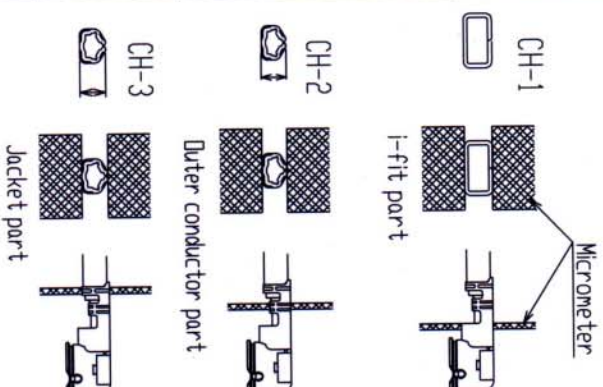
WAS T

DESIGNED BY K.I. Kobayashi	DATE JUN/13/01
CHECKED BY	DATE
APP'D BY K. Kobayashi	DATE JUN/13/01
CUSTOMER COPY	DATE JUN/13/01
TITLE MHF series micro coaxial connector plug vertical (ground contact: gold plating)	SCALE UNIT 6/1mm
DWG. NO. 20278	SHEET REV. 1/3 11C

I-PEX

Interconnect
and Packaging Electronics
TOKYO, JAPAN

Part No.	20278-10IR-08 20278-11IR-08	20278-10IR-13 20278-11IR-13	20278-10IR-32 20278-11IR-32	20278-10IR-18 20278-11IR-18
Applicable cable nominal dimension				
Jacket	Dielectric core	Dielectric core	Dielectric core	Dielectric core
Outer conductor silver or tin plating	Inner conductor silver plating	Inner conductor silver plating	Inner conductor silver plating	Inner conductor silver plating
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	90187-008C	90187-013C	90187-032C	90233-018
P/N of semi auto termination machine	90213-008C	90213-013C	90213-032C	90232-018
Sect. M-M				
Sect. L-L				
Crimp Height	CH-1 1.34~1.40 CH-2 0.76~0.84 CH-3 0.85~0.97	CH-1 1.34~1.40 CH-2 1.06~1.14 CH-3 1.15~1.35	CH-1 1.34~1.40 CH-2 1.20~1.30 CH-3 1.26~1.46	CH-1 1.34~1.40 CH-2 1.41~1.49 CH-3 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°

DESIGN'D BY	DATE
CHK'D BY	DATE
APP'D BY	DATE
REVCN BY	DATE
REV RECORD	DATE
SERIES NO.	2814
CUSTOMER	PROJECTION
COPY	SCALE UNIT
	-/mm
	20278
	2/311C

I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN

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

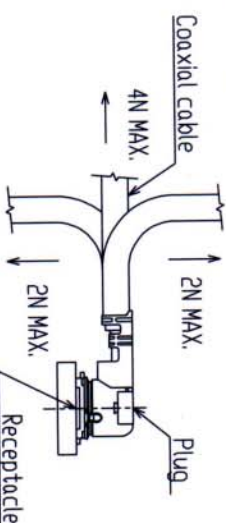
Notes

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) コネクタ
: 金メッキ
(3) トラップコネクタ
: 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



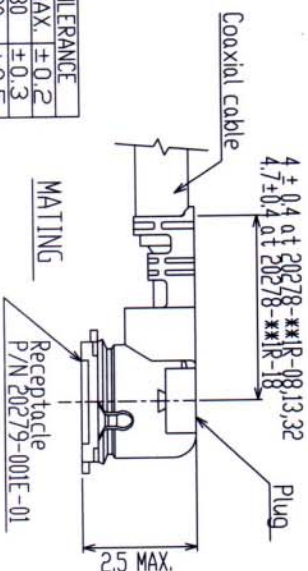
5. Suggestions for mating & unmating operation.

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。

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

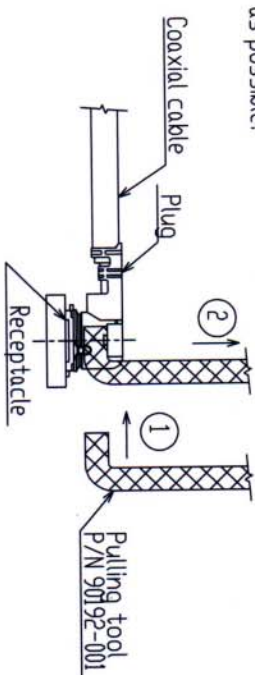


5-2 Unmating.

5-2 コネクタ抜去時

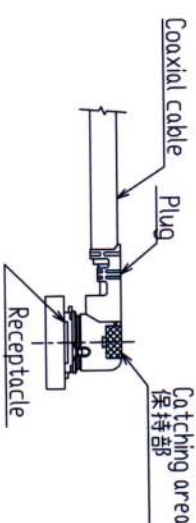
(1) In case of unmating by pulling tool.
Please use the following drawing, tool as the following drawing, and please pull plug to vertical direction as directly as possible.

(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。



DESIGNED BY	DATE	I-PEX Interconnect and Packaging Electronics TIKYO, JAPAN
CHECK BY	DATE	
REVIEW BY	DATE	TITLE MF series micro coaxial connector plug vertical (ground contact: gold plating)
REVIEWED	DATE	
CUSTOMER COPY	DATE	SCALE UNIT Dwg. No. 20278
PROJECTION	DATE	
SHEET REV.	3/311C	