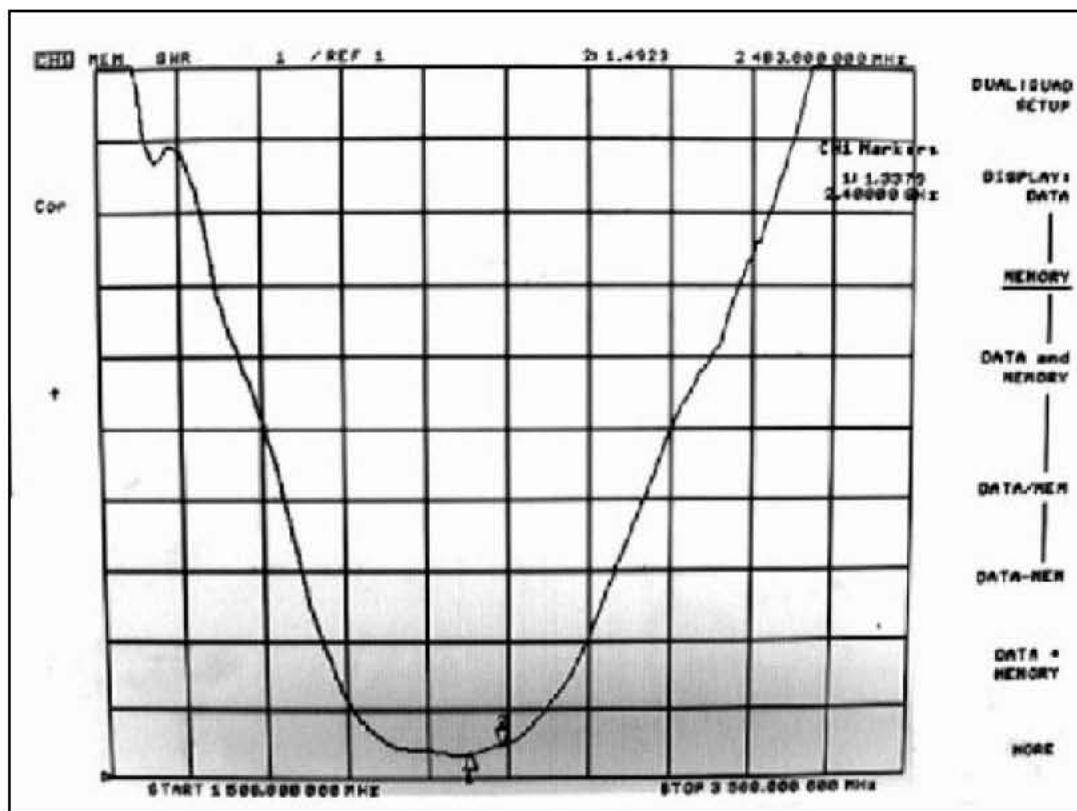
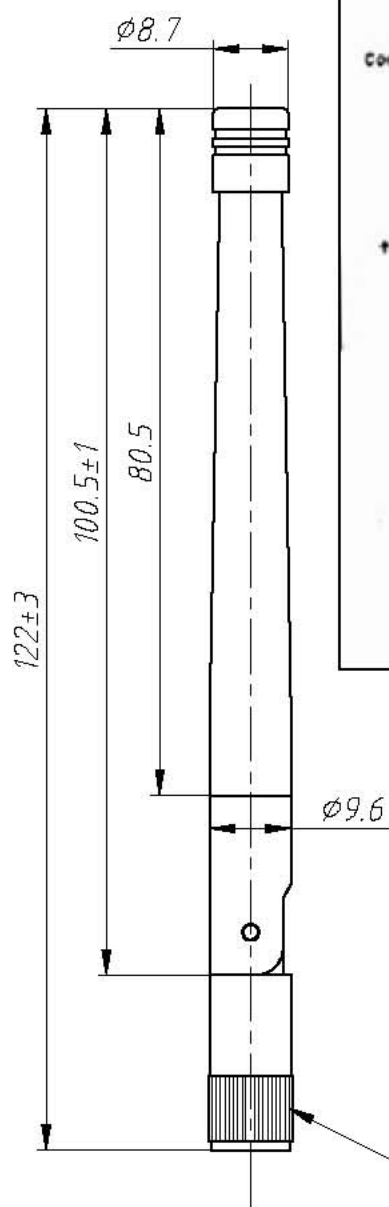




深圳市华士捷通讯器材有限公司

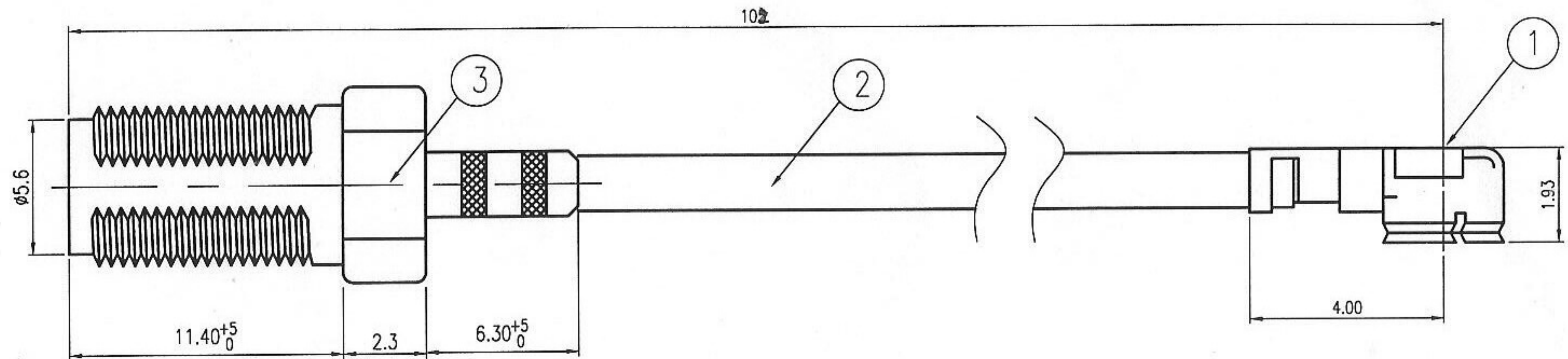
产品规格书

产品名称	2.4G-Rev SMA 接头摺疊膠套天線	版/次	1/1	图纸编号	2008091101
产品编号		单位	mm	日期	2008年09月11日



电气参数ELECTRICAL SPECIFICATIONS		机械特性MECHANICAL SPECIFICATIONS	
型号 Model Type	TLB-2400-SMA122	型号 Model Type	TLB-2400-SMA122
频率范围 Frequency Range	2400-2483MHz	高度 Height	122±3mm
输入阻抗 Impedance	50Ω	接头 Connector	Rev SMA-J
驻波比 VSWR	≤1.5	外罩材料	聚亚安脂
增益 Gain	2.5dBi	外罩颜色	黑色
极化方式 Polarization	垂直	工作温度	-20℃-85℃
辐射方向 Radiation	全向	存放温度	-40℃-90℃
功率容量Maximum Power Input-watts	50W		

REV.	DESCRIPTION	DRAWN/DATE	CHECK/DATE	APPROVED/DATE
A	new release	Tangen 8/20		



NO.	Description	Specification	Remarks
1	RF CONN.	I-PEX MHF	Compatible with Hirose U-FL
2	CABLE	AWG #32 ϕ 1.13	HITACHI P/N: UL1745
3	Rev SMA CONN.		Plating : AU
4	Cable lose	-0.7dB	

GENERAL TOLERANCE		ANGLE TOLERANCE		DRAWN	DATE	Adorer Technology Inc.	
X.	± 0.20	X'	$\pm 2.0'$	Chain	5/20 '02		
.X	± 0.10	.X'	$\pm 1.0'$	DESIGN	DATE	TITLE	
.XX	± 0.05	.XX'	$\pm 0.5'$	Chain	5/20 '02		
.XXX	± 0.03			CHECKED	DATE	RF Cable	
MATL	BERYLLIUM COPPER			Chain	5/20 '02		
FINISH	SEE NOTES			APPROVED	DATE	SERIES	
SCALE	10 : 1	UNIT	mm				
SHEET	1 OF 1					DRAWING NO. RF-SD-00	
						SIZE	
						REV.	

No. : SP01-23-46992Rev.1

Date : Oct. 2, 2001

SPECIFICATION

FOR

UL RECOGNIZED FEP INSULATED HIGH FREQUENCY COAXIAL CABLE

[P/N ;UL1745 SB CX-50 1×32AWG(7/0.08)]

Quantity

Your Ref. No.

Our Ref. No.

Signed by

F. Shimizu
Fumio Shimizu

Manager

Electronic Wire & Cable design department
Hitaka works, Electronic Supplies Group

Hitachi Cable, Ltd.

Issue and revision record

[illegible]

1. Scope

This specification covers UL recognized Fluoroethylene-propylene insulated high frequency coaxial cable.

[UL1745 : 90°C、30V]

Use : Internal wiring of Class 2 Circuits of Electronic Equipment.

2. Construction and materials**2.1 Inner Conductor**

- | | |
|---------------|--------------------------------------|
| (1) Material | ; silver plated annealed copper wire |
| (2) AWG size | ; 32 |
| (3) Stranding | ; 7/0.08mm |
| (4) Diameter | ; 0.24mm |
| (5) Number | ; 1 |

2.2 Insulation

- | | |
|---------------|---------------------------------|
| (1) Material | ; Fluoroethylene-propylene(FEP) |
| (2) Thickness | ; 0.21mm nominal |
| (3) Diameter | ; 0.66 ± 0.05 mm |
| (4) Color | ; natural |

2.3 Outer conductor

- | | |
|------------------|-------------------------------|
| (1) Material | ; Tinned annealed copper wire |
| (2) Form | ; braid |
| (3) Strand | ; 0.05mm |
| (4) Construction | 5×16 |
| (5) Diameter | ; 0.88mm nominal |

2.4 Jacket

- | | |
|---------------|---------------------------------|
| (1) Material | ; Fluoroethylene-propylene(FEP) |
| (2) Thickness | ; 0.125mm nominal |
| (3) Diameter | ; 1.13 ± 0.1 mm |
| (4) Color | ; Gray |

3. Properties

- | | |
|--------------------------------|--------------------------|
| (1) Rating voltage | ; 30V |
| (2) Inner Conductor resistance | ; max. 597Ω/km at 20°C |
| (3) Dielectric strength* | ; A.C. 500V for 1minute |
| (4) Insulation resistance* | ; min. 1000MΩ-km at 20°C |
| (5) Characteristic impedance | ; 50 ± 2 Ω by TDR |
| (6) Capacitance * | ; 95pF/m at 1KHz |
| (7) Nominal attenuation | ; 1.9dB/m at 1GHz |
| | 2.6dB/m at 1.5GHz |
| | 3.0dB/m at 2GHz |

* Between inner conductor and outer conductor

4. Packing

- | | |
|------------------|-------------|
| (1) Unit length | ;305m |
| (2) Package | ;paper reel |
| (3) Approx. mass | ;4.0kg/km |

5. Marking

5.1 Marking on the wire

No marking on the wires.

5.2 Marking on the tag attached to reel

Each reel shall be tagged to show the following information with UL stamp.

- | | |
|----------------------|---------------------------|
| (1) UL Style | (8) File No. |
| (2) Conductor size | (9) Rating temperature |
| (3) No. of conductor | (10) Rating voltage |
| (4) Color | (11) Date of manufacture |
| (5) Lot No. | (12) Insulation thickness |
| (6) Length | (13) Name of manufacture |
| (7) Use | |

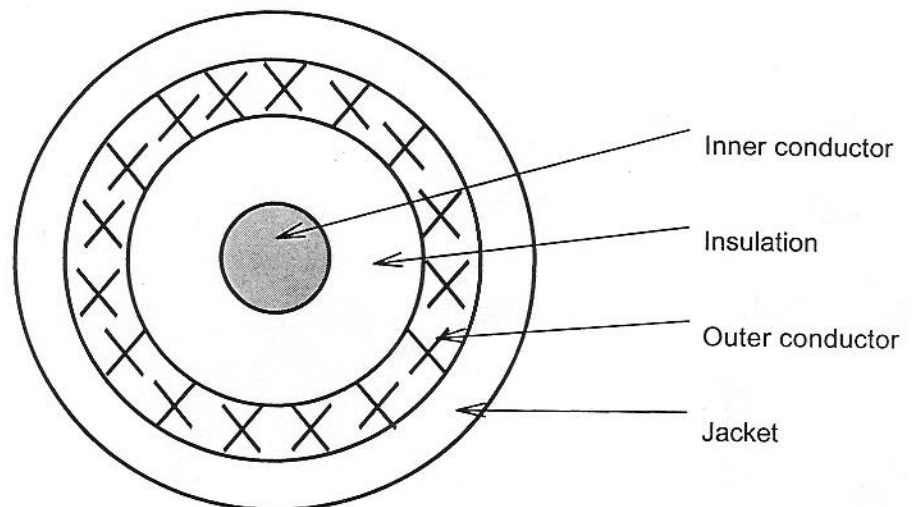
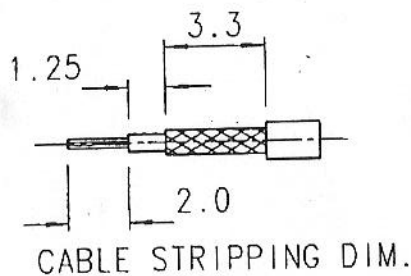
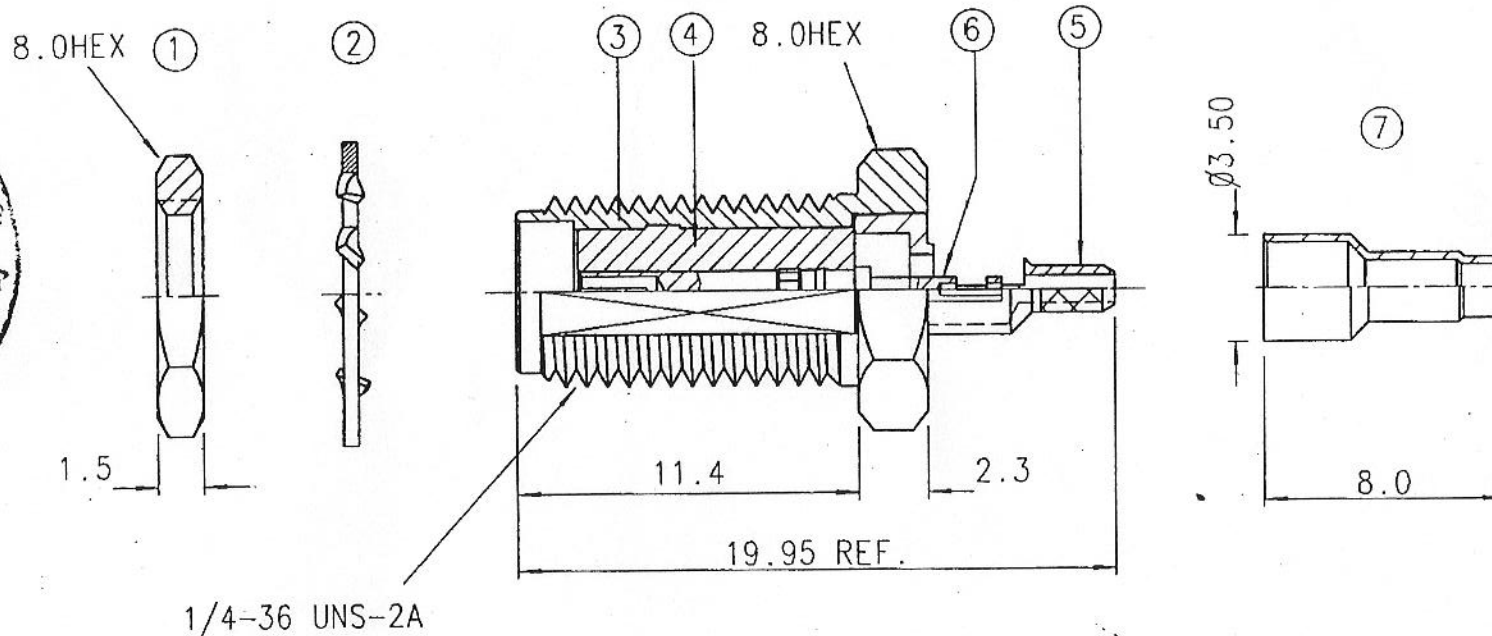
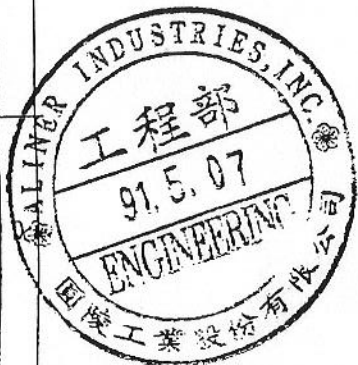


Fig.1 Cross-section of cable



NO.	QT'Y	DESCRIPTION	PART'S NO.	MATERIAL	FINISH
7	1	FERRULE	20-130AB-3G	BRASS	GOLD PLATED
6	1	CONTACT	20-130AB-2G	BERYLLIUM COPPER	GOLD PLATED
5	1	BODY	20-130AB-1G	BRASS	GOLD PLATED
4	1	INSULATOR	20-130A-4	TEFLON	NONE
3	1	BODY	20-130A-1G	BRASS	GOLD PLATED
2	1	WASHER	20-102GA-1G	STEEL	GOLD PLATED
1	1	NUT	20-102GA-2G	BRASS	GOLD PLATED

GENERAL TOLERANCES
 DIM.: .X±0.25(0.01).XX±0.12(0.005)
 ANGULAR: ±3°

DIMENSION CLASSIFICATION
 ■: CRITICAL ☒: MAJOR

MATERIAL: SEE TABLE

FINISH: SEE TABLE

DRAWN BY: AZ 2/06/02' CHK'D BY:

APP'D BY: *OK 18-2045* SCALE: 4:1

SHEET 1 OF 1 UNIT: mm

圓陵工業股份有限公司
 ALINER INDUSTRIES, INC.

TITLE: SMA JACK FOR MINI COAXIAL

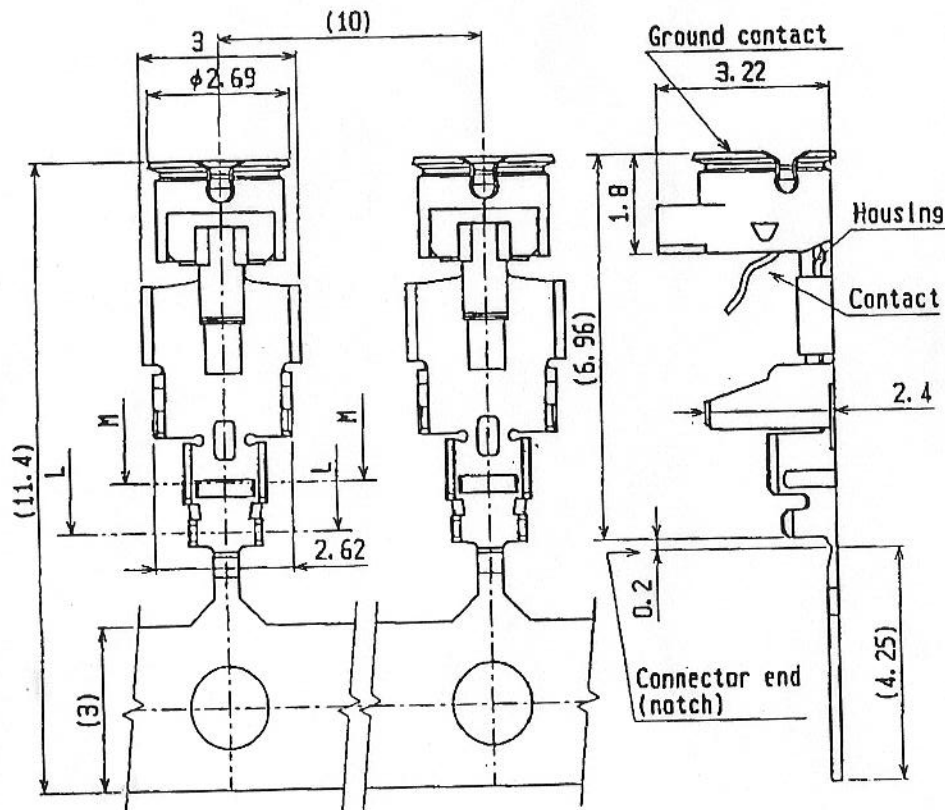
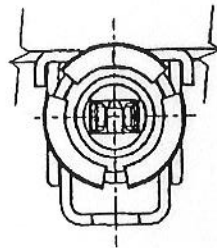
DWG. NO.: 20-130AB

REV
A

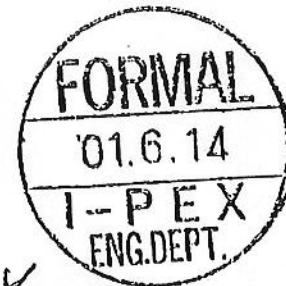
DO NOT SCALE DRAWING

LTR REVISION RECORD ECN DR/CHK DATE

REVISE ONLY ON CAD SYSTEM



営業控



Part No.	20278-001R-08	20278-001R-13	20278-001R-18
Applicable cable nominal dimension			
Jacket			
Outer conductor silver plating			
Dielectric core			
Inner conductor silver plating			
Sect. M-M			
Sect. L-L			

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

DESIGN D BY K.ohbayashi	DATE JUN/13/01	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN
CHK D BY	DATE	
APP D BY K.ohbayashi	DATE JUN/13/01	TITLE MHF series micro coaxial connector plug vertical
REV. RECORD	CUSTOMER COPY	PROJECTION
SERIES No. 2814	SCALE 10/1	UNIT mm
	DWG. No. 20278	SHEET 1/2
		REV. 0

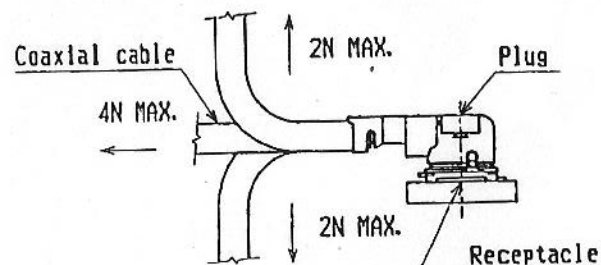
Notes

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

4. Permissible load of cable at mating

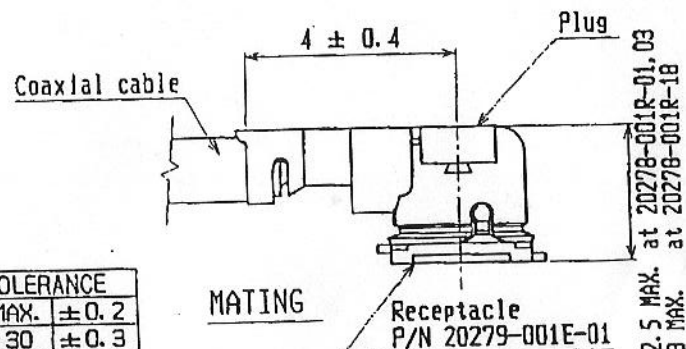
可負荷



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.



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

1. 材料

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

コネクタ嵌合後のケーブルに対する荷重

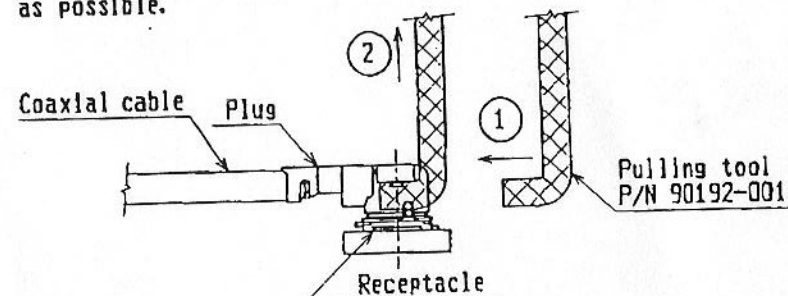
5. コネクタ嵌合時および抜去時の注意

5-1 コネクタ挿入時

PlugとReceptacleの嵌合軸を合わせ、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、過度なこじり挿入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.

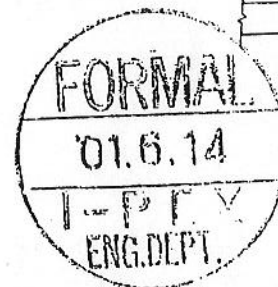
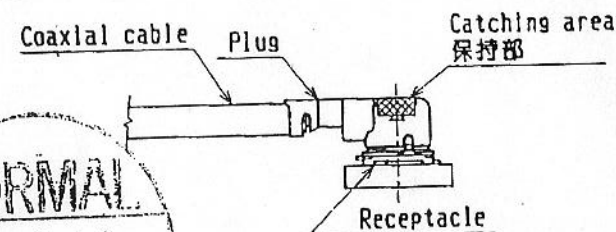


- (2) In case of unmating directly by hand
 Please catch the catching area of plug, and please pull plug to vertical direction as directly as possible.

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) 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。



DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN					
CHK'D BY	DATE						
APP'D BY	DATE						
REV. RECORD	CUSTOMER COPY	PROJECTION	SCALE	UNIT	DWG. No.	SHEET	REV.
SERIES No.	2814		mm	20278	2/2	0	