

# CABLINE® - UY

Low mating height (Height = 0.76 mm), Narrow pitch (0.35 mm pitch), Right angle vertical mating type micro-coaxial cable connector

**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):**

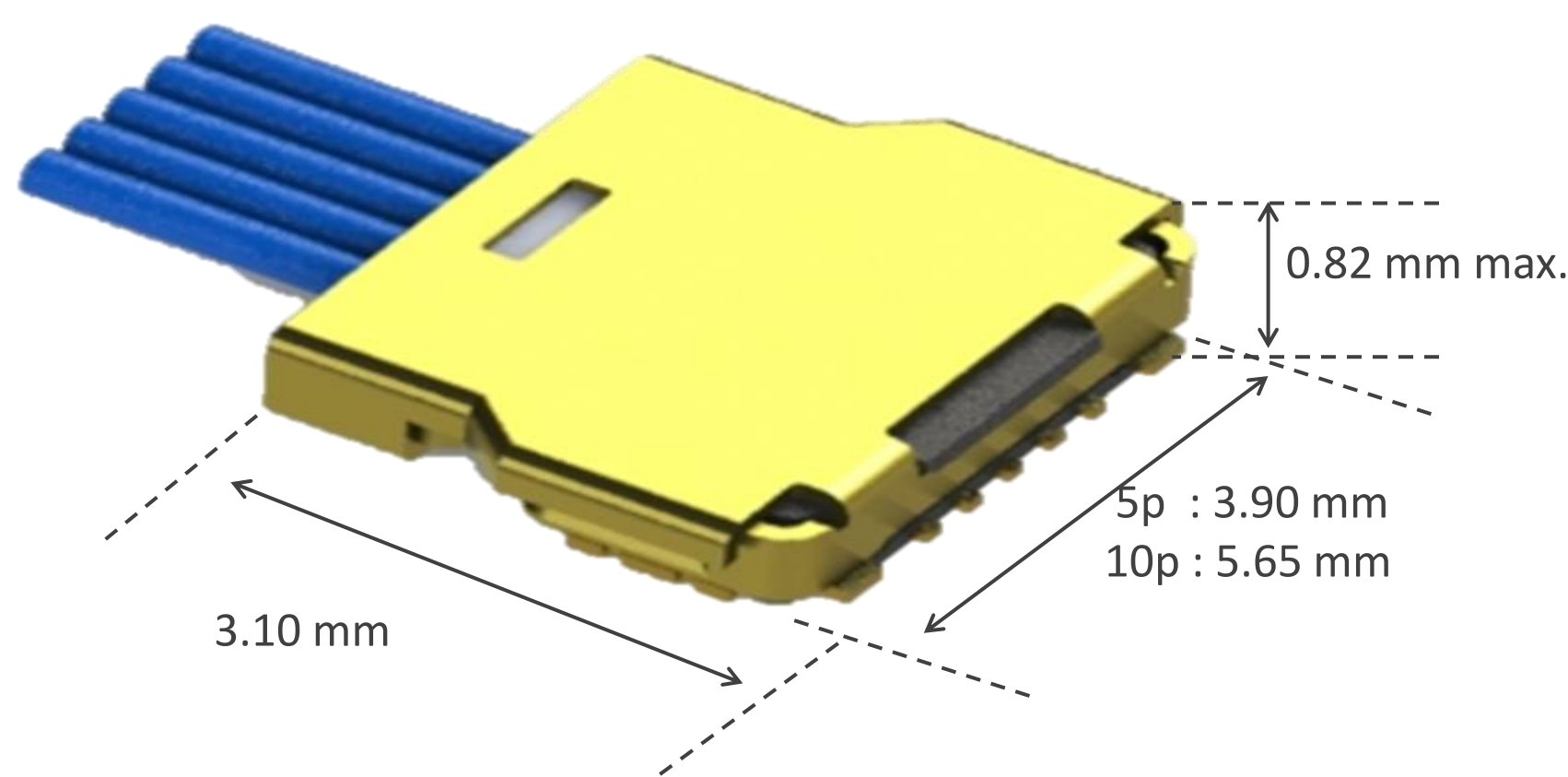
USB4 Gen4 (40Gbps/Lane PAM3)  
USB4 Gen3/ Thunderbolt 4 (20 Gbps/lane)  
eDP HBR 3 (8.1 Gbps)



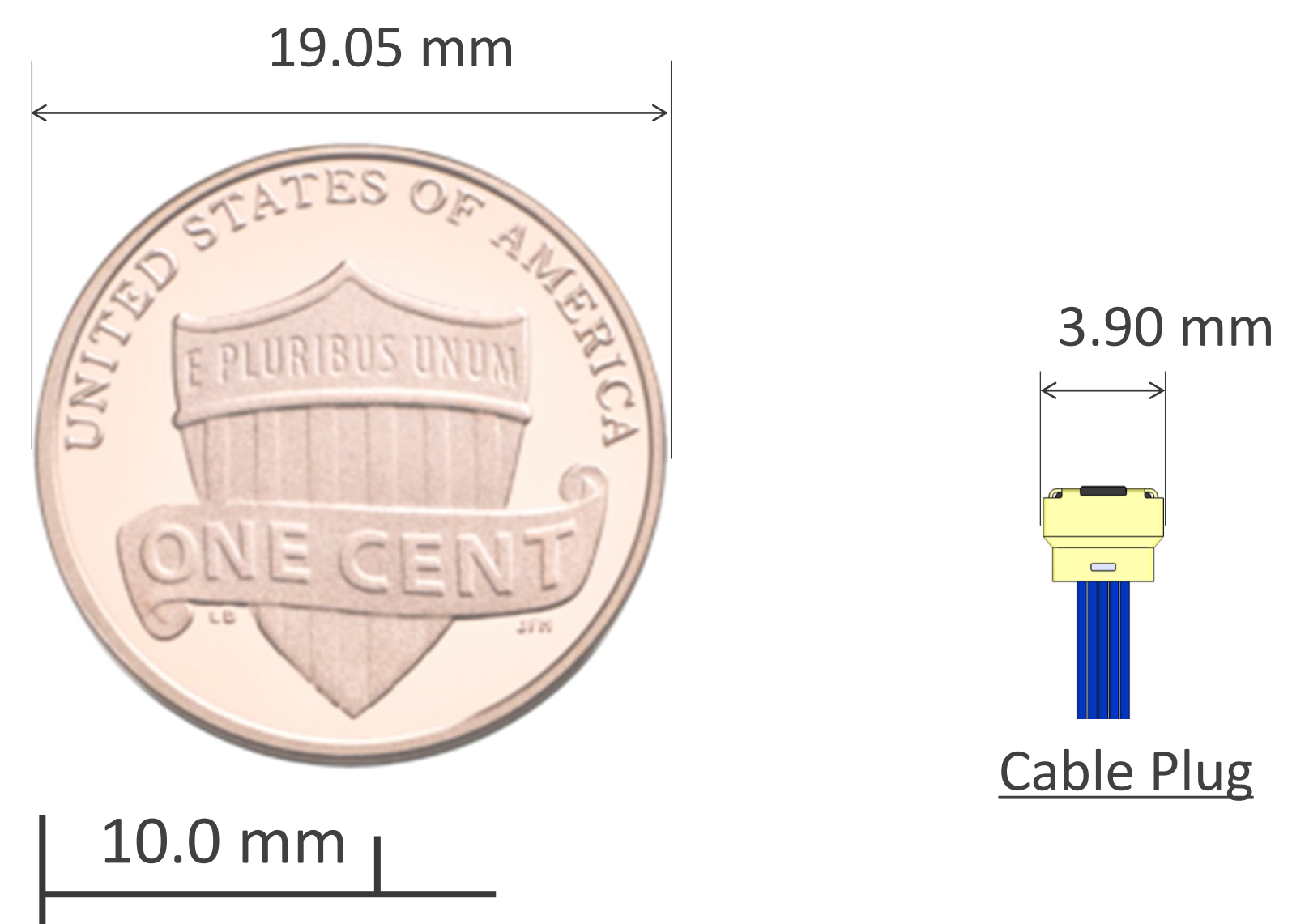
\* Please inquire for pin counts not listed or outside of the pin count range.

## Small, low height design, suitable for narrow spaces

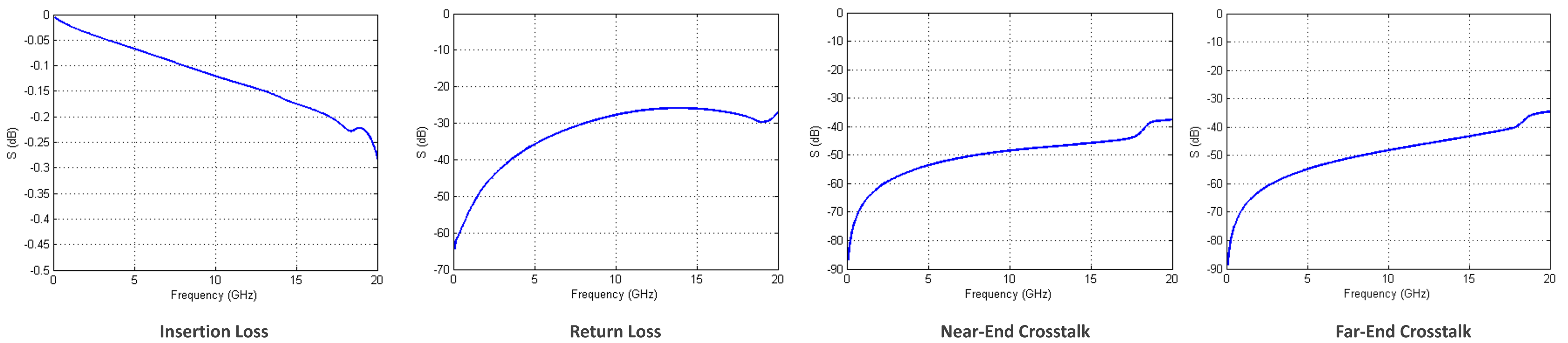
Connector mated size



Size comparison image of 5p plug with a one-cent coin



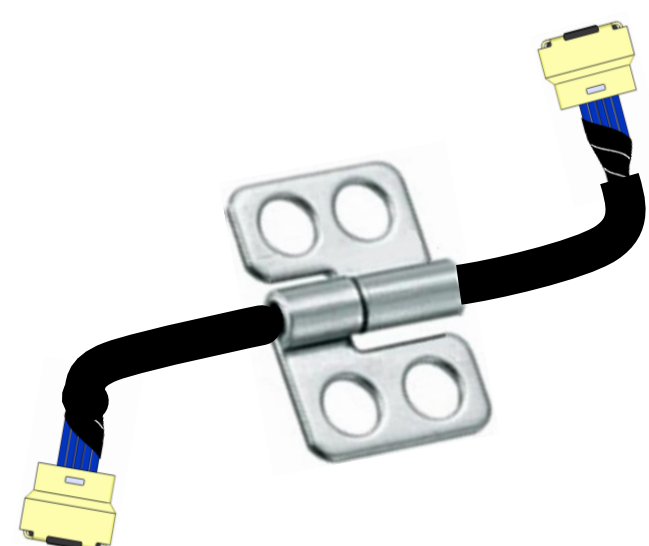
## Excellent differential SI performance(32Gbps/Lane)



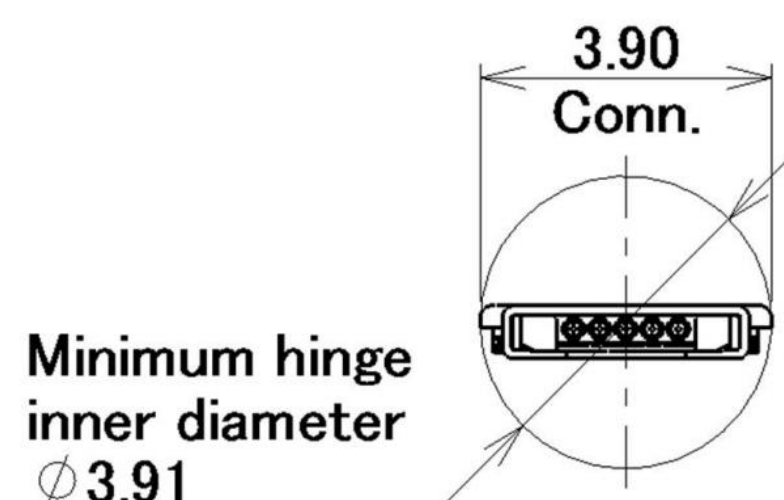
Simulation Software : ANSYS Electronics Desktop 2021 R1  
Simulation Model : Cable plug mated to a receptacle  
Frequency Range : 0.1 – 20 GHz

Data Format : Touchstone Data (.s8p)  
Reference Impedance : 90 Ohms differential  
Pin Assignment GSSGSSG

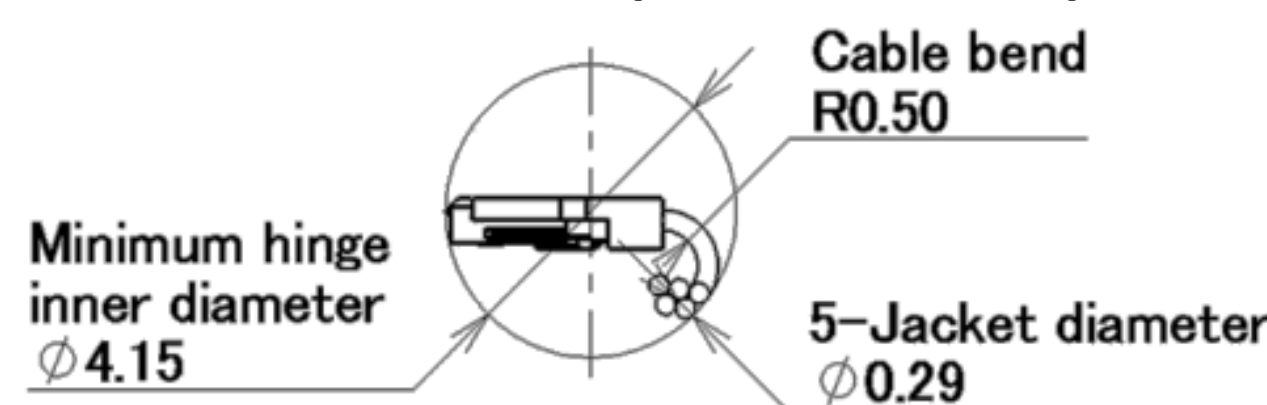
## Plug design able to go through small hinge after cable termination



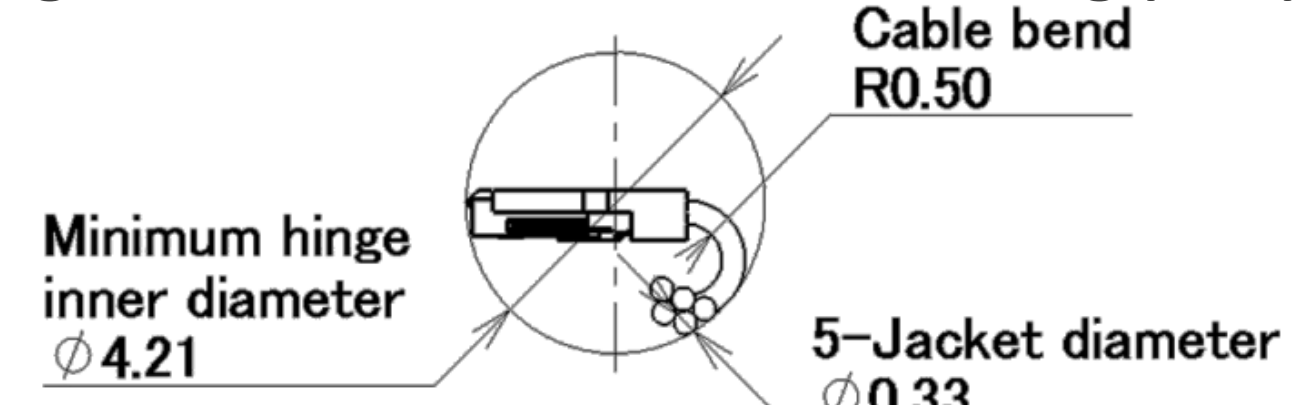
Simulation results (5P):  
No need to bend the cable



Simulation results (more than 5P): Minimum hinge inner diameter without bonding (mm)

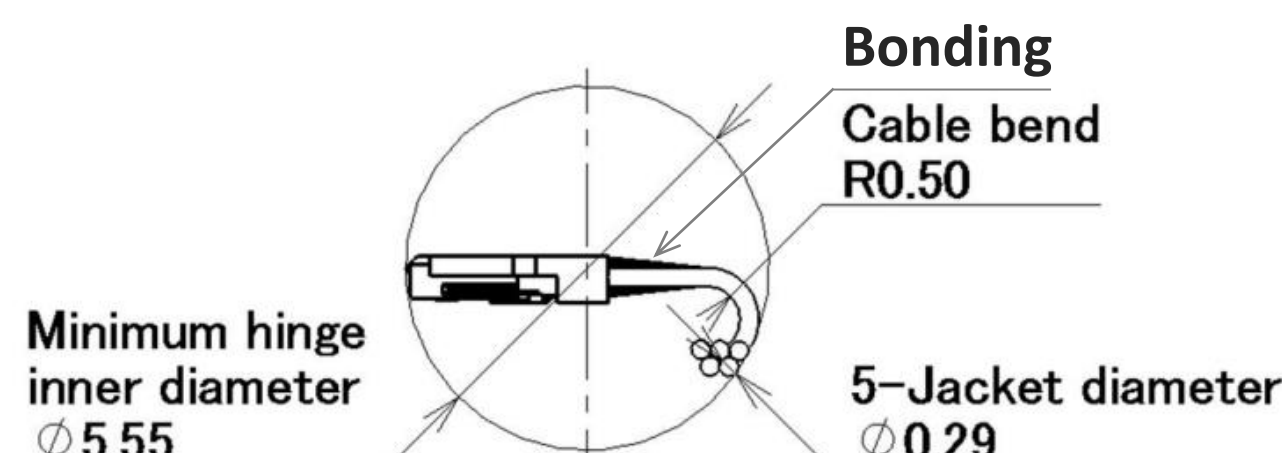


AWG#42 (45ohm)

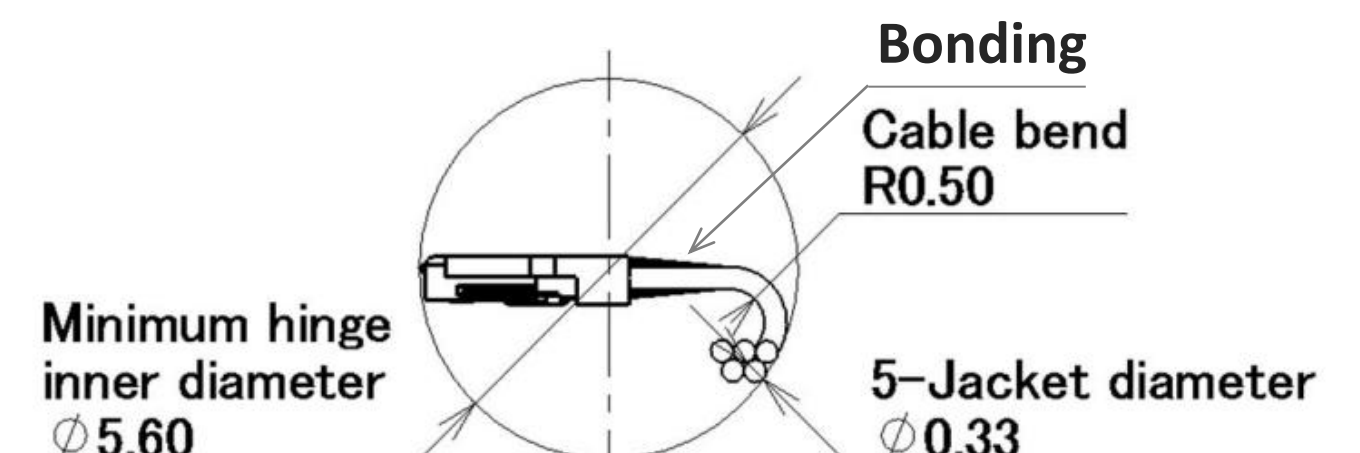


AWG#42 (50ohm)

Simulation results (more than 5P): Minimum hinge inner diameter with bonding (mm)



AWG#42 (45ohm)

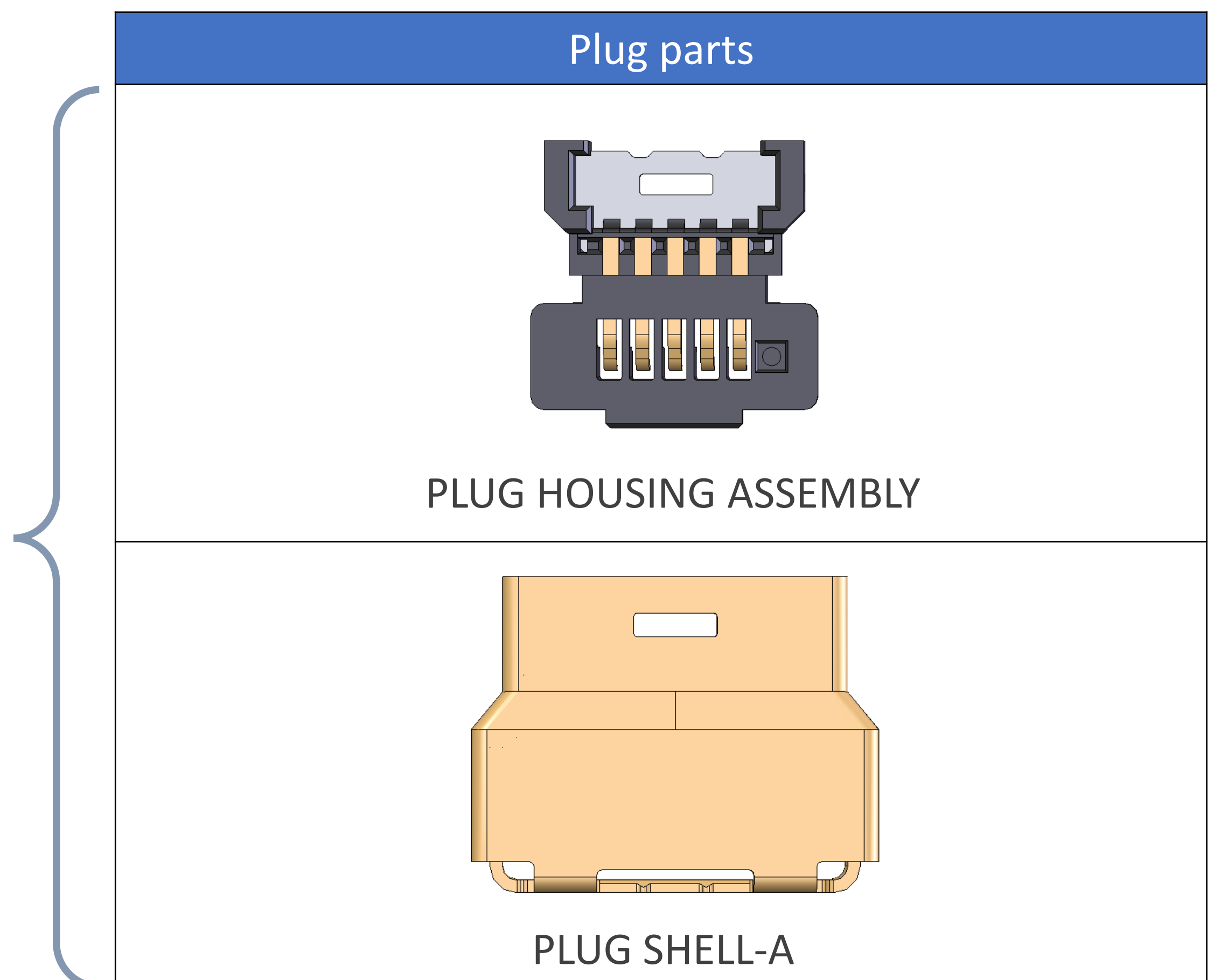
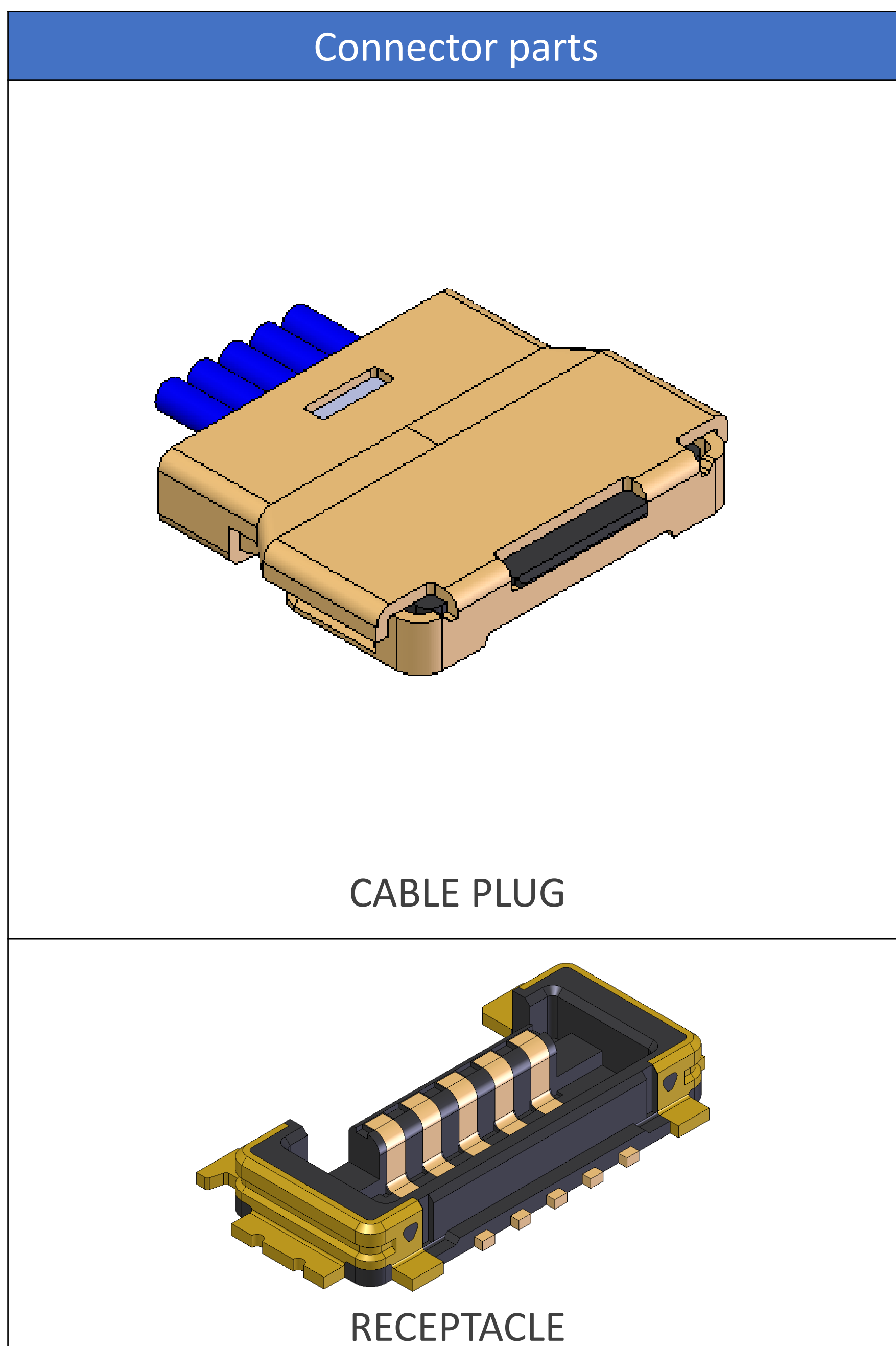


AWG#42 (50ohm)



# Component Parts Details

## Component Parts

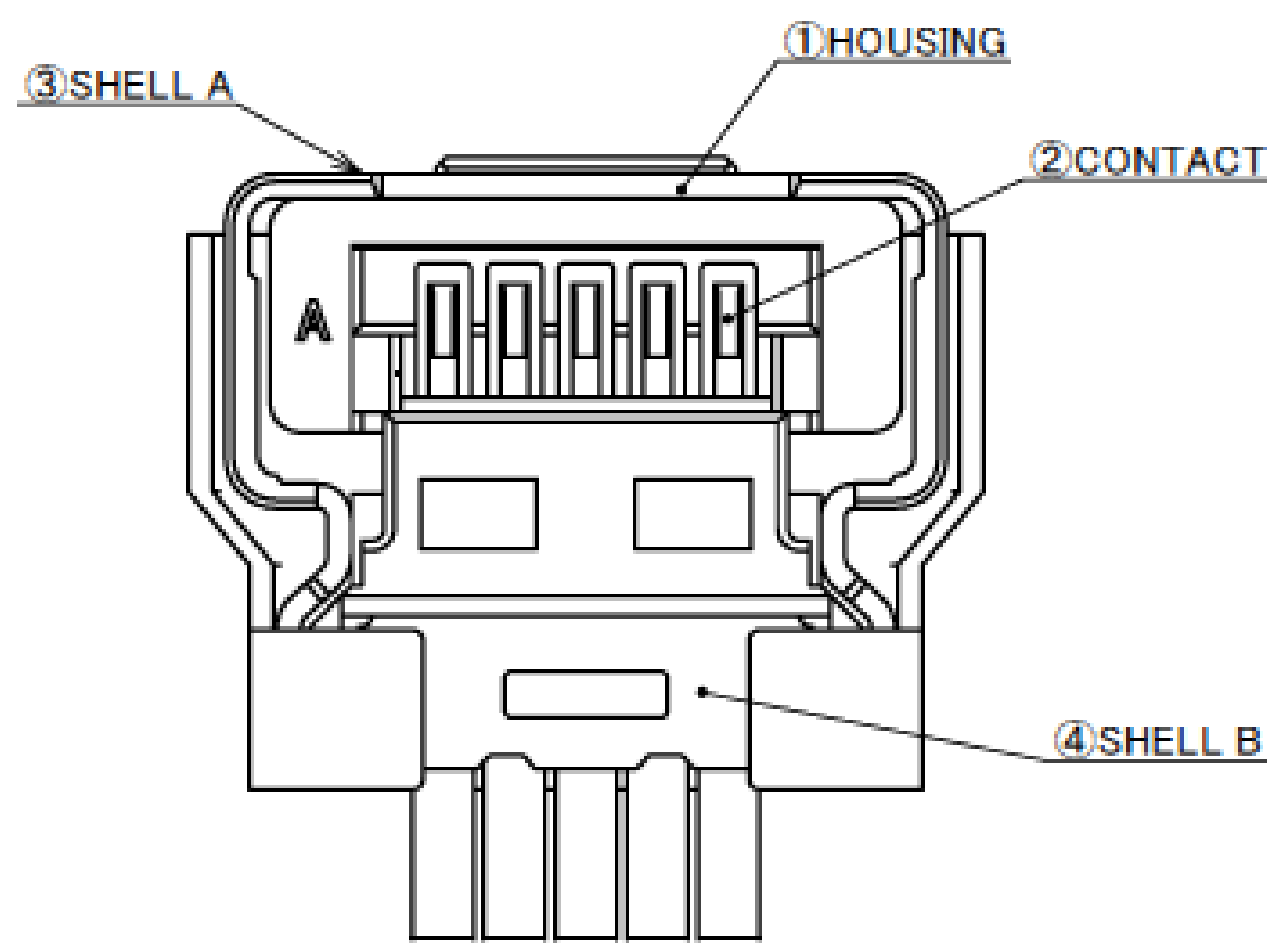
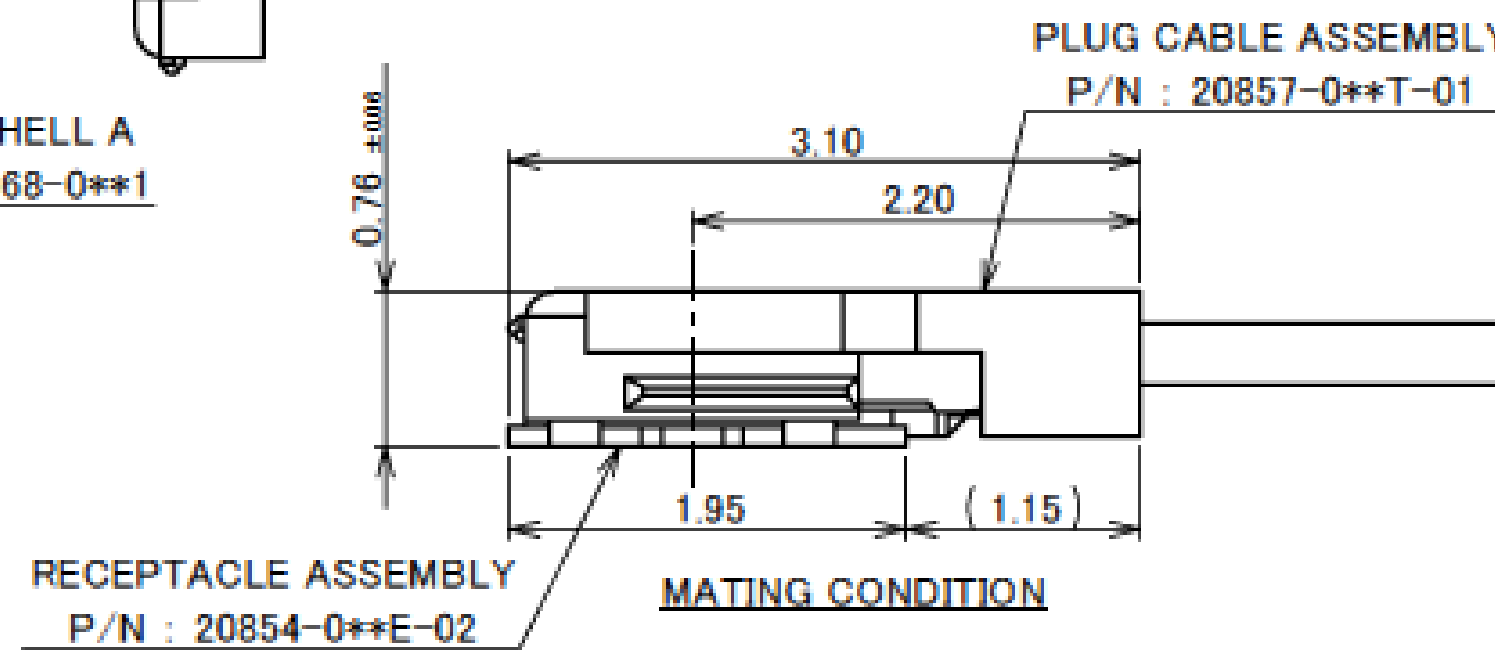
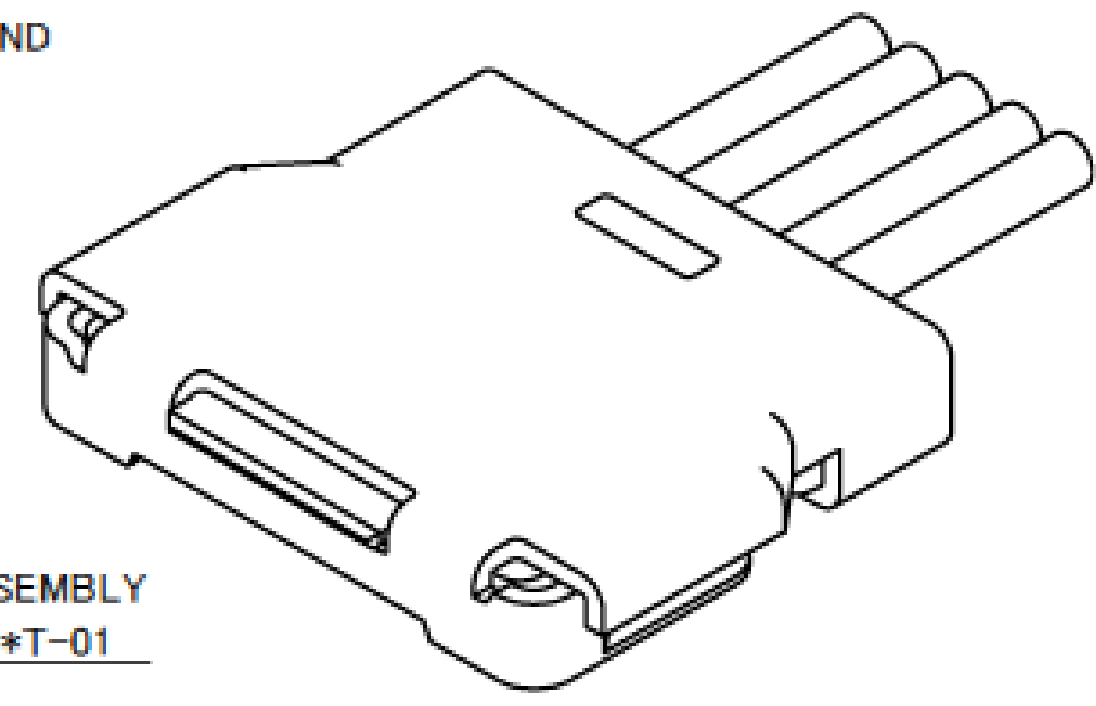
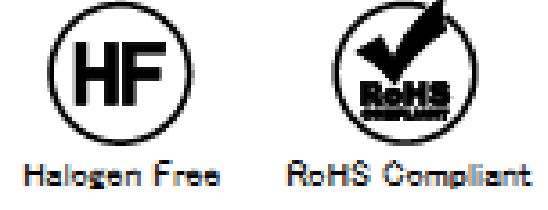
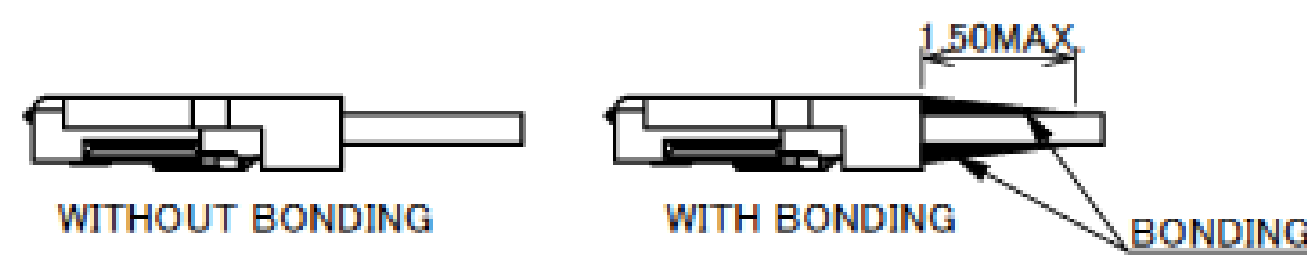
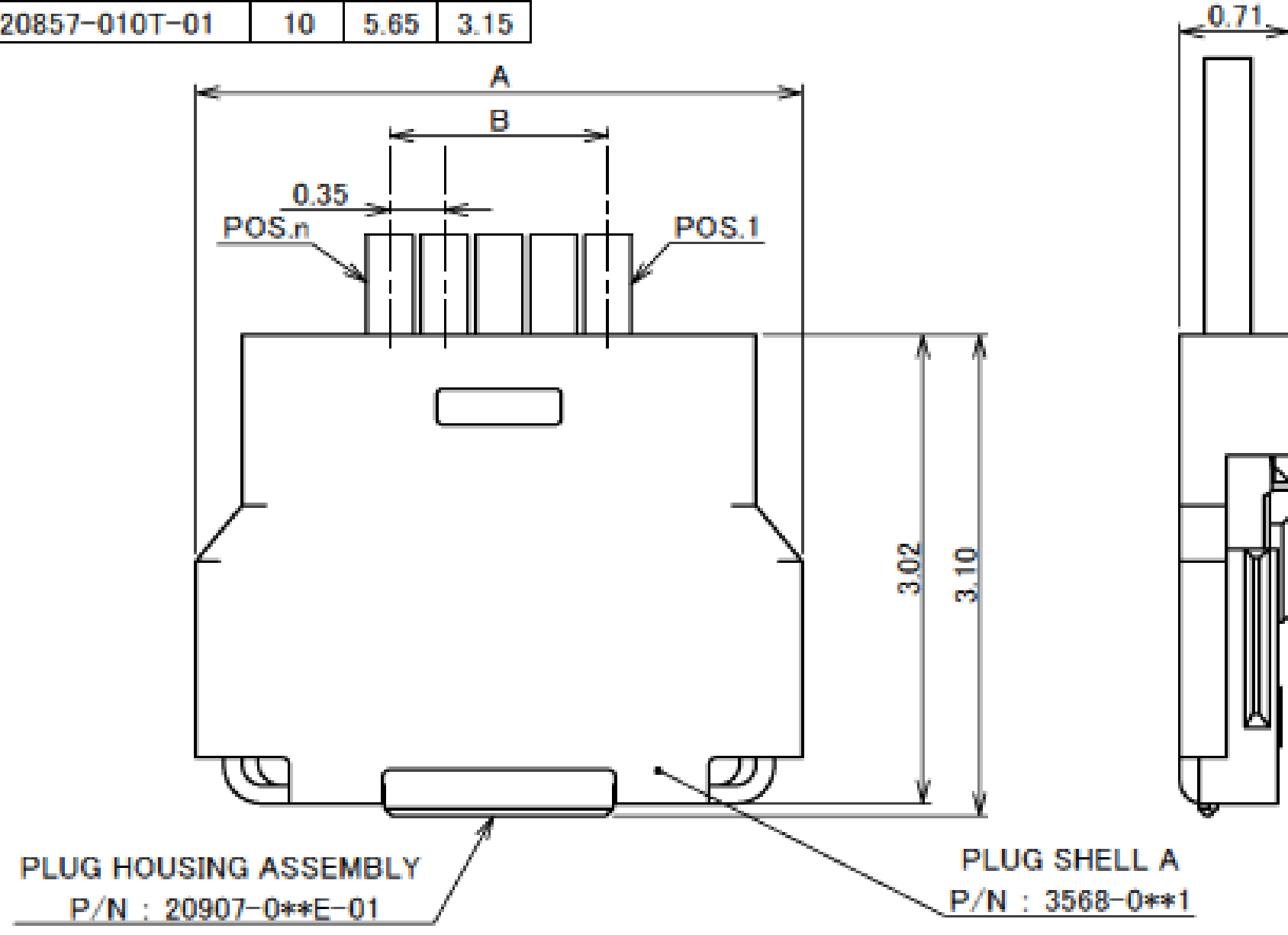


# Plug for Cable Assembly

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

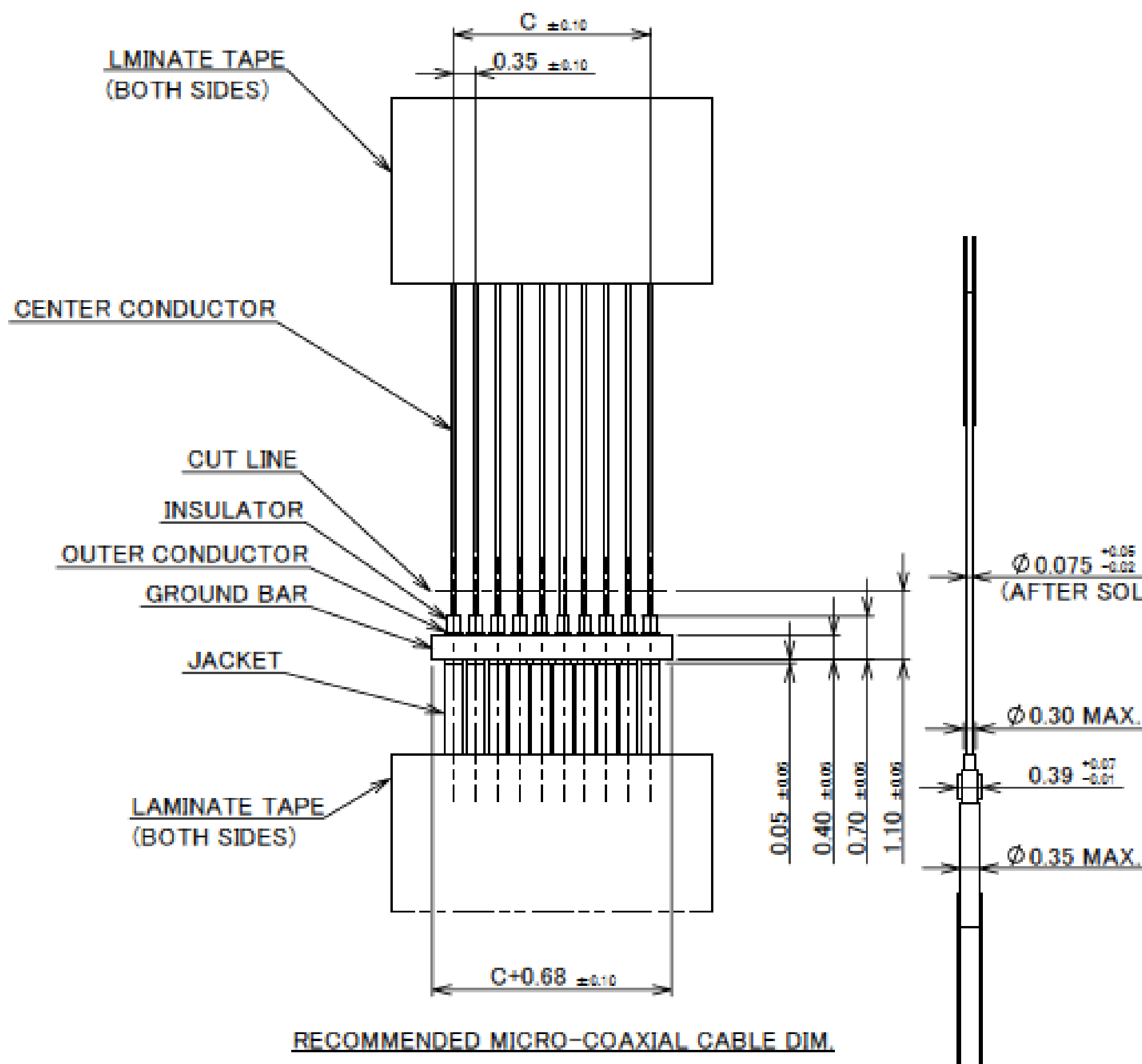
PART COMBINATION TABLE			
PLUG CABLE ASSEMBLY	PLUG HOUSING ASSEMBLY	PLUG SHELL A	RECEPTACLE ASSEMBLY
20857-005T-01	20907-005E-01	3568-0051	20854-005E-02
20857-010T-01	20907-010E-01	3568-0101	20854-010E-02



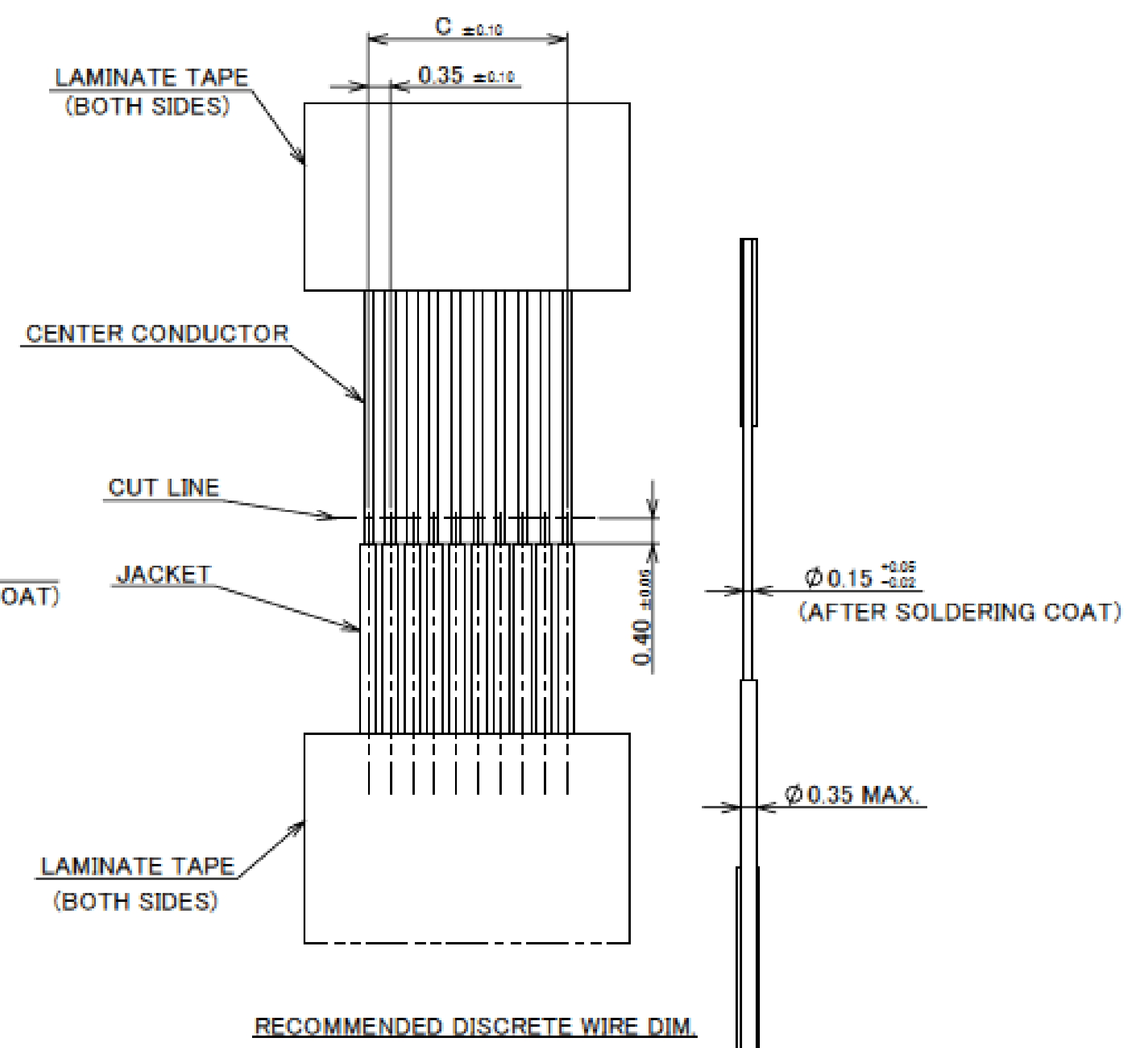
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL B	SUS	Au 0.02 μm MIN. OVER Ni 1.00 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. SOLDERING PART Au 0.02 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. SOLDERING PART Au 0.02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

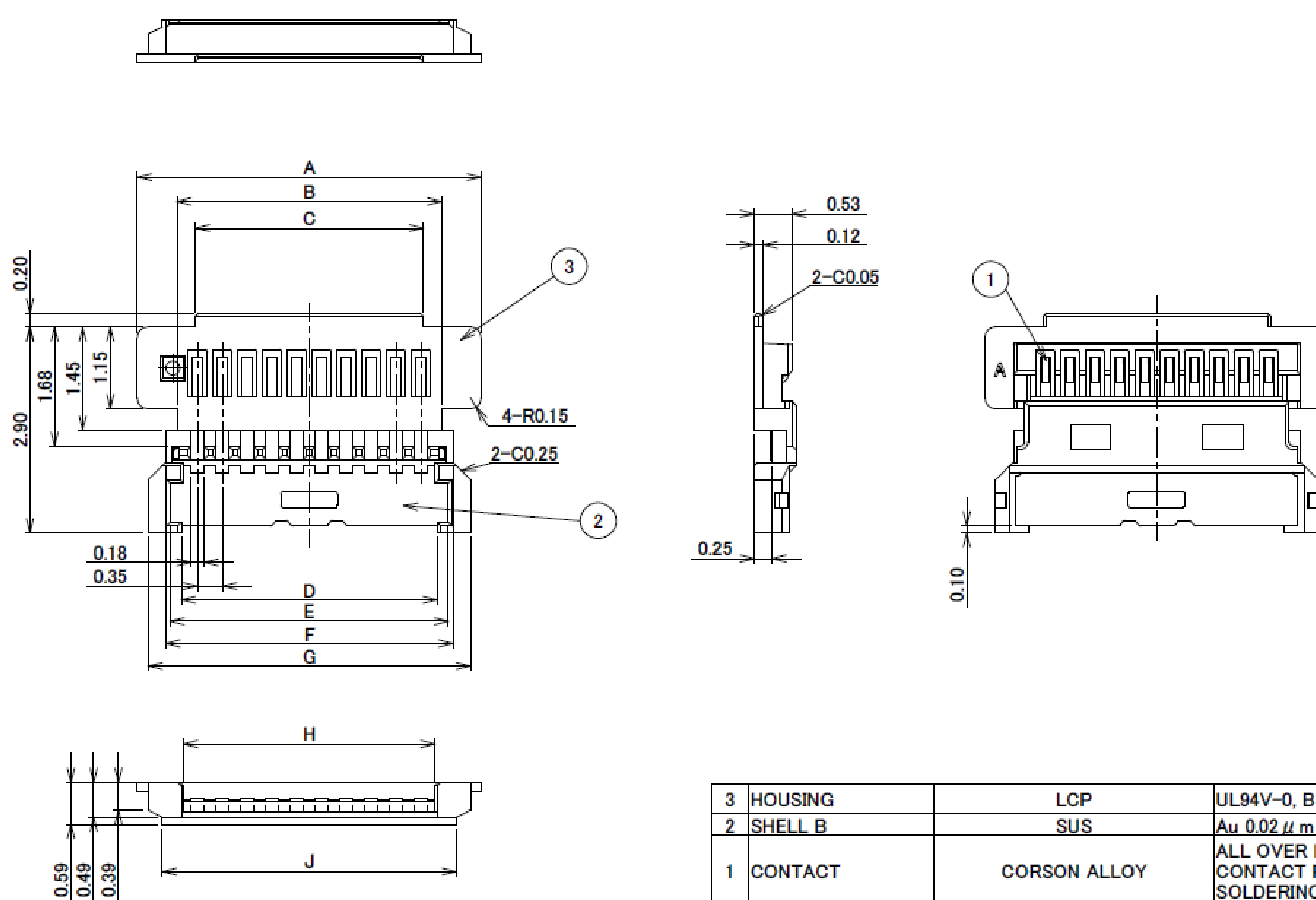
# Plug for Cable Assembly

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

# Plug Housing Assembly

Recommended P/N		20907-0**E-01									
PART NO.	Pos.	A	B	C	D	E	F	G	H	J	
20907-005E-01	5	3.10	1.98	1.47	1.86	2.18	2.30	2.80	1.80	2.40	
20907-010E-01	10	4.85	3.73	3.22	3.61	3.93	4.05	4.55	3.55	4.15	

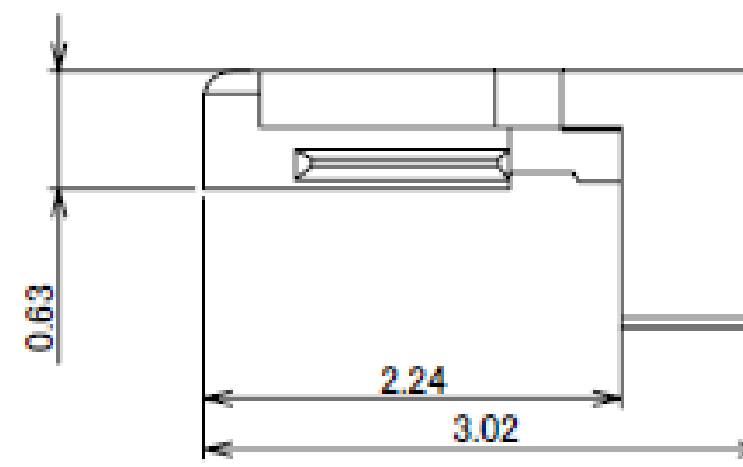
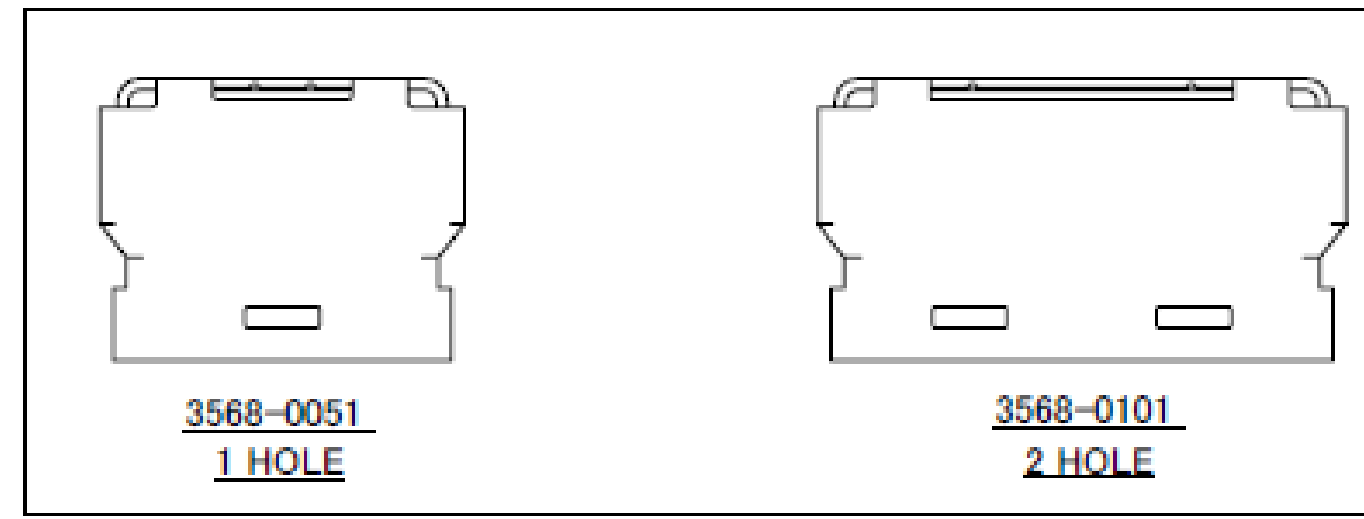
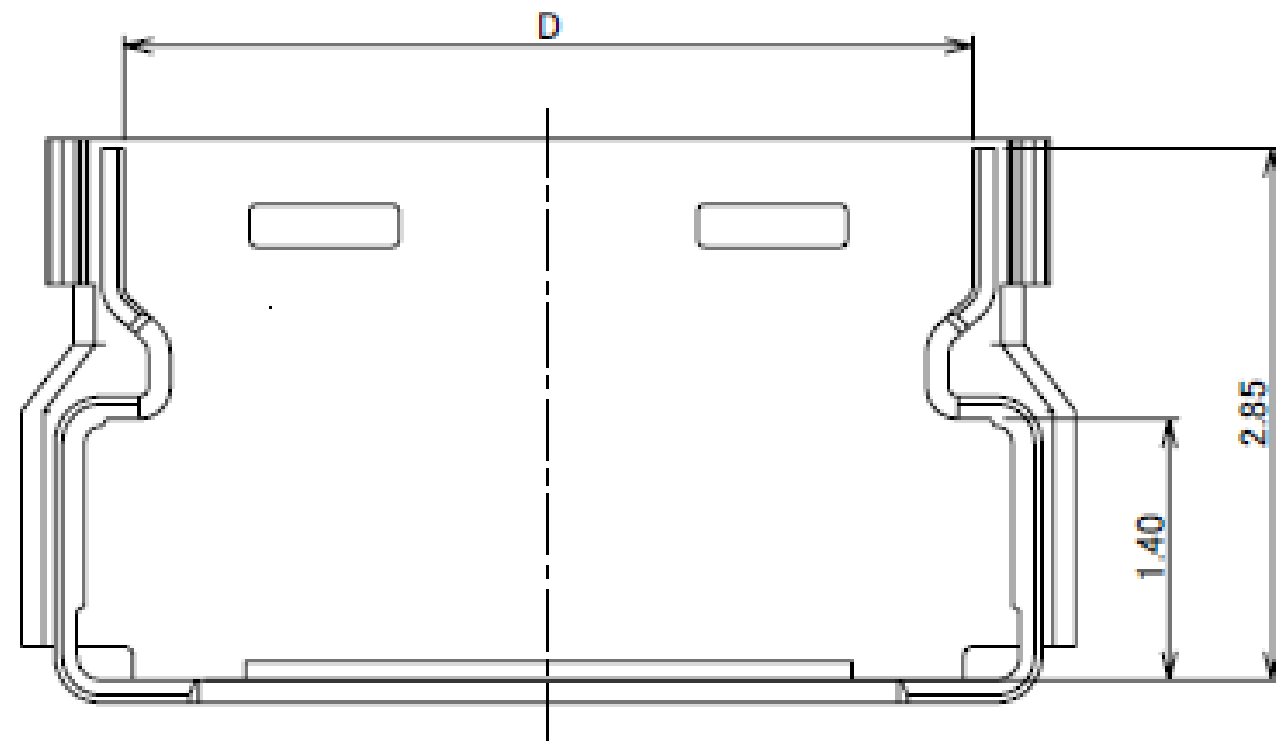
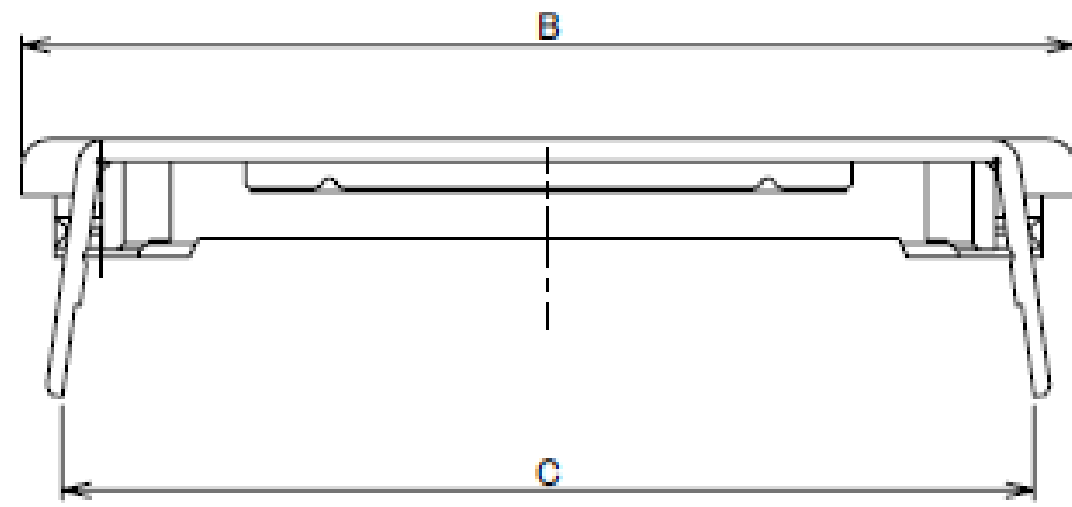
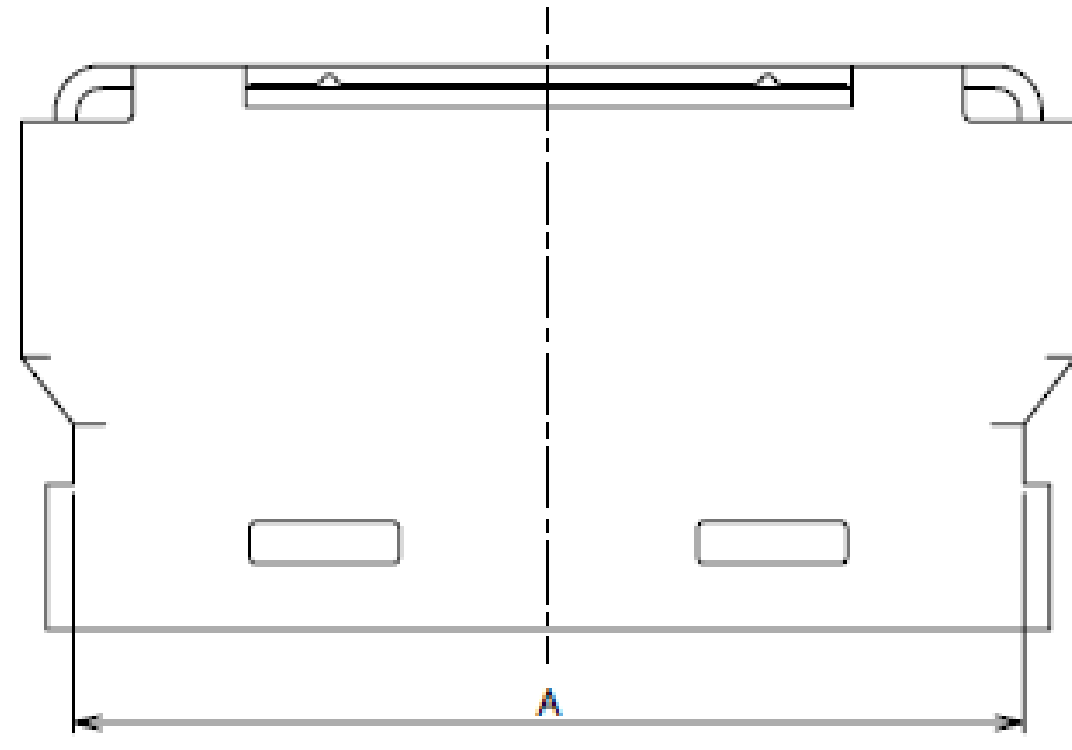


3	HOUSING	LCP	UL94V-0, BLACK
2	SHELL B	SUS	Au 0.02 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
1	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.02 $\mu$ m MIN. SOLDERING PART Au 0.02 $\mu$ m MIN.
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS

Rev.1

# Plug Shell-A

Recommended P/N		3568-0**1			
PART NO.	Pos.	A	B	C	D
3568-0051	5	3.34	3.90	3.46	2.80
3568-0101	10	5.09	5.65	5.21	4.55

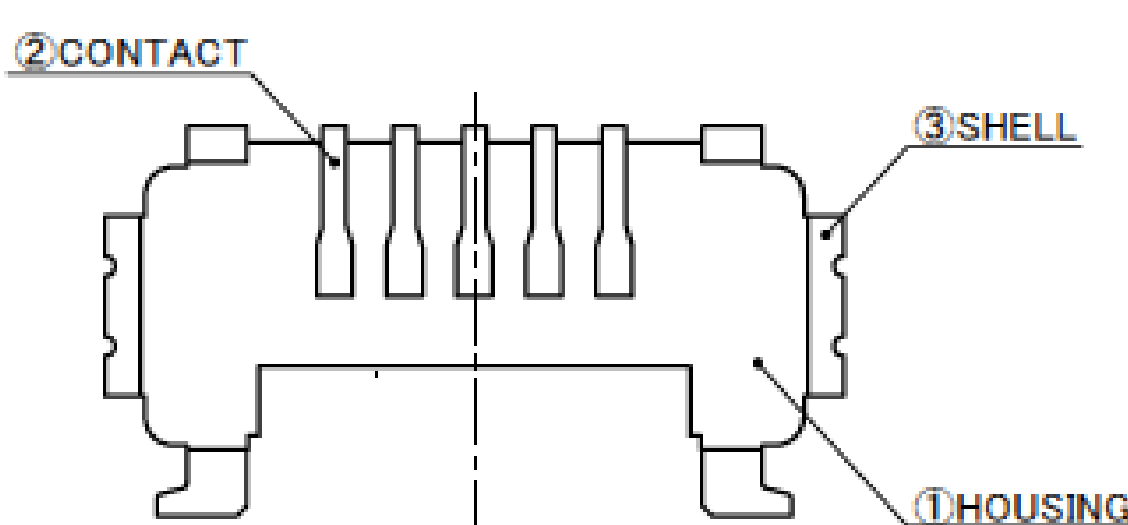
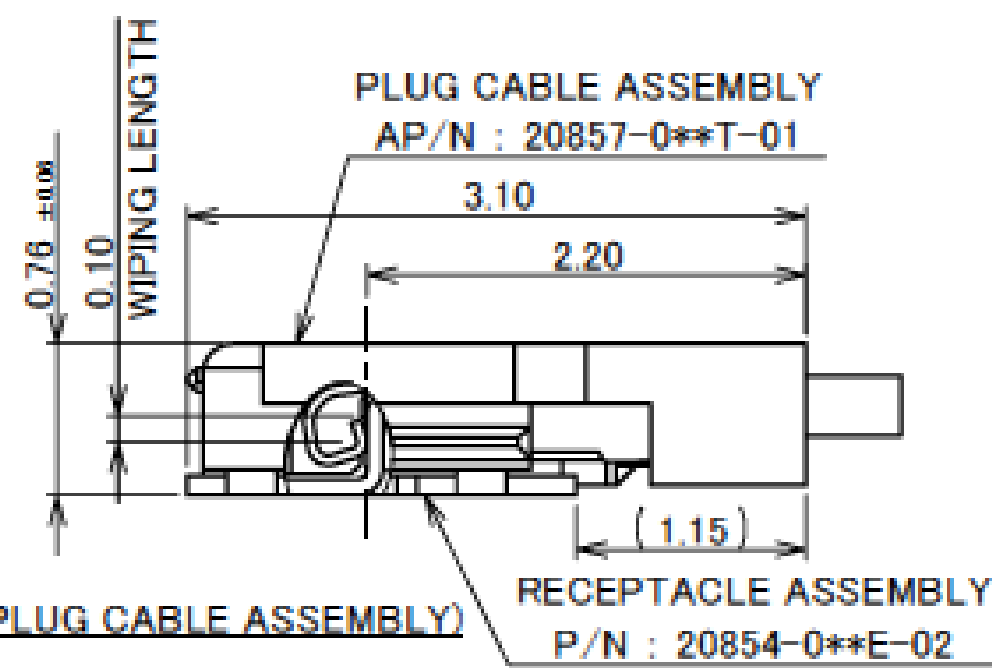
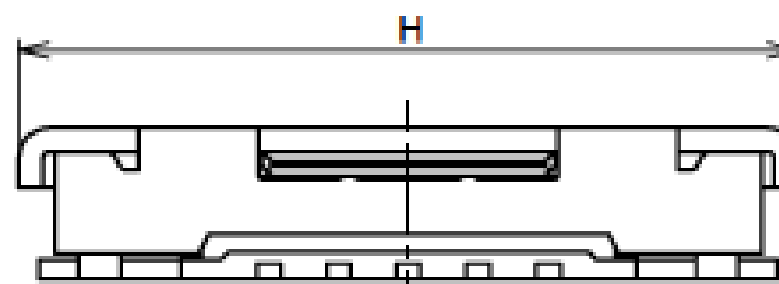
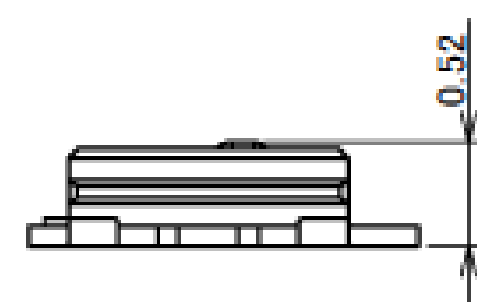
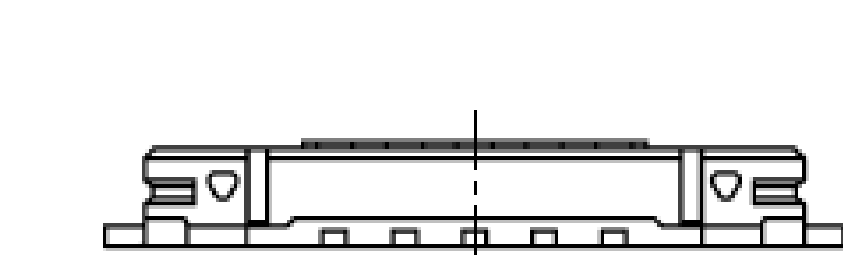
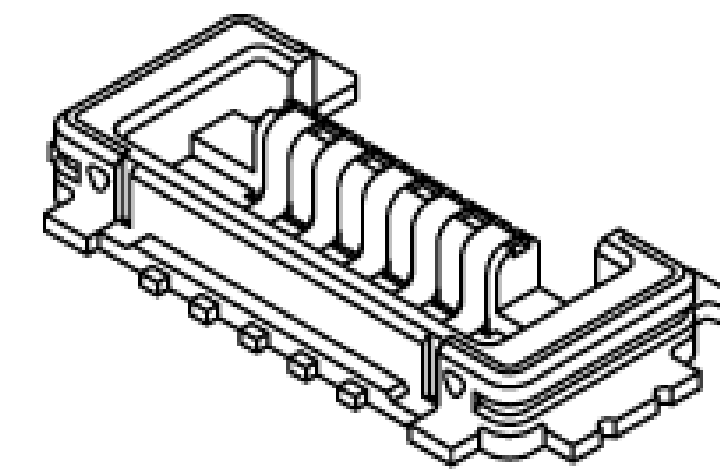
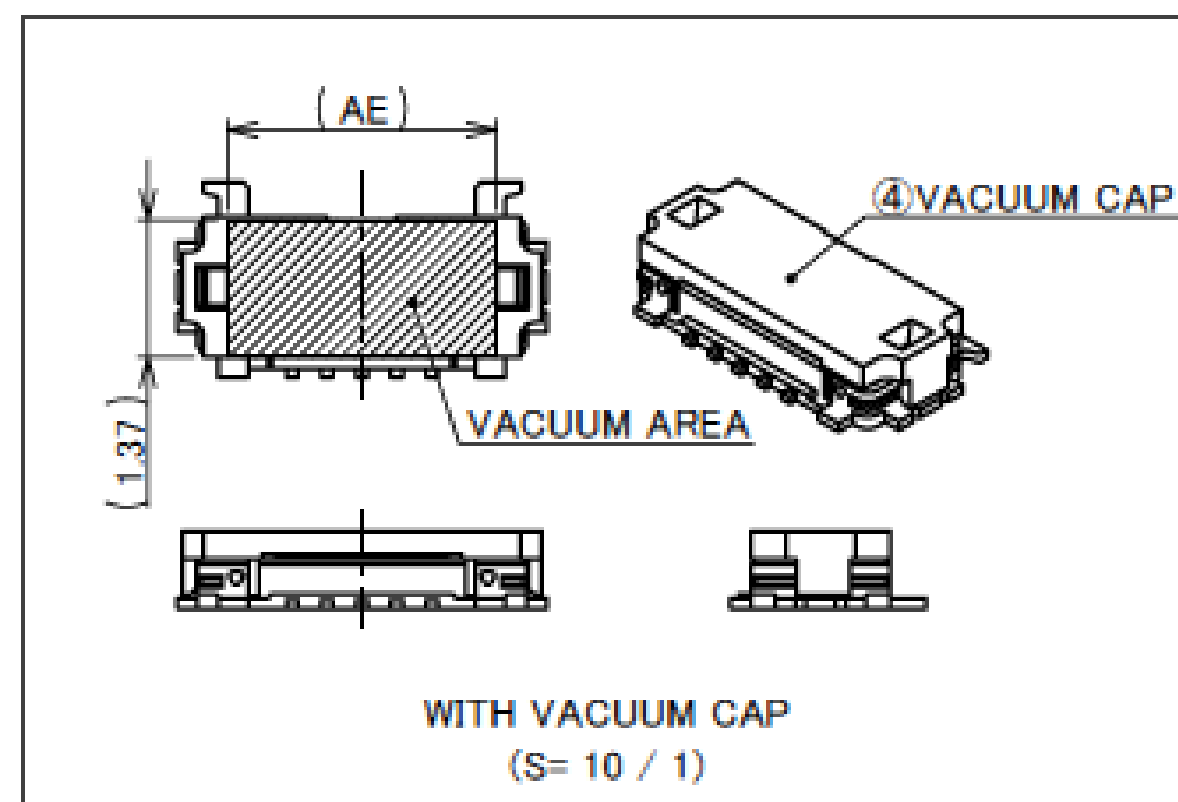
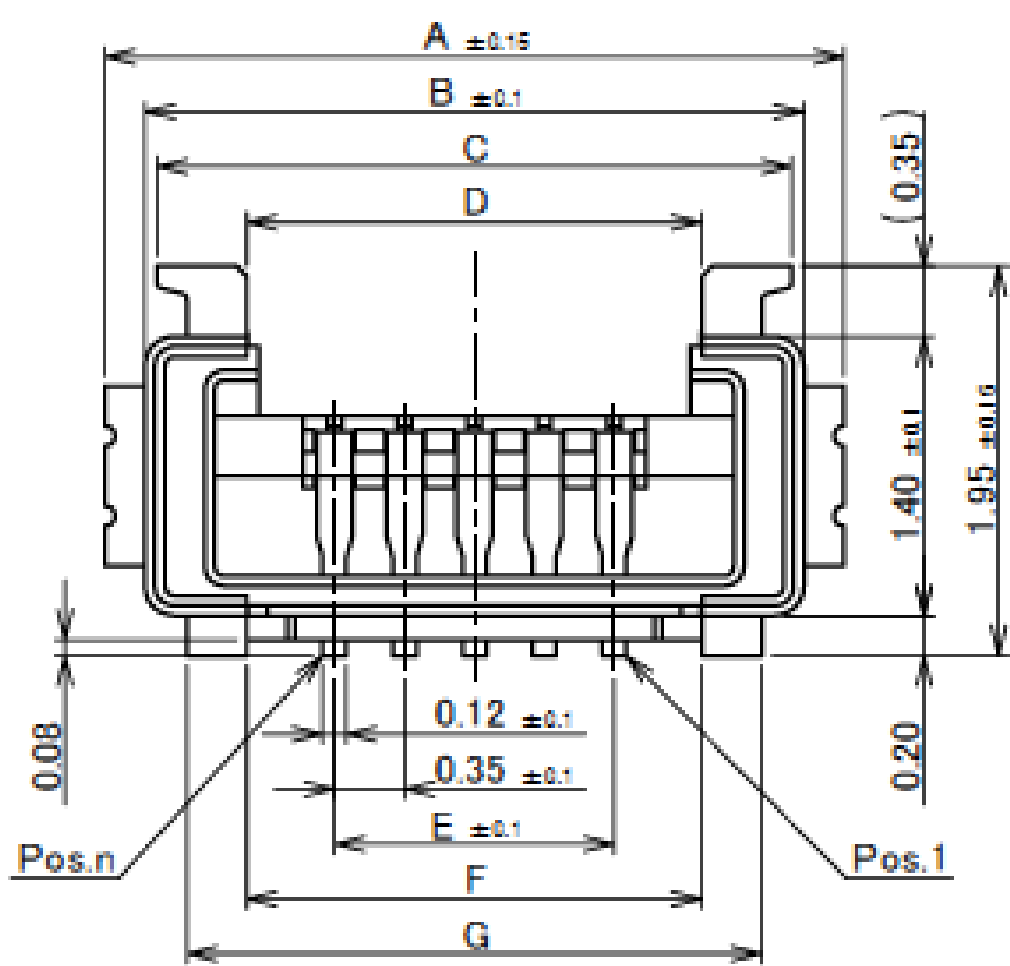
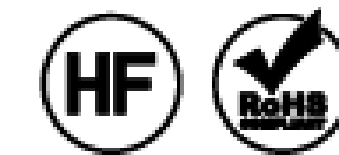


NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL A	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. SOLDERING PART Au 0.02 μm MIN.

Rev.2

# 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	



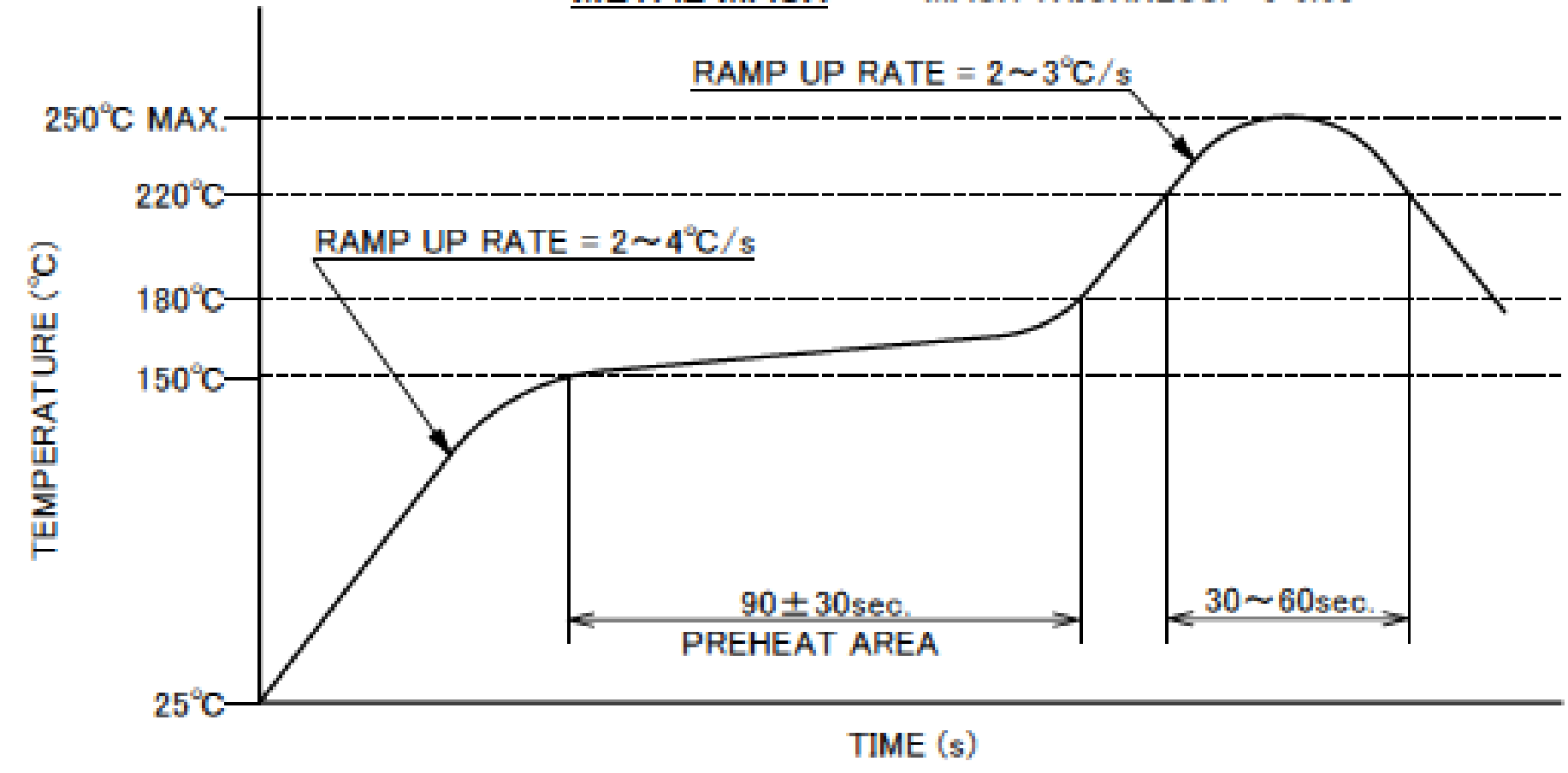
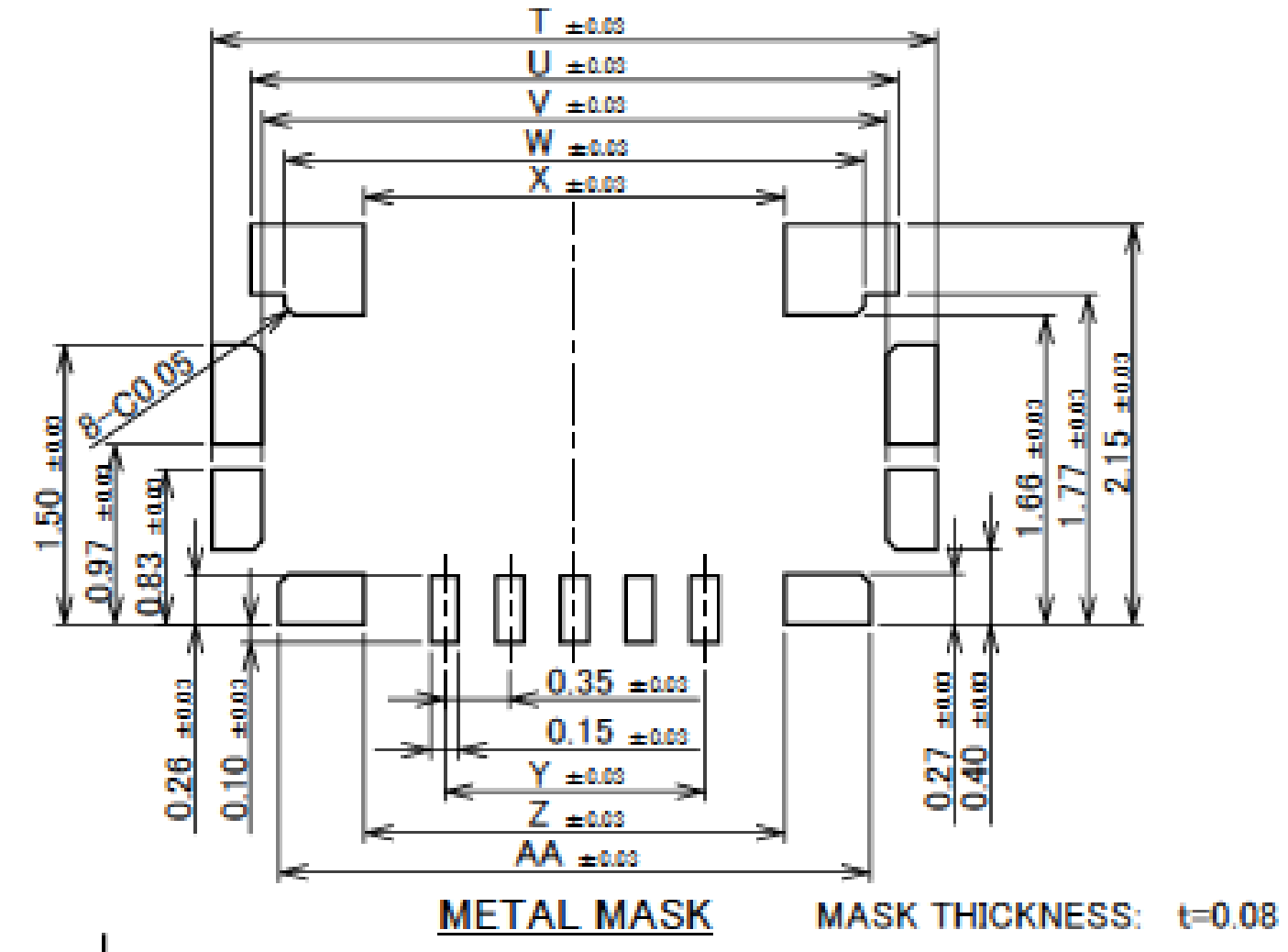
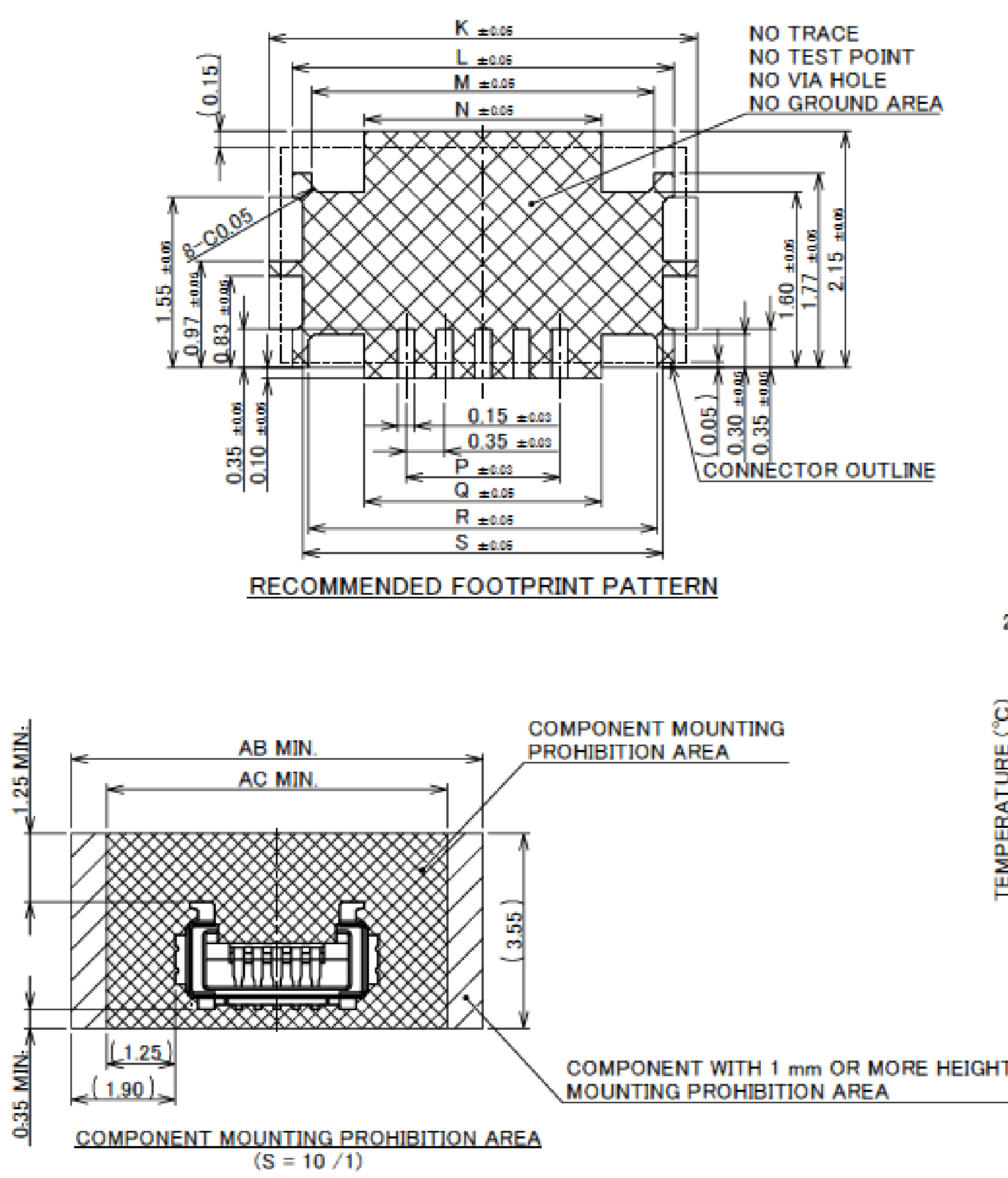
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CAP	LCP	UL94V-0, BLACK
3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART: Au 0.01 μm MIN. SOLDERING PART: Au 0.01 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART: Au 0.05 μm MIN. SOLDERING PART: Au 0.03 μm MIN.
1	HOUSING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

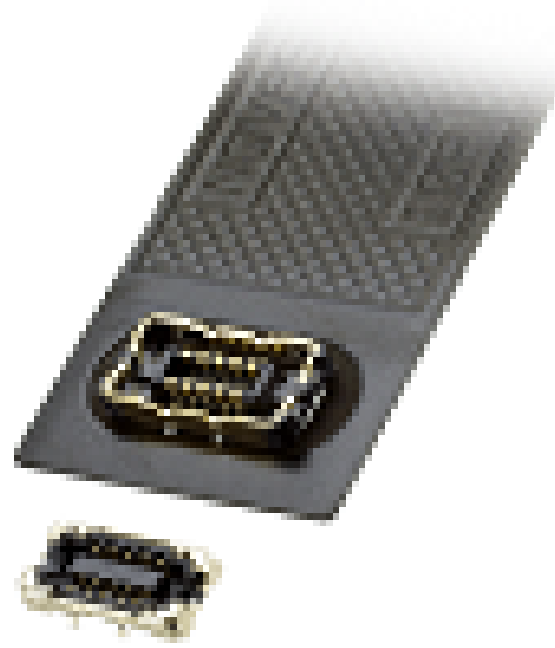


ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20857-0**T-01 (PLUG CABLE ASSEMBLY)
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 42 DISCRETE WIRE : AWG# 36
RATING VOLTAGE	60V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.35 AC/DC [AWG#42] PER CONTACT PIN 0.50 AC/DC [AWG#36] PER CONTACT PIN
OPERATING 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



Board to Board



High-Density



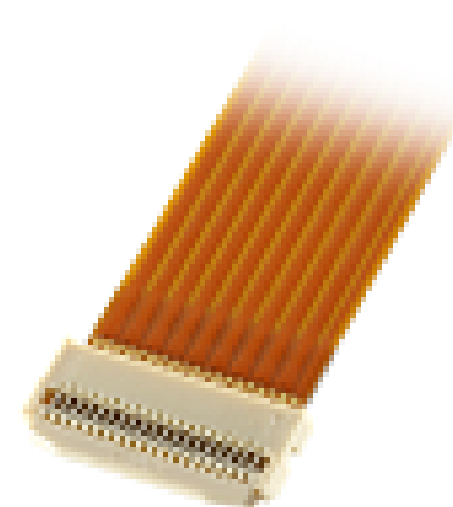
Autolocking FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial / Discrete Cable



High-Speed



RF



High-Frequency



Optical Module



High-Speed



Effector



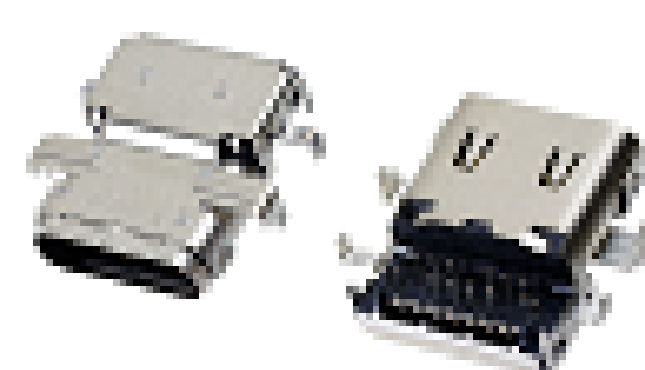
Power



High-Power



I/O (Input/Output)



Quick charge



Inquiry



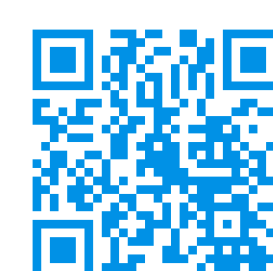
Custom Connectors Available



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