

MHF® Plug Cable Assembly

Mating Profile : **2.5mm MAX.**

Applicable for various cable gauge

【Part Number】

Ground Contact : **Au** Plating

20278-1 * 2 R- * *
 ① ② ③

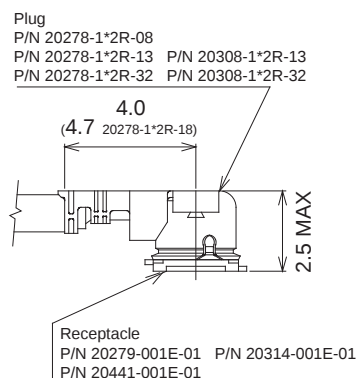
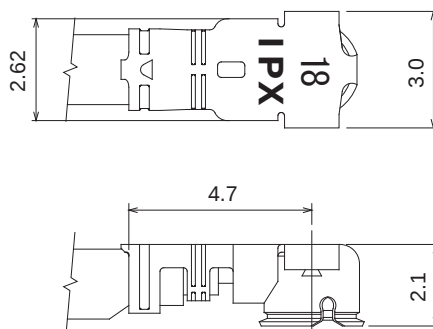
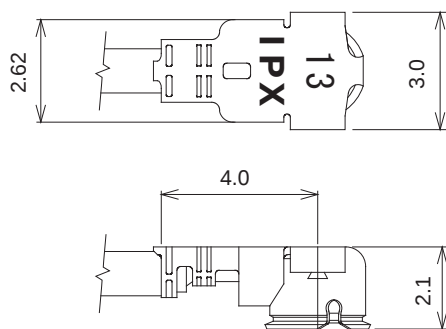
Ground Contact : **Ag** Plating

20308-1 * 2 R- * *
 ① ② ③

①	Tool	0	for Hand Tool (with Notch)
		1	for Semi-Auto (without Notch)
②	Packing	R	Reel 1reel : 2,000pcs
③	Applicable Cable Size	-	P/N 20278 : 08, 13, 32, 18 P/N 20308 : 13, 32

【Applicable Cable gauge】

Part No. (Au)	20278-1*2R-08	20278-1*2R-13	20278-1*2R-32	20278-1*2R-18
Part No. (Ag)	-	20308-1*2R-13	20308-1*2R-32	-
	for AWG#36	for AWG#32	for AWG#32	for AWG#30
Braided Shield of Outer Conductor	Single Braided Shield	Single Braided Shield	Double Braided Shield	Single Braided Shield



【Material and Finish】

MATED VIEW

Parts	Material	Plating / Color	Note
HOUSING	PBT UL94V-0	NATURAL or BLACK	Only Au 08, Au 18 is NATURAL
CONTACT	COPPER ALLOY	Au	
GROUND CONTACT	COPPER ALLOY	Au or Ag	

MHF® Plug Cable Assembly

Mating Profile : **2.5mm MAX.**

Applicable for AWG30 (ϕ 1.37mm) Cable

【Part Number】

Ground Contact : **Au** Plating

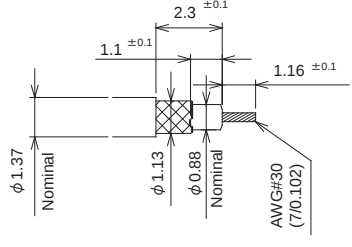
20351-1 * 2 R- 37

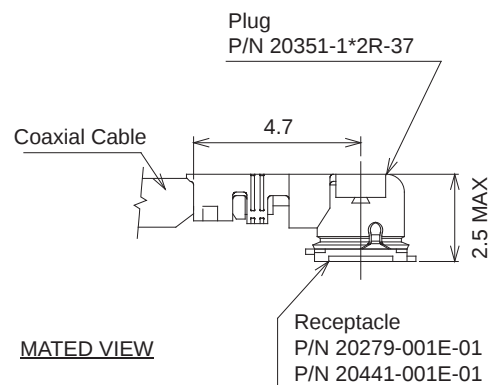
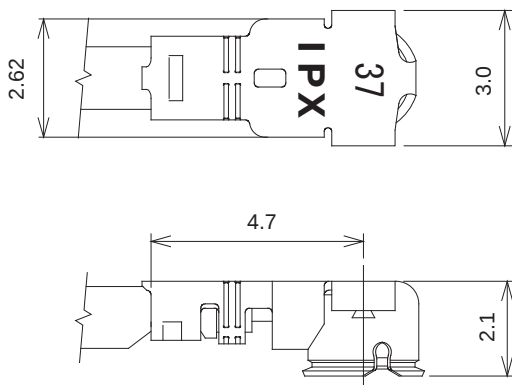
①

②

①	Tool	0	for Hand Tool (with Notch)
		1	for Semi-Auto (without Notch)
②	Packing	R	Reel 1reel : 2,000pcs

【Applicable Cable Size】

Part No. (Au)	20351-1*2R-37
Part No. (Ag)	-
	for AWG#30
Applicable Cable Nominal Dimension	
Braided Shield of Outer Conductor	Single Braided Shield



【Material and Finish】

Parts	Material	Plating / Color
HOUSING	PBT UL94V-0	NATURAL
CONTACT	COPPEER ALLOY	Au
GROUND CONTACT	COPPEER ALLOY	Au

MHF® Receptacle

3pad type

【Part Number】

Ground Contact : **Au** Plating

20279-001 E- * *

①

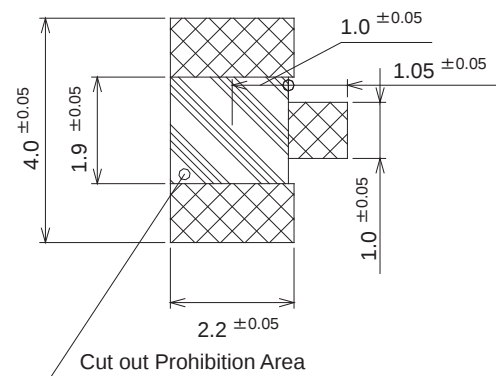
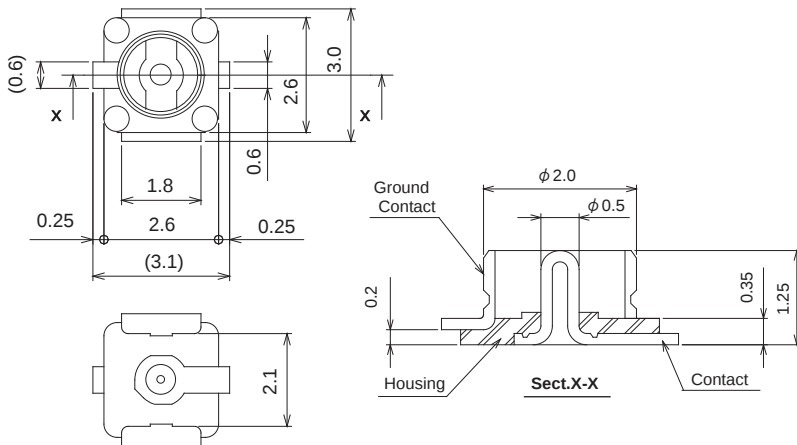
②

Ground Contact : **Ag** Plating

20314-001 E- 01

①

①	Packing : Emboss Tape		
②	1reel	01	2,500pcs
		03	5,000pcs



RECOMMENDED FOOTPRINT PATTERN

4pad type

【Part Number】

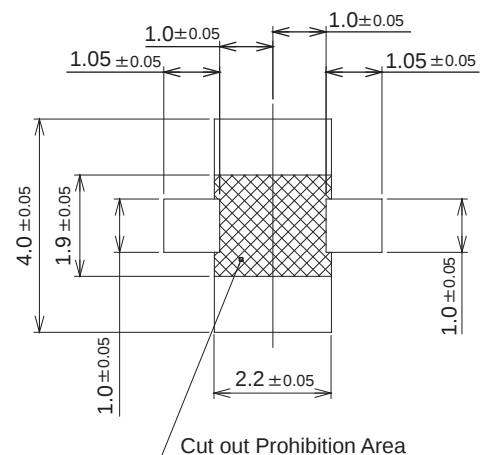
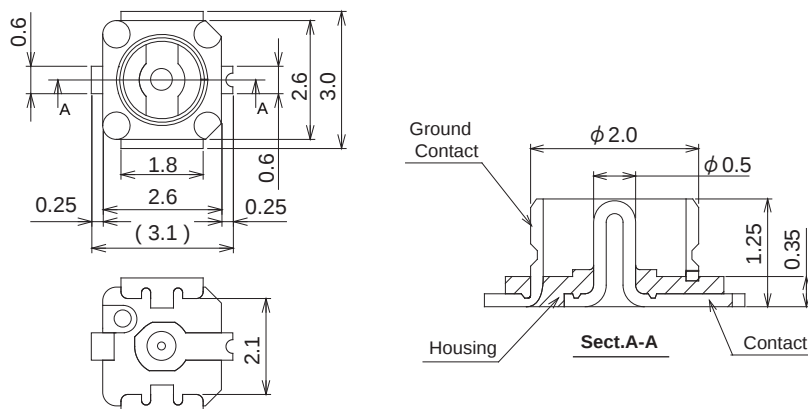
Ground Contact : **Au** Plating

20441-001 E- 01

※

※ Packing : Emboss Tape

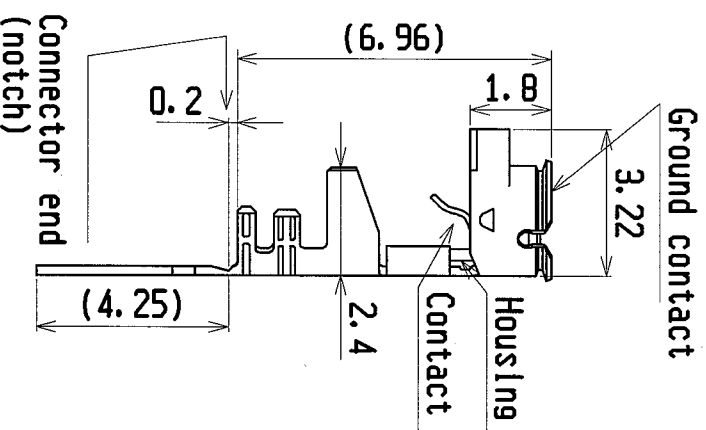
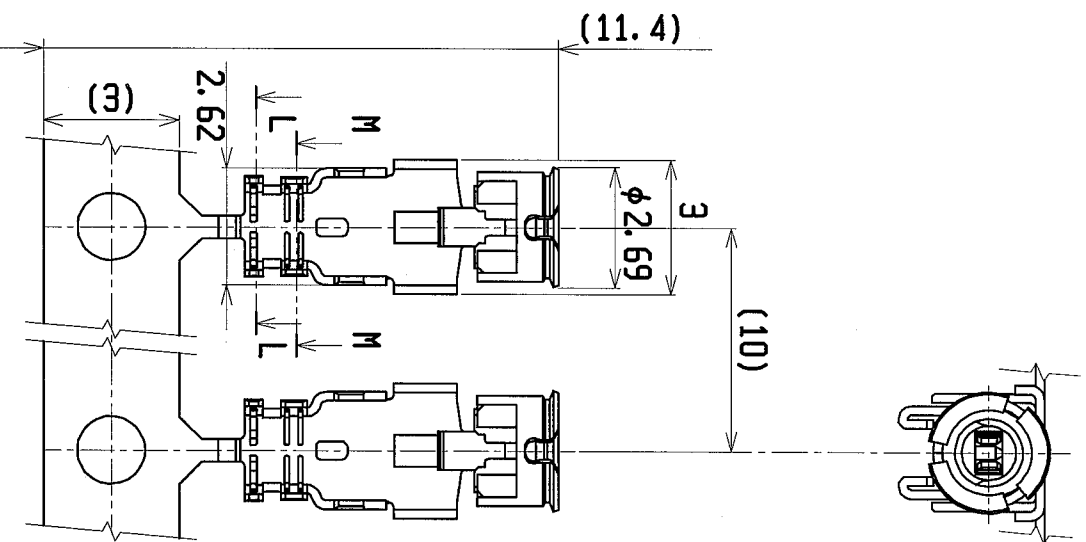
1reel : 5,000pcs



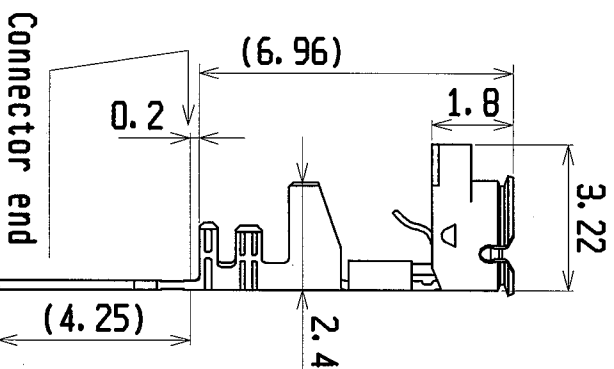
RECOMMENDED FOOTPRINT PATTERN

【Material and Finish】

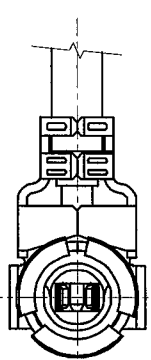
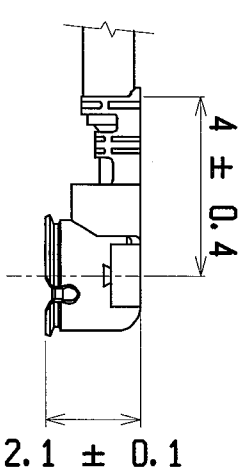
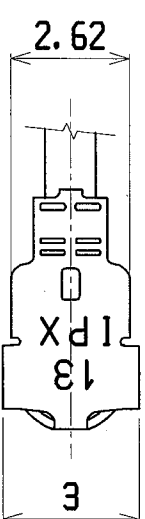
Parts	Material	Plating / Color (3pad)	Plating / Color (4pad)
HOUSING	LCP UL94V-0	NATURAL	BLACK
CONTACT	COPPER ALLOY	Au	Au
GROUND CONTACT	COPPER ALLOY	Au or Ag	Au



Part No. 20278-101R-08
20278-102R-08
20278-101R-13
20278-102R-13
20278-101R-32
20278-102R-32
For hand tool
(with notch)

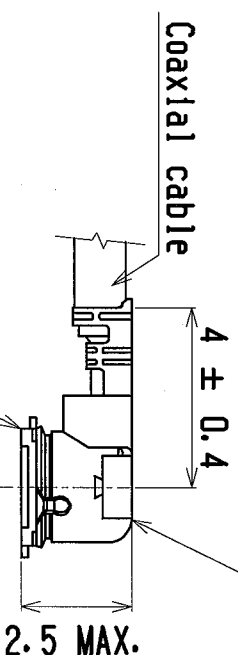


Part No. 20278-111R-08
20278-112R-08
20278-111R-13
20278-112R-13
20278-111R-32
20278-112R-32
For semi auto
termination machine
(without notch)



Cable Ass'y

Plus
P/N 20278-1**R-08
P/N 20278-1**R-13
P/N 20278-1**R-32



MATING

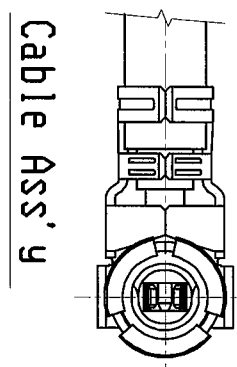
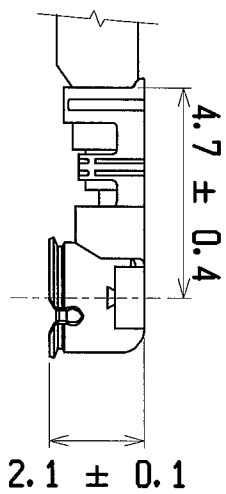
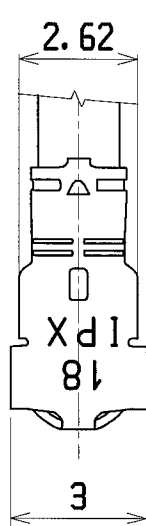
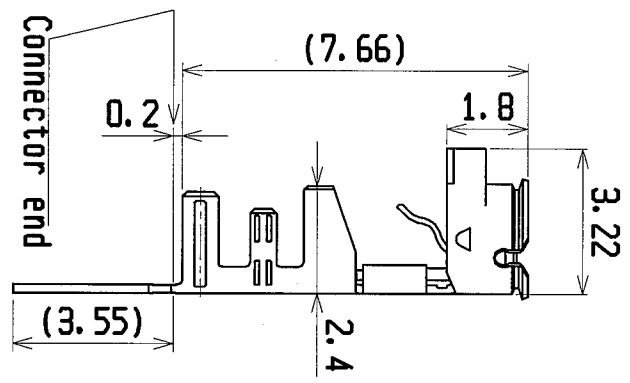
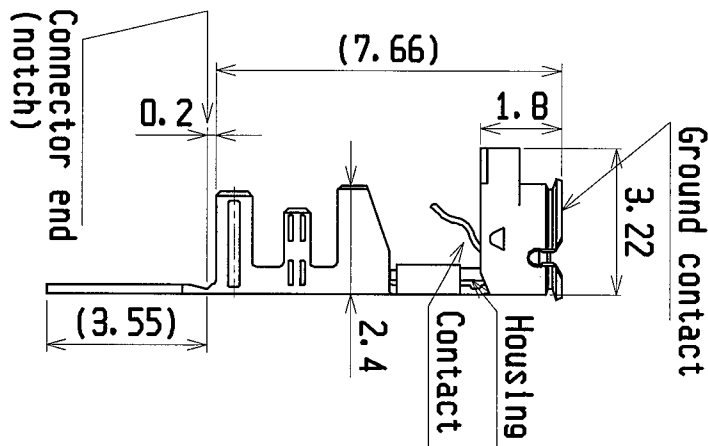
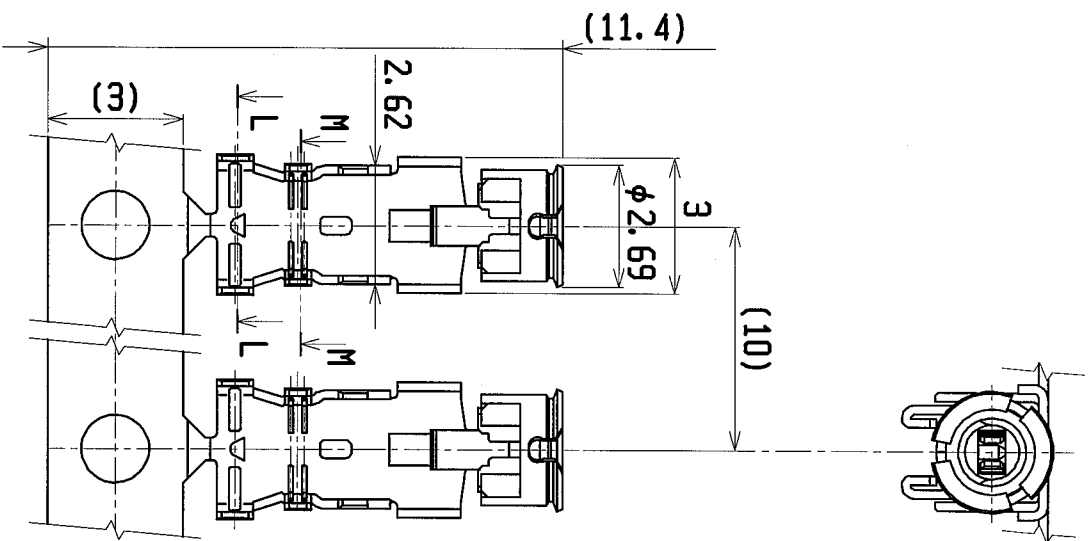
Receptacle
Part No. 20279-001E-01
20441-001E-01

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

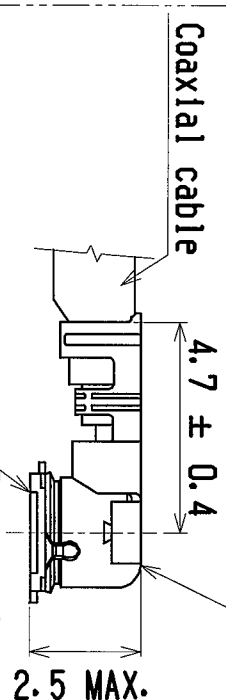
19C E08056	K.O	Feb/04/08	E.K	DESIGN D BY	K. Ohbayashi	DATE	JUN/13/01
18C 207346	K.O	JUL/10/08	E.K	CHK D BY		DATE	
17C 205233	K.O	MAY/19/05	T.H				
16C 205024	K.O	JAN/20/05	T.H				
15C 204398	K.O	NOV/12/04	T.H	APP D BY	K. Katayuchi	DATE	JUN/13/01
REV ECN	BY	DATE	APP	CUSTOMER COPY			
REV. RECORD				PROJECTION			
SERIES No.				SCALE			
2814				UNIT			
				DWG. No.			
				20278			
				SHEET			
				1/4			
				REV.			
				19C			

I-P-EX
Interconnect
and Packaging Electronics
TOKYO, JAPAN

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



Plug
P/N 20278-111R-18



Receptacle
Part No. 20279-001E-01
20441-001E-01
MATING

GENERAL TOLERANCE

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

DESIGN D BY	DATE	TITLE	
CHK D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN	
APP D BY	DATE	MF series micro coaxial connector plug vertical (ground contact : gold plating)	
REV ECN	BY	DATE	APP
REV. RECORD			
SERIES No. 2814			
CUSTOMER COPY		PROJECTION	SCALE UNIT DWG. No. 20278
COPY		6/1 mm	20278
SHEET			REV. 2/4 19C
General			

Notes

1. Material

(1) Housing : PBT , UL94V-0

(2) **Contact**

phosphor bronze

gold plating 0.1 μ m MIN.

over nickel 1.27 μ m MIN.

(3) Ground contact

phosphor bronze

gold plating 0.05 μ m MIN.

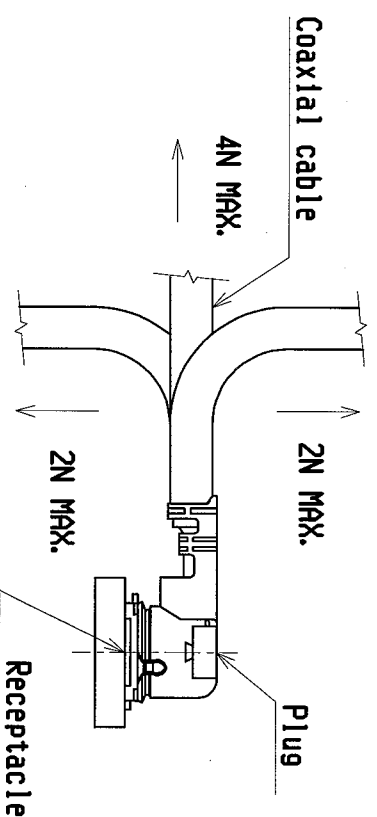
over nickel 1.27 μ m MIN.

2. Packing : reel

3. Matling Partner Part No.

: 20279-001E-01, 20441-001E-01

4. Permissible load of cable at mating



5. Suggestions for mating & unmating

5-1 Matlng.

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.

1. 材料

(1) ハジメテ: PBT, UL94V-0

(2) コンタクト

ウソ青銅

金メッキ0.1μm MIN.

ニツクル1.27 μ m MIN.

(3) グラントコンタクト

のん青銅

金メッキ0.05μm MIN.

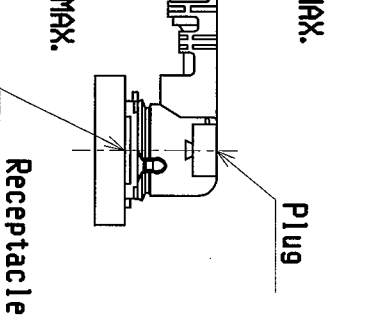
ニツクル1.27 μ m MIN.

2. 補則 : リール

3. カル合相手 Part No.

: 20279-001E-01, 20441-001E-01

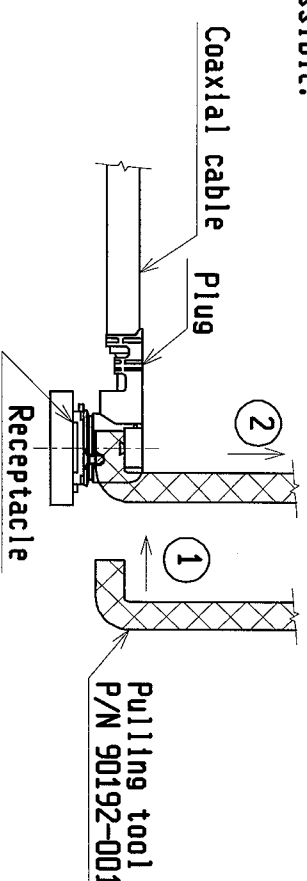
4. コネクタかん合後のケーブに対する荷重



5-2 Unmating.

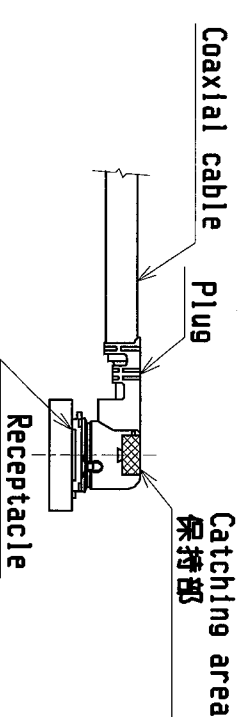
5-2 コネクタ抜き時

(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.



(1) 抜きシクを用いる場合
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 unmatting directly by hand Please catch the catching area of plug, and please pull plug to vertical direction as directly as possible.



5-3 Crimp over standards of
outer conductor

Standards: Less than 10% from total numbers of outer conductor
(Numbers of outer conductor's crimp over from outer conductor's barrel)

5-4 Caution about Heat shrinkage tubes

**Please be careful not to melt housing when using heat shrinkage tubes.
It will become cause of open circuit.**

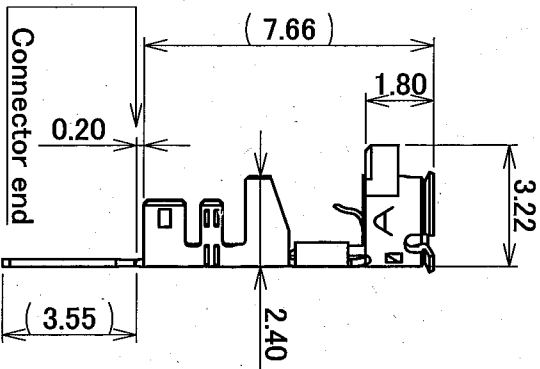
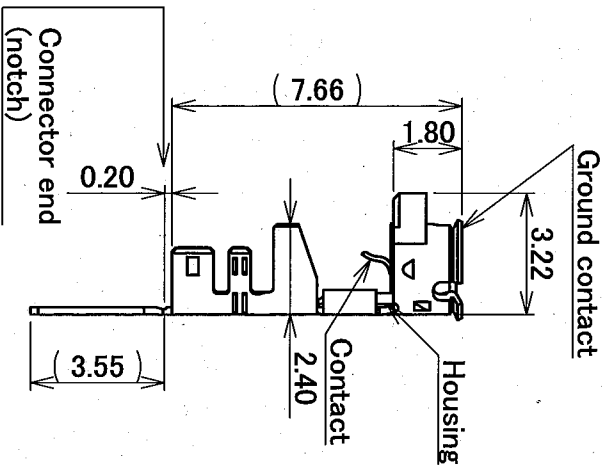
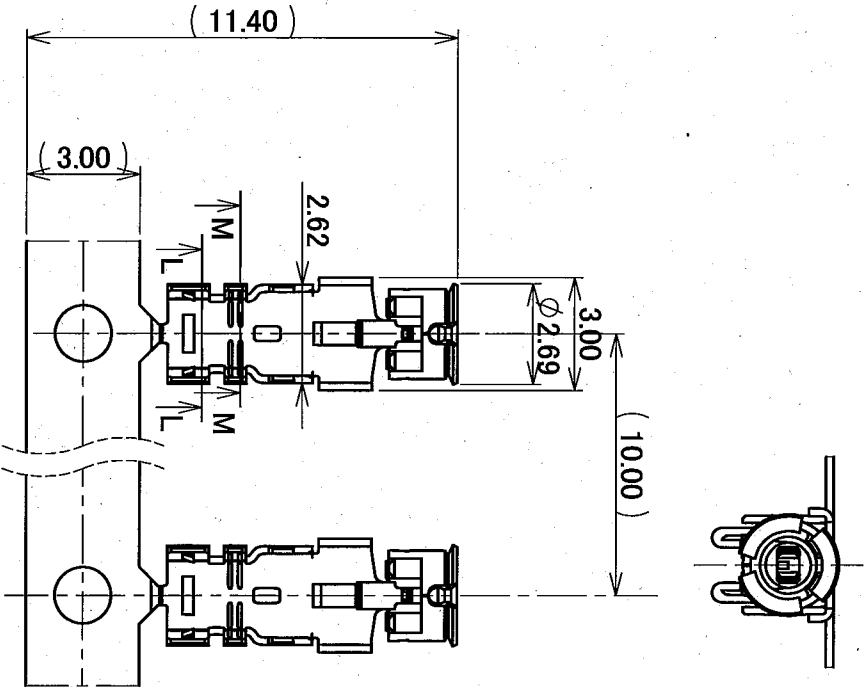
6. This is 'Pb-free' connector.

5. **鉛フリー Pb-free**
鉛フリー

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
REV ECN	BY	DATE	APP		
REV. RECORD				CUSTOMER	PROJECTION
SERIES No.				COPY	
2814					
				SCALE	UNIT
				MM	DWG. No.
				20278	SHEET
				4/4	REV
				190	

 Interconnect and Packaging Electronics TOKYO, JAPAN	TITLE MHF series micro coaxial connector plug vertical (ground contact : gold plating) General
--	---

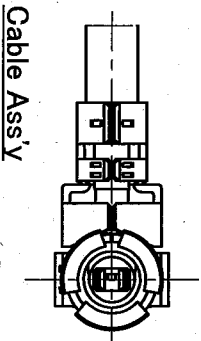
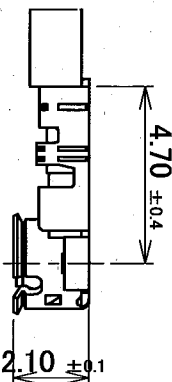
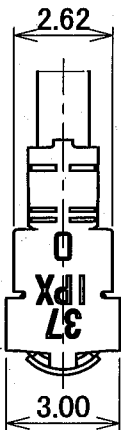


Part No. 20351-101R-37
20351-102R-37

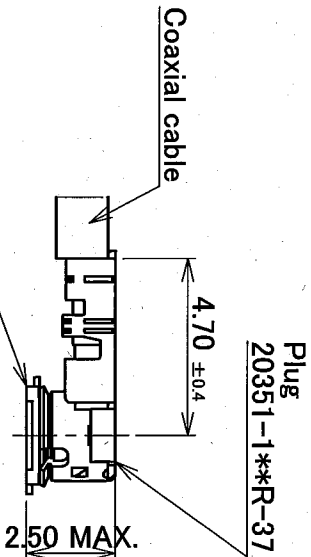
For hand tool
(with notch)

Part No. 20351-111R-37
20351-112R-37

For semi auto
termination machine
(without notch)



Cable Ass'y



Receptacle
Part No.20279-001E-01
20441-001E-01

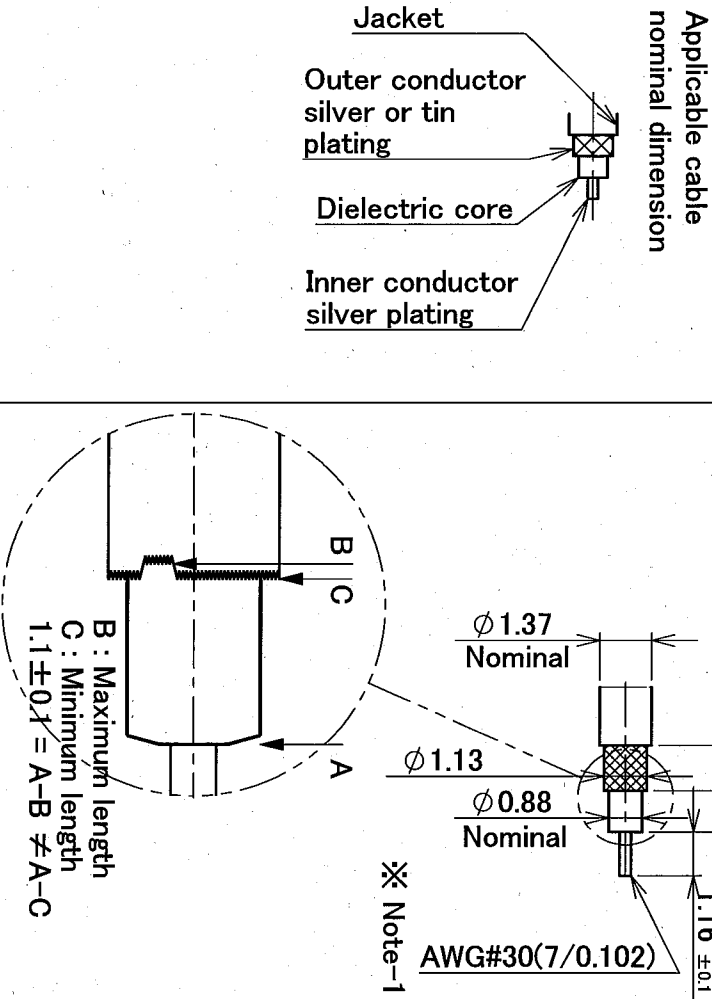
MATING

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

12	Z12832	H.M	Sep./27/12	Tan	DESIGNED BY	T.Hirakawa	DATE	Sep./11/'03
11	Z08056	K.O	Feb./04/'08	E.K	CHKD BY		DATE	
10	Z07346	K.O	Jul./10/'07	E.K	CHKD BY		DATE	
9	Z06053	K.O	Feb./07/'06	E.K	T.Harada		Sep./11/'03	
8	Z05233	K.O	May./18/'05	T.H	APPD BY		DATE	
REV	ECN	BY	DATE	APP	K.Katabuchi	Sep./11/'03	PROJECTION	
REV.RECORD				CUSTOMER COPY				
SERIES No.								

TITLE				MHF series micro coaxial connector plug vertical (ground contact : gold plating)			
IP-PEX DA-ICHI SEIKO CO.,LTD. I-Pex Business Company				SCALE	UNIT	DWG. No.	
				5:1	mm	20351	
							SHEET 1/3
							REV. 12

Part No. of non halogen free type	20351-101R-37	20351-111R-37
Part No. of halogen free type	20351-102R-37	20351-112R-37



中心導体への半田コーティングは不可
Must not use solder coated inner conductor.

Braided shield of Outer conductor 外部導体の編組

Single / 1重編組

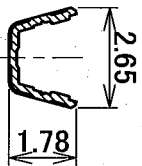
P/N of hand Tool

90233-037

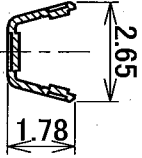
P/N of semi auto termination machine

90232-037

Sect. M-M

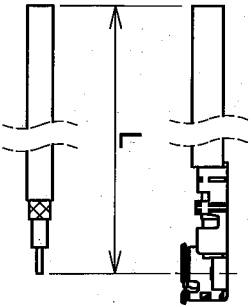


Sect. L-L



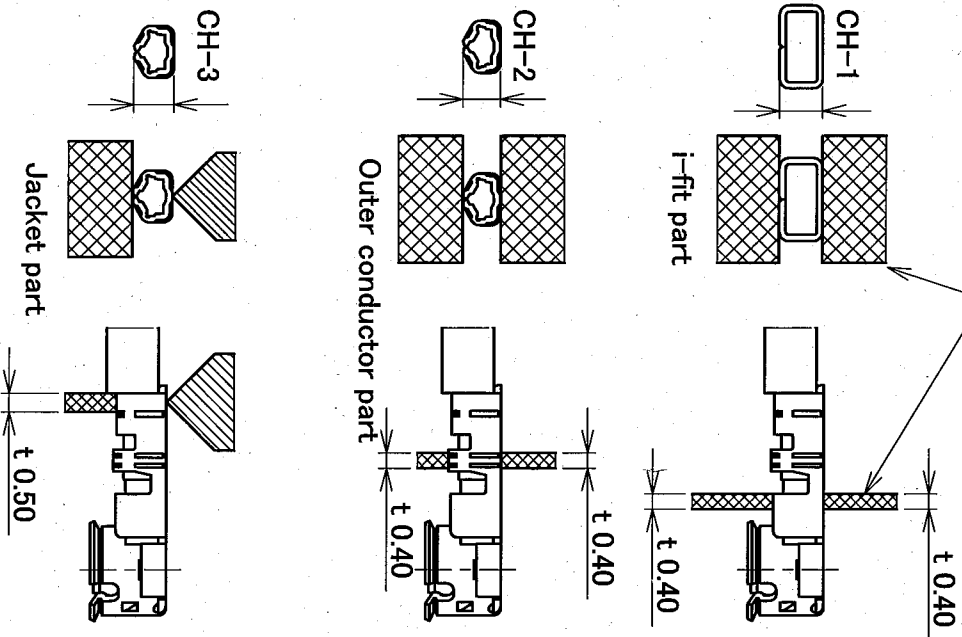
Crimp Height	CH-1	1.34~1.40
	CH-2	1.36~1.42
	CH-3	1.28~1.34

Cable cut length



Crimp Height

Blade Micrometer



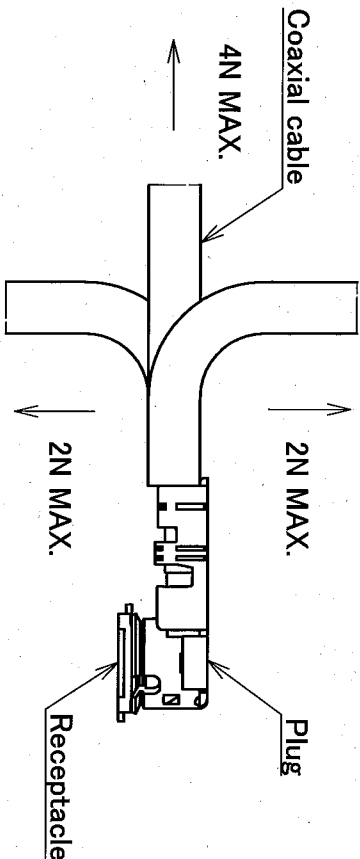
DESIGNED BY				DATE			
CHK'D BY				DATE			
APP'D BY				DATE			
REV	ECN	BY	DATE	APP			
REV/RECORD							
SERIES No.							
CUSTOMER COPY							
PROJECTION							
SCALE				5:1			
UNIT				mm			
DWG. No.				20351			
SHEET				2/3			
REV.				12			

I-PEXDAI-ICHI SEIKO CO.,LTD.
I-PEx Business Company

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

Notes

- 1.Material
(1) Housing : PBT , white, UL94V-0
(2) Contact
phosphor bronze
gold plating 0.1 μ m MIN.
over nickel 1.27 μ m MIN.
(3) Ground contact
phosphor bronze
gold plating 0.05 μ m MIN.
over nickel 1.27 μ m MIN.
2.Packing : reel
3.Mating partner part No.
: 20279-001E-01, 20441-001E-01
4. Permissible load of cable at mating



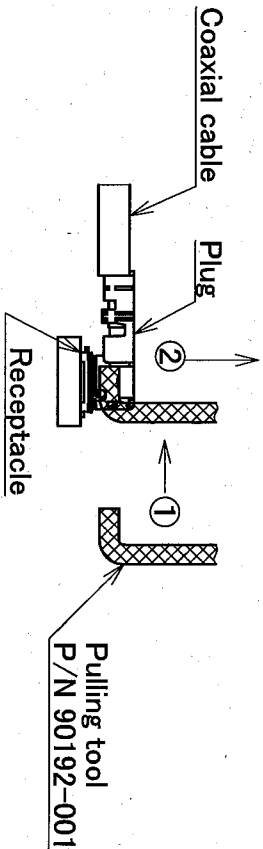
5. Suggestions for mating & unmating operation.
- 5-1 Mating.
Please mate the connector straightly to vertical direction as much as possible, adjusting the mating axis of plug and receptacle.
As excessive slant angle mating may break the connector , please don't do it.

- 1.コネクタの材料
(1) ハウジング:PBT,白色,UL94V-0
(2) コンタクト
りん青銅
金メッキ0.1 μ m MIN.
下地 ニッケル1.27 μ m MIN.
(3) グランドコンタクト
りん青銅
金メッキ0.05 μ m MIN.
下地 ニッケル1.27 μ m MIN.
2. 梱包 : リール
3. かん合相手 part No.
: 20279-001E-01,20441-001E-01
4. コネクタかん合後のケーブルに対する荷重

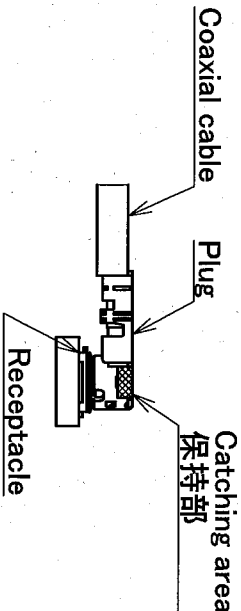
5. コネクタかん合時および抜去時の注意

- 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.



- (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.



5-3 Crimp over standards of outer conductor

Standards:Less than 10% from total numbers of outer conductor
(Numbers of outer conductor's crimp over from outer conductor's barrel)

5-3 外部導体はみ出し量

外部導体はみ出し量規定
:外部導体トータル本数の10%以下
(外部導体レベルの外にはみ出した量)

5-4 Caution about Heat shrinkage tubes

Please be careful not to melt housing when using heat shrinkage tubes.
It will become cause of open circuit.

- 5-4 熱収縮チューブについての注意
熱収縮チューブで外部導体を覆う場合は、導通不良の原因になりますので、熱によりハウジングを溶融させないよう注意してください。

6. Tip of contact should be recessed of housing after crimped about mating area.
7. This is “Pb-free” connector.
7. 本コネクタは“Pb-free”である

6. 圧着後、コネクタかん合部において、
コンタクト先端がハウジングより
飛び出さない事。

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

DESIGN BY	DATE	TITLE	
CHK'D BY	DATE	MHF series micro coaxial connector plug vertical (ground contact : gold plating)	
REV	ECN	BY	DATE
REV/RECORD		APP	
SERIES No.	CUSTOMER COPY	PROJECTION	SCALE
			5:1
			mm
			DWG. No.
			20351
			SHEET
			3/3
			REV.
			12