

# CABLIN<sup>®</sup>- UY

较低嵌合高度（嵌合高度 = 0.76 mm），较窄间距（0.35 mm pitch），90度出线垂直插拔款的极细同轴线连接器

**Product Specifications:**

Mating type	Right angle vertical	
Board Pitch (mm)	0.35	
Wiping Length (mm)	0.1	
Mated size (mm)	Height	0.76 +/- 0.06
	Width	Formula: 2.15 + (0.35 * ?p)
	Depth	3.10
Pin Counts	Range	Up to 25p
	Available	5, 10p

**Applicable Cable Size:**

Maximum O.D. (mm)	0.35
Micro-Coaxial for Signal (AWG)	45 ohm: #40 or smaller
	50 ohm: #42 or smaller
Twinax (AWG)	-
Discrete (AWG)	#36 or smaller

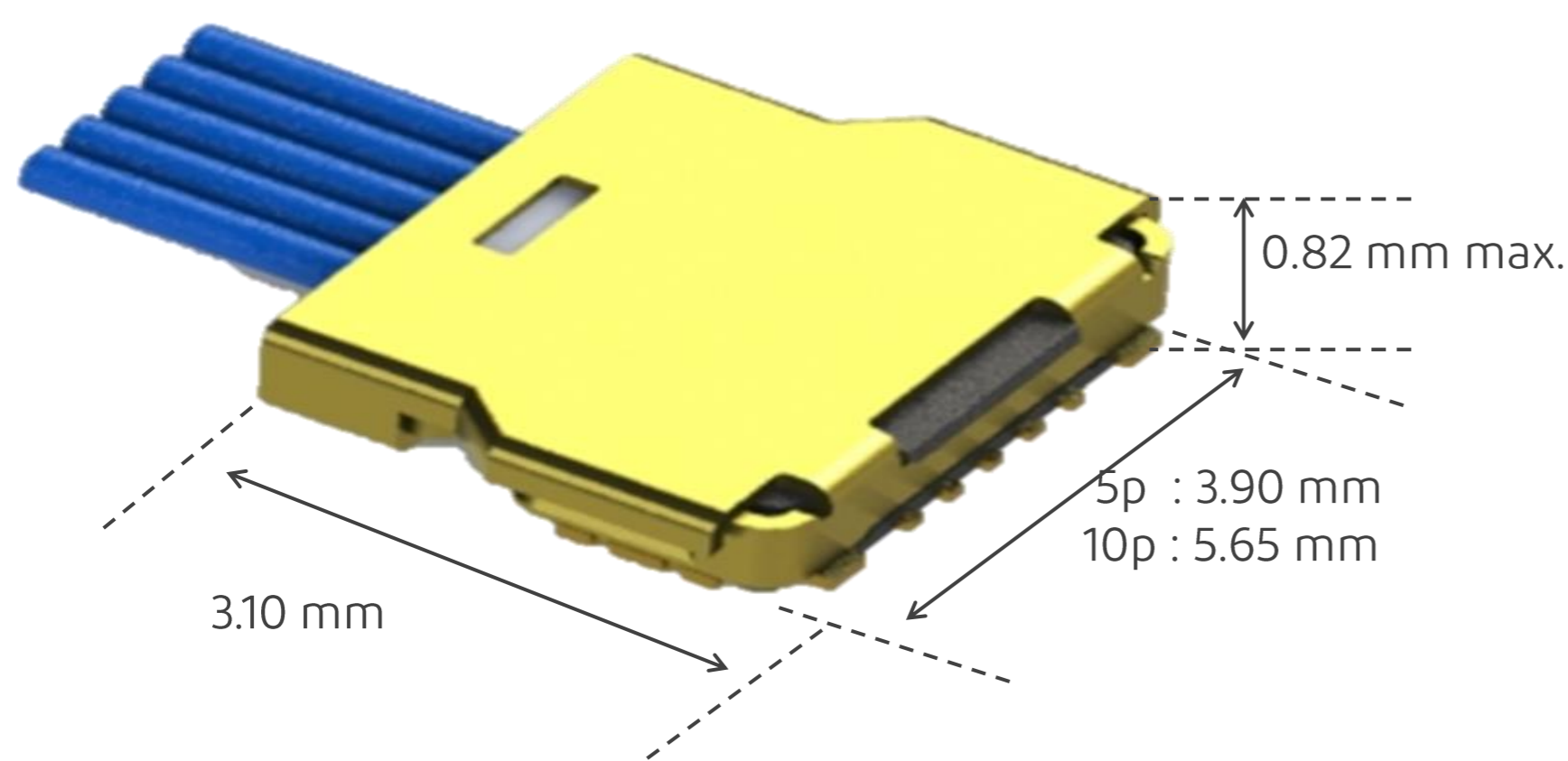
**Applicable Standards (Reference Only):**

USB4 Gen4 (40Gbps/Lane PAM3)  
 USB4 Gen3/ Thunderbolt 4 (20 Gbps/lane)  
 eDP HBR 3 (8.1 Gbps)



## 小而低的设计，适用于狭窄的空间

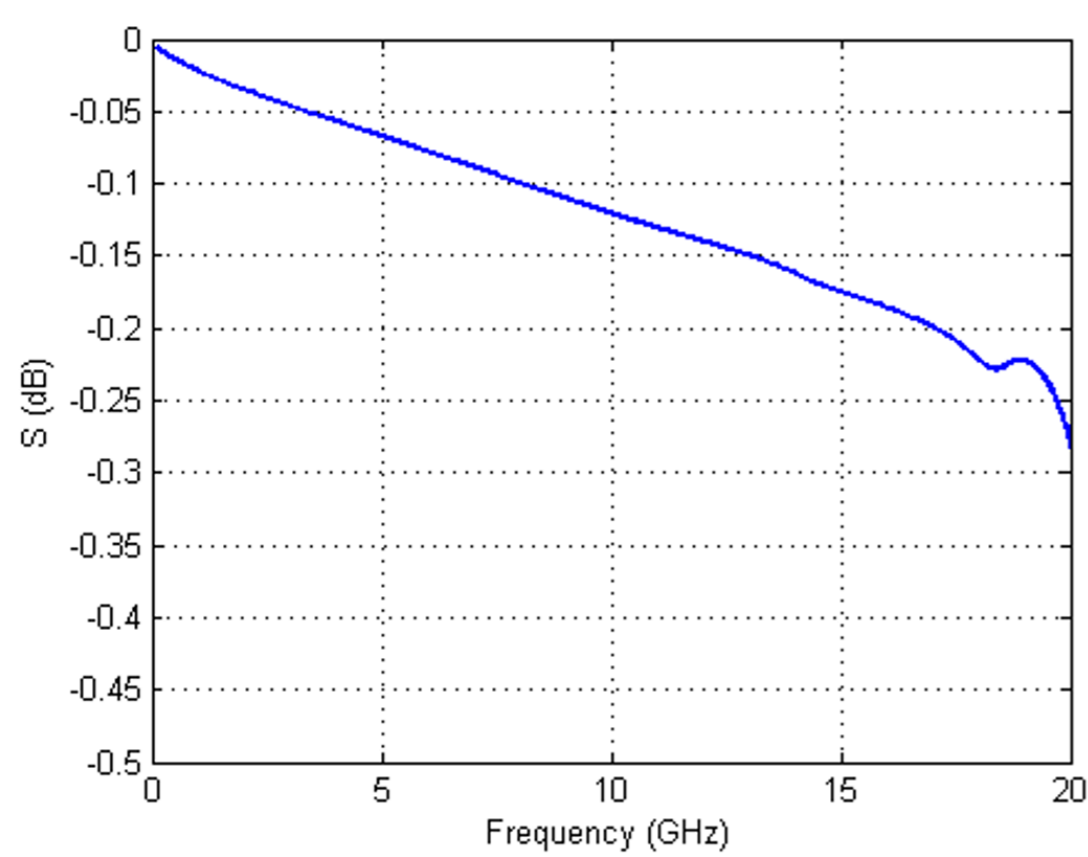
连接器组合大小



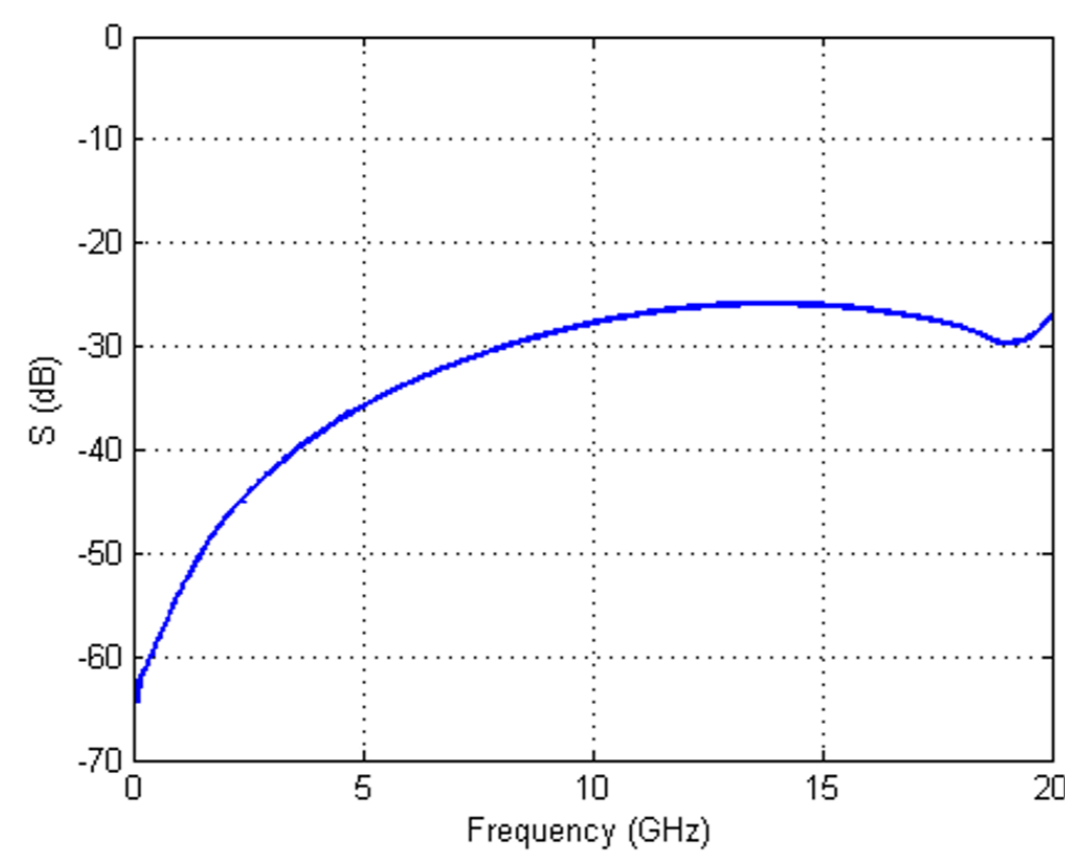
5p 公座和一美分硬币大小比较



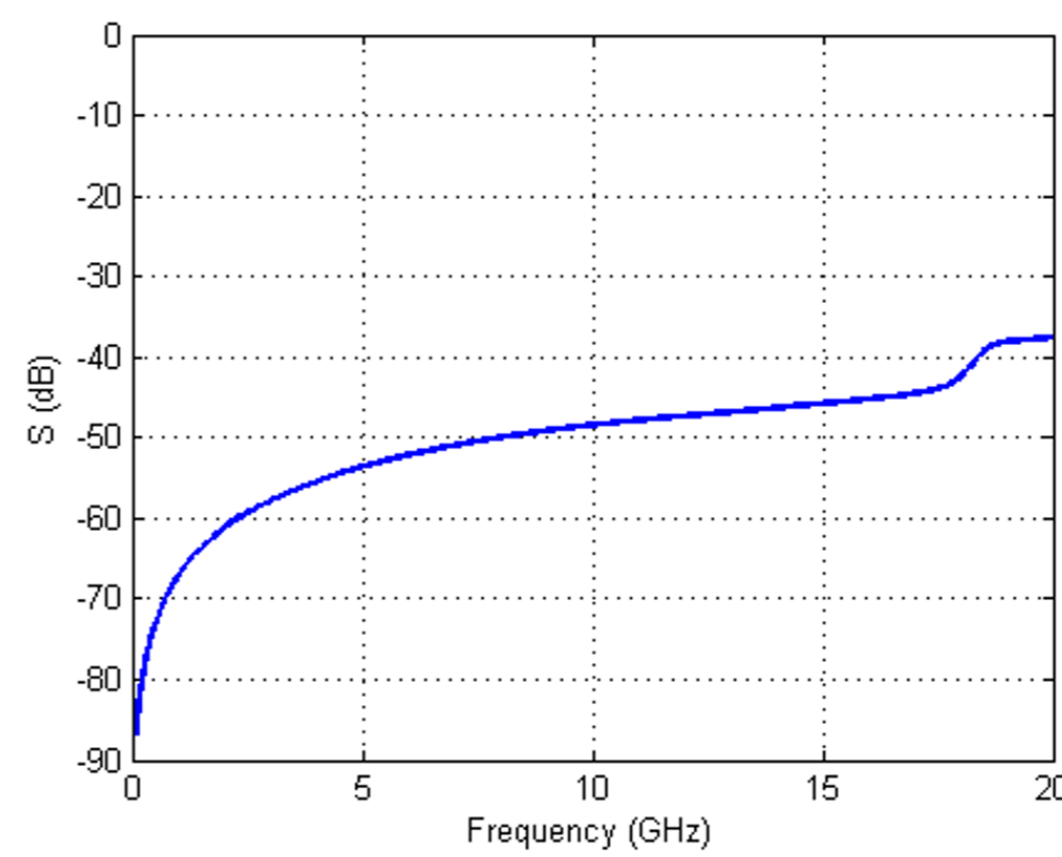
## 出色的差分 SI 性能(32Gbps/Lane)



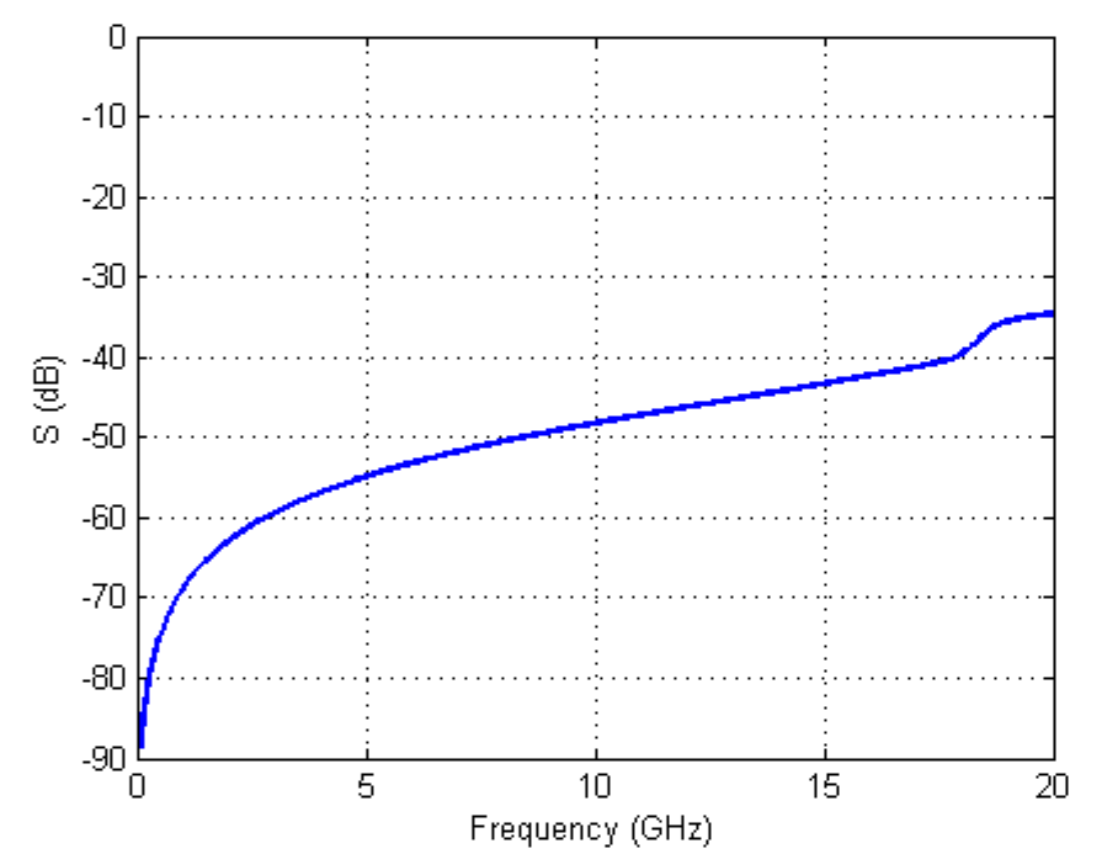
Insertion Loss



Return Loss



Near-End Crosstalk

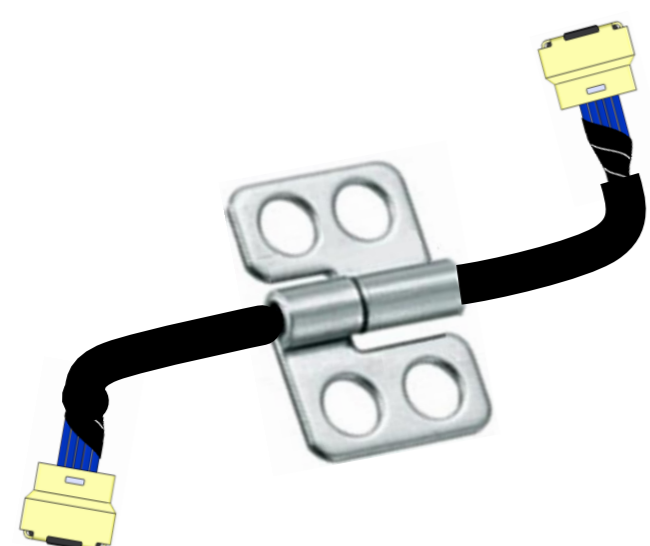


Far-End Crosstalk

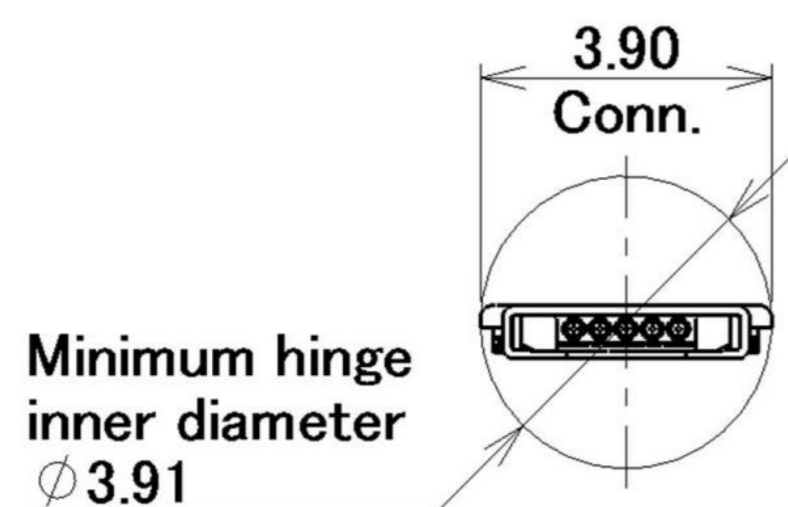
仿真软件： ANSYS Electronics Desktop 2021 R1  
 仿真模型： 电缆公座配接到母座  
 频率范围： 0.1 - 20 GHz

数据格式： Touchstone 数据 (.s8p)  
 参考阻抗： 90欧姆差分  
 引脚分配： GSSGSSG

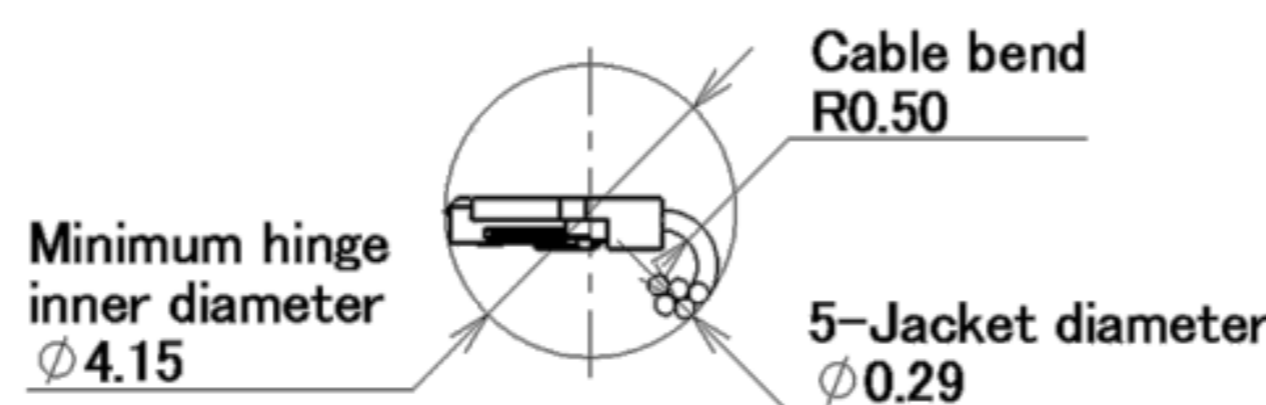
## 适于穿孔的窄小型设计



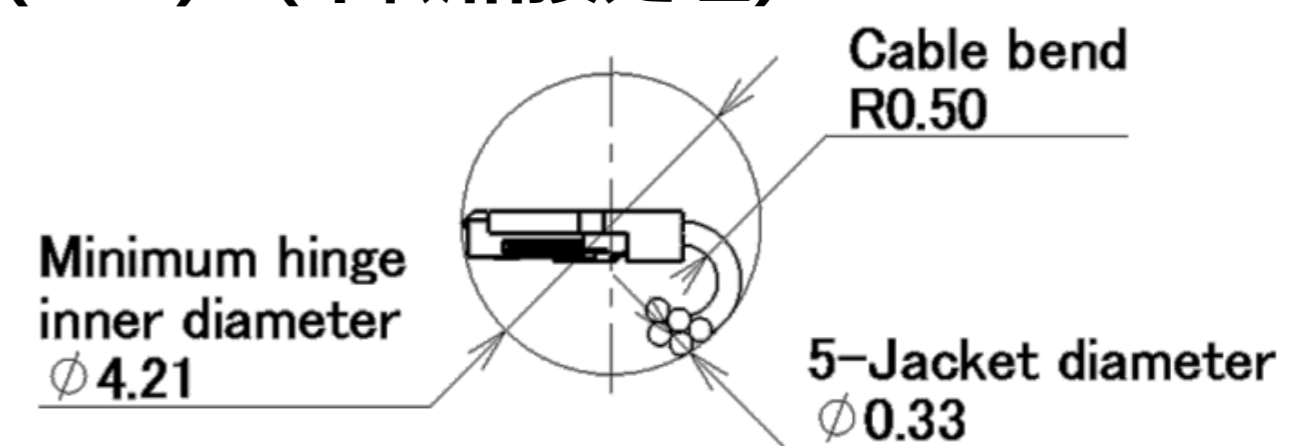
仿真结果 (5P) :  
 不需要弯曲电缆线即可穿越转轴



仿真结果 (大于5P) : 最小转轴内径(mm) (未做粘接处理)

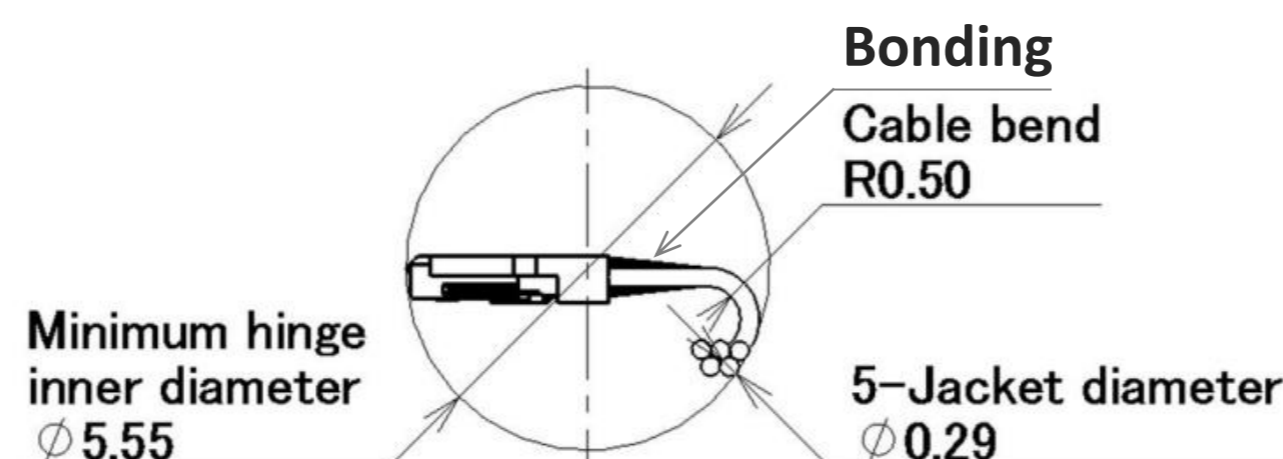


AWG#42 (45ohm)

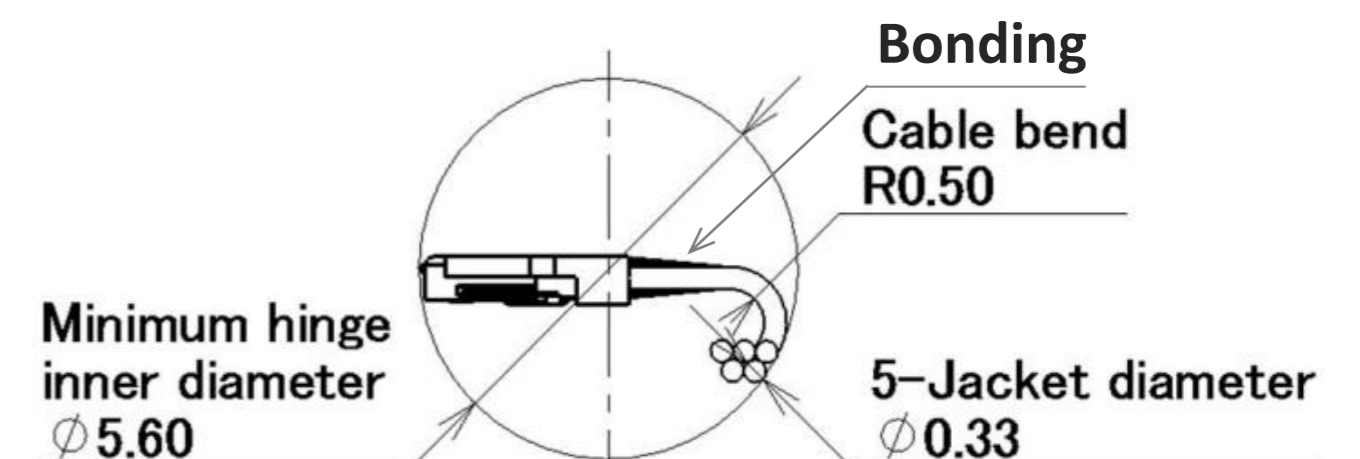


AWG#42 (50ohm)

仿真结果 (大于5P) : 最小转轴内径(mm) (做粘接处理)



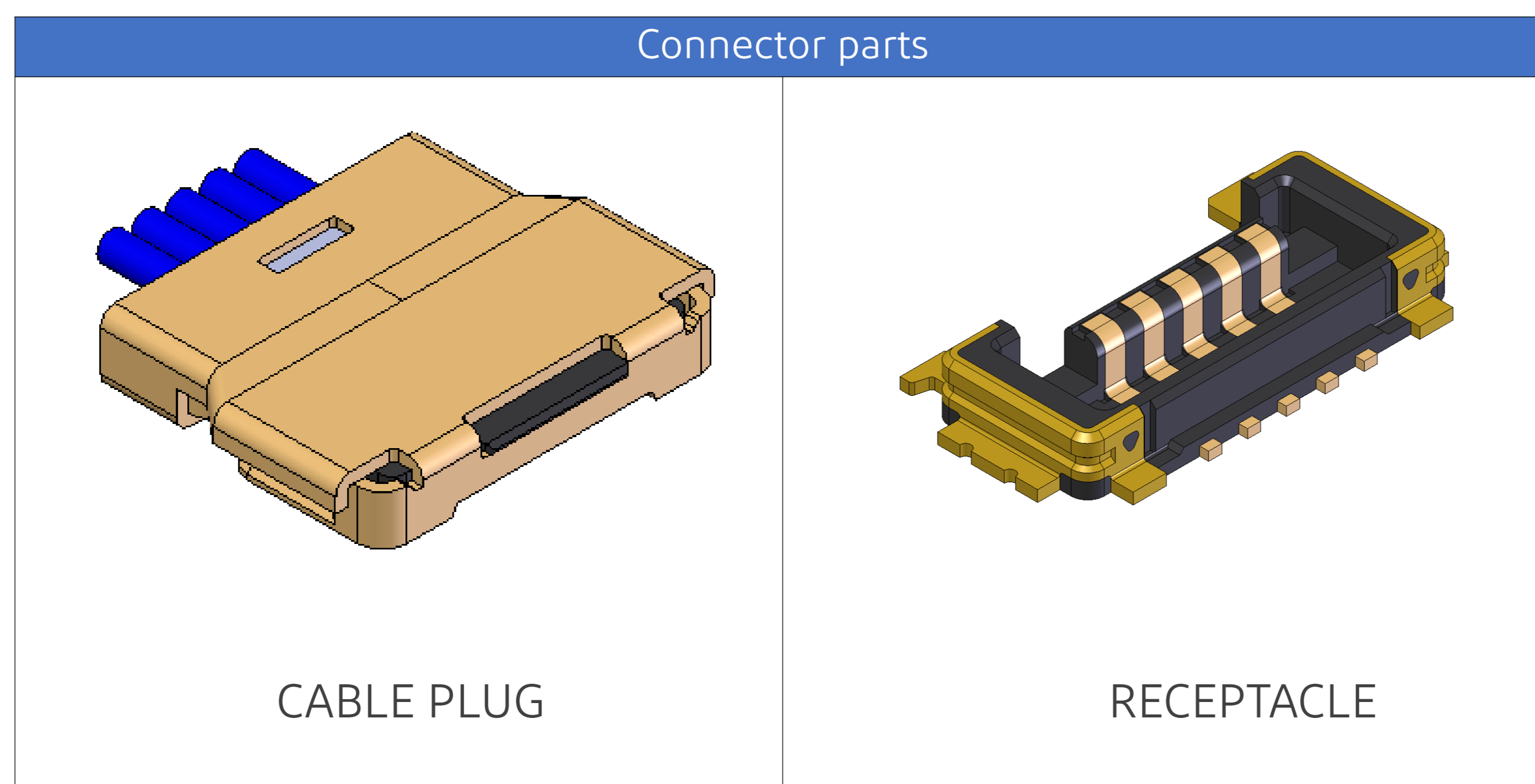
AWG#42 (45ohm)



AWG#42 (50ohm)

# Component Parts Details

## Component Parts

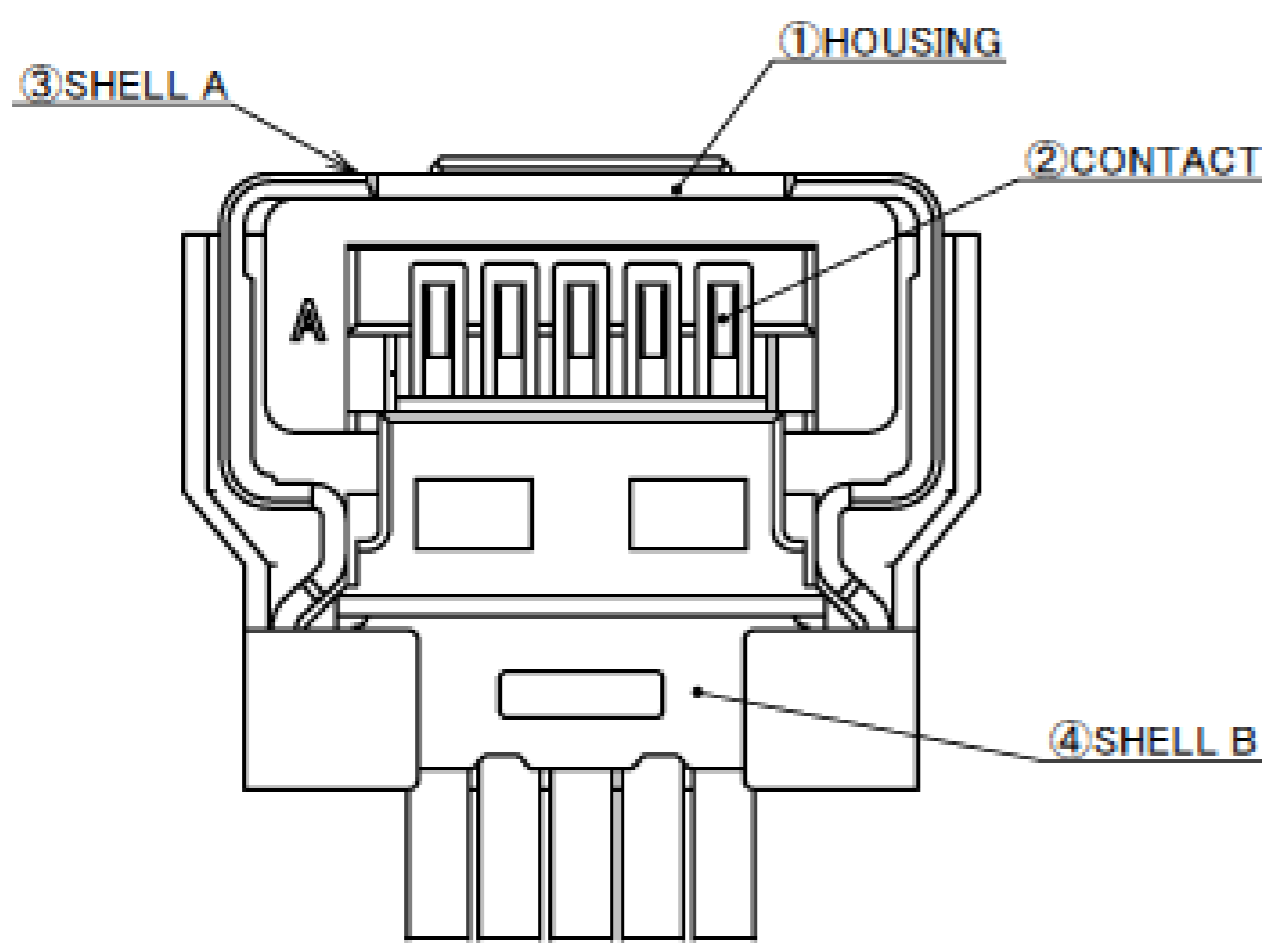
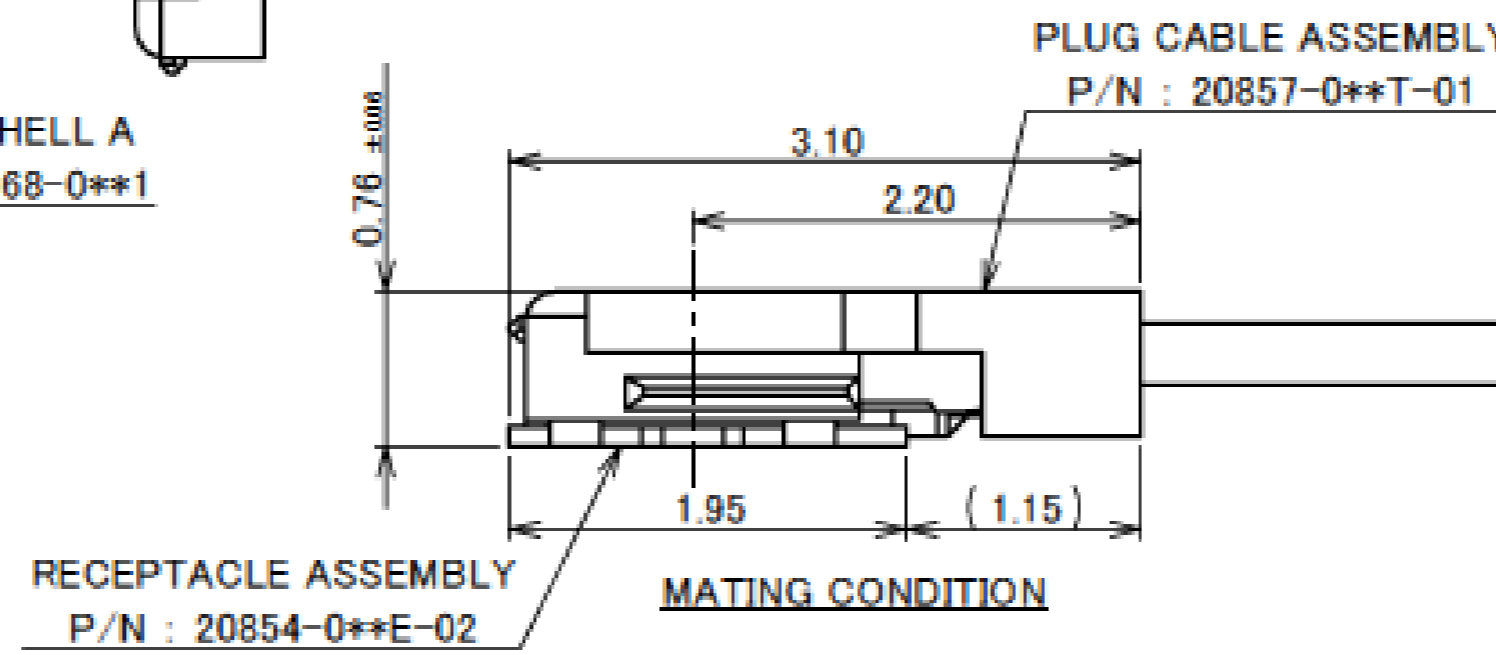
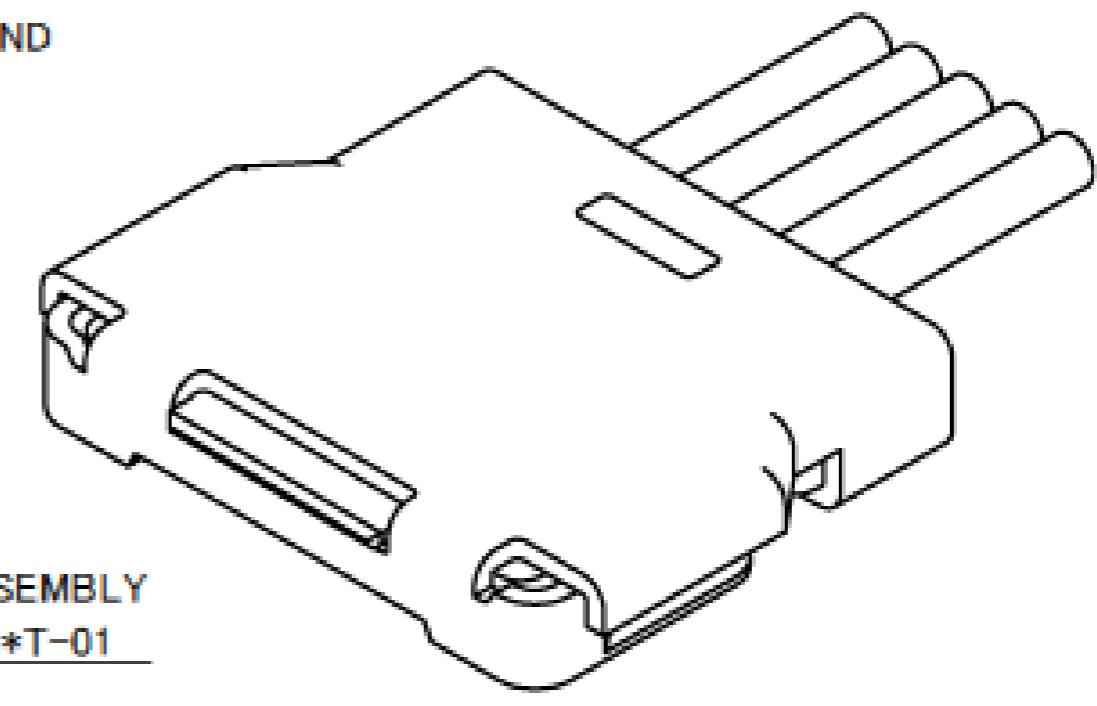
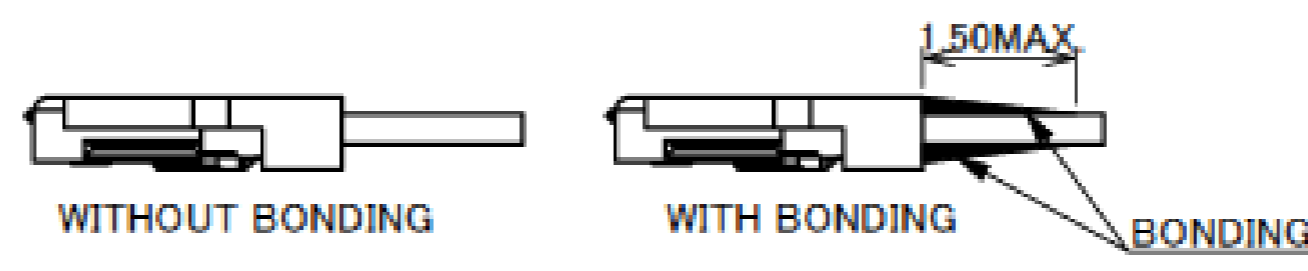
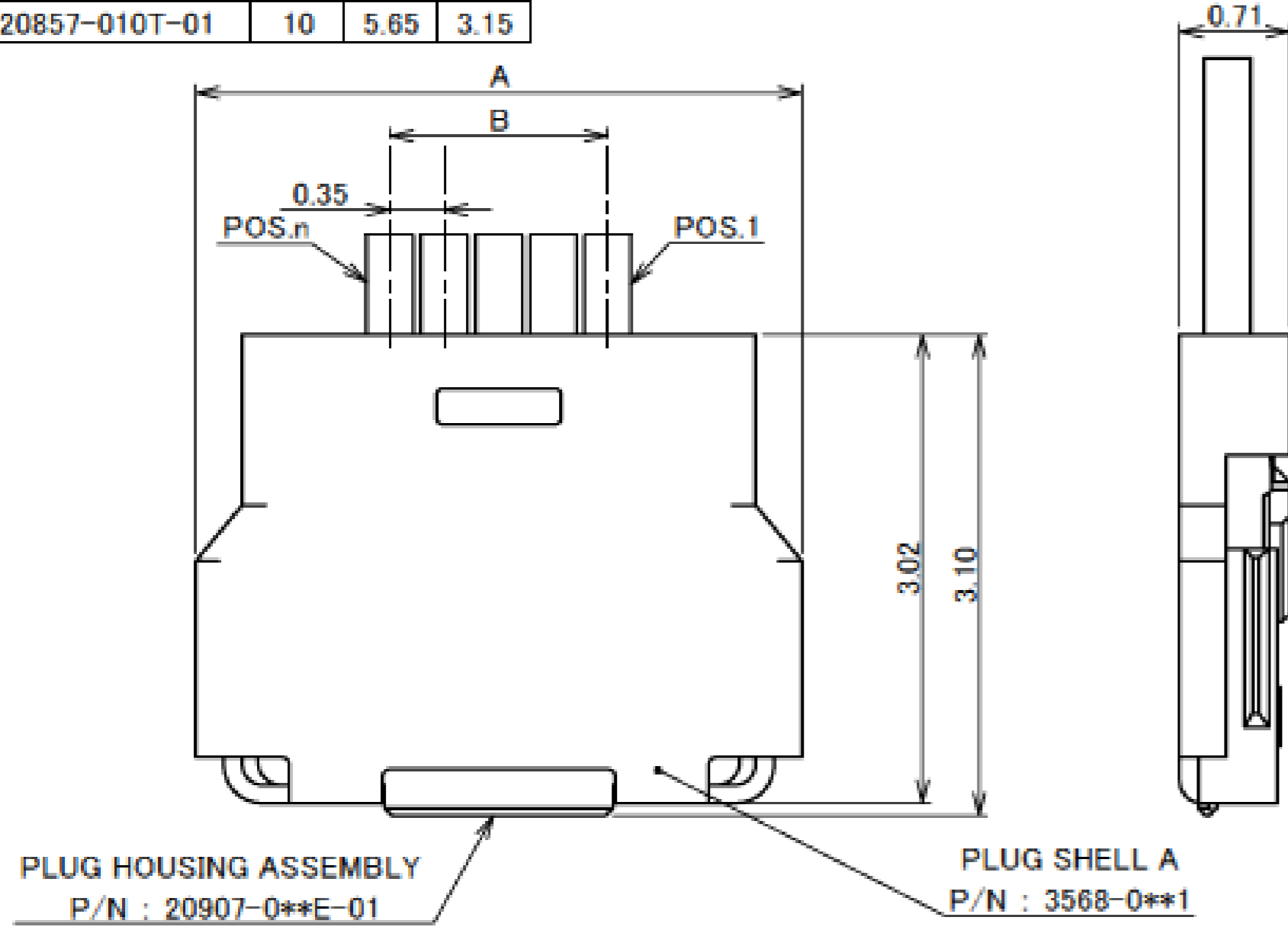


# Plug for Cable Assembly

Recommended P/N		20857-0**T-01	
PART NO.	Pos.	A	B
20857-005T-01	5	3.90	1.40
20857-010T-01	10	5.65	3.15

PART NO.	Pos.	A	B
20857-005T-01	5	3.90	1.40
20857-010T-01	10	5.65	3.15

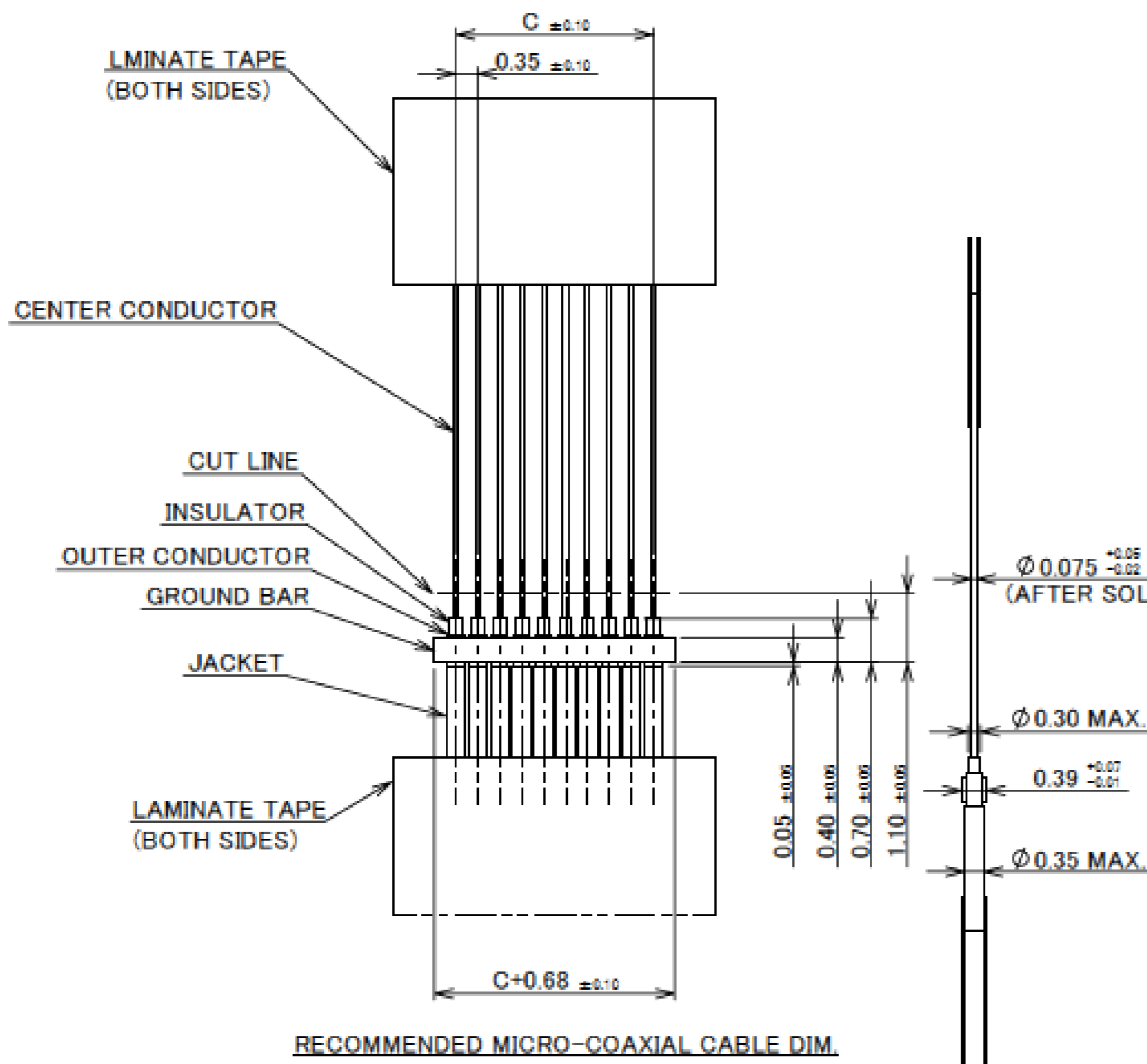
PART COMBINATION TABLE			
PLUG CABLE ASSEMBLY	PLUG HOUSING ASSEMBLY	PLUG SHELL A	RECEPTACLE ASSEMBLY
20857-005T-01	20907-005E-01	3568-0051	20854-005E-02
20857-010T-01	20907-010E-01	3568-0101	20854-010E-02



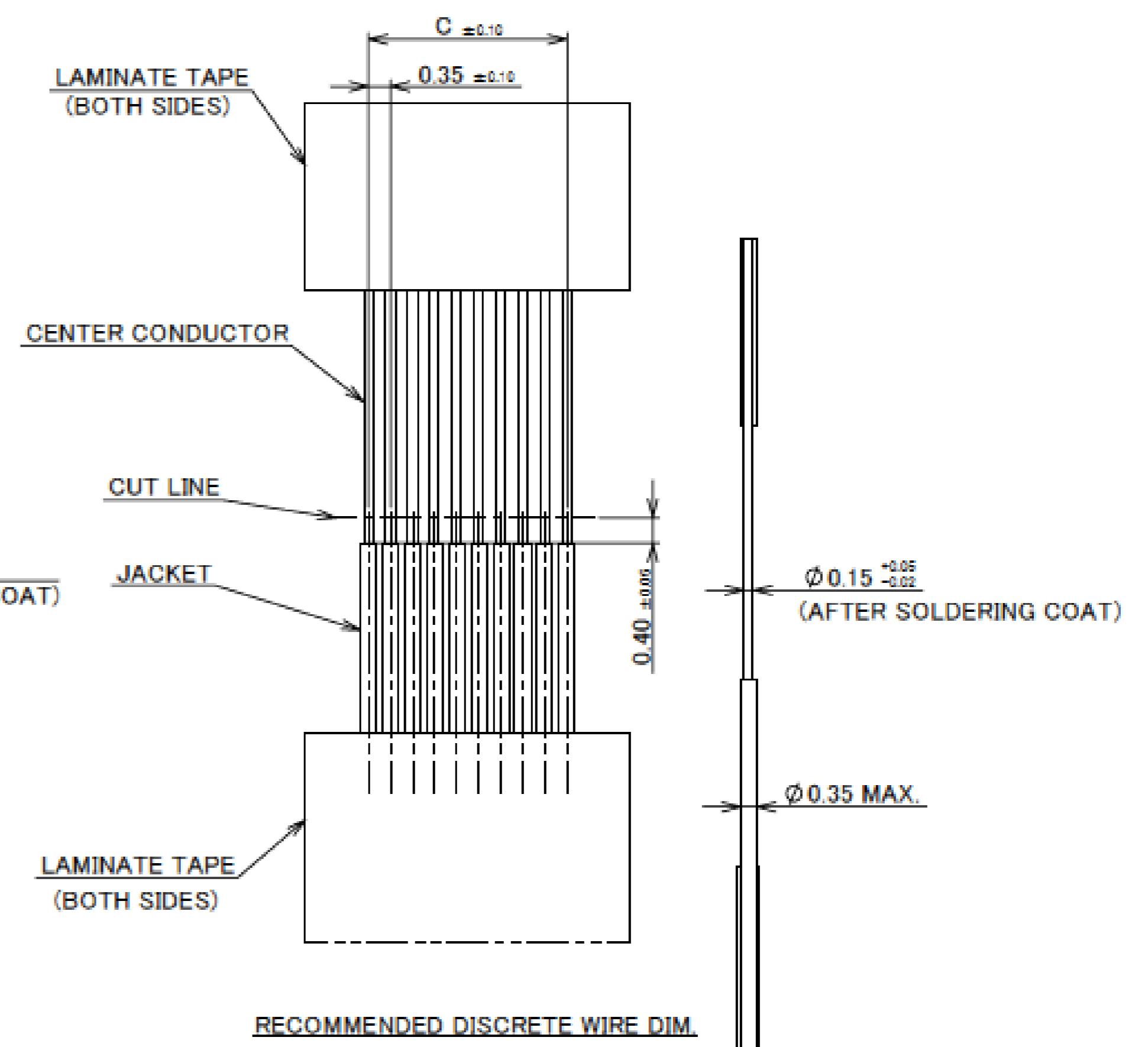
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL B	SUS	Au 0.02 μm MIN. OVER Ni 1.00 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. SOLDERING PART Au 0.02 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. SOLDERING PART Au 0.02 μm MIN.
1	HOUSING	LCP	UL94V-0. BLACK

Rev.5

PART NO.	Pos.	C
20857-005T-01	5	1.40
20857-010T-01	10	3.15



MICRO-COAXIAL CABLE AWG# 42



DISCRETE WIRE AWG# 36

Rev.5

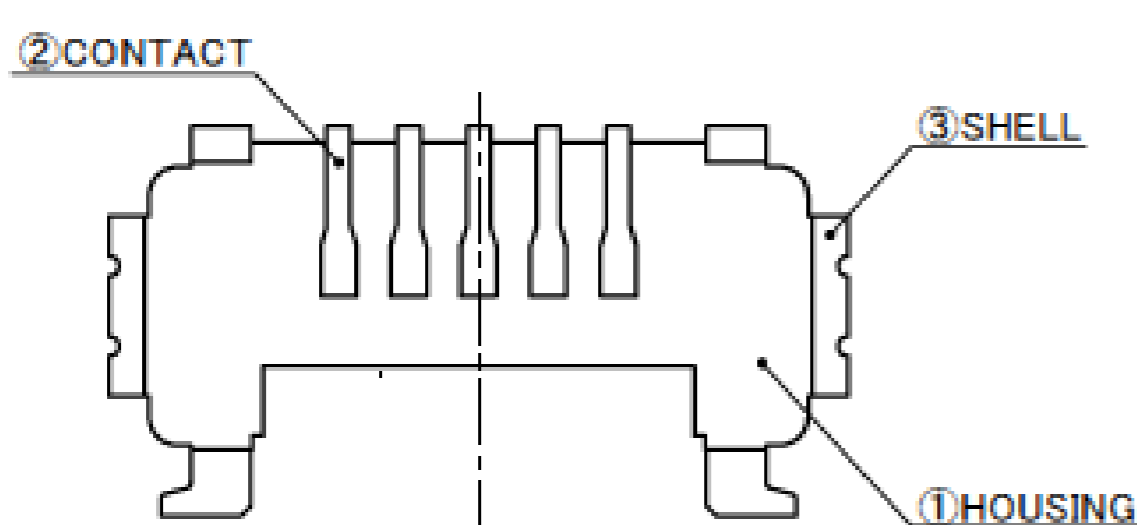
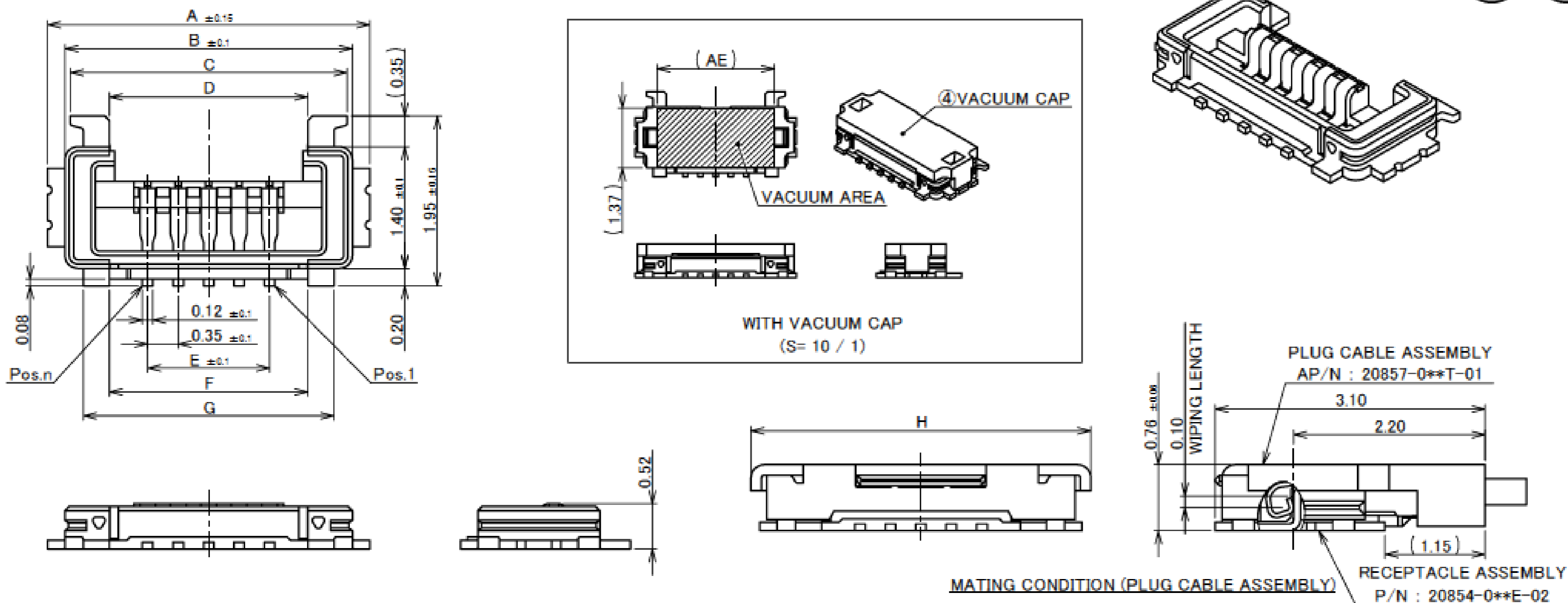
# Plug for Cable Assembly

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 42 DISCRETE WIRE : AWG# 36
RATING VOLTAGE	60V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.35 AC/DC[AWG# 42] 0.5 AC/DC[AWG# 36]
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 700mohm MAX.(AWG# 42) / AFTER TEST : $\angle$ R 40mohm MAX. 275mohm MAX.(AWG# 36)
GROUND SHELL RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : $\angle$ R 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 500mohm MIN. / AFTER TEST : 100mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	5P : INITIAL: 30N MAX. / AFTER TEST: 30N MAX. 10P : INITIAL: 30N MAX. / AFTER TEST: 30N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	5P : INITIAL: 5N MIN. / AFTER TEST: 3N MIN. 10P : INITIAL: 5N MIN. / AFTER TEST: 3N MIN.
CABLE RETENTION FORCE	5Pin : 2.45N MIN. 10Pin : 4.9N MIN.
PRODUCT SPECIFICATION	PRS-2634
TEST REPORT	TR-19084
INSTRUCTION MANUAL	HIM-18037
ASSEMBLY MANUAL	ASM-18002
APPEARANCE CRITERIA No.	QLS-A***

Rev.5

# Receptacle Assembly

Recommended P/N	20854-0**E-02										
PART NO	Pos	A	B	C	D	E	F	G	H	J	AF
20854-005E-02	5	3.70	3.30	3.18	2.28	1.40	2.28	2.88	3.90	2.90	2.70
20854-010E-02	10	5.45	5.05	4.93	4.03	3.15	4.03	4.63	5.65	4.65	4.45



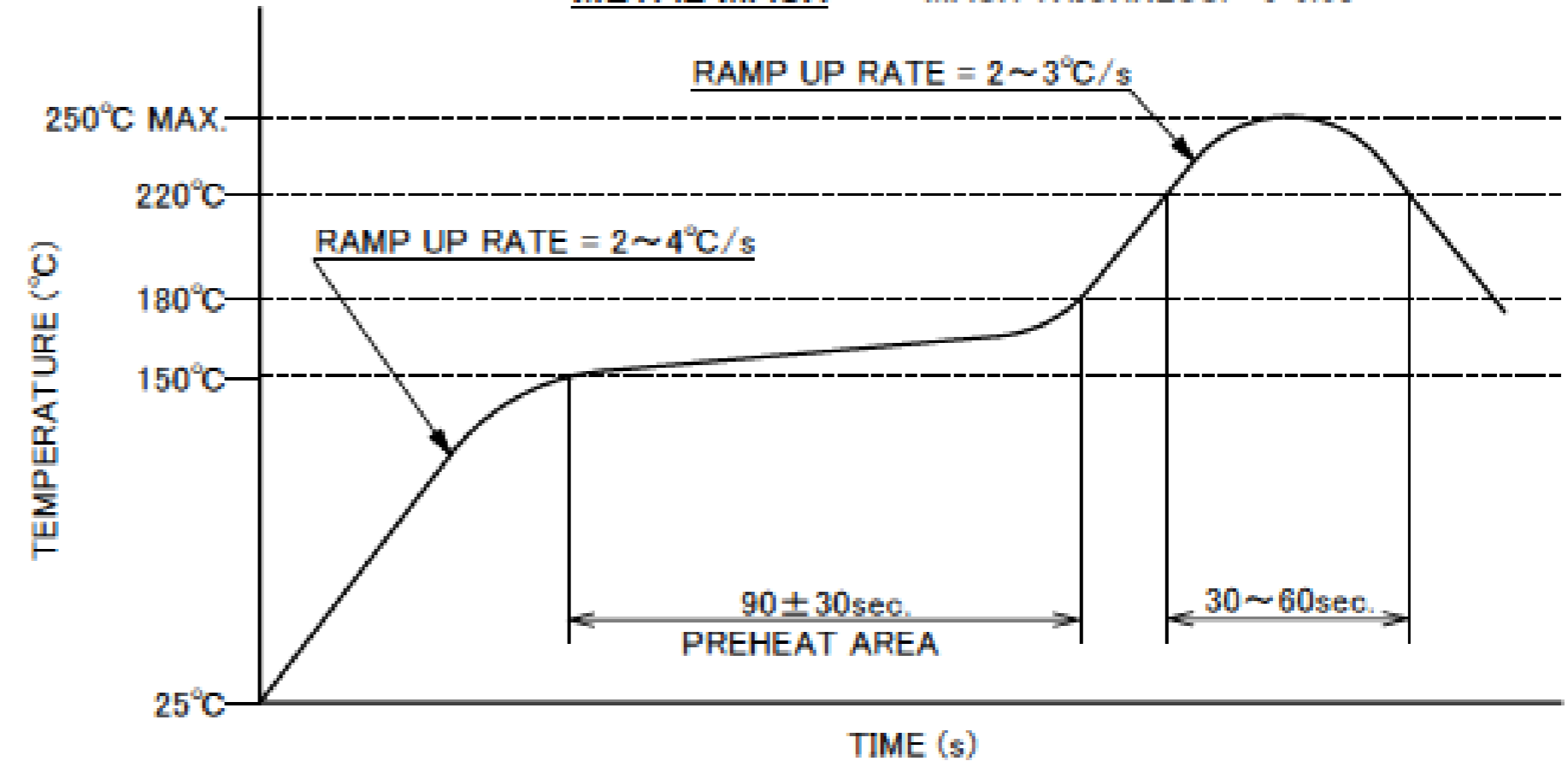
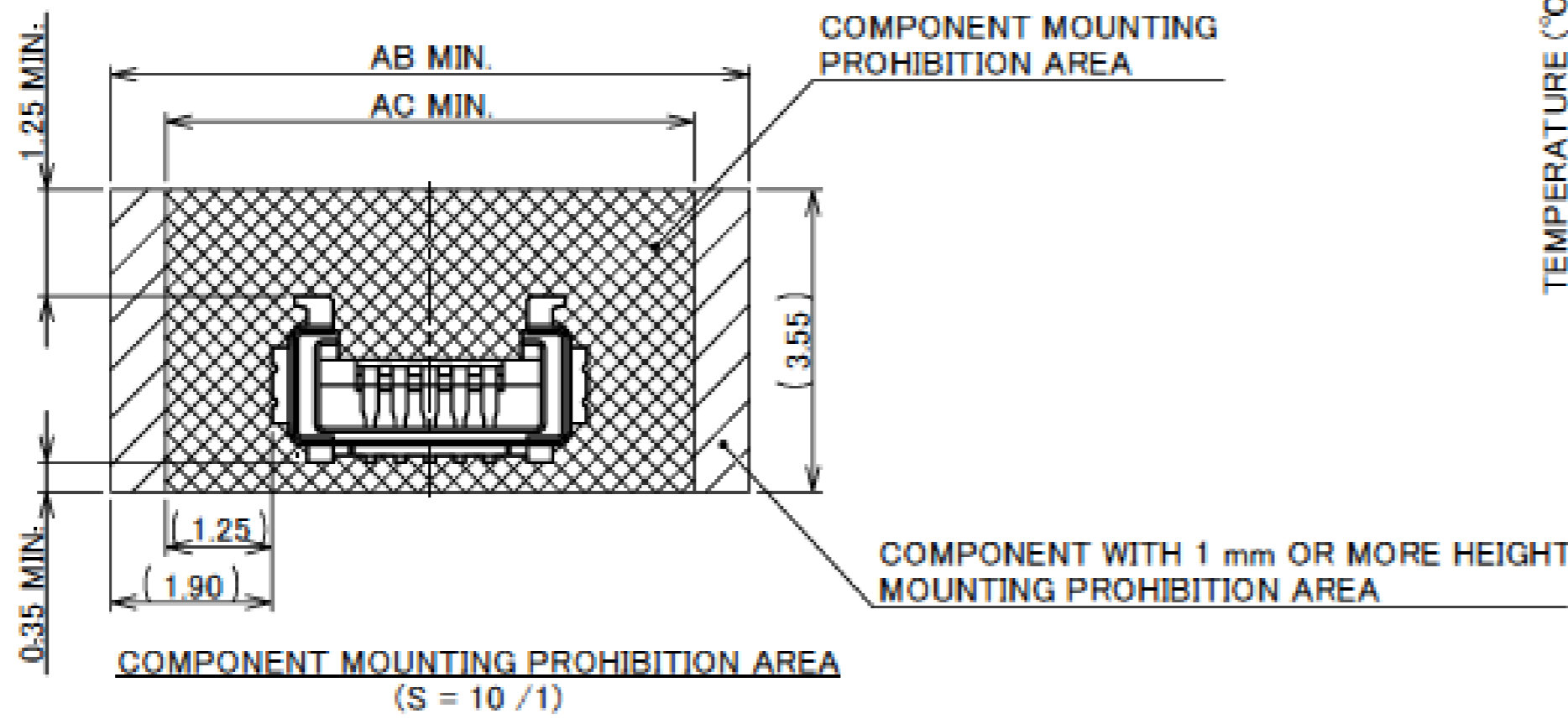
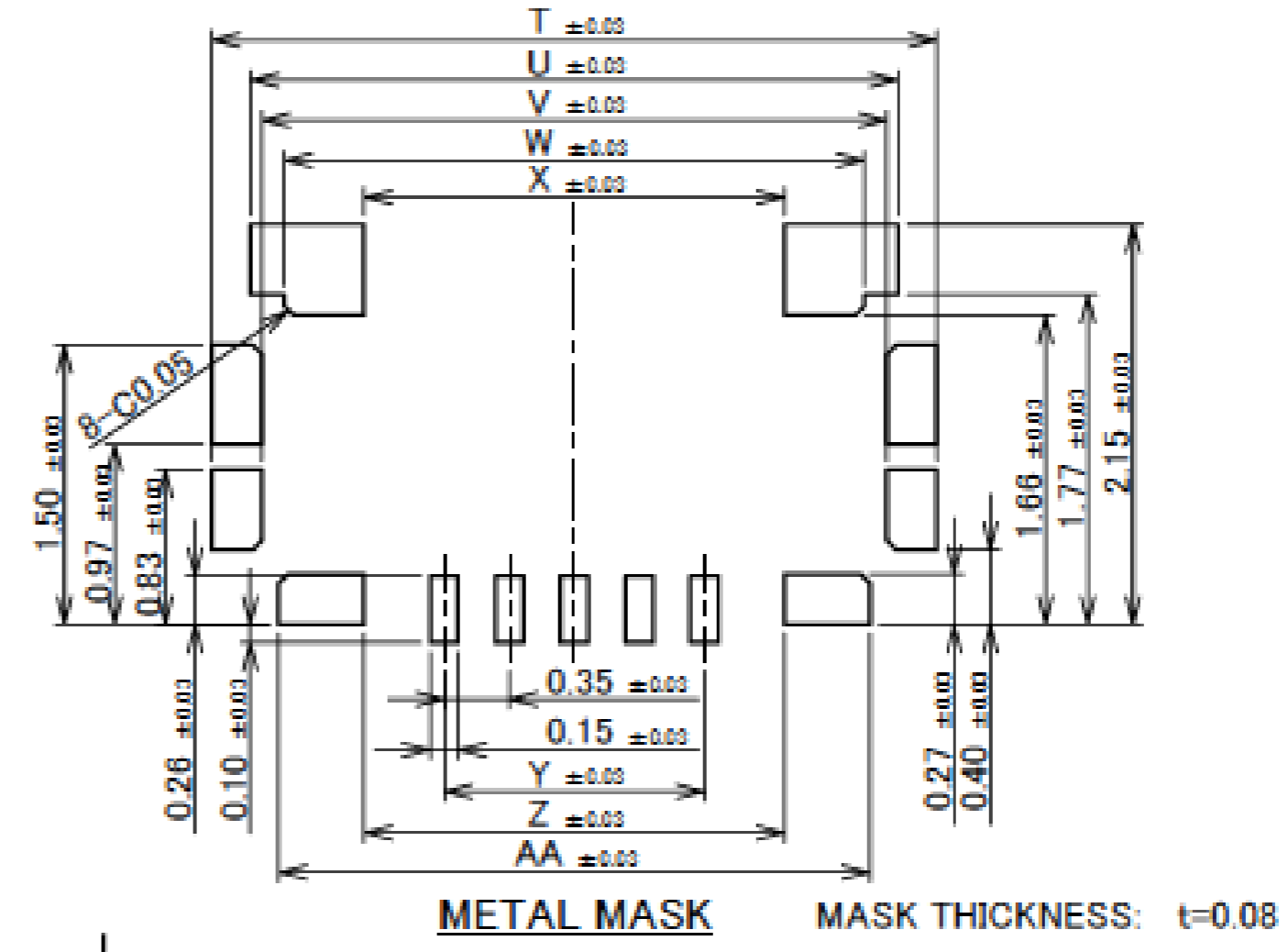
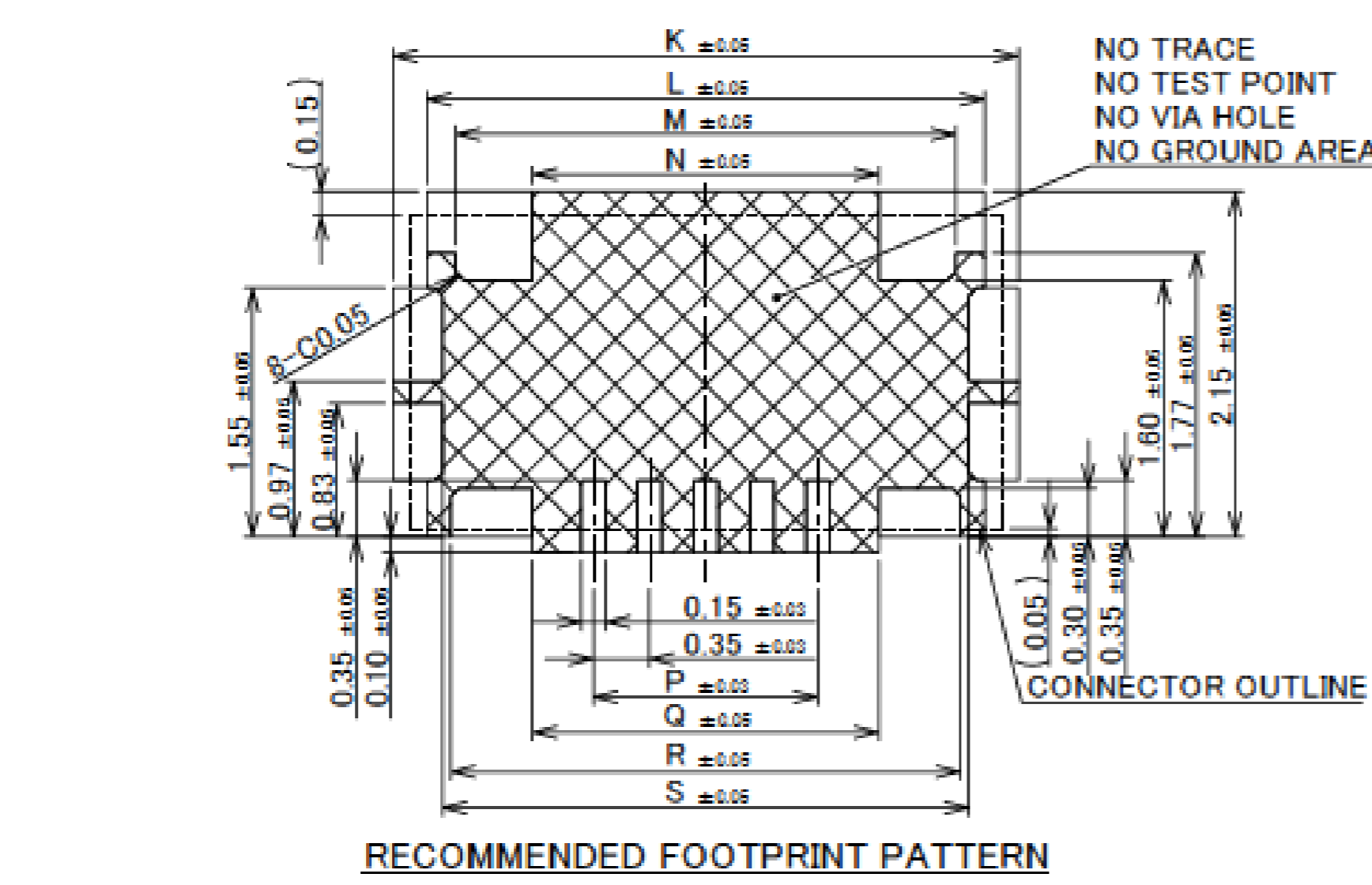
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
4	VACUUM CAP	LCP	UL94V-0, BLACK
3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART: Au 0.01 $\mu$ m MIN. SOLDERING PART: Au 0.01 $\mu$ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART: Au 0.05 $\mu$ m MIN. SOLDERING PART: Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK

NOTE.  
1. COPLANARITY: 0.08mm MAX.

Rev.6

# Receptacle Assembly

PART NO.	Pos.	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
20854-005E-02	5	3.90	3.48	3.12	2.16	1.40	2.16	3.18	3.28	3.90	3.48	3.36	3.12	2.26	1.40	2.26	3.18	7.50	6.20
20854-010E-02	10	5.65	5.23	4.87	3.91	3.15	3.91	4.93	5.03	5.65	5.23	5.11	4.87	4.01	3.15	4.01	4.93	9.25	7.95



ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20857-0**T-01 (PLUG CABLE ASSEMBLY)
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 42 DISCRETE WIRE : AWG# 36
RATING VOLTAGE	60V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.35 AC/DC [AWG#42] PER CONTACT PIN 0.50 AC/DC [AWG#36] PER CONTACT PIN
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 700mohm MAX.(AWG#42) 275mohm MAX.(AWG#36) / AFTER TEST : $\Delta$ R 40mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : $\Delta$ R 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 500Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	5P : INITIAL: 30N MAX. / AFTER TEST: 30N MAX. 10P : INITIAL: 30N MAX. / AFTER TEST: 30N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	5P : INITIAL: 5N MIN. / AFTER TEST: 3N MIN. 10P : INITIAL: 5N MIN. / AFTER TEST: 3N MIN.
CABLE RETENTION FORCE	5P : 2.45N MIN. 10P : 4.90N MIN.
COPLANARITY	0.08 MAX.
PRODUCT SPECIFICATION	PRS-2634
TEST REPORT	TR-19084
PACKING STANDARD	PST-18040
INSTRUCTION MANUAL	HIM-18037
APPEARANCE CRITERIA No.	QLS-A***

Rev.6

Rev.6

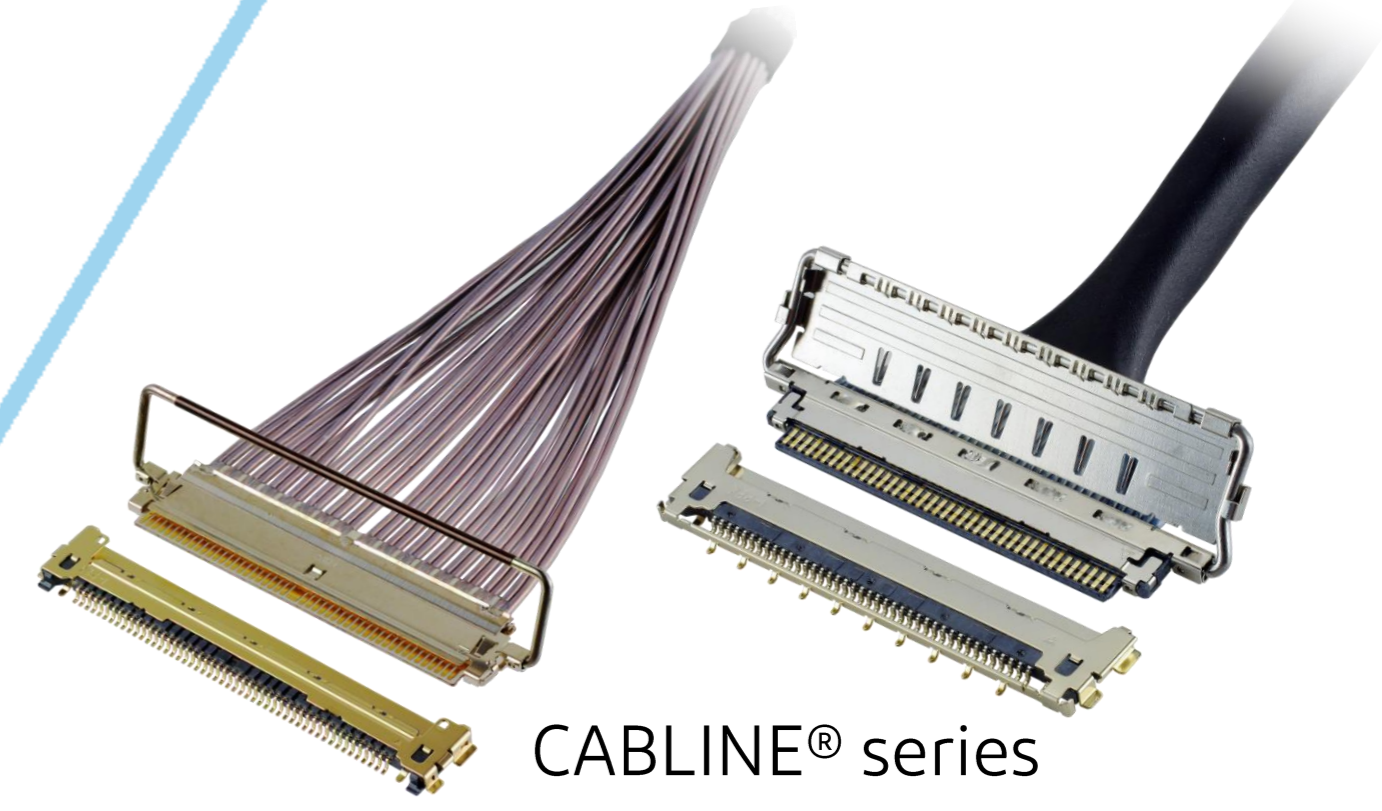
# Custom Connectors Available

## RF Connector

MHF® series



## Micro-coaxial/Twinax/Discrete Wire Connector

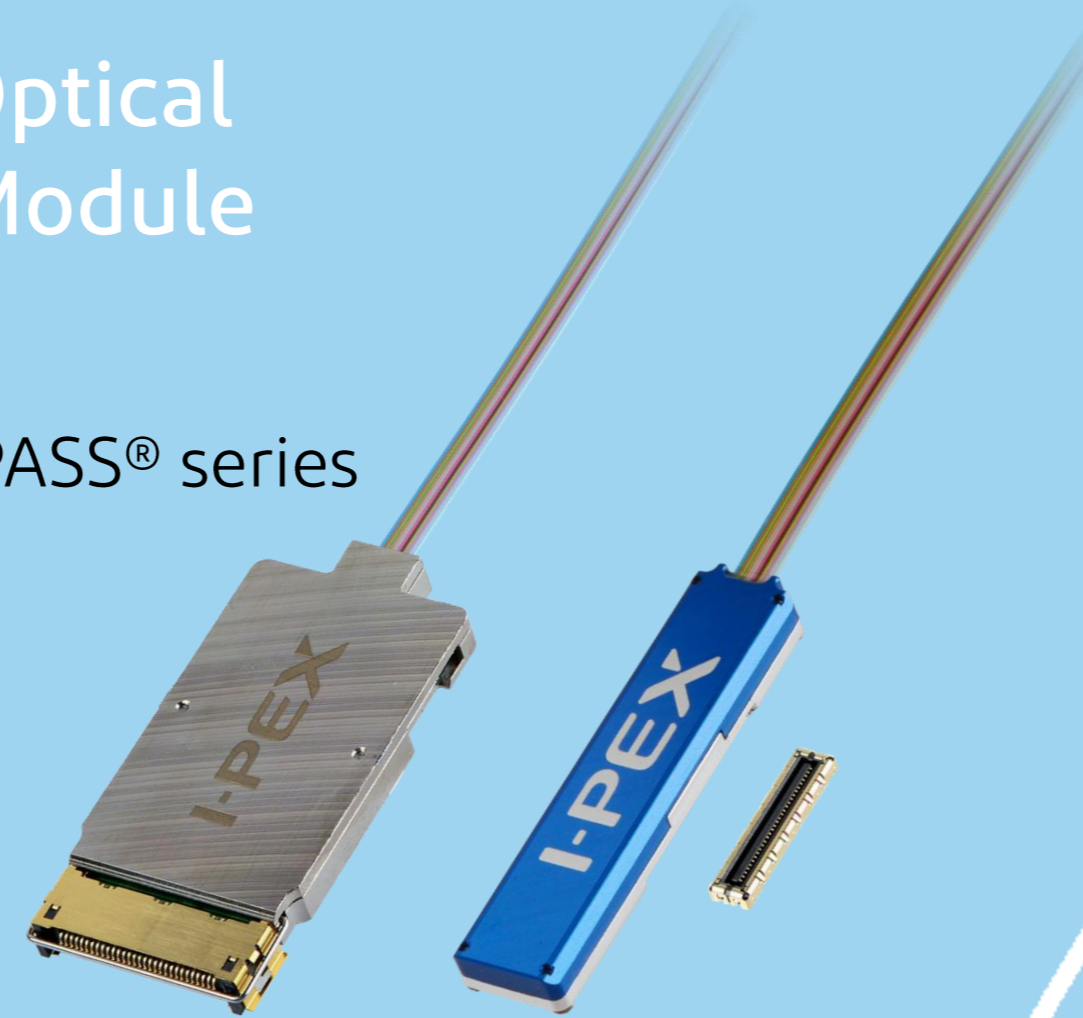


CABLINE® series

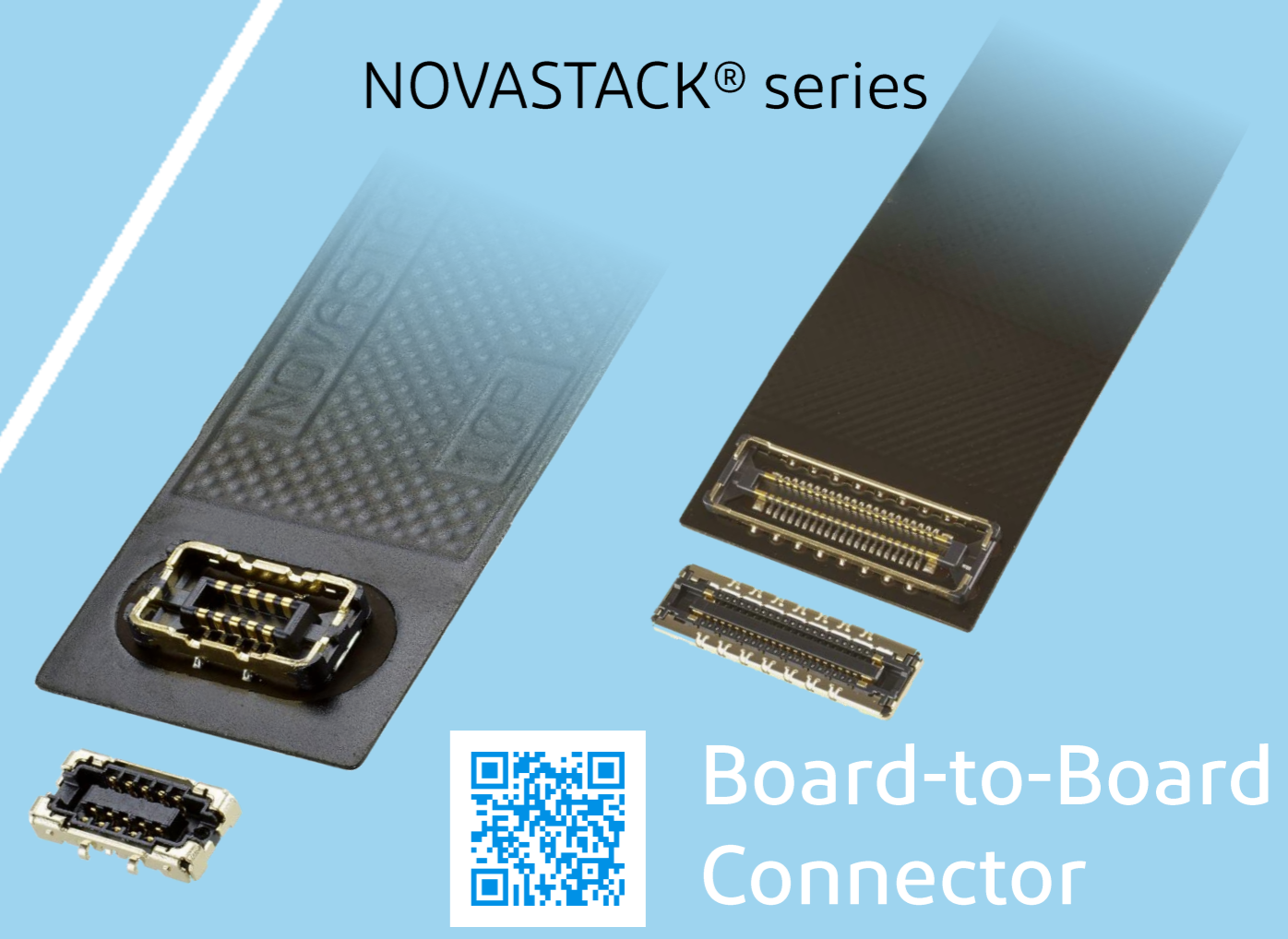


## Optical Module

LIGHTPASS® series



NOVASTACK® series



## Board-to-Board Connector



## Power Connector/Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



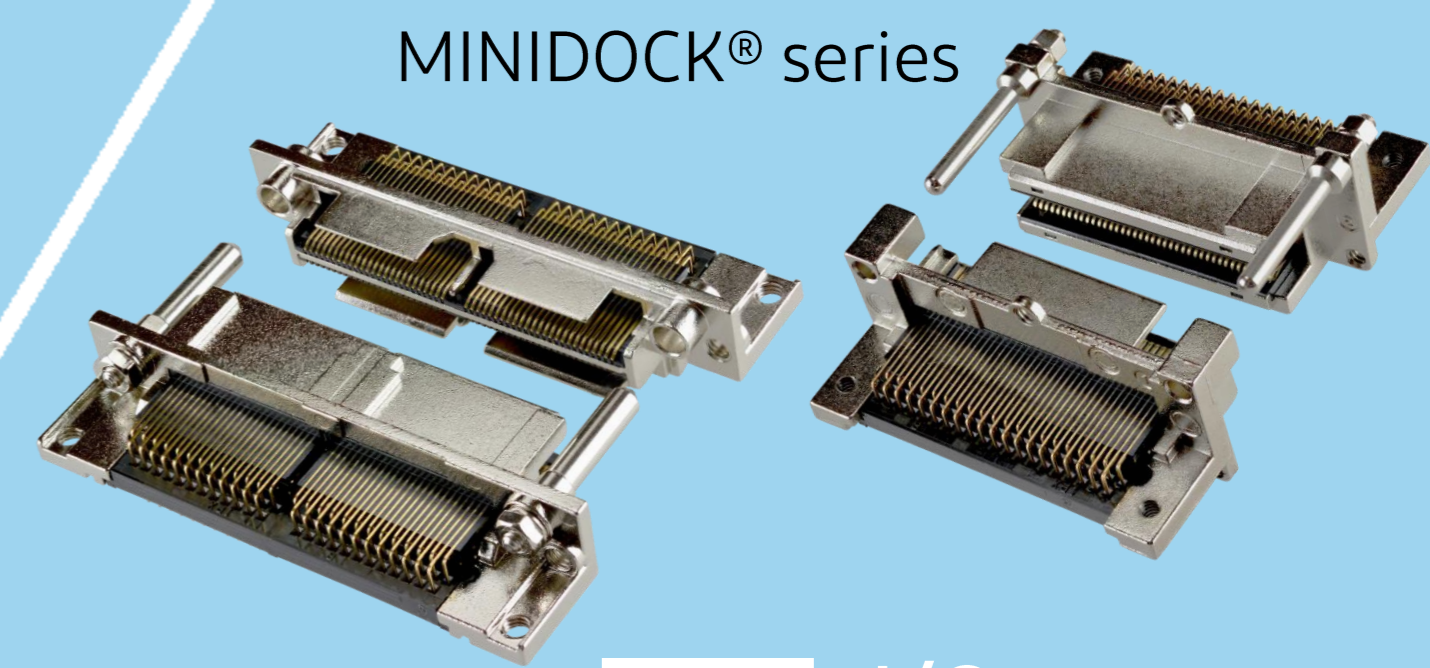
## FPC FFC Connector



## Inquiry



MINIDOCK® series

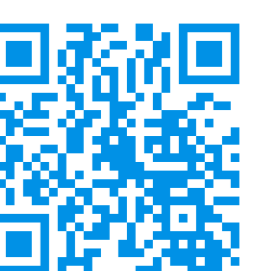


## I/O Connector

I-PEX, MHF, CABLINE, LIGHTPASS, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCKS and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

[www.i-pex.com](http://www.i-pex.com)



# I-PEX

© I-PEX Inc. 2024  
All rights reserved