

RoHS & Halogen Free & REACH Compliance

產	品表	見枚	各	承	認	書	
<u>S</u>	PECIFIA	TION F	OR A	<u>PPRO</u>	VAL		
Customer :	英業達	股份有	限公	司			_
Vendor code:	234764						_
MACHINERT:	ACEP 13						_
PART NAME :	ACEP 13	WLAN .	ANTE	ENNA			_
Customer P/N:	<u>6036B028</u>	37401					_
Pulse P/N :	ANTA0Z	V1420 <u>12</u>	2455 <u>1</u>			Date :	20221101

SPECIFICATION						
ACCEPTED BY:						
核准	核准 審 核 承認者 承認單位					

審 核	作成
Yen	Ellen

新加坡商普思電子有限公司 PULSE ELECTRONICS (SINGAPORE) PTE LTD No. 99 Huo Ju Road, Suzhou New District Jiangsu Province, suzhou 215009, P.R. China



## TECHNICAL DATA SHEET Description: 2400 ~ 2500 / 5150 ~ 5850 FPC+Holder Antenna PART NUMBER: ANTA0ZV1420124551 INVENTEC P/N: 6036B0287401

2 撕手 7.5 20.24 25 25 VAGEO 6.24 **WLAN** CONNECTOR: IPE /85±3/GRAY/ø1. Cu-FOI S S L S

## Features:

- WLAN Antenna
- •2.4~2.5 GHz, 5.15-5.85 GHz,
- •Gain 2.7~ 3.97 dBi peak
- •Size 27.74x25x6.1 mm
- •1.13mm cable with IPEX-1L
- •RoHS Compliant

## **Applications:**

•廣告刊版

#### All dimensions are in mm / inches

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For more information:

Pulse Worldwide Headquarters 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998 1



**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

PIFA

## **ELECTRICAL SPECIFICATIONS**

Antenna Type Frequency Nominal Impedance **VSWR Radiation Pattern** Gain Polarization **Power Withstanding** 

## 2.4-2.5GHz,5.15-5.85GHz **50** Ω ≤3.0 Omni 2.70 ~ 3.97 dBi Linear 1W

## **MECHANICAL SPECIFICATIONS**

**Overall Length** Antenna Color / Material Connector type Cable type Cable length Adhesive tape Protective tube

27.74x25x6.1mm Black/ FPC See table, P3 Material:FEP ,See table, P3 See table, P3 HSDS15 Color: Yellow

## **ENVIRONMENTAL SPECIFICATIONS**

**Operating Temperature** Storage Temperature **RoHS** Compliant

-40 ~ +55°C -40 ~ +75°C Yes

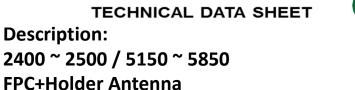
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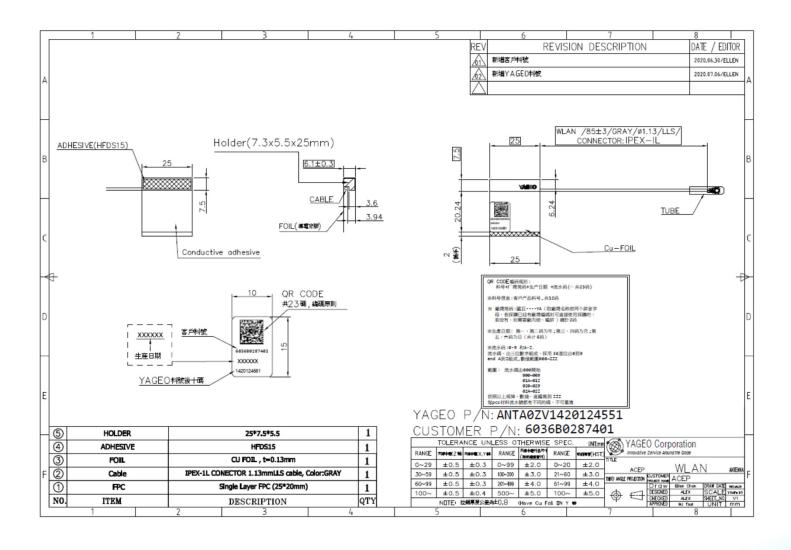




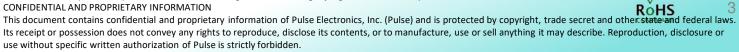


**PART NUMBER:** ANTA0ZV1420124551 INVENTEC P/N: 6036B0287401

## **MECHANICAL DRAWING**



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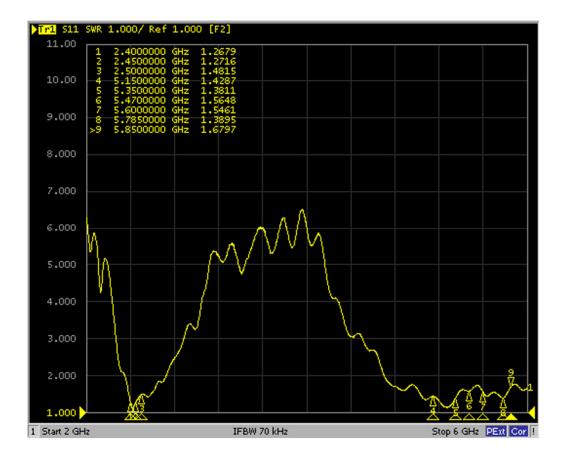


#### **TECHNICAL DATA SHEET**



## **Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 INVENTEC P/N: 6036B0287401

**VSWR** 



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## ACeP13





PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **Peak-Gain and Average-Gain**

Antenna/ Band / Frequency		Test Date Free Space Gain Peak Gair		
	F	2400	-3.45	2.77
	2.4GHz	2450	-3.30	2.81
	2.	2500	-3.83	2.70
z		5150	-2.06	3.25
A		5250	-2.32	3.25
1st WLAN		5350	-2.01	3.49
st	5GHz	5470	-2.37	3.73
-	5G	5600	-3.00	2.96
		5725	-2.85	3.44
		5785	-2.47	3.97
		5850	-2.73	3.92

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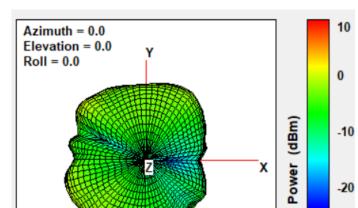
## ACeP13



**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

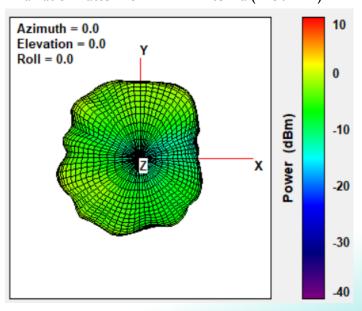
-30

## **CHARTS**



Radiation Pattern of WLAN Antenna (2400MHz)

## Radiation Pattern of WLAN Antenna (2450MHz)



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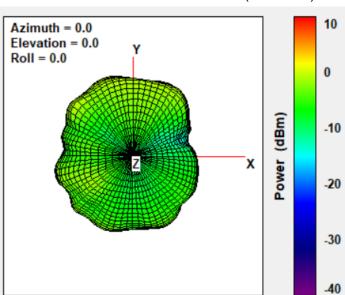
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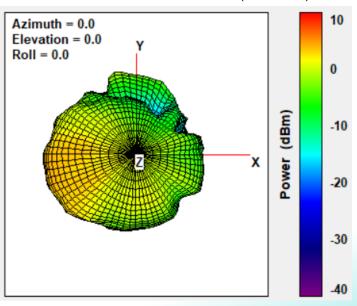
**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **CHARTS**



#### Radiation Pattern of WLAN Antenna (2500MHz)

#### Radiation Pattern of WLAN Antenna (5150MHz)



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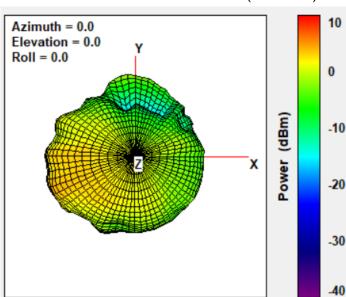
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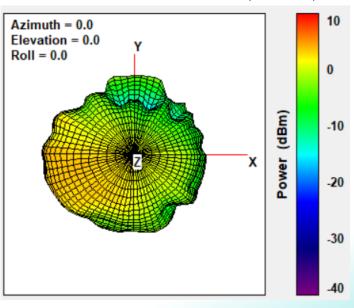
**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **CHARTS**



Radiation Pattern of WLAN Antenna (5250MHz)

## Radiation Pattern of WLAN Antenna (5350MHz)



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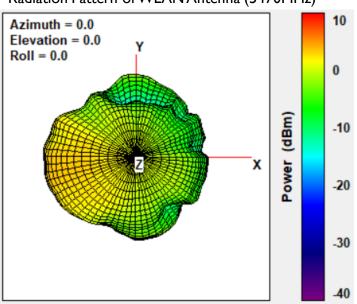
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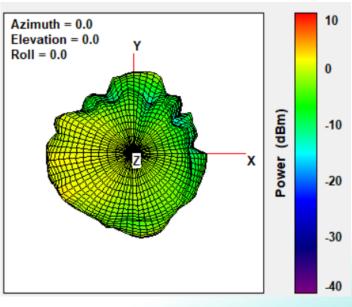
**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **CHARTS**



Radiation Pattern of WLAN Antenna (5470MHz)

#### Radiation Pattern of WLAN Antenna (5600MHz)



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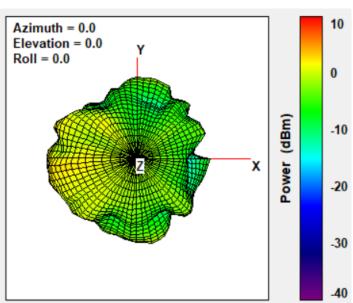
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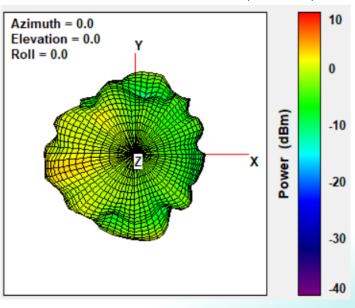
**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **CHARTS**



Radiation Pattern of WLAN Antenna (5725MHz)

## Radiation Pattern of WLAN Antenna (5785MHz)



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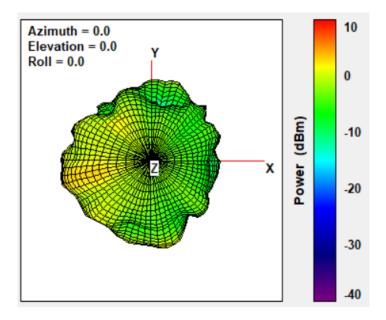




**TECHNICAL DATA SHEET Description:** 2400 ~ 2500 / 5150 ~ 5850 **FPC+Holder Antenna** PART NUMBER: ANTAOZV1420124551 **INVENTEC P/N: 6036B0287401** 

## **CHARTS**

#### Radiation Pattern of WLAN Antenna(5850MHz)



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# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Date E467827 E467827-2022-07-22 2022-July-27

Issued to: NANCHANG ZHENGYE TECHNOLOGY CO.,LTD No.16 Industrial Road,Wengang Town,Jinxian County Nanchang Jiangxi 331722 CN

This is to certify that representative samples of

POLYMERIC MATERIALS - FILAMENT-WOUND TUBING, INDUSTRIAL LAMINATES, VULCANIZED FIBER, AND MATERIALS FOR USE IN FABRICATING RECOGNIZED PRINTED WIRING BOARDS - COMPONENT

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety:	See Addendum Page for Standards	
Additional Information:	See the UL Online Certifications Directory at <u>https://iq.ulprospector.com</u> for additional information	

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

+ Mally

Bruce Mahrenholz, Director North American Certification Program

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# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Date

E467827 E467827-2022-07-22 2022-July-27

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Models:

Flexible Base Materials with or without copper on one or both sides furnished in sheets or rolls, with Flammability only Recognition.for Grade Designations

Base Material Grade ZYF

Standards:

UL746F - Standard for Safety for Polymeric Materials – Flexible Dielectric Film Materials for Use in Printed-Wiring Boards and Flexible Materials Interconnect Constructions

Bamely



Bruce Mahrenholz, Director North American Certification Program

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## AVLV2.E318898 Appliance Wiring Material - Component

Page Bottom

#### **Appliance Wiring Material - Component**

See General Information for Appliance Wiring Material - Component

#### SHENYU COMMUNICATION TECHNOLOGY INC

E318898

275 E Waihuan Rd

Jiangyin, Jiangsu 214400 CHINA

	Table of Recognized Styles						
Single-cond	Single-conductor, thermoplastic insulation.						
<u>1007</u>	<u>1333</u>	<u>1589</u>	<u>1723</u>	<u>1858</u>	<u>1901</u>	<u>10111</u>	
<u>1226</u>	<u>1354</u>	<u>1591</u>	<u>1726</u>	<u>1859</u>	<u>1927</u>	<u>10248</u>	
<u>1227</u>	<u>1371</u>	<u>1592</u>	<u>1727</u>	<u>1860</u>	<u>10005</u>	<u>10362</u>	
<u>1330</u>	<u>1538</u>	<u>1708</u>	<u>1766</u>	<u>1882</u>	<u>10011</u>	<u>10518</u>	
<u>1331</u>	<u>1571</u>	<u>1709</u>	<u>1847</u>	<u>1886</u>	<u>10064</u>	<u>11149</u>	
<u>1332</u>	<u>1577</u>	<u>1710</u>	<u>1857</u>	<u>1887</u>	<u>10072</u>		
Multiple-co	Multiple-conductor, thermoplastic insulation.						
<u>2464</u>	<u>2725</u>	<u>20276</u>	<u>21100</u>				

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper, and use.

Last Updated on 2016-06-13

Questions?

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UNDERWRITERS LA Subj.758 Se Style 1354	
SCATE 1224	COaxial Cable.
Rating	60, 80 deg C, 30 Vac, Horizontal flame.
Conductor	44 AWG min., material not specified.
Insulation	2 mils minimum at any point, 125 mils maximum. The insulation may be: Extruded solid or cellular PE, FRPE, PP, PFA, FEP, ECTFE, PTFE, ETFE, or combination thereof with or without irradiation; or tape wrapped solid or cellular PTFE, PFA, or FEP. Applied as a spiral wrapped thread (5 mils minimum, 40 mils maximum) and enclosed in a tube of insulation.
Assembly	Insulated conductor with optional inner covering, optional inner shield, optional middle covering, required outer shield and required outer covering.
Shield	Optional. Outer Shield required.
Covering	Optional Inner Covering - Extruded PVC, PFA, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PFA or FEP tape; Polyester or Polyester- Polyethylene film. Thicknesses not specified. Optional Middle Covering - Extruded PVC, PFA, PP, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PFA or FEP tape; Polyester or Polyester-Polyethylene film. Thicknesses not specified. Required Outer Covering - Extruded Irradiated PE, Irradiated PVC, Polyurethane, PVC, PFA, PP, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PVC, PFA or FEP tape; Polyester or Polyester-Polyethylene film. Thicknesses not

Standard	Appliance Wiring Material UL 758.
Marking	General.
Use	Internal wiring of Class 2 circuits of electronic equipment or as insulated single in jacketed multiconductor cables.

#### SY-3YF-020-A

-020-A				神宇通信www.shenyu	
型号 Type	RF-1.13L/50	料号 P/N	SY113L/50-003(Gray)	版本: V0	
吉构图 Structure drawing	-	0			
「相当 Structure drawing	9	1 2	3 4 5		
胸特性 Structure chara	acteristics	L			
结构 Structure		Item		tandard value	
	材料 Material		镀银铜线 Silverplated copper wire		
内导体 Inner conductor	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		7/0.083		
	(绞合)标称外径(mm)		0.249±0.02		
	(Intertwist)NOM.O.D.(mm) 材料 Material		聚全氟乙丙烯 FEP		
绝缘层 Insulation	颜色 Color		透明 Clarity		
	顾巴 Color 标称外径(mm)		0.735±0.03		
	NOM.O.D.(mm)				
	材料 Material 组成:厚度(mm)×宽度(mm)		铜塑箔 Cu-plastic composite tape		
补导体 Outer conductor	Makeup:thickness(mm)×width(mm) 标称外径(mm)		0.012×2.5		
	NOM.O.D.(mm)		0.759±0.03		
	覆盖率(%) Coverage ratio(%)		100		
	材料 Material		镀锡铜线 Tinned copper wire		
外导体 Outer conductor	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		4/0.05		
	标称外径(mm) NOM.O.D.(mm)		0.96±0.05		
	覆盖率(%) Coverage ratio(%)		90±5		
	材料 Material		聚全氟乙丙烯 FEP		
护套层 Jacket	颜色 Color		灰 Gray		
	标称外径(mm) NOM.O.D.(mm)		1.15±0.05		
性能特性 Electrical cha			I		
项目 Item	标准值 Standard value	项目 Item	频率 Frequency	标准值 Standard value 单位 Unit:dB/m	
容(pF/m) pacitance(pF/m)	98		1GHz	<u>≤1.88</u>	
率(%) locity(%)	70	-	2GHz	≤2.55	
抗(Ω) @1ns	50±2	-	3GHz	≤3.05	
pedance(Ω) 波比	≪1.3@0~6GHz	- 衰减 Attenuation	4GHz	≤3.52	
anding wave ratio 大工作电压(V)	1000	-		≪4.05	
ax.operating voltage(V)				< 1.00	
		-	5GHz 6GHz	<4 4	
		-	6GHz	≤4.4	
董性 Dependability	项目 Item	 单位 Unit	6GHz	≤4.4	
「 <b>靠性 Dependability</b> 」 小弯曲半径(一次)	页目 Item	- 単位 Unit mm	6GHz		
<b>丁靠性 Dependability</b> 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复)	页目 Item	mm	6GHz	tandard value	
「輩性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围	页目 Item	mm	6GHz 标准值 St	tandard value 4	
<b>準性 Dependability</b> 小弯曲半径(一次) n.bending radius static 小弯曲半径(重复) n.bending radius repeated 作温度范围 perating temperature	页目 Item	mm	6GHz 标准值 St	tandard value	
本 生 本 等 曲 半 径(一次) n.bending radius static 小 等 曲 半 径(重复) n.bending radius repeated 作 温度 范 間 berating temperature 上 本 本 本 本 本 本 本 本 本		mm mm °C	6GHz 标准值 SI	tandard value 4	
「靠性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围 perating temperature 出装 Packing	项目 Item 页目 Item	mm mm で 単位 Unit	6GHz	tandard value 4	
「輩性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围 perating temperature 以後 Packing		mm mm ℃ <b>単位 Unit</b> /	6GHz <b>标准值 SI</b> -5: -5: -5: -5: -5: -5: -5: -5:	tandard value 4	
「 <b>靠性 Dependability</b> 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围 perating temperature <b>U裝 Packing</b> 壊方式 acking mode 盘长度 ne length of each plate		mm mm で 単位 Unit	6GHz <b>标准值 SI</b> -5: -5: -5: -5: -5: -5: -5: -5:	tandard value 4	
「 <b>靠性 Dependability</b> 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作溫度危間 perating temperature <b>以装 Packing</b> なが成 mode 盘长度 the length of each plate 盘技头数 ack connector plate number		mm mm ℃ <b>単位 Unit</b> /	6GHz <b>标准值 SI</b> -5: -5: -5: -5: -5: -5: -5: -5:	tandard value 4	
「輩性 Dependability 小弯曲半径(一次) n.bending radius static 小弯曲半径(重复) n.bending radius repeated 作編度范围 berating temperature 以後 Packing 支方式 texting mode 盘长度 e length of each plate 盘技头数 tech connector plate number 段最短长度		mm mm で 単位 Unit	6GHz <b>标准值 SI</b> -5: -5: -5: -5: -5: -5: -5: -5:	tandard value 4	
「輩性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作品度范丽 berating temperature <b>以後 Packing</b> 支持 支持 支持 支持 支持 支持 支持 支持 支持 支持 支持 支持 支持		mm mm で で	6GHz <b>标准值 SI</b> -5: -5: -5: -5: -5: -5: -5: -5:	tandard value 4	
事性 Dependability           小弯曲半径(一次)           n.bending radius static           小弯曲半径(重复)           n.bending radius repeated           作温度范围           perating temperature           製技 Packing           支方式           cking mode           盘长度           e length of each plate           盤技头数           ch connector plate number           契最超长度           e shortest length of each root <b>T用提示 Use tips</b> 儲环境		mm mm で で 単位 Unit / / m / 温度: 30で以下: 湿度: 20%~65% Temperature: Under 30で: Humidi	6GHz	tandard value 4	
「輩性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作為度意面 berating temperature 以後 Packing 型 支方式 acking mode 盘长度 te length of each plate 盘接头致 ack connector plate number 段最短长度 te shortest length of each root <b>E用提示 Use tips</b> 儲环境 orage environment 佳保存周期		mm mm で 単位 Unit / 「 加 が 二 二 二 二 二 二 二 二 二 二 二 二 二	GGHz       标准值 SI       小市市       小市       小市       小市       小市       大学校       小市       シーン       シーン       小市       シーン       シーン <td>tandard value 4 4 5-+125 tandard value 纸盘 ery plate 1000 ≤5 ≥10 温高還环境开剩后需尽快流转 nned effect may become worse, but i</td>	tandard value 4 4 5-+125 tandard value 纸盘 ery plate 1000 ≤5 ≥10 温高還环境开剩后需尽快流转 nned effect may become worse, but i	
「 <b>非性 Dependability</b> 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) n.bending radius repeated 作温度范围 berating temperature 地 使 Packing な なたののector plate number 設最短长度 te shortest length of each root <b>5月提示 Use tips</b> 儲环境 orage environment 佳保存周期 te best save cycle 工温度 occessing temperature		mm mm で で	GGHz       标准值 Si       小市市       小市市       小市市       小市市       小市市       小市市       小市市       小市市       小市市       シーン       小市市       シーン        シーン	tandard value 4 4 5-+125 tandard value 纸盘 ery plate 1000 <<5 ≥10 温高湿环境开剥后需尽快流转 nned effect may become worse, but soon as possible in the summer higi 解: 400℃以上发生显著的热分解	
「非性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围 perating temperature 型装 Packing 型装方式 acking mode 盘长度 e length of each plate 盘接头数 ach connector plate number 段最短长度 te shortest length of each root <b>U用提示 Use tips</b> 储环境 orage environment 佳保存周期 te best save cycle 工温度 occessing temperature 氧龙收缩		mm mm で で	6GHz       标准值 Si       小市本値 Si       -5:       小市本値 Si       小市本値 Si	tandard value 4 4 5-+125 tandard value 纸盘 ery plate 1000 <<5 >>10  温商還环境开剥后需尽快流转 nned effect may become worse, but I soon as possible in the summer higl 解: 400℃以上发生显著的热分解 h terminal groups will decompose ov	
「靠性 Dependability 小弯曲半径(一次) in.bending radius static 小弯曲半径(重复) in.bending radius repeated 作温度范围 perating temperature 出装 Packing		mm mm mm で で	6GHz       标准值 Si       小市本値 Si       -5:       小市本値 Si       小市本値 Si	tandard value 4 4 5~+125 tandard value 然盘 ery plate 1000 ≤5 ≥10 ang遲环境开剩后需尽快流转 nned effect may become worse, but f soon as possible in the summer high 解; 400℃以上发生显著的热分解 h terminal groups will decompose ov mm	

特殊加工工艺,请与供方协商后使用 Special processing technology,please consult with supplier before using.

## UL Product **iQ**<sup>™</sup>

# XFR 4840 GF10 (w), 310NF (w) - Plastics - Component

## **Plastics - Component**

File Number: E213445

Yellow Card<sup>®</sup> c<sup>mu</sup>us



#### COMPANY

#### POLYPLASTICS CO LTD

18-1 KONAN 2-CHOME MINATO-KU, TOKYO 108-8280 Japan

#### **MODEL INFO**

#### Duranex: XFR 4840 GF10 (w), 310NF (w)

Polybutylene Terephthalate (PBT), furnished as pellets

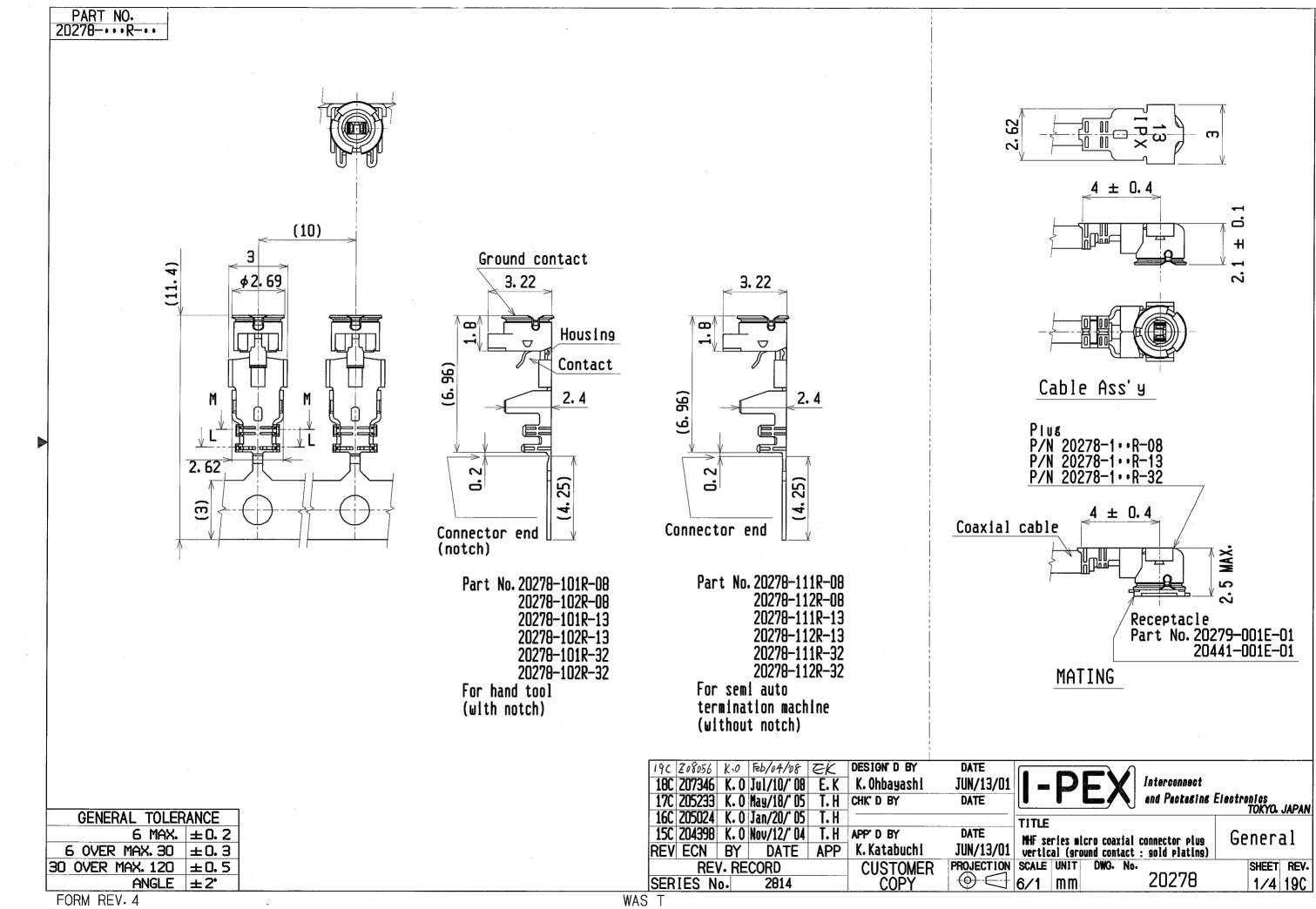
--(w) Virgin and regrind up to 50% by weight inclusive, have the same flame characteristics only.

FLAMMABILITY PROPERTIES	NOMINAL VALUE	TEST METHOD
Flammability		ANSI/UL 94
0.75 mm, Color: ALL	V-0	
1.5 mm, Color: ALL	V-0	
3.0 mm, Color: ALL	5VA V-0	

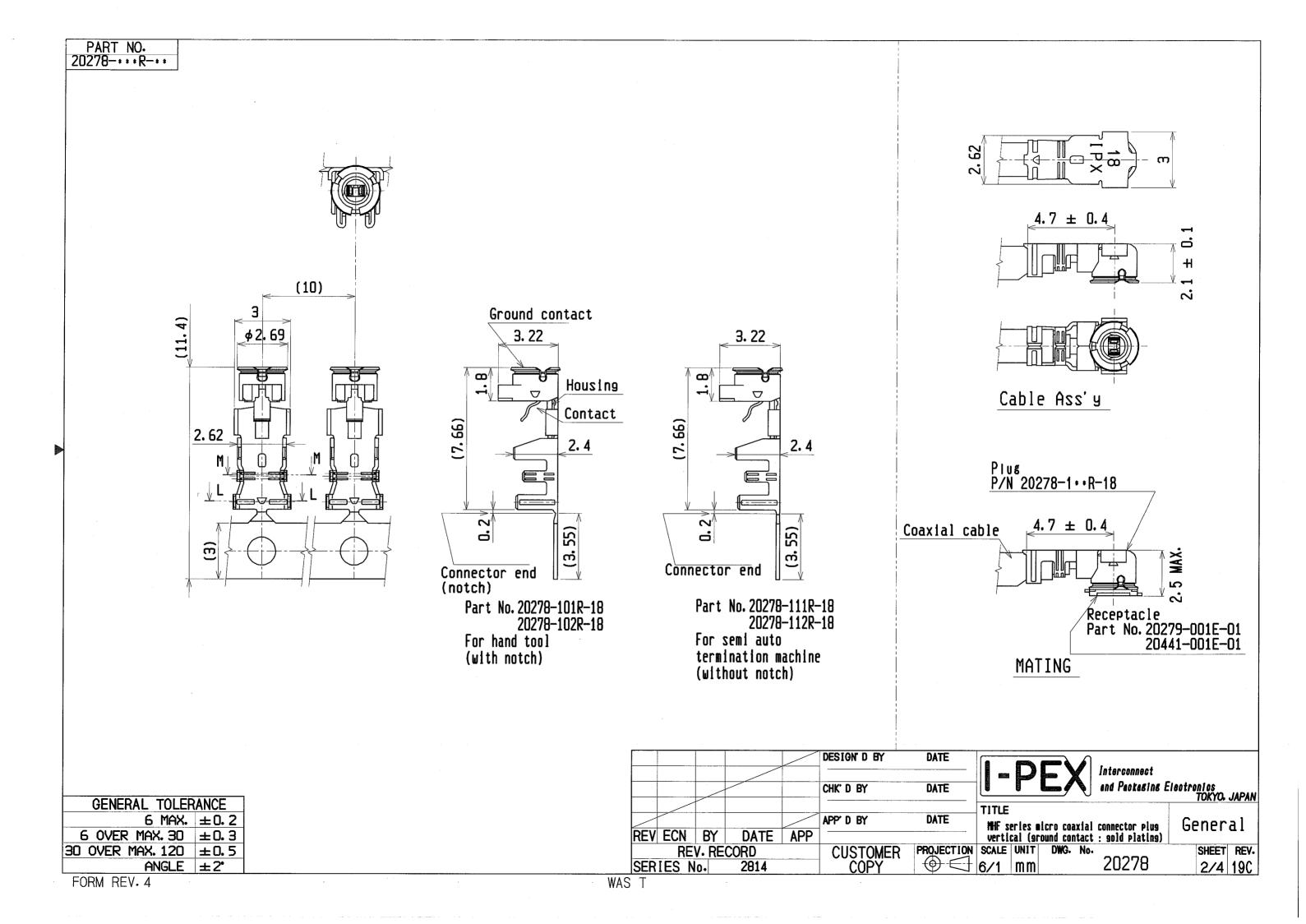
ISO/IEC FLAMMABILITY PROPERTIES	NOMINAL VALUE	TEST METHOD
Flammability		IEC 60695-11-10
0.75 mm, Color: ALL	V-0	
1.5 mm, Color: ALL	V-0	
3.0 mm, Color: ALL	V-0	
<b>Flammability</b> (3.0 mm, Color: ALL)	5VA	IEC 60695-11-20

ELECTRICAL PROPERTIES	NOMINAL VALUE		TEST METHOD
Hot-wire Ignition (HWI)			UL 746A
0.75 mm	1 PLC		
1.5 mm	1 PLC		
3.0 mm	1 PLC		
High Amp Arc Ignition (HAI)			UL 746A
0.75 mm	0 PLC		
1.5 mm	0 PLC		
3.0 mm	0 PLC		
Comparative Tracking Index (CTI)	1 PLC		UL 746
Dielectric Strength	24	kV/mm	ASTM D149
High Voltage Arc Tracking Rate (HVTR)	0 PLC		
Volume Resistivity	1.0E+14	ohms∙cm	ASTM D257/IEC 60093
High Voltage, Low Current Arc Resistance	5 PLC		

THERMAL PROPERTIES	NOMINAL VALUE	TEST METHOD
Relative Thermal Index - Electrical Strength		UL 746B
0.75 mm	130 °C	
1.5 mm	130 °C	
3.0 mm	130 °C	
Relative Thermal Index - Mechanical Impact		UL 746B
0.75 mm	125 °C	
1.5 mm	125 °C	
3.0 mm	125 °C	
Relative Thermal Index - Mechanical Strength		UL 746B
0.75 mm	125 °C	
1.5 mm	125 °C	
3.0 mm	125 °C	



FORM REV. 4



Part No. of non halogen free type	20278-101R-08 20278-111R-08	20278-101R-13 20278-111R-13	20278-101R-32 20278-111R-32	20278-101R-18 20278-111R-18	
Part No. of halogen free type	20278-102R-0820278-112R-08	20278-102R-13 20278-112R-13	20278-102R-32 20278-112R-32	20278-102R-18 20278-112R-18	
Housing color	White	Black	Black	White	
	2.09±0.1 1.25±0.1 1.16±0.1 40.00 1.16±0.1 (\$0,02	2.09±0.1 1.25±0.1 1.16±0.1 (0,03)	2. 09 ± 0. 1 1. 25 ± 0. 1 1. 16 ± 0. 1 1. 16 ± 0. 1 (a) 1 (c) 10 (b) 10 (c) 10 (c	2. 09 ± 0. 1 RG178 B/U I umu mov 8.1. 4 1. 25±0.1 1. 16±0.1 Vor 1. 10 1. 16±0.1 Vor 1. 10 Vor 1. 10 Vor Vor Vor Vor Vor Vor Vor Vor	
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	Ē
P/N of hand Tool	90187-008C	90187-013C	90187-032C	90233-018	
P/N of seni auto // Termination machine	90213-008C	90213-013C	90213-0320	90232-018	
Sect. M-M	1.68	2.24	2.29		(
Sect. L-L	1.72	2.28	2. 37	3.1 97.7	
Crimp CH-1	1. 34~1. 40	1. 34~1. 40	1. 34~1. 40	1. 34~1. 40	
Height <u>CH-2</u>	0. 76~0. 84	1.06~1.14	1.20~1.30	1. 41~1. 49	
CH-3	0.85~0.97	1. 15~1. 35	1.26~1.46	1.70~1.80	
	,外部導体への半田コーティングは use solder coated	は不可		DESIGN D BY DATE CHK' D BY DATE	
inner co	nductor and outer conduct	or.		APP' D BY DATE	

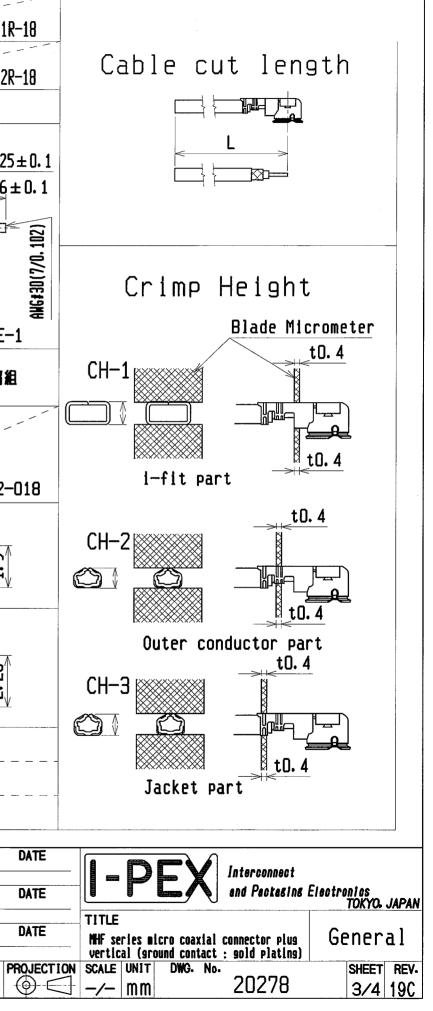
WAS T

SERIES No.

REV ECN BY DATE APP REV. RECORD

2814

CUSTOMER COPY

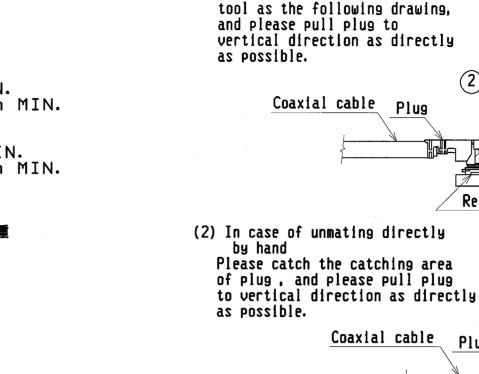


#### 5-2 Unmating.

(1) In case of unmating by

Please use the pulling

pulling tool.

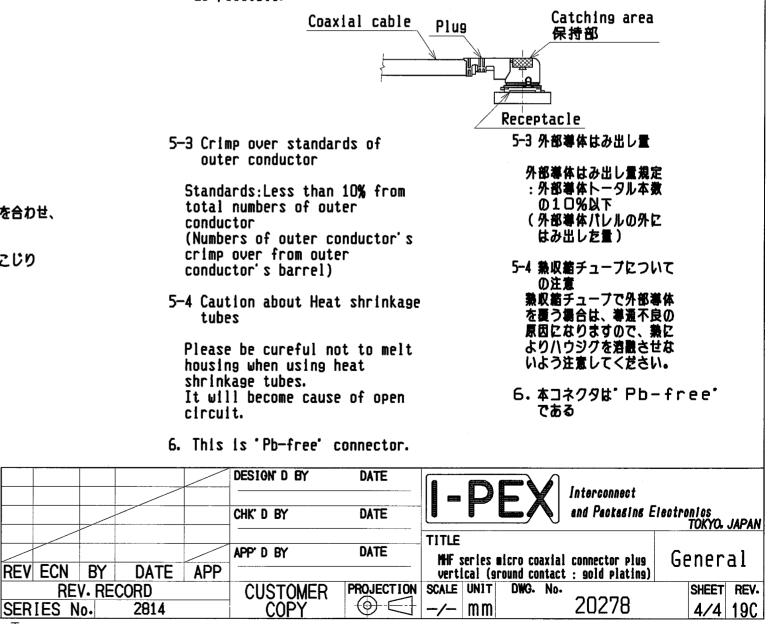


outer conductor

total numbers of outer (Numbers of outer conductor's

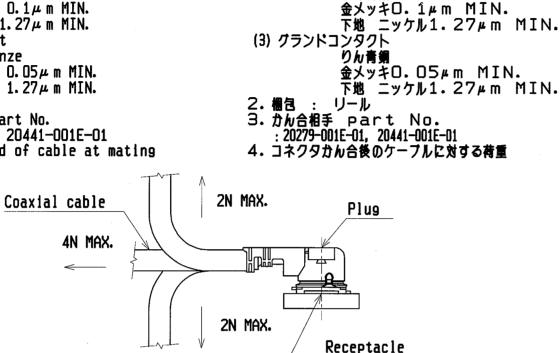
tubes

housing when using heat shrinkage tubes. It will become cause of open circuit.



Notes

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



1. 材料

(2) コンタクト

ハウジング:PBT,UL94V-0

りん青銅

- 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.

5-1 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

5. コネクタカル合時あよび抜去時の注意

挿抜は行わないで下さい。

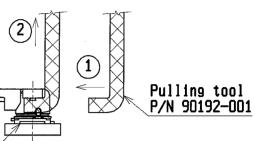
## GENERAL TOLERANCE 6 MAX. $\pm 0.2$ 6 OVER MAX. 30 $\pm 0.3$ 30 OVER MAX. 120 $\pm 0.5$ ANGLE $\pm 2^{\circ}$

FORM REV. 4

WAS T

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。



Receptacle

(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。

Plug