

CABLINE®-CX II Without Cover

較窄間距 (0.25 mm pitch) , 較低嵌合高度(嵌合高度 = 0.78 mm max), 機械鎖扣, 帶屏蔽, 多點接地設計, 水平插拔款的極細同軸線連接器

Product Specifications:

Mating type		Horizontal
Board Pitch (mm)		0.5
Wiping Length (mm)		0.54
Mated size (mm)	Height	0.78 Max
	Width	Formula: 6.45 + (0.25*?p)
	Depth	5.21
Pin Counts	Range	Up to 40
	Available	40

Applicable Cable Size:

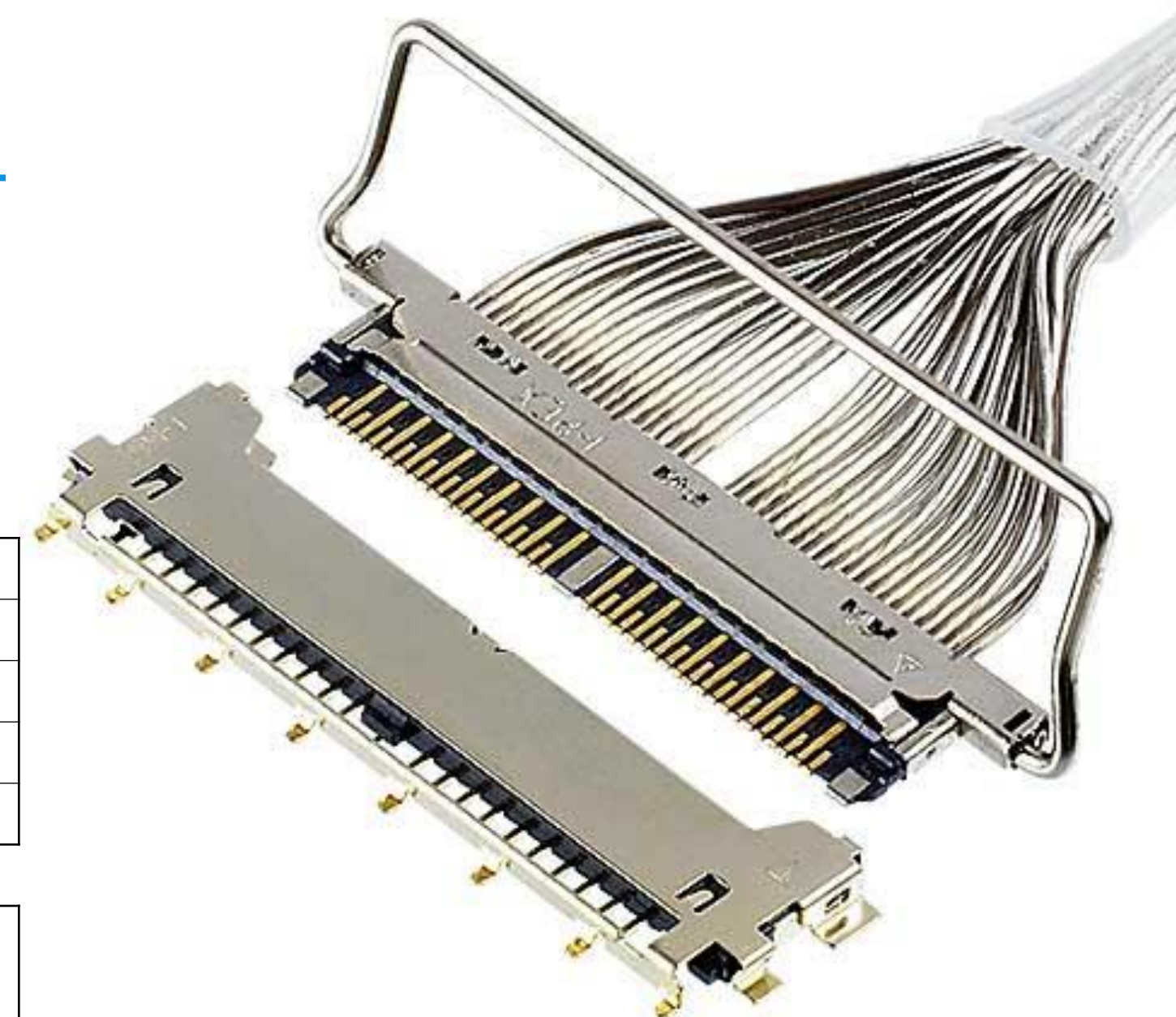
Maximum O.D. (mm)	0.25
Micro-Coaxial for Signal (AWG)	45 ohm: #44 or smaller 50 ohm: #46 or smaller
Twinax (AWG)	-
Discrete (AWG)	#39 or smaller

Applicable Standards (Reference Only):

USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps) Gbps

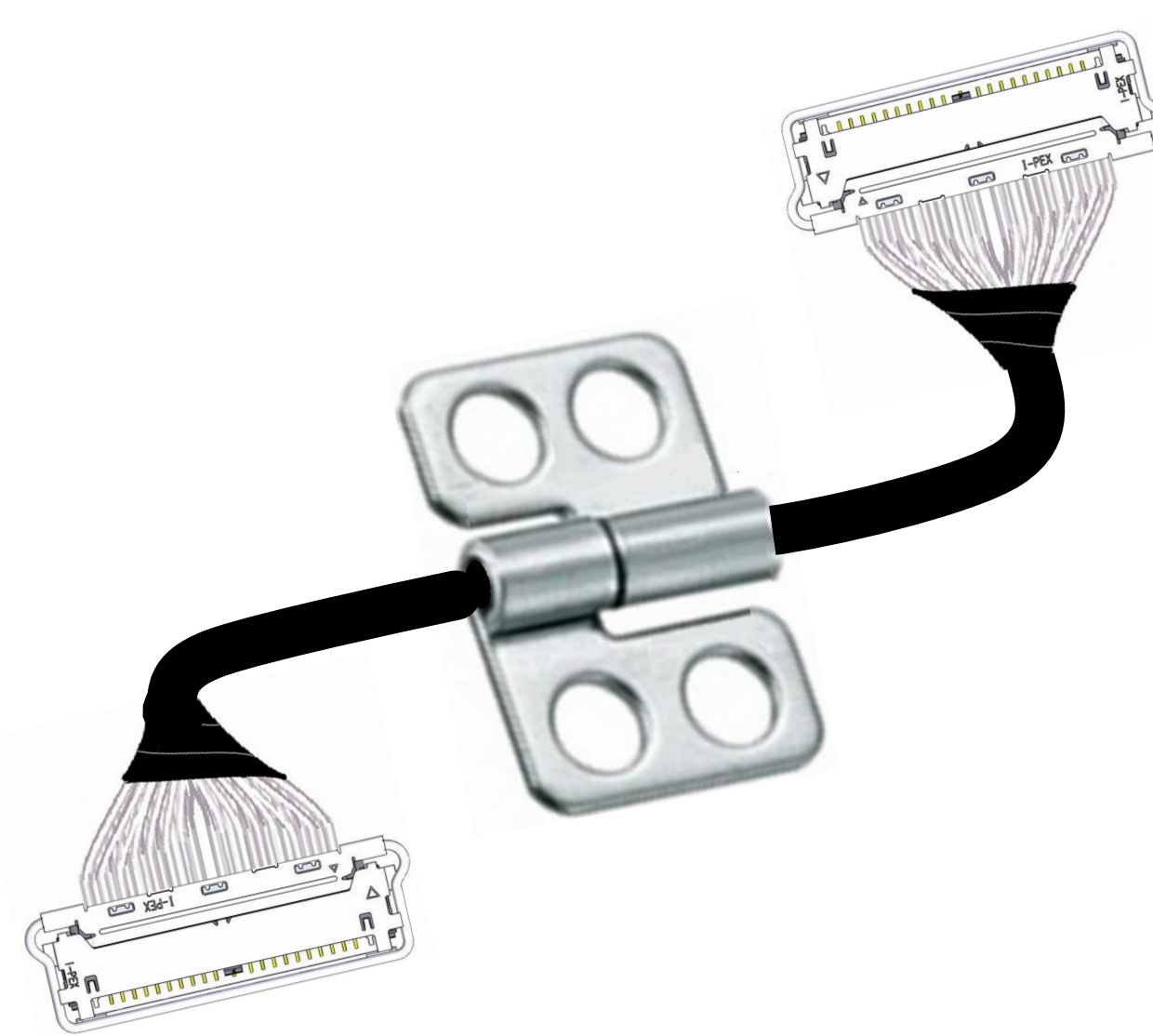
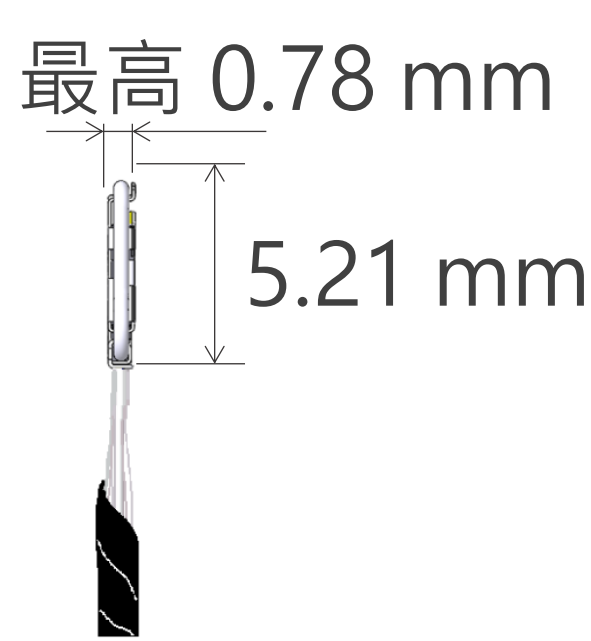
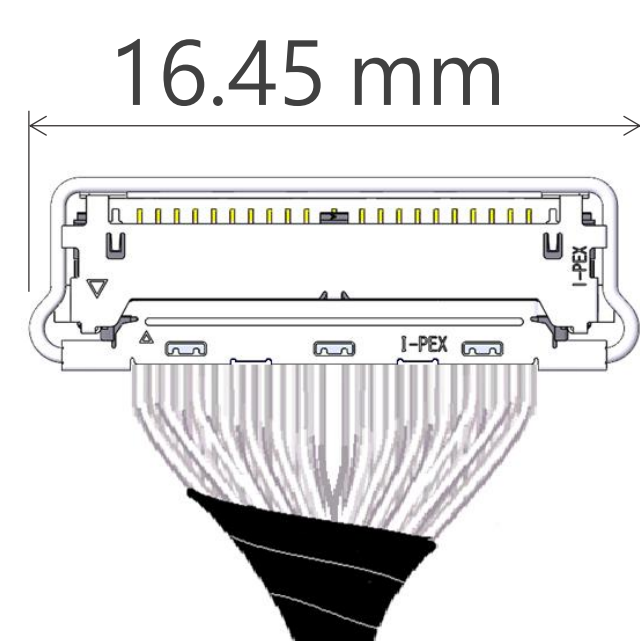
*若有規格外 Pin 數需求, 請與當地負責業務窗口聯繫。

*CABLINE®-CX II 帶 EMI 屏蔽罩的款式(組合高度最高 1.0 mm) 也可提供。



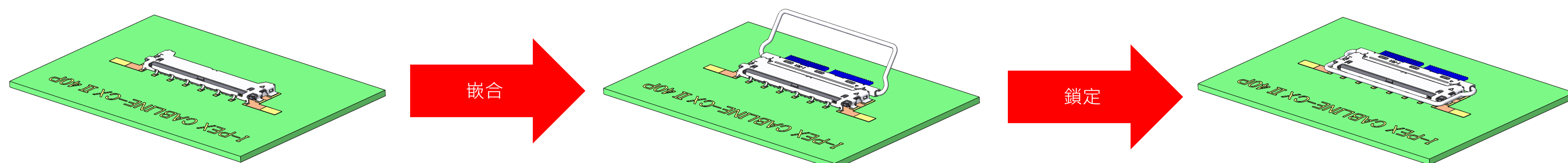
適用於小型連接器空間 [穿越轉軸組件- CABLINE®連接器](#)

CABLINE-CX II 40p的大小比一分錢硬幣還小。
組合高度: 最高 0.78 mm



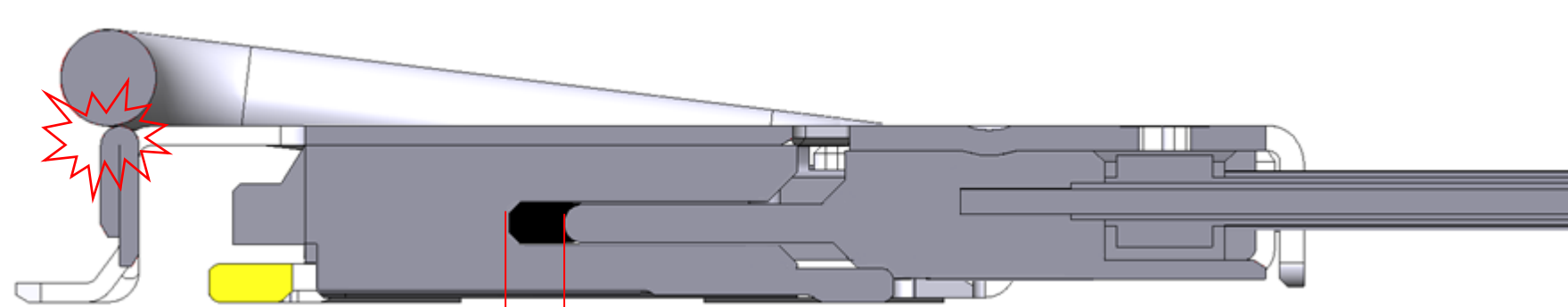
柔性極細同軸線束適合轉軸設計的應用

機械鎖扣防止連接器不完全嵌合及脫落/未嵌合

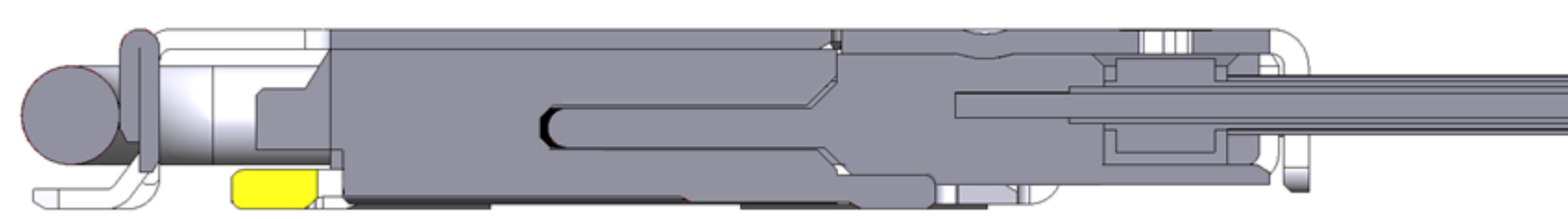


只有當公座完全和母座嵌合時, 機械鎖扣才能鎖上。

干涉

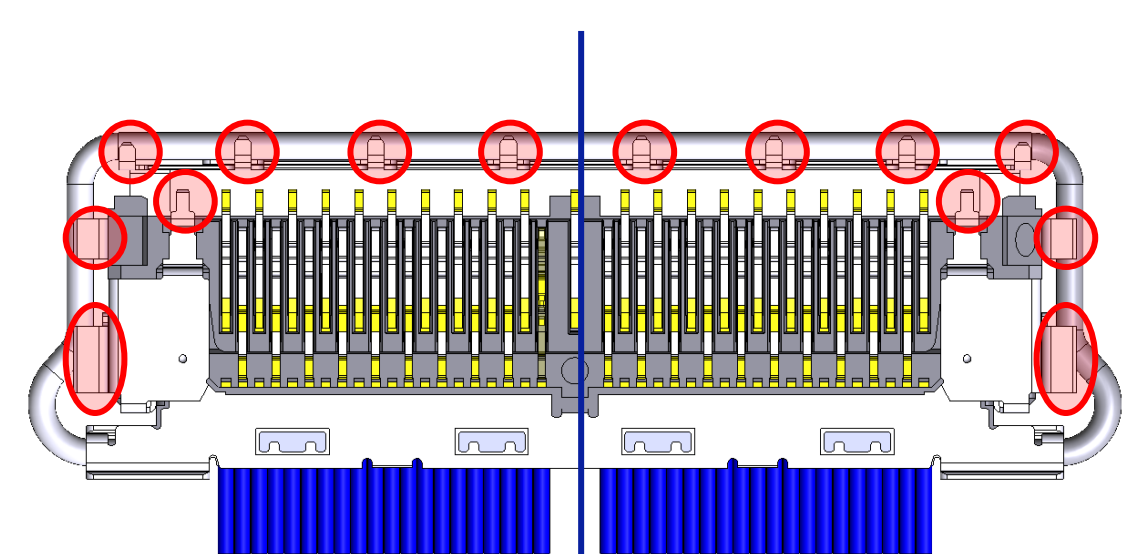


不完全嵌合

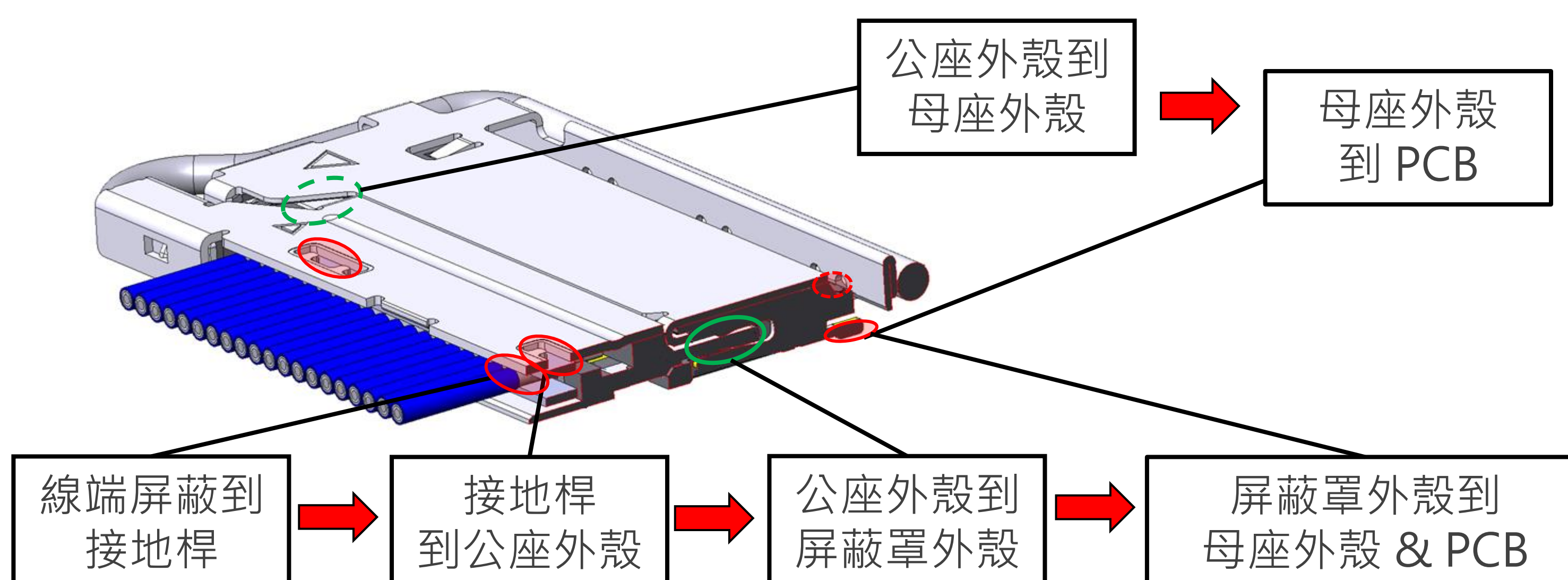


完全嵌合

EMI 屏蔽和多點接地設計



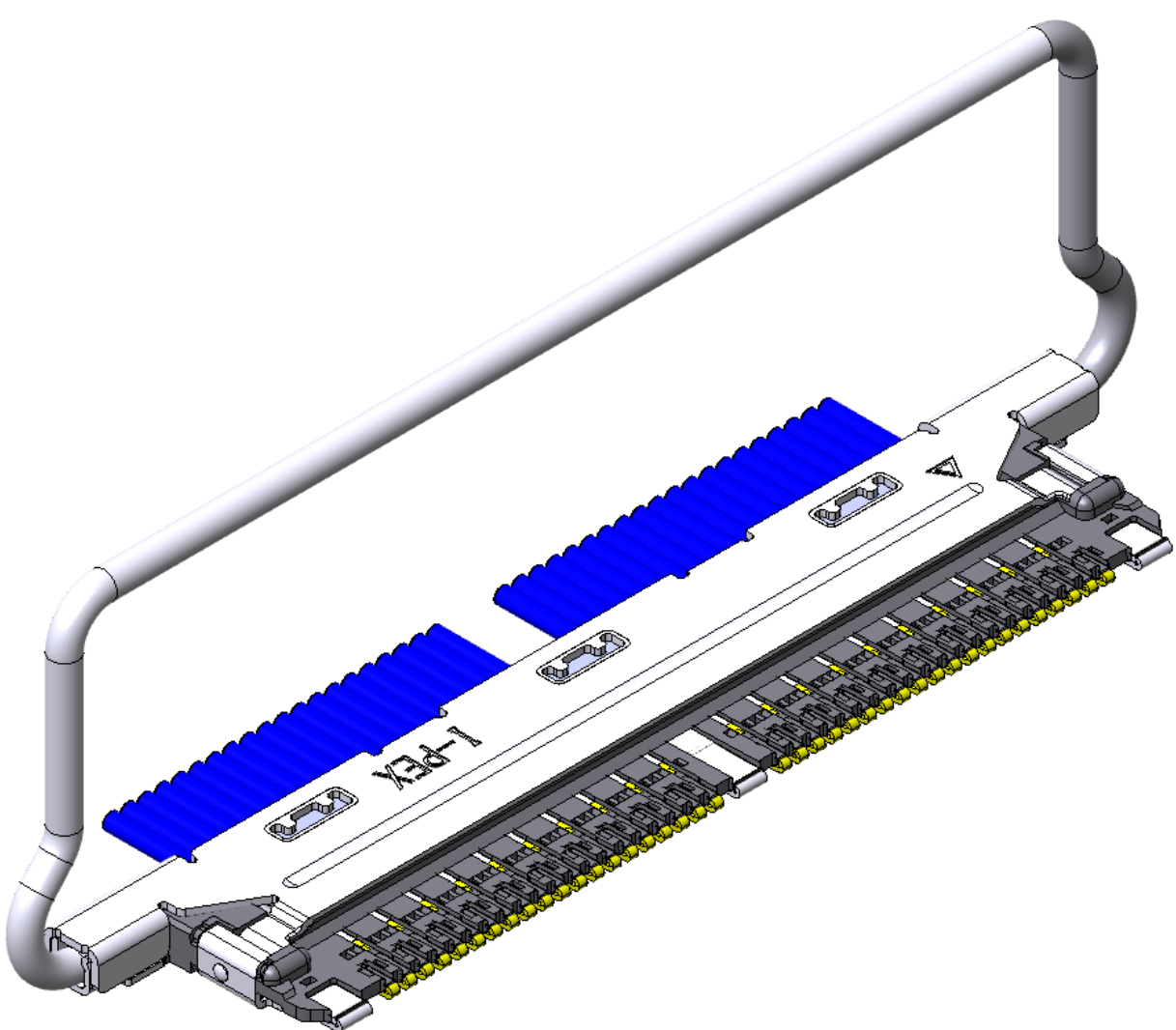
底面圖



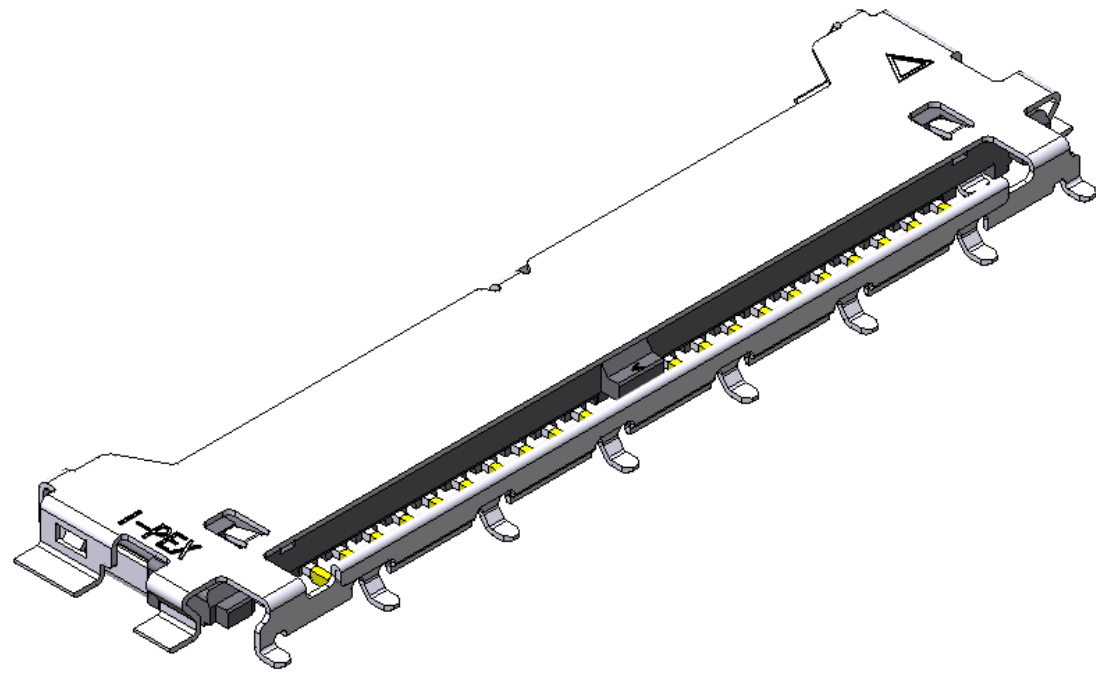
Component Parts Details

Component Parts

Connector parts

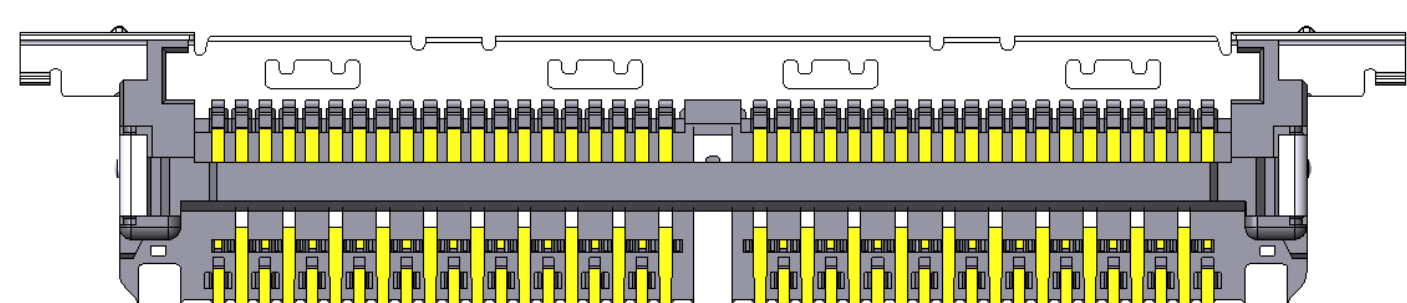


PLUG

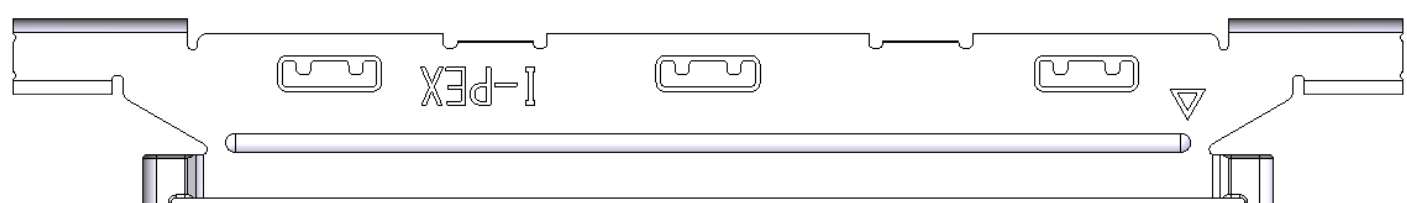


RECEPTACLE

Plug parts



PLUG HOUSING ASSEMBLY



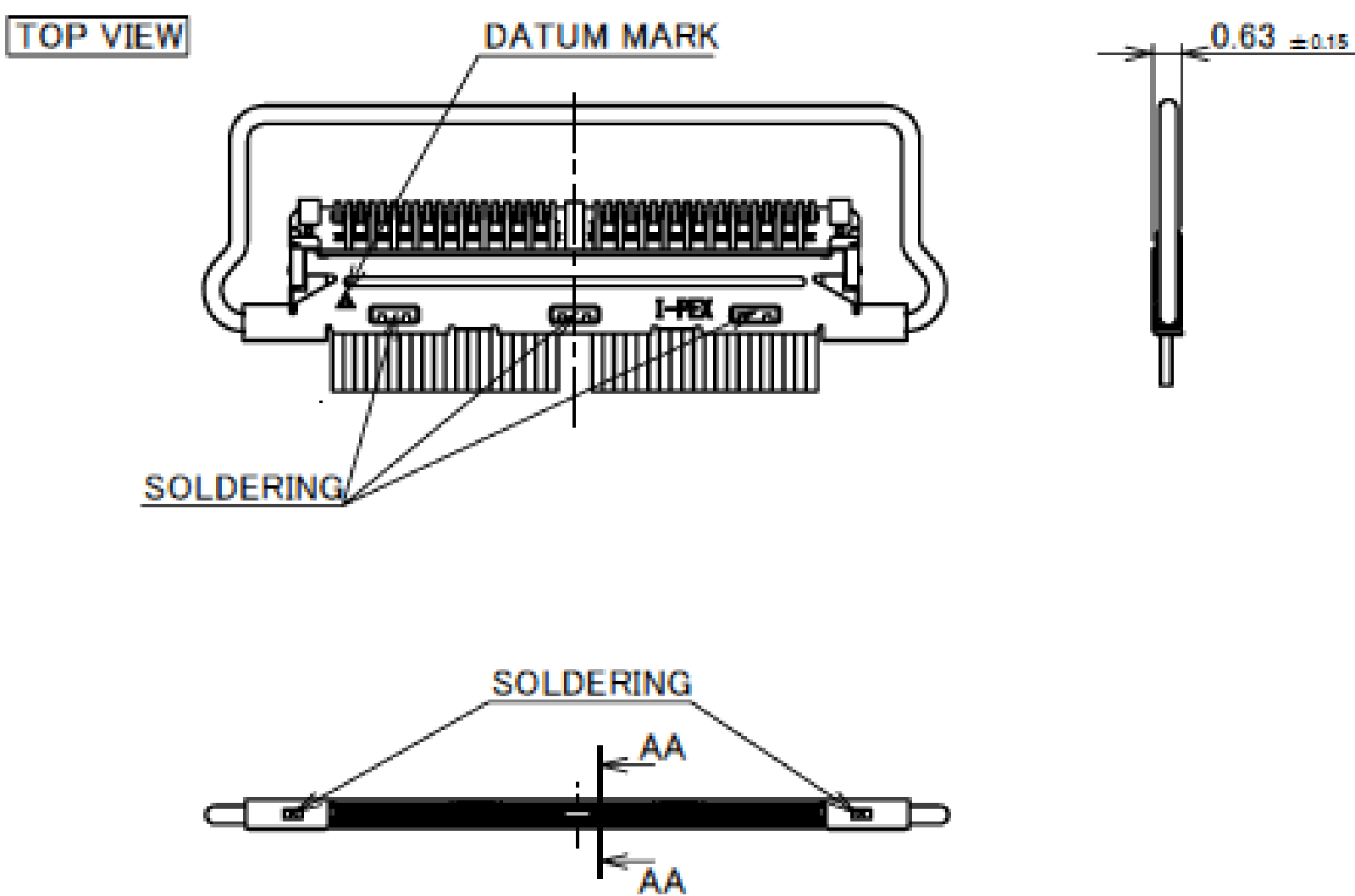
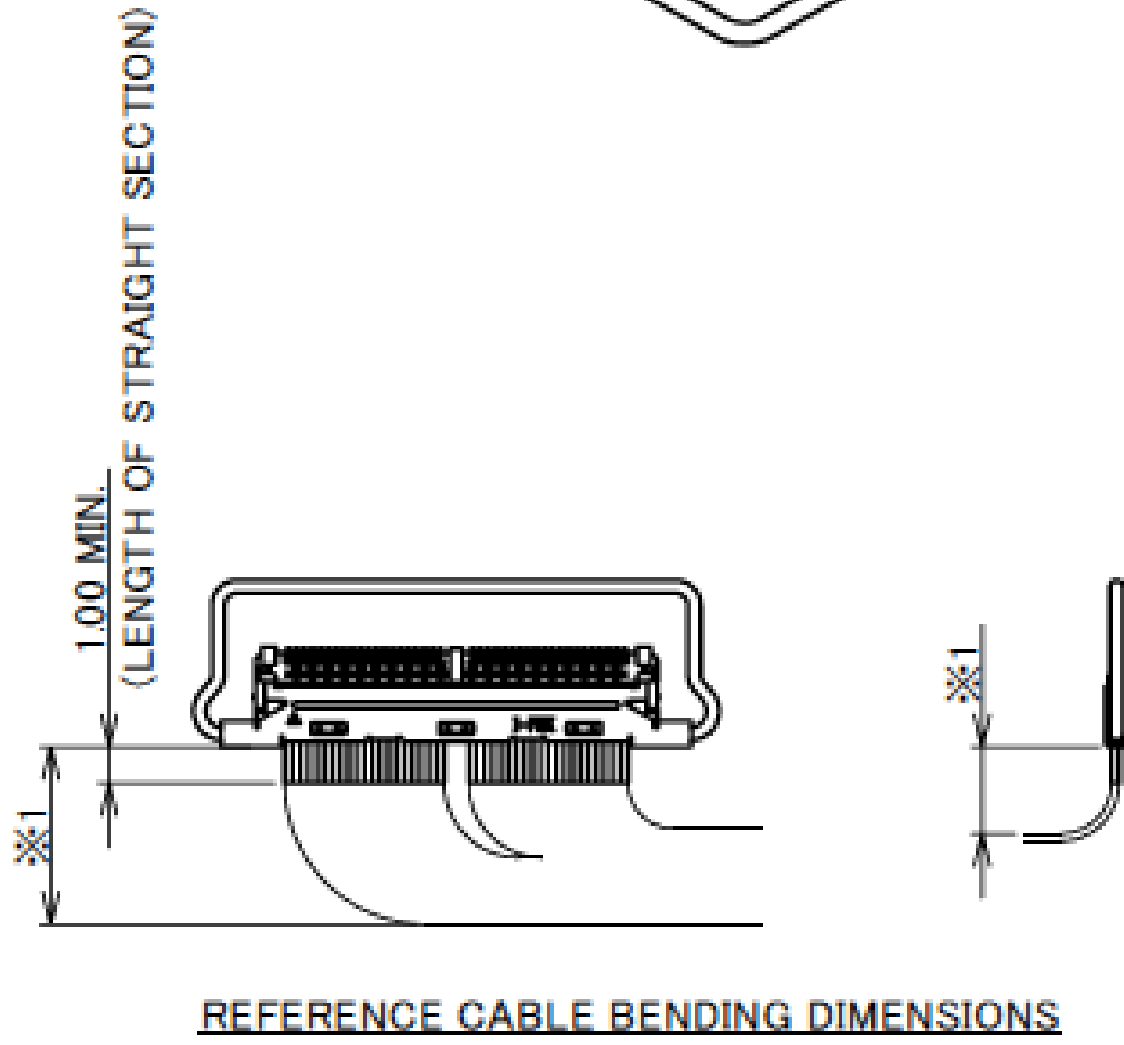
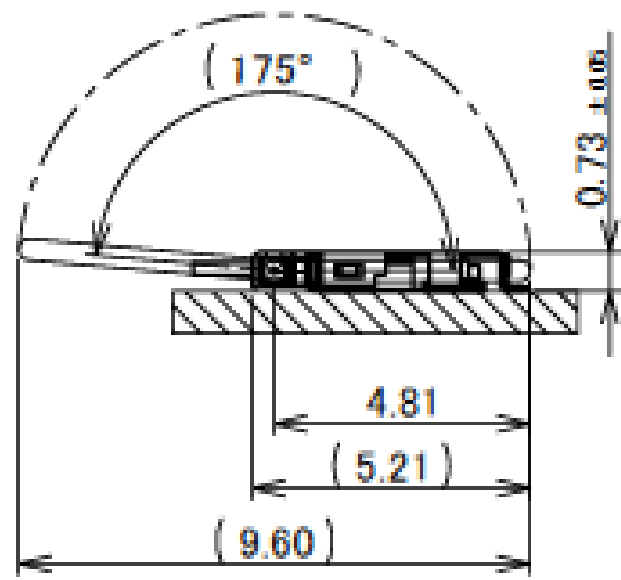
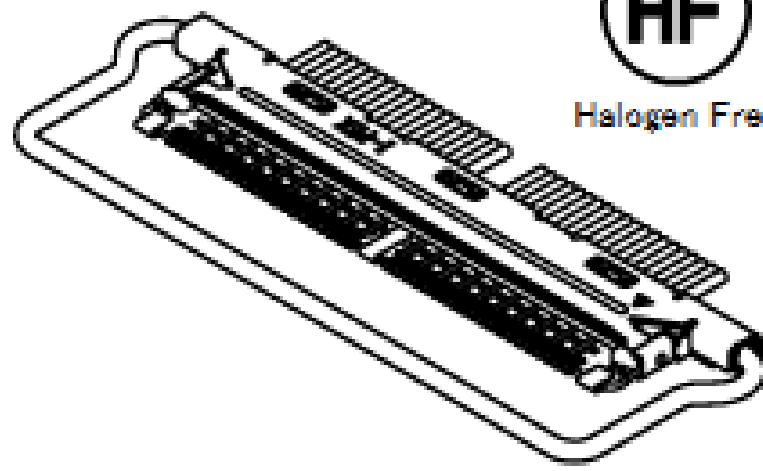
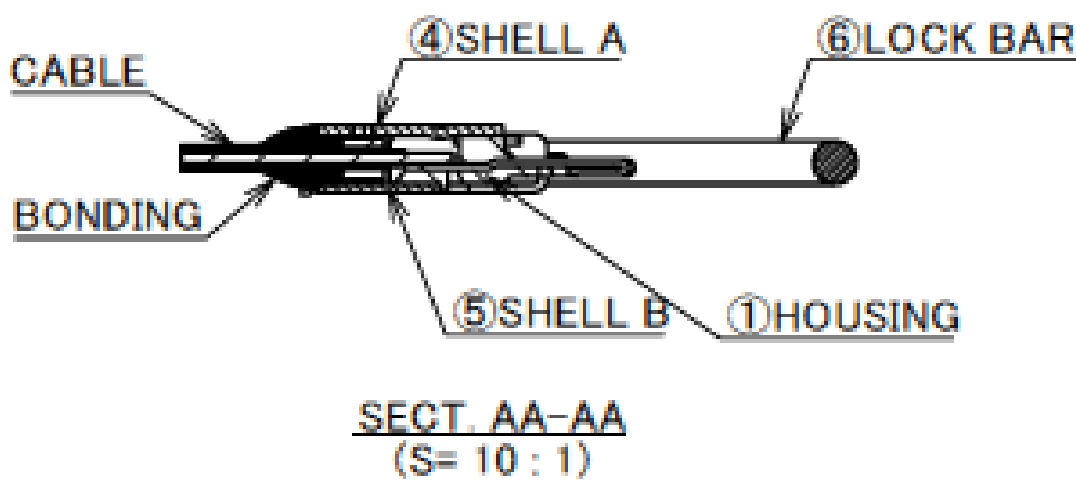
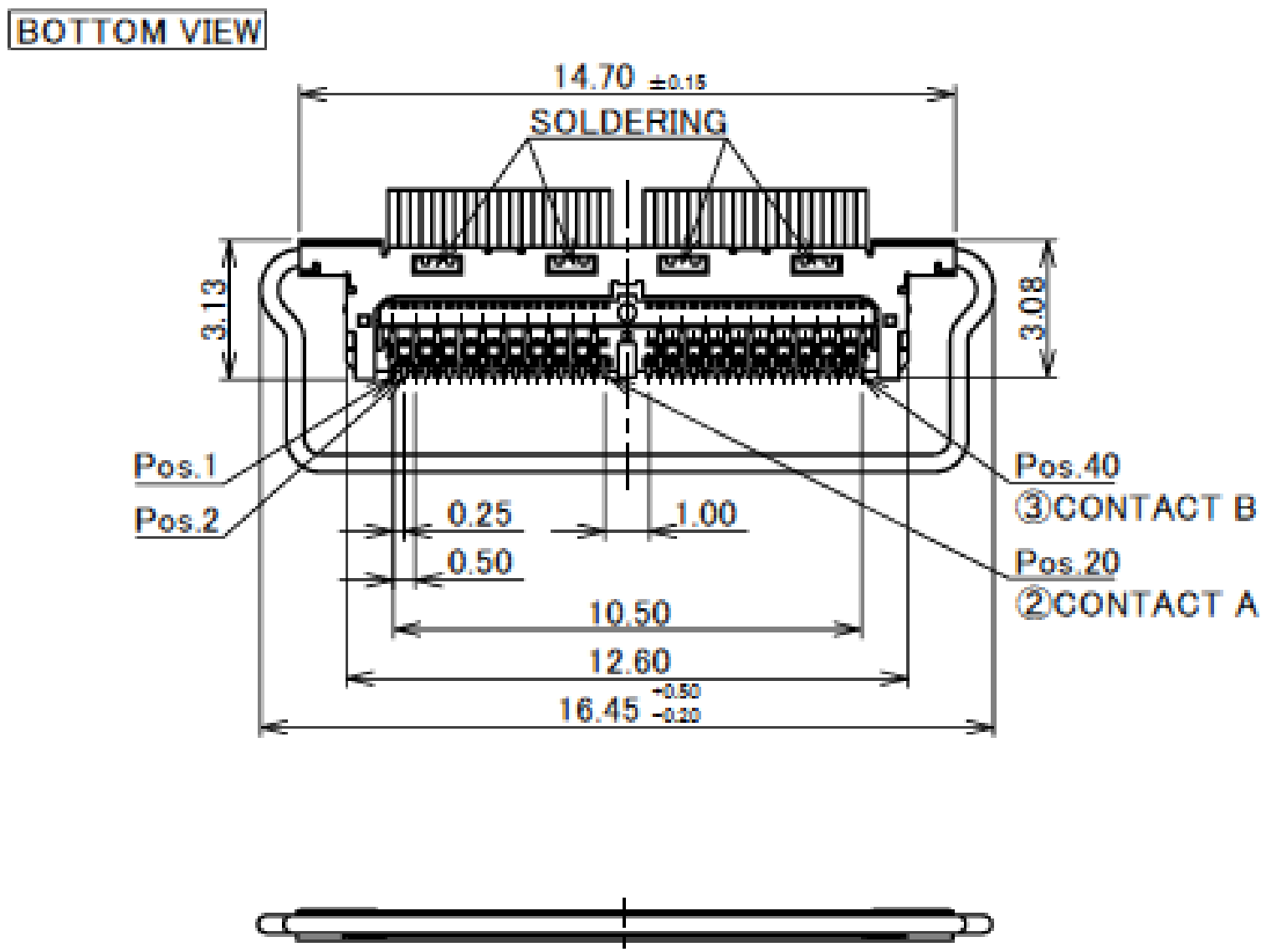
PLUG SHELL-A



PLUG LOCK BAR

Plug for Cable Assembly

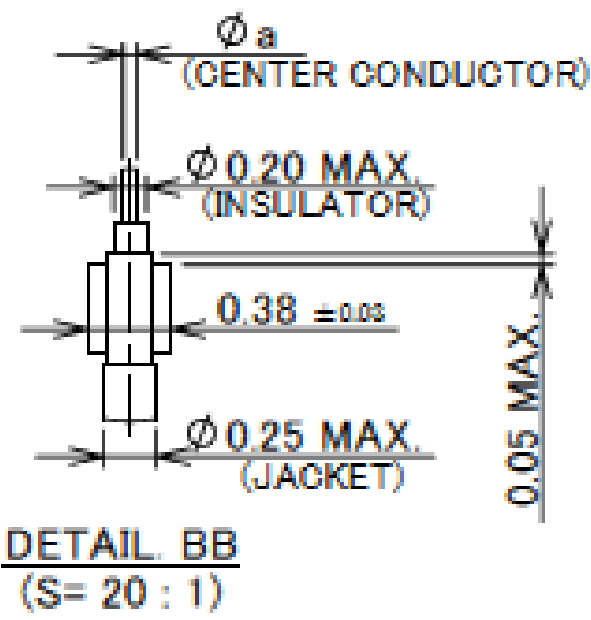
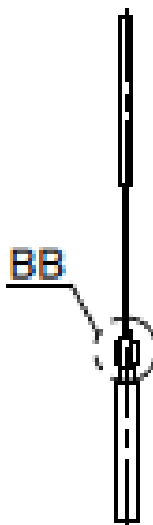
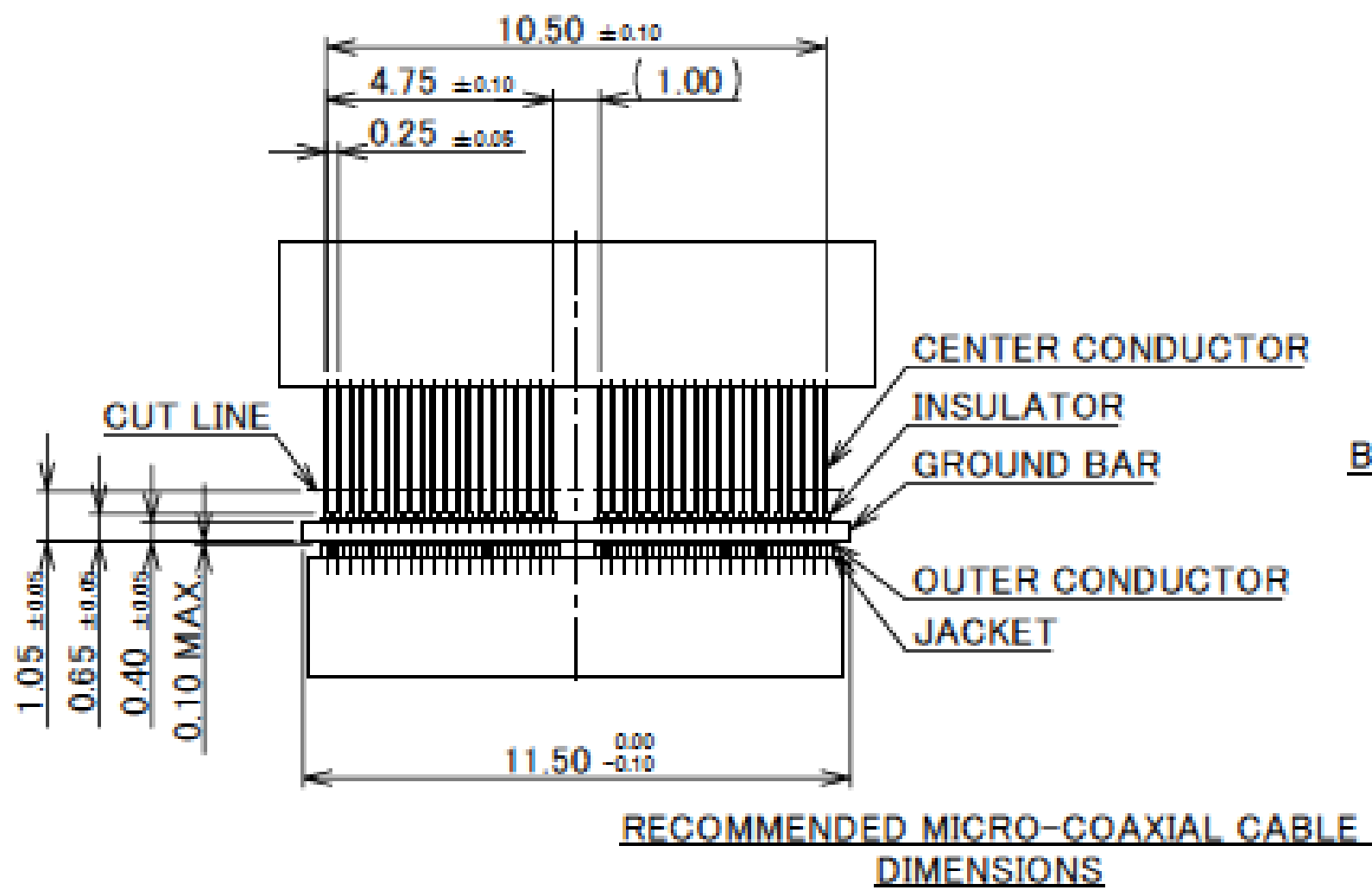
Recommended P/N		20978-040T-01
PART NO.	Pos.	
20978-040T-01	40	



※1 : THE BEND DIMENSIONS MAY VARY BASED ON THE SIZE AND QUANTITY OF CABLES.
PLEASE CONFIRM THE MINIMUM BENDING RADIUS WITH I-PEX OR THE HARNESS MANUFACTURER.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
6	LOCK BAR	SUS	-
5	SHELL B	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
4	SHELL A	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

Rev.4



CHARACTERISTIC IMPEDANCE MATCHING MICRO-COAXIAL CABLE

	a
#44	0.063
#46	0.048

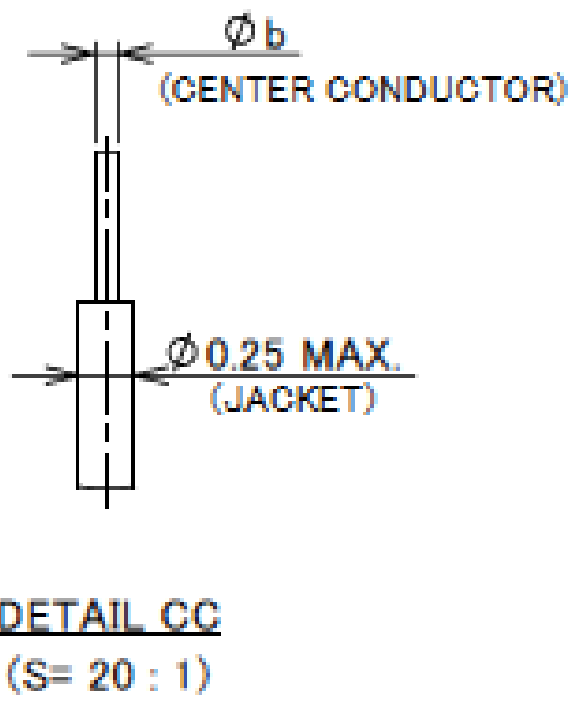
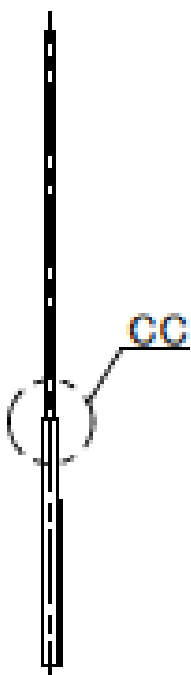
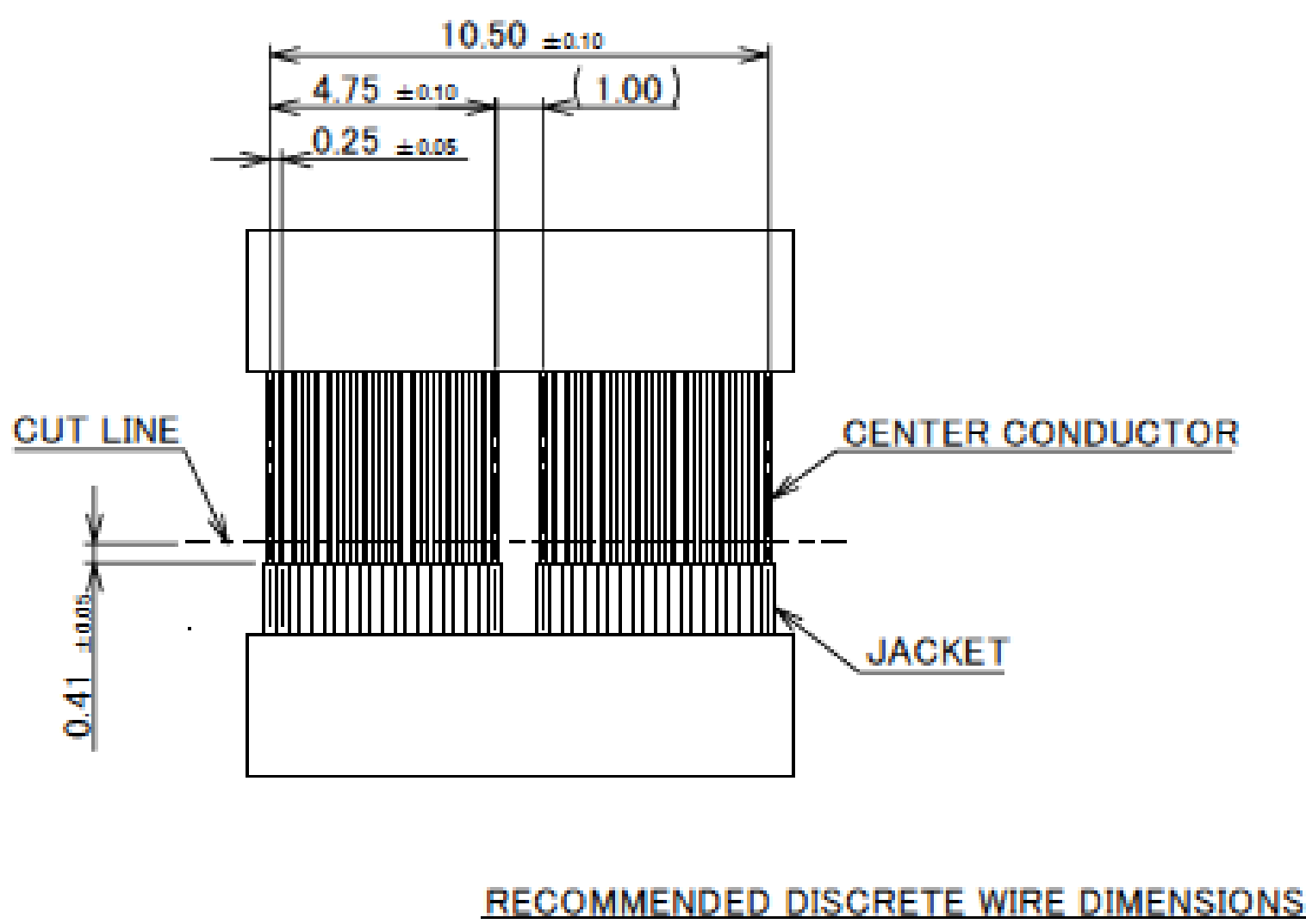
CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO-COAXIAL CABLE

	a
#39	0.102

MICRO-COAXIAL CABLE #39 : NOT RECOMMENDED
FOR HIGH SPEED SIGNAL TRANSFER

DISCRETE WIRE DIMENSION

	b
#39	0.102



Rev.4

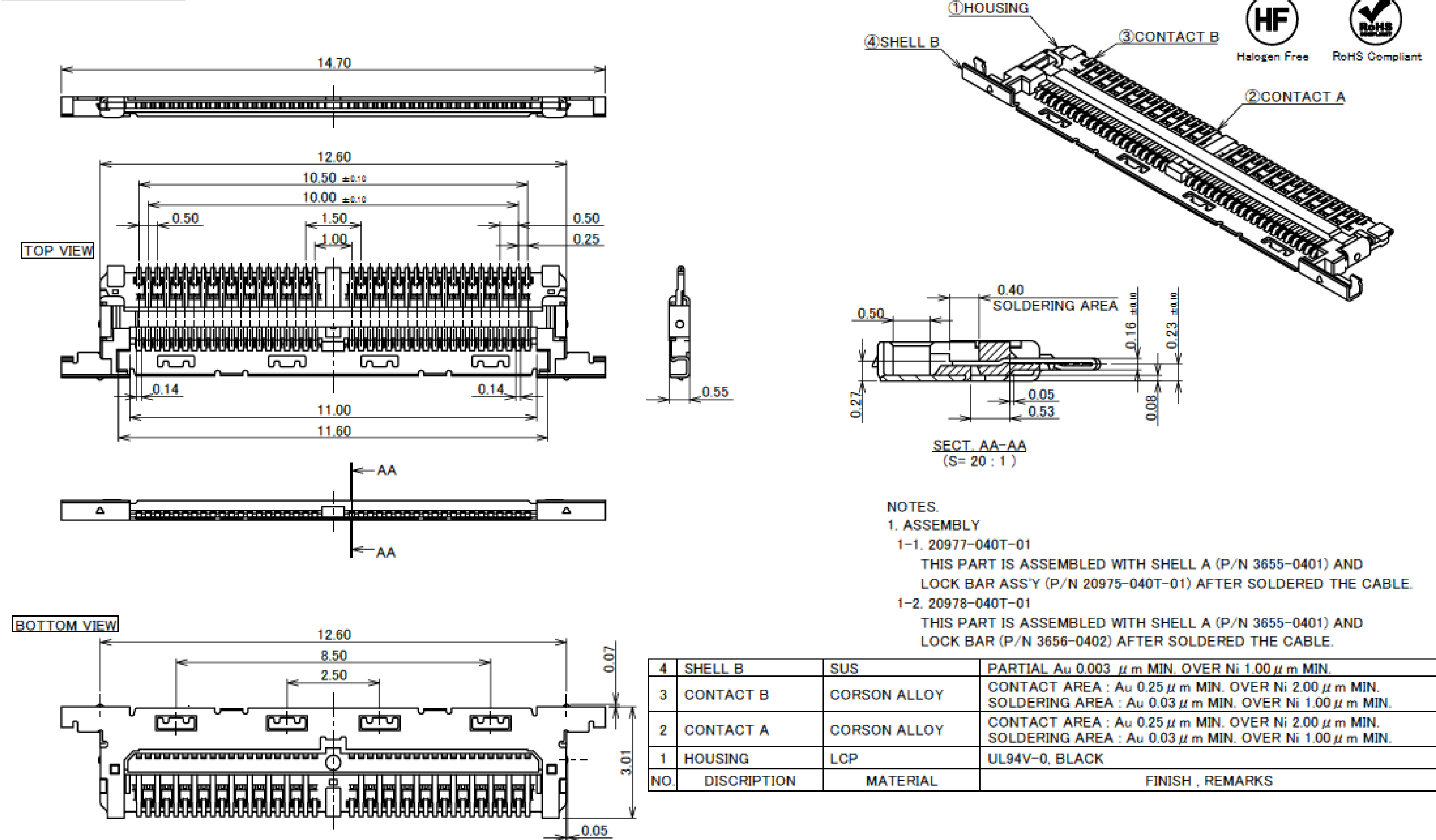
Plug for Cable Assembly

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46,44,39 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED.
RATING AMPERAGE (FOR CONTACT)	0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PER CONTACT PIN/UP TO 7 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233~358K(-40℃~+85℃) (CONTAINING TEMPERATURE RISE BY CURRENT)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : ∠40mohm MAX. INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : ∠40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / 20 CYCLES)	40P : 30.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	40P : 4.0N MIN.
CABLE RETENTION FORCE	40P : 19.60N MIN.
PRODUCT SPECIFICATION	PRS-2403
TEST REPORT	TR-17063
INSTRUCTION MANUAL	HIM-17040
ASSEMBLY MANUAL	ASM-17011
APPEARANCE CRITERIA No.	QLS-A***

Rev.4

Plug Housing Assembly

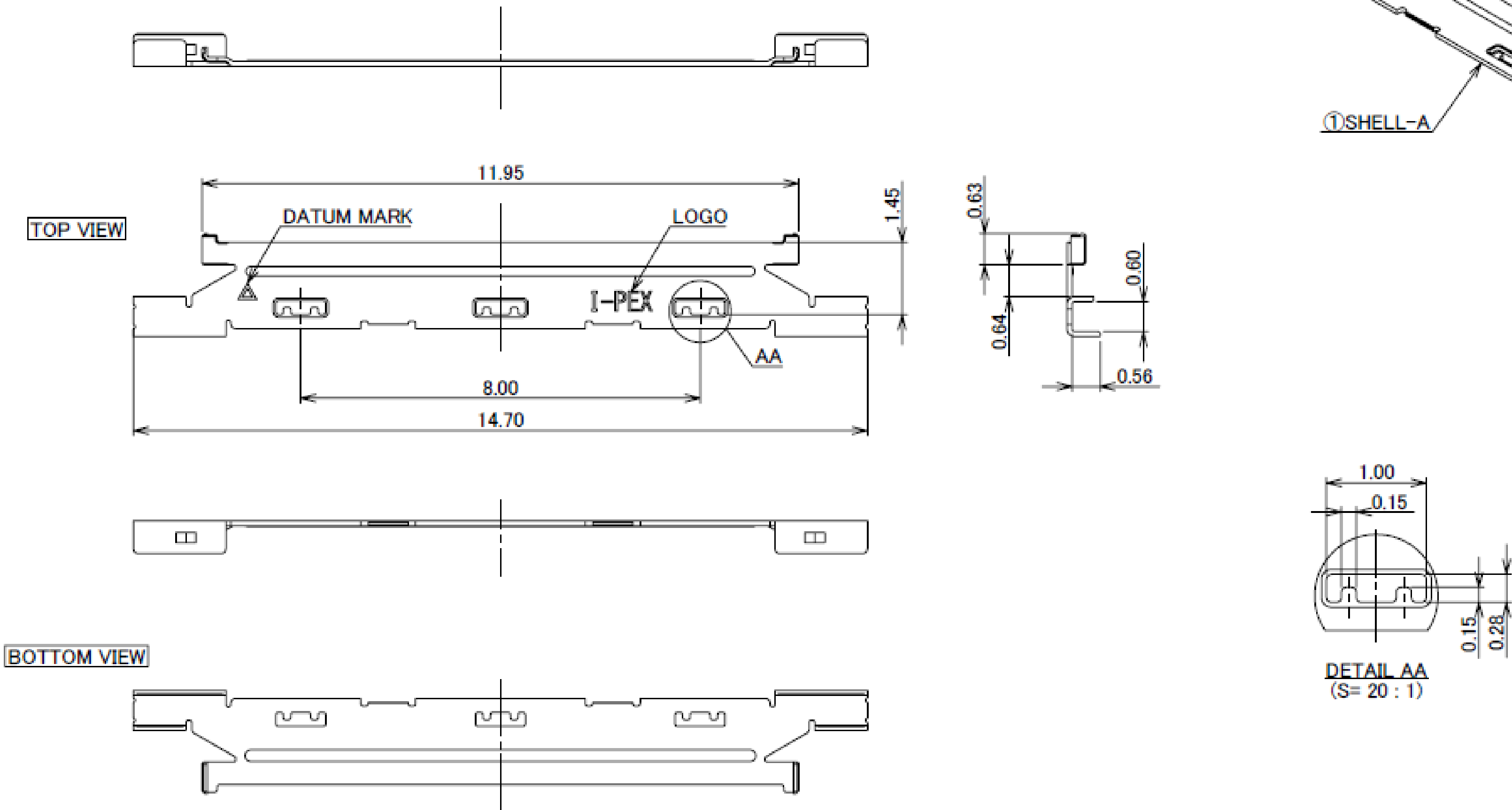
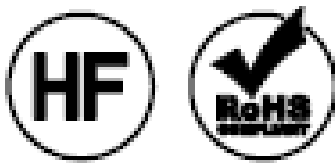
Recommended P/N	20974-040T-01
PART NO.	Pos.
20974-040T-01	40



Rev.1

Plug Shell-A

Recommended P/N	3655-0401
PART No.	
3655-0401	

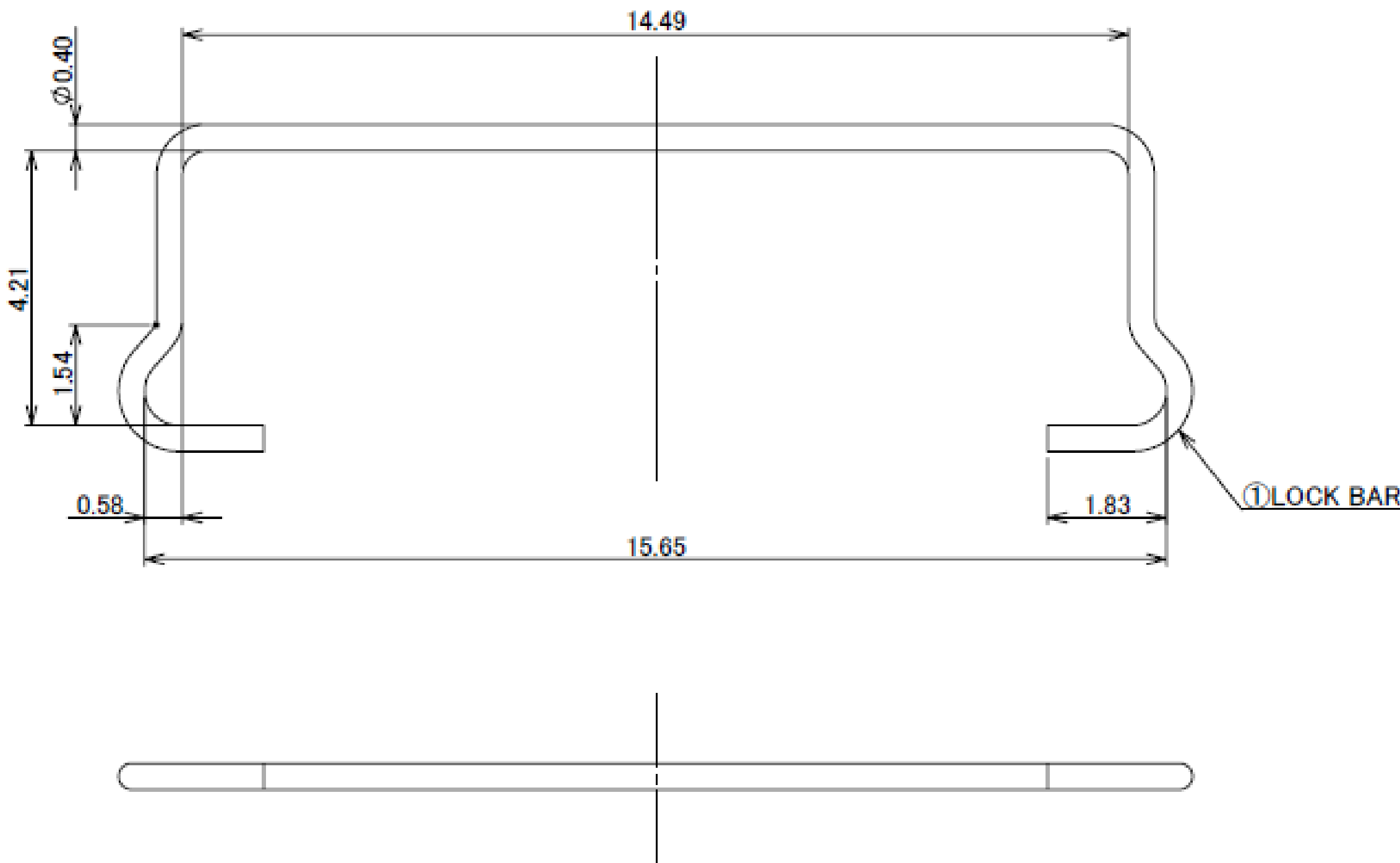
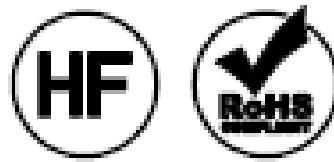


1	SHELL-A	SUS	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.0

Plug Lock Bar

Recommended P/N	3656-0402
PART No.	
3656-0402	

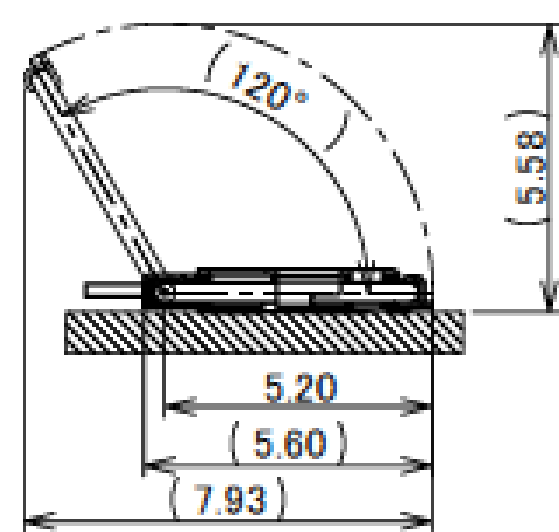
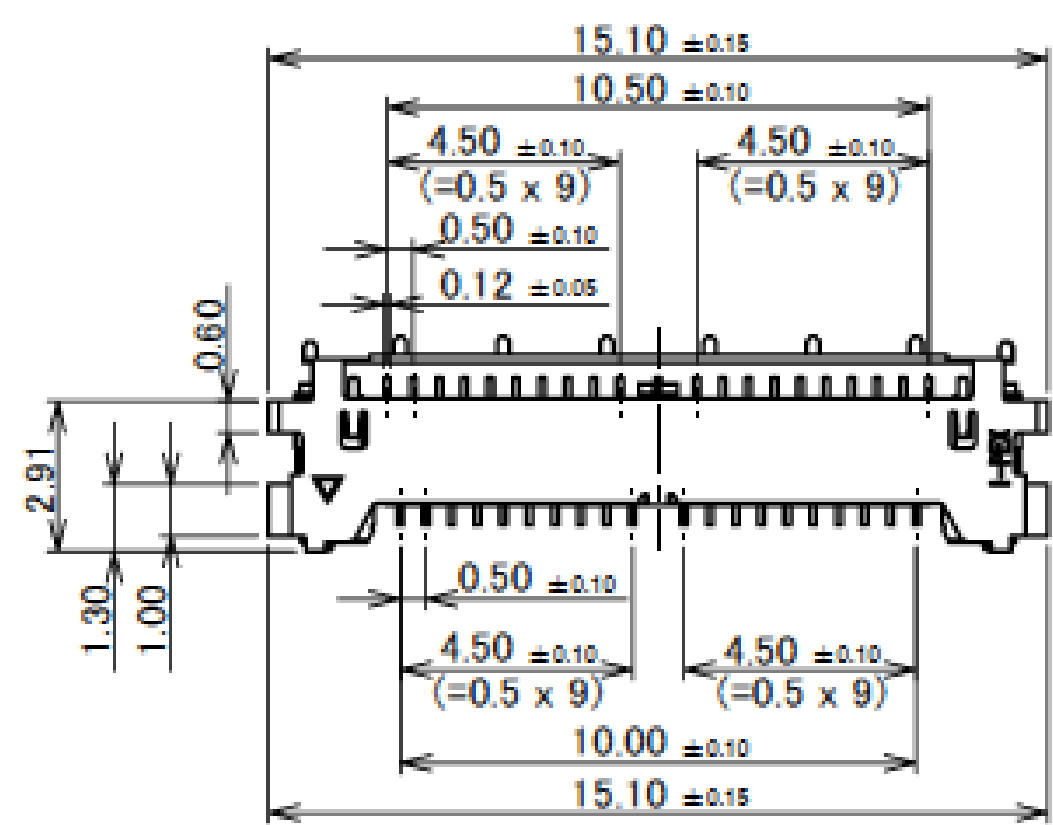


1	LOCK BAR	SUS ϕ 0.40	-
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

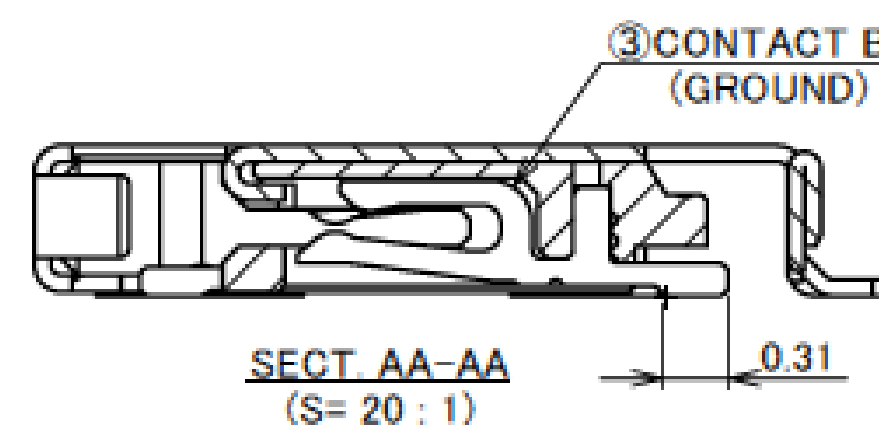
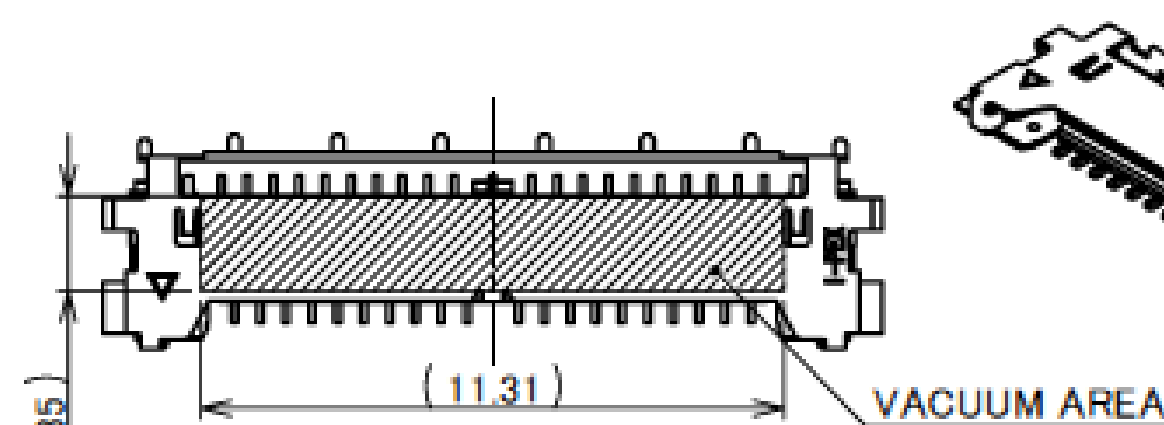
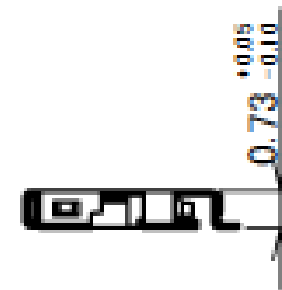
Rev.0

Receptacle Assembly

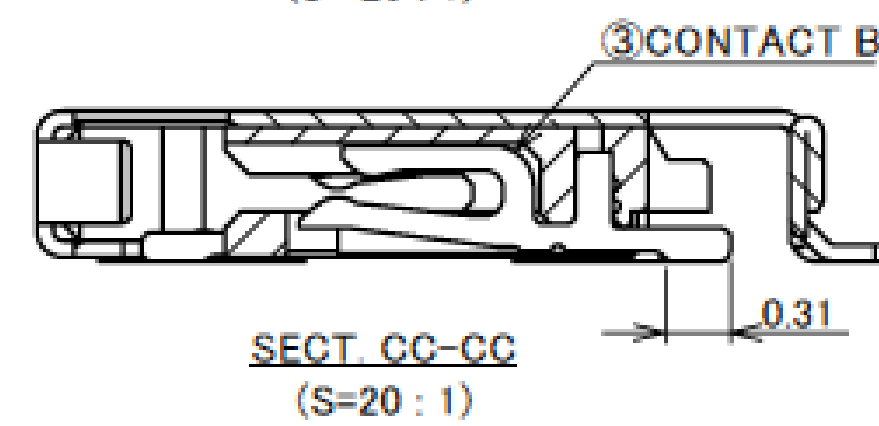
Recommended P/N	
20976-040E-01	
PART NO.	Pos.
20976-040E-01	40



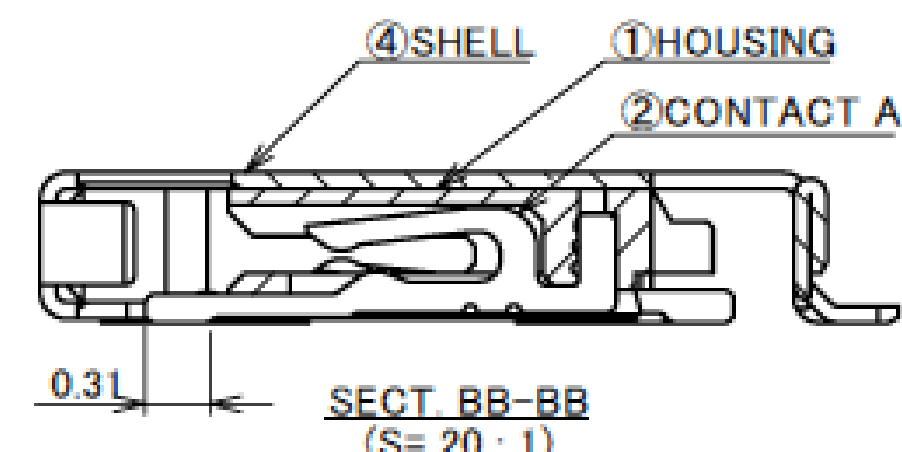
LOCK BAR MOVEMENT



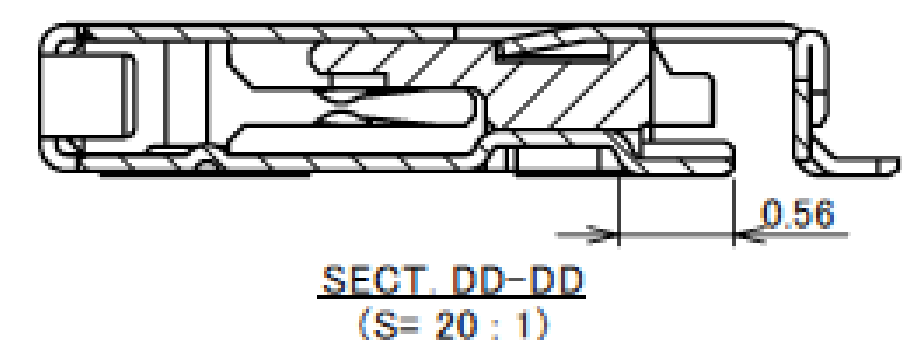
SECT. AA-AA (S=20:1)



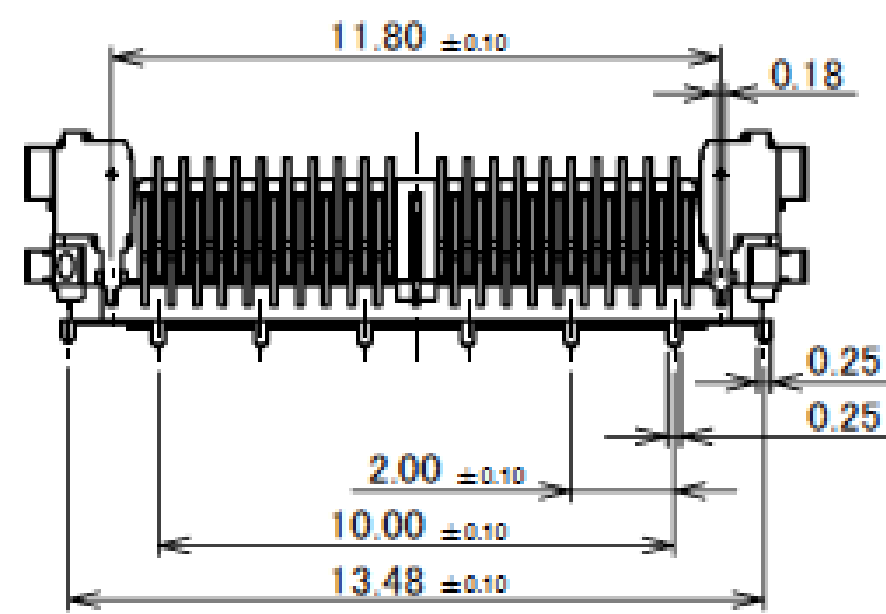
SECT. CC-CC (S=20:1)



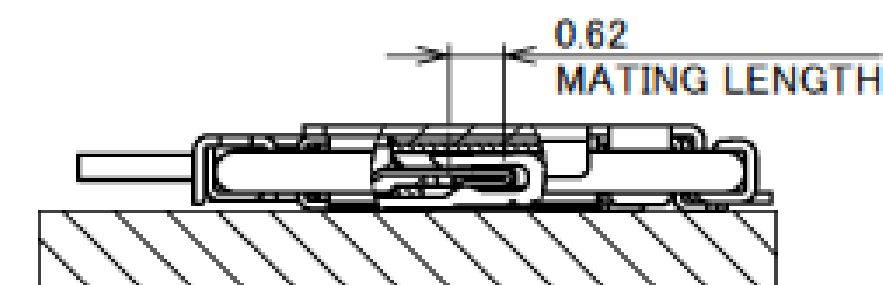
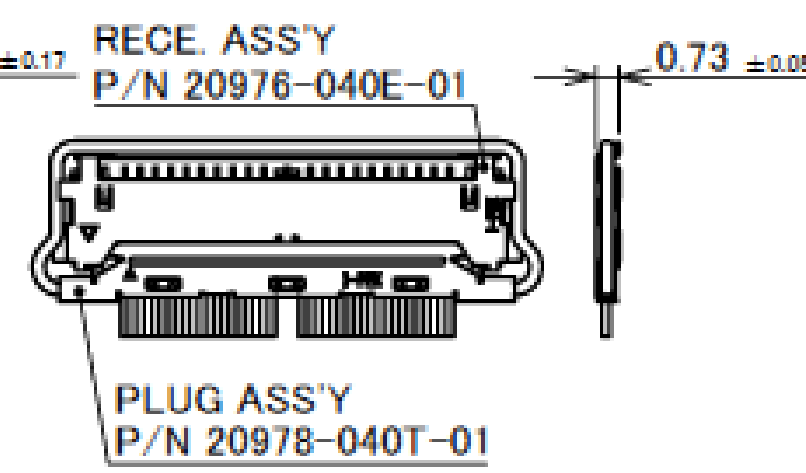
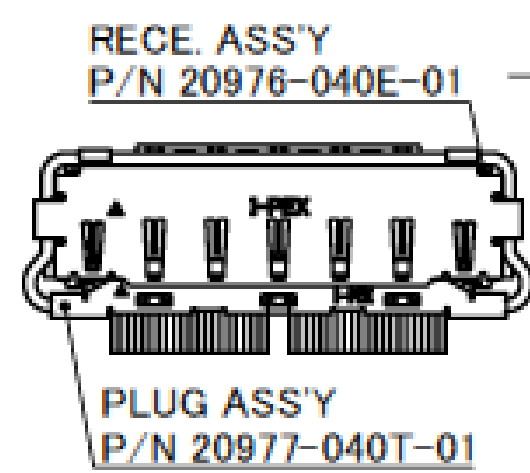
SECT. BB-BB (S=20:1)



SECT. DD-DD (S=20:1)

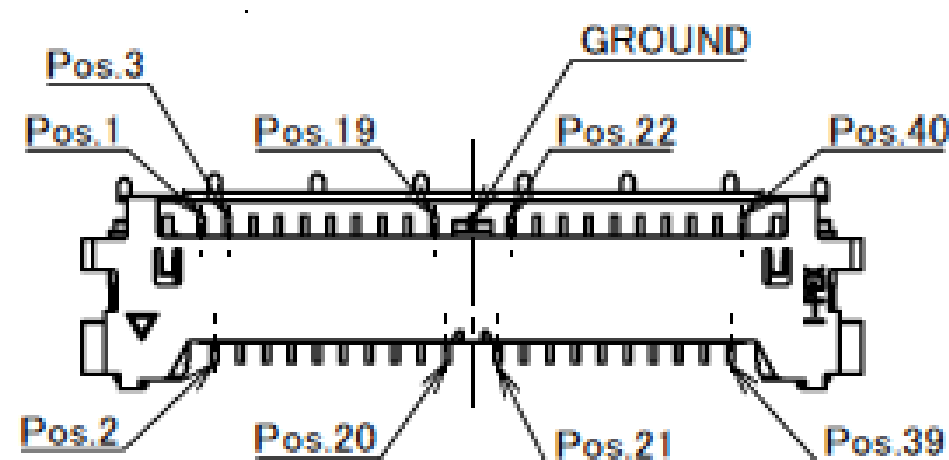


GROUND PITCH



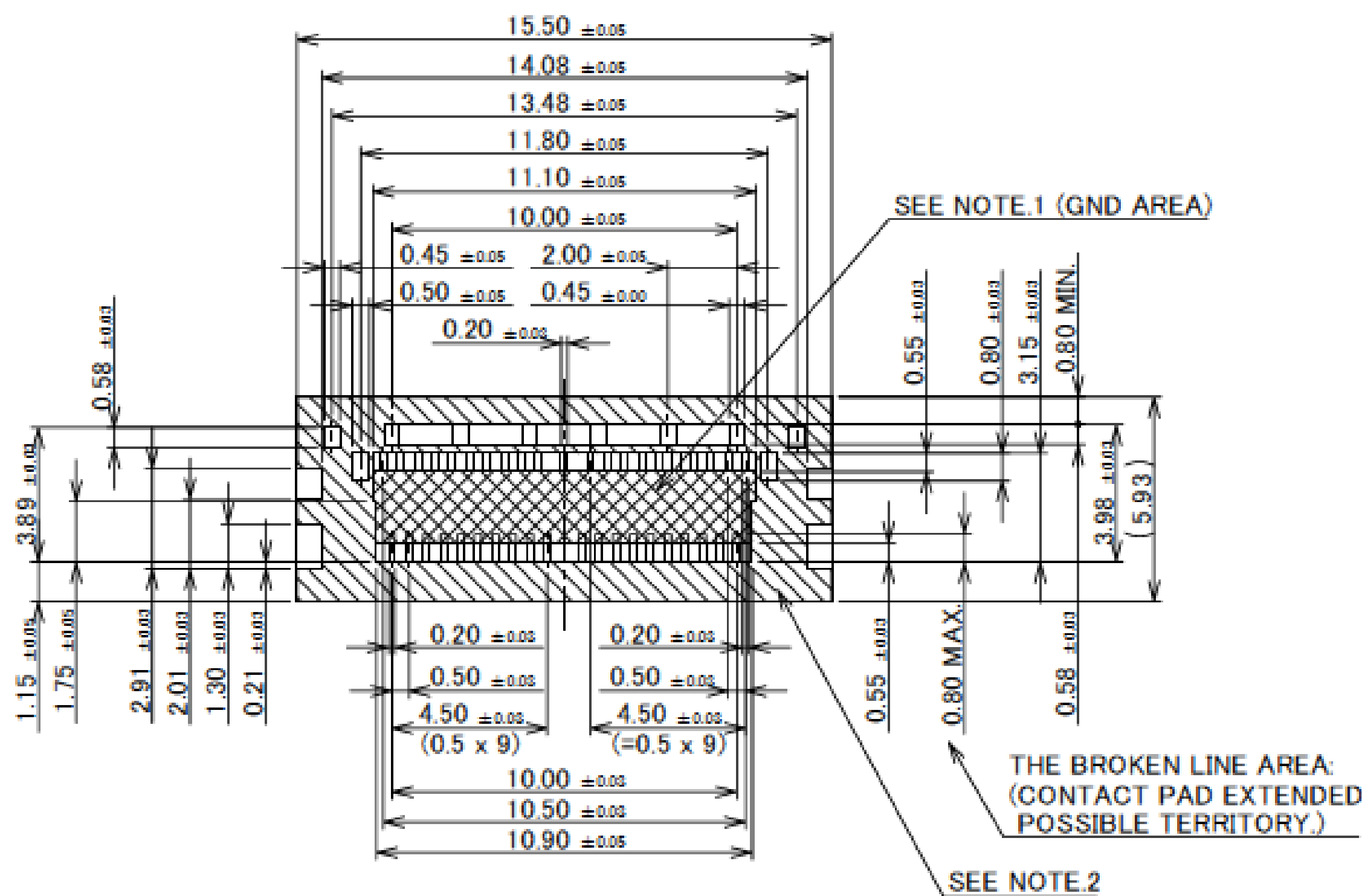
MATING CONDITION

NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	CORSON ALLOY	CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	CORSON ALLOY	CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

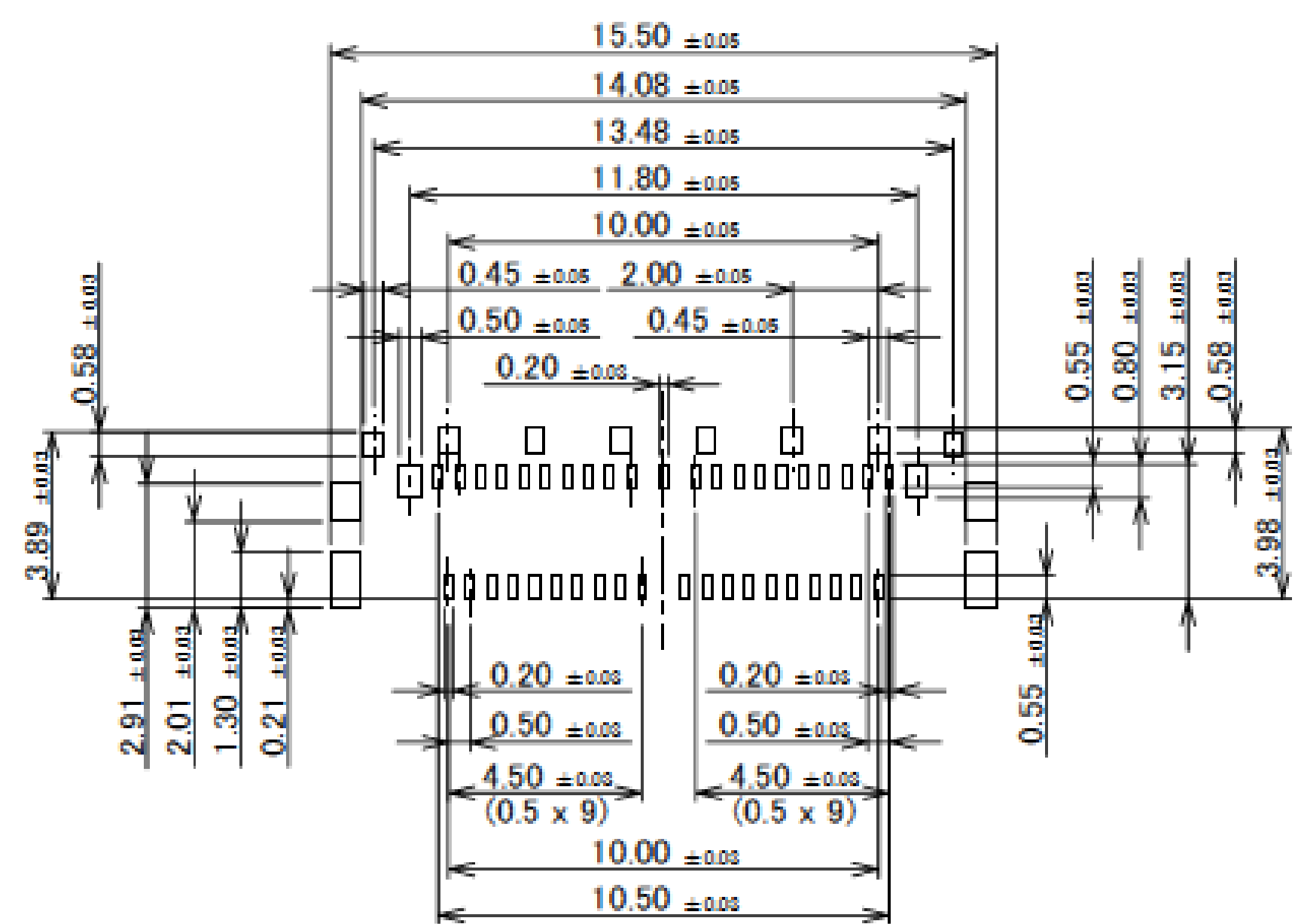


CONTACT ARRANGEMENT

Rev.3



RECOMMENDED FOOTPRINT PATTERN LAYOUT

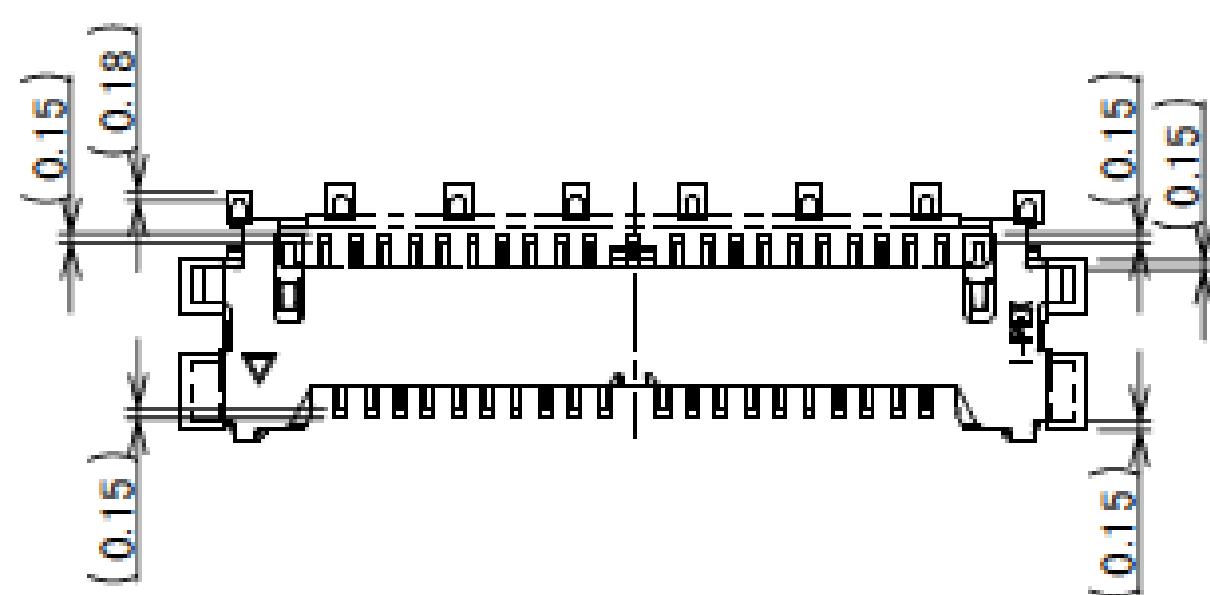


RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12 mm

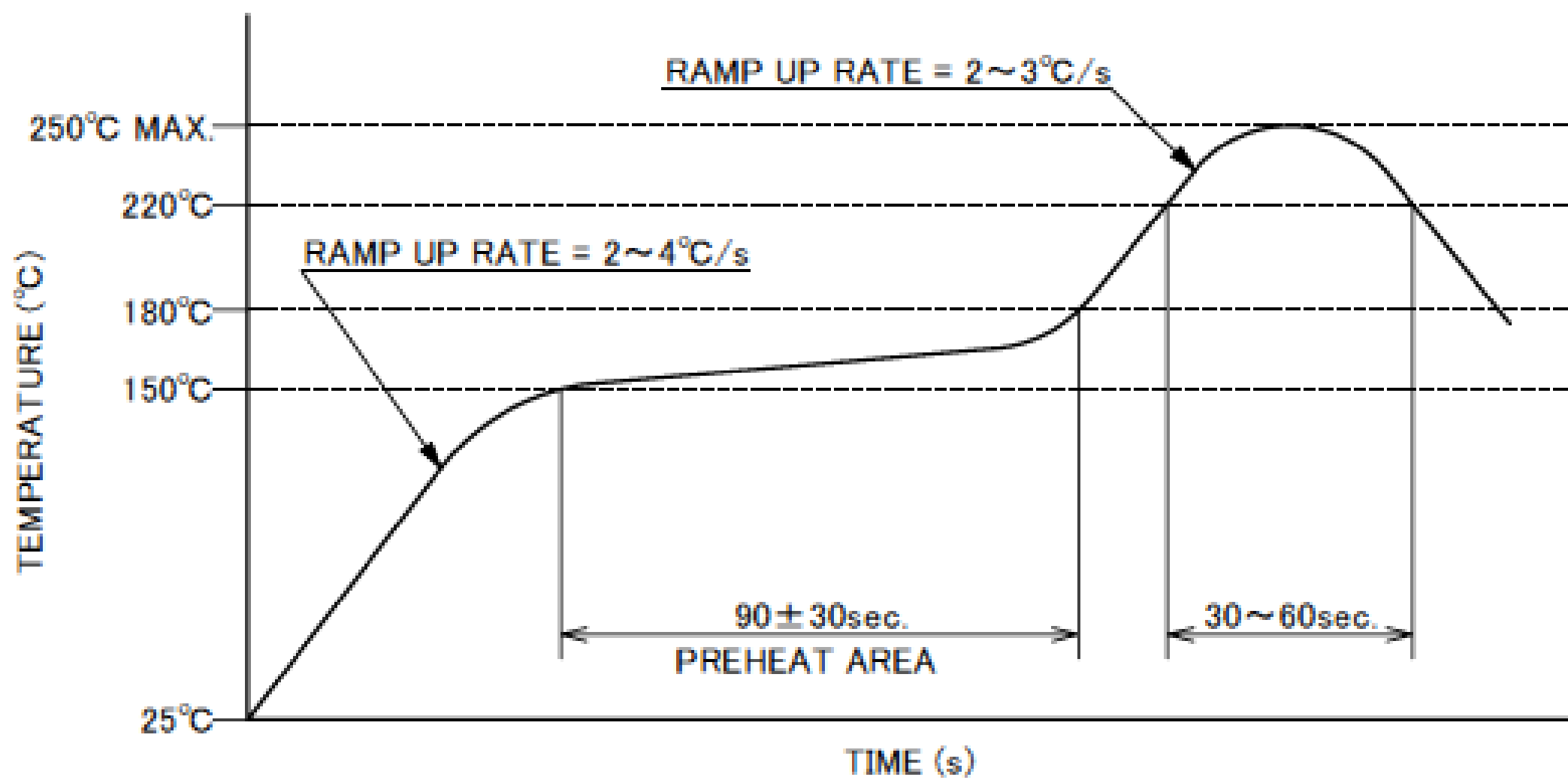
NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA
2. DO NOT MOUNT ANOTHER COMPONENTS IN THIS AREA.

Rev.3

Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

Rev.3

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46,44 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PLUG WITH COVER CABLE ASS'Y (P/N : 20977-040T-01) PER CONTACT PIN/UP TO 8 CONTACTS PLUG WITHOUT COVER CABLE ASS'Y (P/N : 20978-040T-01) PER CONTACT PIN/UP TO 7 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233~358K(-40°C~+85°C) (CONTAINING TEMPERATURE RISE BY CURRENT)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : ≦140mohm MAX. INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : ≦140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / 20 CYCLES)	40P : 30.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	40P : 4.0N MIN.
CABLE RETENTION FORCE	40P : 19.60N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2403
TEST REPORT	TR-17063
PACKING STANDARD	PST-17126
INSTRUCTION MANUAL	HIM-17035 (WHEN PLUG WITH COVER CABLE ASS'Y IS USED) HIM-17040 (WHEN PLUG WITHOUT COVER CABLE ASS'Y IS USED)
APPEARANCE CRITERIA No.	QLS-A***

Rev.3

Custom Connectors Available

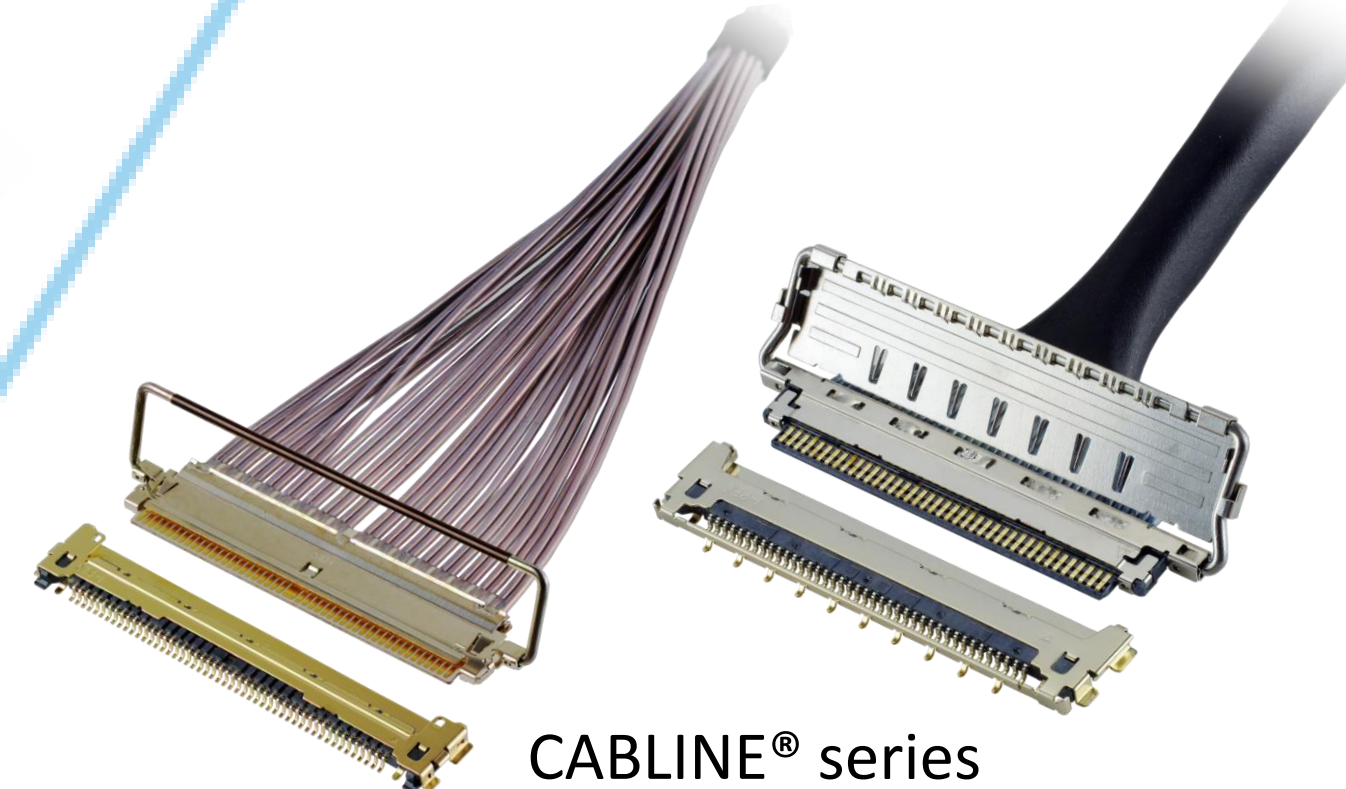


RF
Connectors

MHF® series



Micro-Coaxial/Twinax
Connectors



CABLIN® series



Wire-to-Board
Connectors/
Terminals



AP series

ISH® series



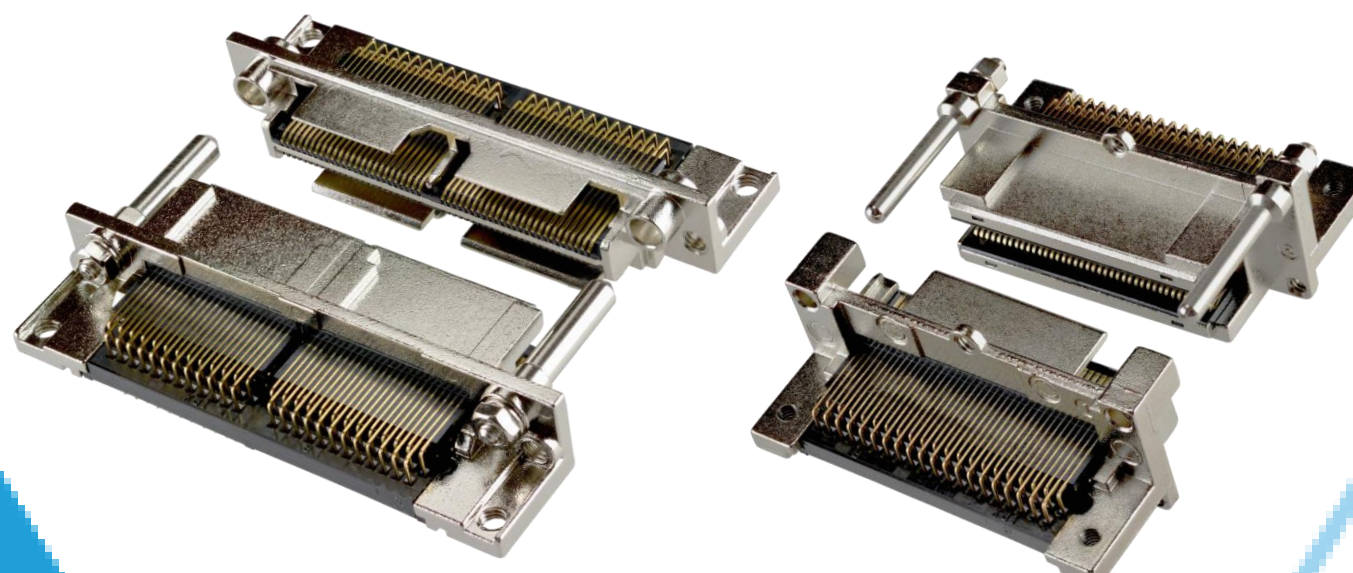
Board-to-Board
Connectors



NOVASTACK® series



I/O
Connectors



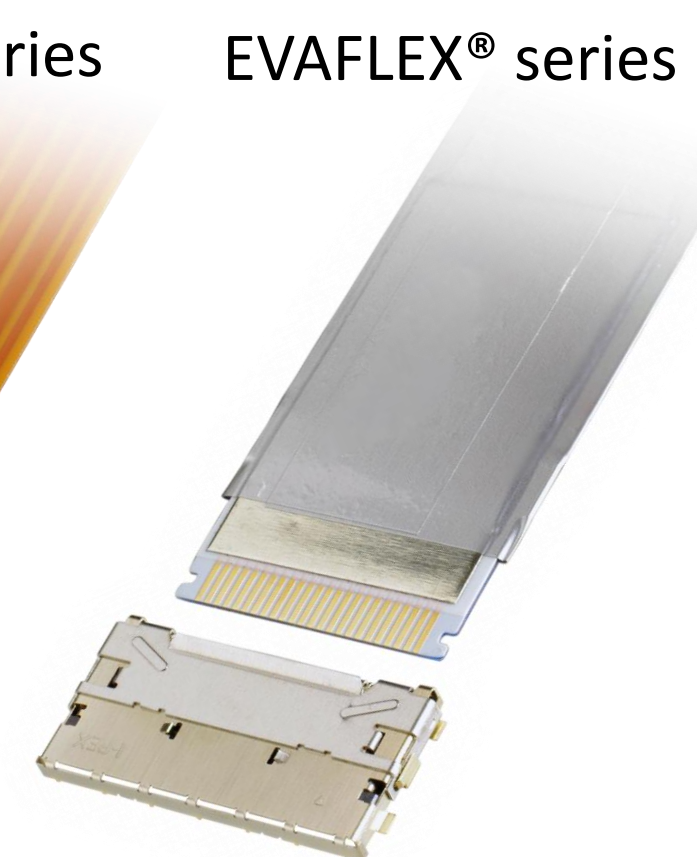
MINIDOCK™ series



FPC/FFC
Connectors



MINIFLEX® series



EVAFLEX® series



Inquiry



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