



**DESCRIPTION:** 4G External antenna

---

**PART NUMBER:** YS030-0128

---

**DATE:** 2024-2-21

---

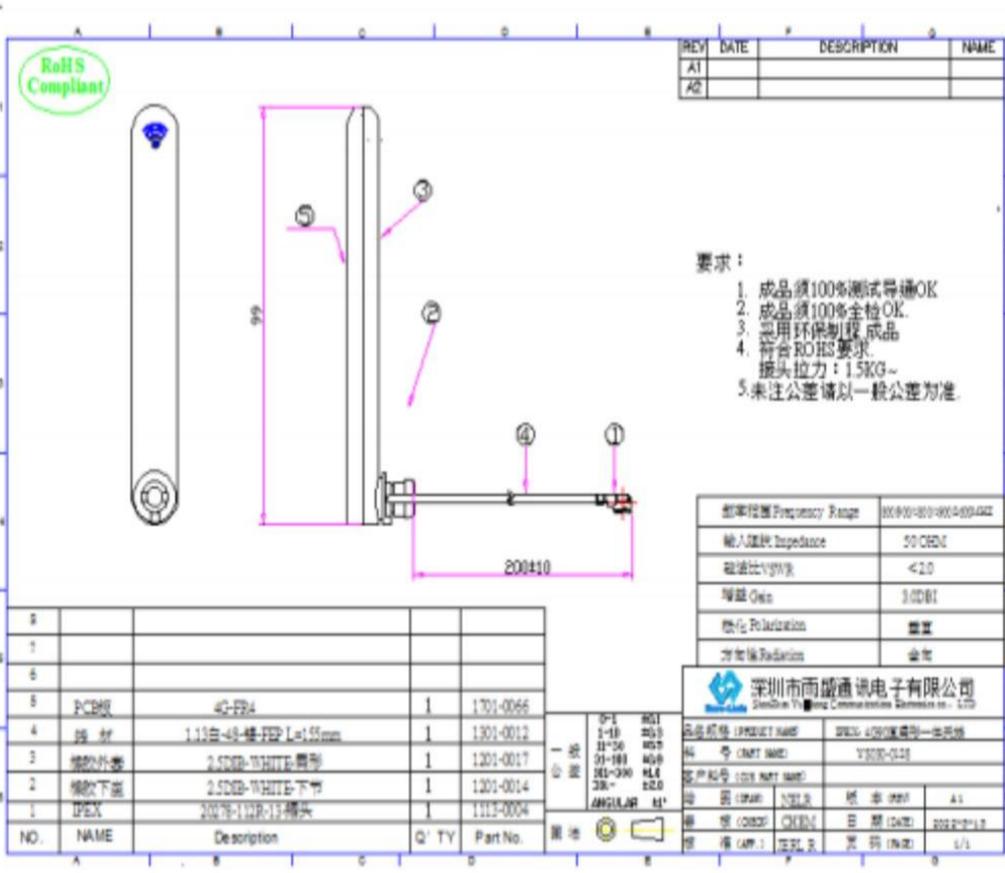
Manufacturer: Shenzhen Yu Sheng Communications Electronics co., LTD  
Add: 3-4th Floor, No. 102, Aoxi Road, Aobei Village 1, Henggang Town, Longgang  
District, Shenzhen City



电性能指标		Electrical Specifications	
频率范围	800/900/1800/1900/2600MHZ	Frequency Range	800/900/1800/1900/2600MHZ
电压驻波比	≤2.0	VSWR	≤2.0
增益	3DBI	GAIN	3DBI
输入阻抗	50 Ω	Input Impedance	50 Ω
机械指标		Mechanical Specifications	
天线颜色	白色	Antenna Color	WHITE
接口形式	IPEX	Input connector	IPEX
天线长度	300mm	Cable length	300mm
工作温度	-40℃~+85℃	Working Temperature	-40℃~+85℃
工作湿度	20~80%	Working Humidity	20~80%

Product picture:





REV	DATE	DESCRIPTION	NAME
A1			
A2			

- 要求：
1. 成品须100%测试导通OK
  2. 成品须100%全检OK
  3. 采用环保制程成品
  4. 符合ROHS要求
  5. 来注公差请以一般公差为准

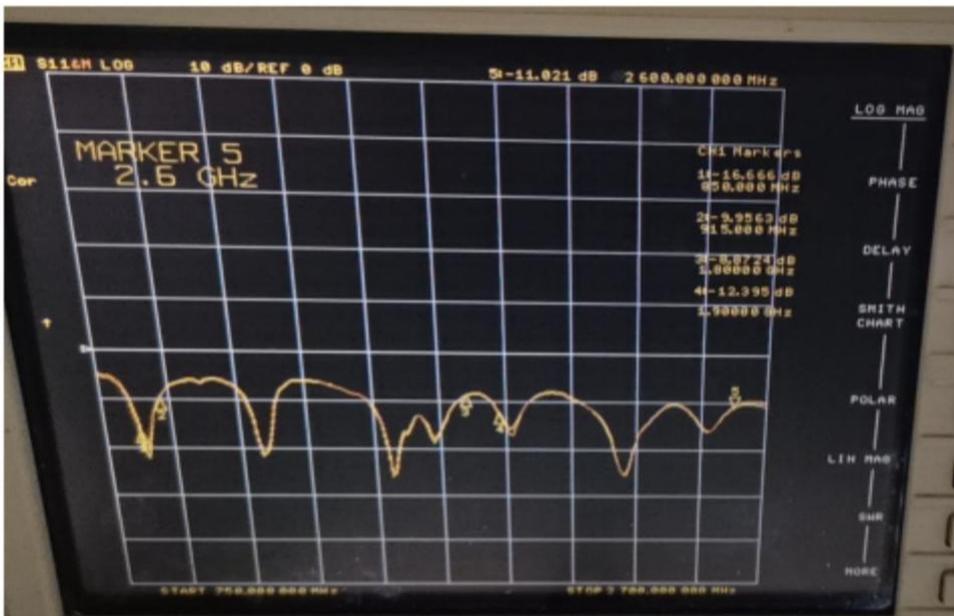
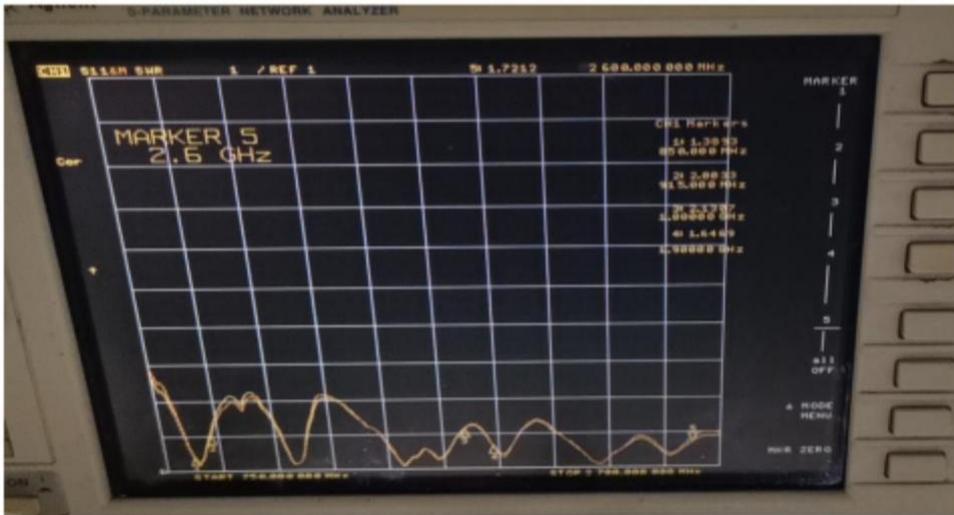
频率范围 Frequency Range	800MHz-800MHz-800MHz
输入阻抗 Impedance	50 OHMS
衰减比(dB)	<1.0
增益 Gain	1.0dB
极化 Polarization	垂直
方向性 Radiation	全向

NO.	NAME	Description	QTY	Part No.
5	PCB板	4G-FPC	1	1301-0066
4	线材	1.13白-48-编-FPC L=155mm	1	1301-0012
3	编织外套	2.5DIB-WHITE-圆形	1	1301-0017
2	编织下套	2.5DIB-WHITE-下管	1	1301-0014
1	IPEX	20176-112R-13-插头	1	1113-0004

一般公差  
ANGULAR 45°

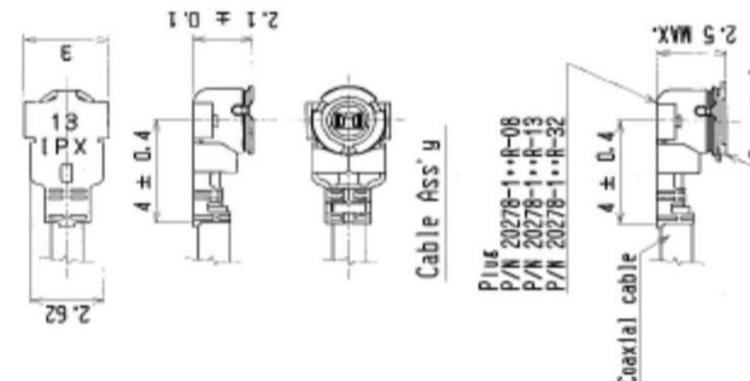
**深圳市雨盛通讯电子有限公司**  
 Shenzhen Yusheng Communications Electronics Co., Ltd.

产品名称 (PRODUCT NAME) 2023-4G-编-连接器-总成线  
 料号 (MATERIAL NO.) Y300-010  
 客户代号 (CUSTOMER NAME)  
 图号 (DRAWING NO.) 版本 (VERSION) A1  
 编制 (DRAWN) CHENL 日期 (DATE) 2023-07-17  
 审核 (APP.) 日期 (DATE) 1/1



# Material Data Sheet

## MHF Connector



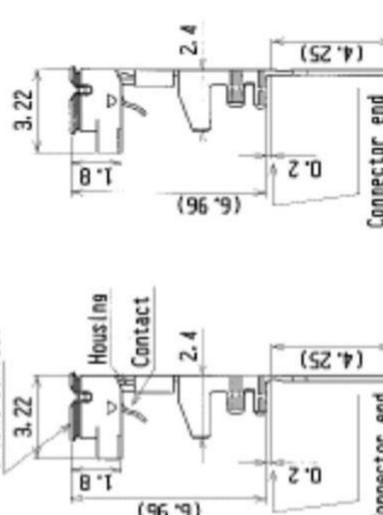
**Cable Ass'y**

Plus  
P/N 20278-10R-08  
P/N 20278-10R-13  
P/N 20278-10R-32

Coaxial cable

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

**MATING**



Connector end

Part No. 20278-11R-08  
20278-11R-13  
20278-11R-32

For seal auto termination machine (without notch)

Ground contact

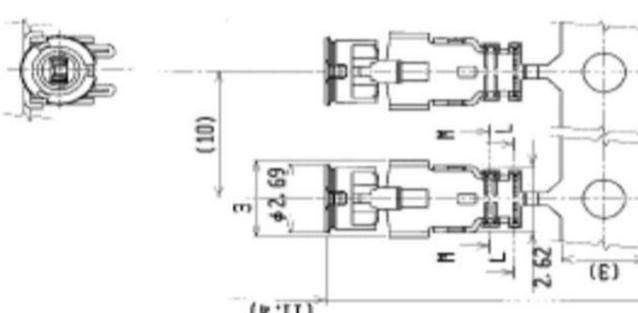
Housing

Contact

Connector end (notch)

Part No. 20278-10R-08  
20278-10R-13  
20278-10R-32

For hand tool (with notch)



REV	DATE	BY	CHK	APP	DATE	BY	CHK	APP	DATE
13C	2013/06	K.O.	T.H.	T.H.	2013/06	K.O.	T.H.	T.H.	2013/06
14C	2014/04	K.O.	T.H.	T.H.	2014/04	K.O.	T.H.	T.H.	2014/04
15C	2015/08	K.O.	T.H.	T.H.	2015/08	K.O.	T.H.	T.H.	2015/08
REV	DATE	BY	CHK	APP	DATE	BY	CHK	APP	DATE
16C	2016/08	K.O.	T.H.	T.H.	2016/08	K.O.	T.H.	T.H.	2016/08

DESIGN BY: K. Ohbayashi  
CHK BY: T.H.  
APP BY: T.H.

CUSTOMER: K. Katabuchi

REV. RECORD: 2814

SERIES No.: 2814

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

	Addressnet and Precision Electrodes TOKYO, JAPAN
TITLE	General
MF series micro coaxial connector plus vertical ground contact : with plating	
SCALE	6/1 mm
UNIT	mm
OWC No.	20278
SHEET REV.	1/4, 19C

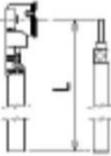
FORM REV. 4

WAS T

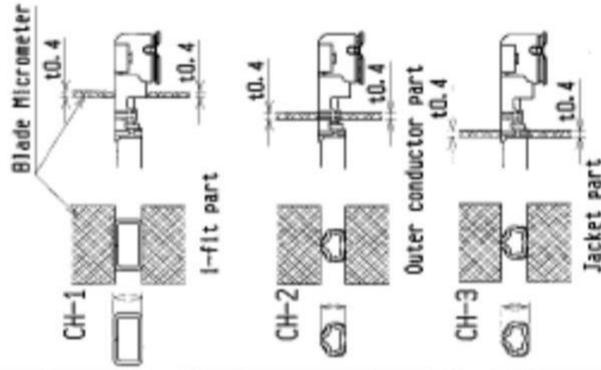
PART NO.  
20278-10R-13

Part No. of non halogen free type	20270-101P-00 20270-111P-00	20270-101P-13 20270-111P-13	20270-101P-32 20270-111P-32	20270-101P-18 20270-111P-18
Part No. of halogen free type	20270-102P-08 20270-112P-08	20270-102P-13 20270-112P-13	20270-102P-32 20270-112P-32	20270-102P-18 20270-112P-18
Housing color	White	Black	Black	White
Applicable cable nominal dimension	2.09±0.1 1.25±0.1 1.16±0.1	2.09±0.1 1.25±0.1 1.16±0.1	2.09±0.1 1.25±0.1 1.16±0.1	2.09±0.1 1.25±0.1 1.16±0.1
Jacket	φ0.81 Nominal Inner conductor silver plating Dielectric core Outer conductor silver or tin	φ1.13 Nominal Inner conductor silver plating Dielectric core Outer conductor silver or tin	φ1.32 Nominal Inner conductor silver plating Dielectric core Outer conductor silver or tin	φ1.8 Nominal Inner conductor silver plating Dielectric core Outer conductor silver or tin
Notes	※ NOTE-1 RNF#3617/0.05	※ NOTE-1 RNF#3217/0.08	※ NOTE-1 RNF#3217/0.08	※ NOTE-1 RNF#3017/0.102
Shielding	Single / 1層構造	Single / 1層構造	Double / 2層構造	Single / 1層構造
P/N of hand Tool	90187-008C	90187-013C	90187-032C	90233-018
P/N of seal auto termination machine	90213-008C	90213-013C	90213-032C	90232-018
Sect. M-M	1.68 1.12	2.24 1.68	2.29 1.91	2.71 1.9
Sect. L-L	1.72 1.19	2.28 1.91	2.37 1.71	3.1 2.26
Crimp Height	CH-1 1.34~1.40 CH-2 0.76~0.84 CH-3 0.85~0.97	1.34~1.40 1.06~1.14 1.15~1.35	1.34~1.40 1.20~1.30 1.26~1.46	1.34~1.40 1.41~1.49 1.70~1.80

Cable cut length



Crimp Height



**I-PEX** Interconnect and Protective Enclosures TOKYO, JAPAN

DESIGN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHK'D BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APP'D BY: \_\_\_\_\_ DATE: \_\_\_\_\_

REV. ECN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 REV. RECORD

SERIES No. 2814

CUSTOMER COPY

TITLE: General

Scale: mm

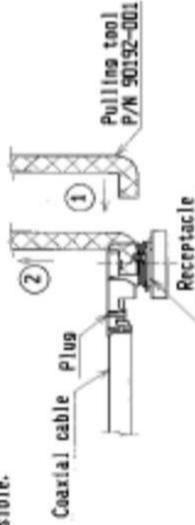
DWG. No. 20278

SHEET REV. 3/4 19C

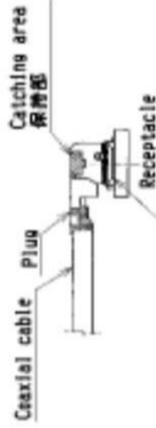
NOTE-1  
中心導体、外部導体への半田コテイングは不可  
Must not use solder coated  
inner conductor and outer conductor.

5-2 Unmating.

(1) In case of unmating by pulling tool.  
Please use the pulling drawing, 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  
外導体はみだし量規定 : 外導体はみだし量の10%以下 (外導体はみだしの外にのみ出し位置)

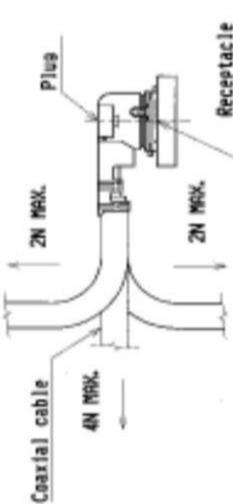
5-4 Caution about heat shrinkage tubes  
Please be careful not to melt housing when using heat shrinkage tubes. It will become cause of open circuit.

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導体保護を施す場合は、熱収縮管の溶融に注意する必要があります。開放回路の原因となります。

6. This is 'Pb-free' connector.

Notes

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



- 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.
- Suggestions for mating & unmating operation.  
5-1 コネクタ挿入時  
PlugとReceptacleの中心合わせを合わせ、  
できるだけ直交に挿入して下さい。  
傾斜角度の挿入は行わないで下さい。  
コネクタ裏面の裏面と合わせが、過度な傾斜  
挿入は行わないで下さい。

DESIGN BY		DATE
CHK BY		DATE
APP BY		DATE
REV. EON	BY	DATE
REV. RECORD	APP	
SERIES No.	2814	
TITLE		
I-PEX Interconnect and Passive Electrical TOKYO, JAPAN		
NF series slotted coaxial connector plug vertical (ground contact : solid plating)		
SCALE	UNIT	PROJECTION
1/1	mm	1st angle
CUSTOMER COPY		
20278		
General		
SHEET REV.	4/4 19C	