

CABLIN[®]-UM

풀 실드, 다중 접점 그라운드, 메카니컬 록 포함, 고속 전송 대응(20Gbps/lane), 0.4mm 피치, 라이트 앵글의 세로 결합 타입 세션 동축 커넥터

Product Specifications:

Mating type	Right Angle Vertical	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.65	
Mated size (mm)	Height	With Lock Cover : 2.2 +/- 0.15
		Without Lock Cover : 2.0 +/- 0.15
		With Pull Tape Holder: 2.2 +/- 0.15
Width	Formula: 5.0 + (0.4 * ? p)	
	Depth	5.0 with lock cover
Pin Counts	Range	Up to 60
	Available	30, 40, 50, 60

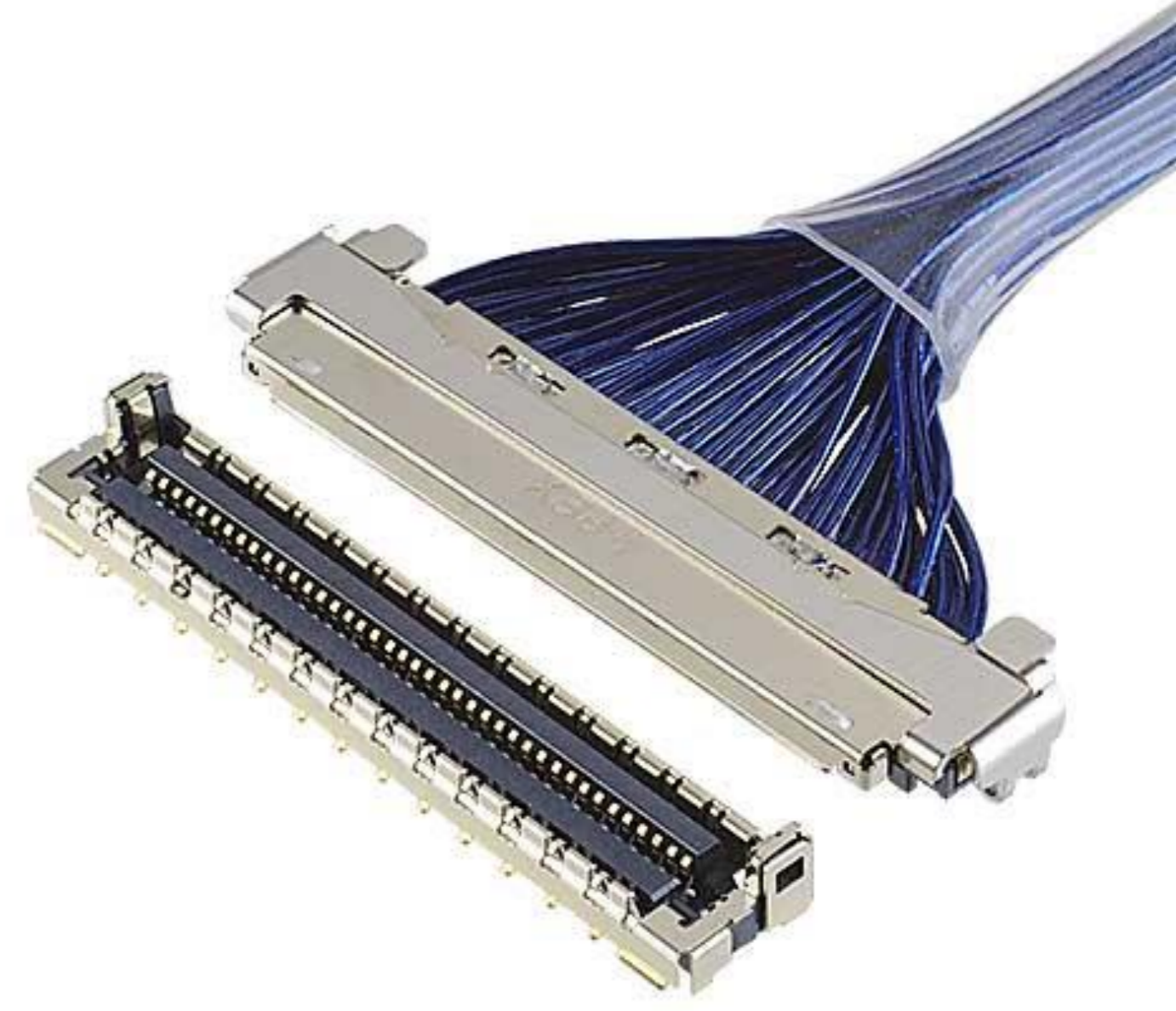
Applicable Cable Size:

Maximum O.D. (mm)	0.4
Micro-Coaxial for Signal (AWG)	45 ohm: #38 or smaller 50 ohm: #40 or smaller
Twinax (AWG)	#40, #42
Discrete (AWG)	#34 or smaller

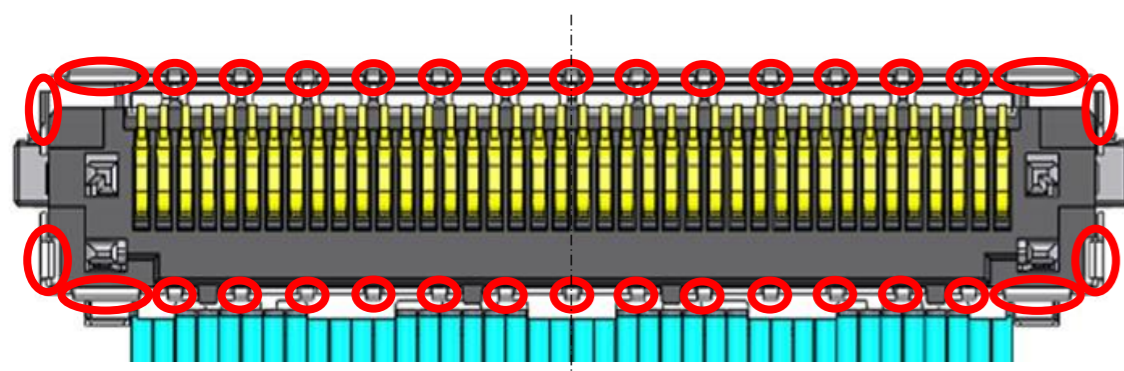
Applicable Standards (Reference Only):

USB4/Thunderbolt 4 (20 Gbps/lane), PCIe Gen 4 (16GT/s), eDP HBR 3 (8.1 Gbps)

*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁드립니다.



▶ 다중 접점 그라운드에 의한 360도 ZenShield[®] 풀 실드로 EMI 대책



리셉터클 뒷면

○ 그라운드 SMT 점



일반적인 커넥터

EMI



ZenShield[®] 커넥터

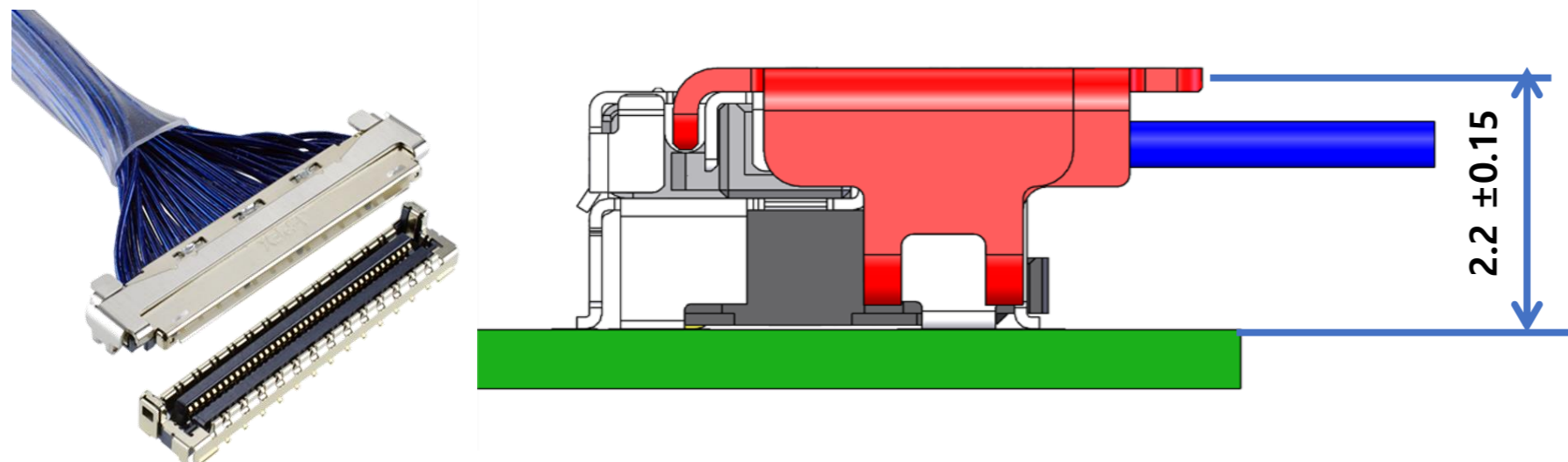
EMI 최소화

시그널 점퍼 연결
(전자기 노이즈 소스의 예시)

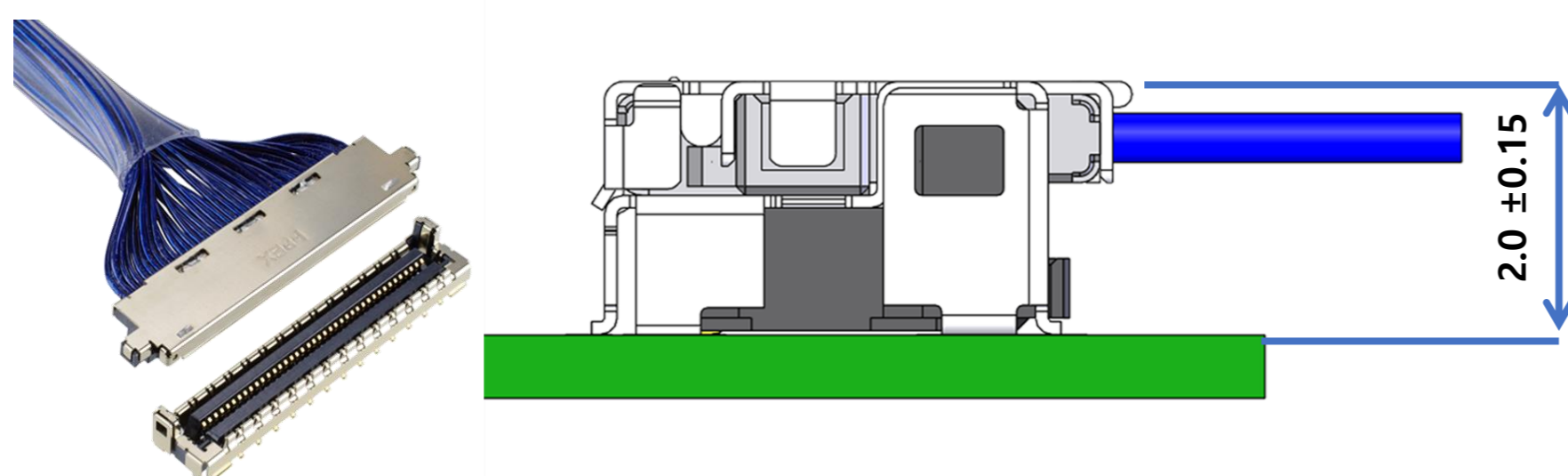
ZenShield[®] 커넥터를 사용하면 안테나 또는 방사 구조에 더 가깝게 배치할 수 있습니다.

▶ 풍부한 Variation

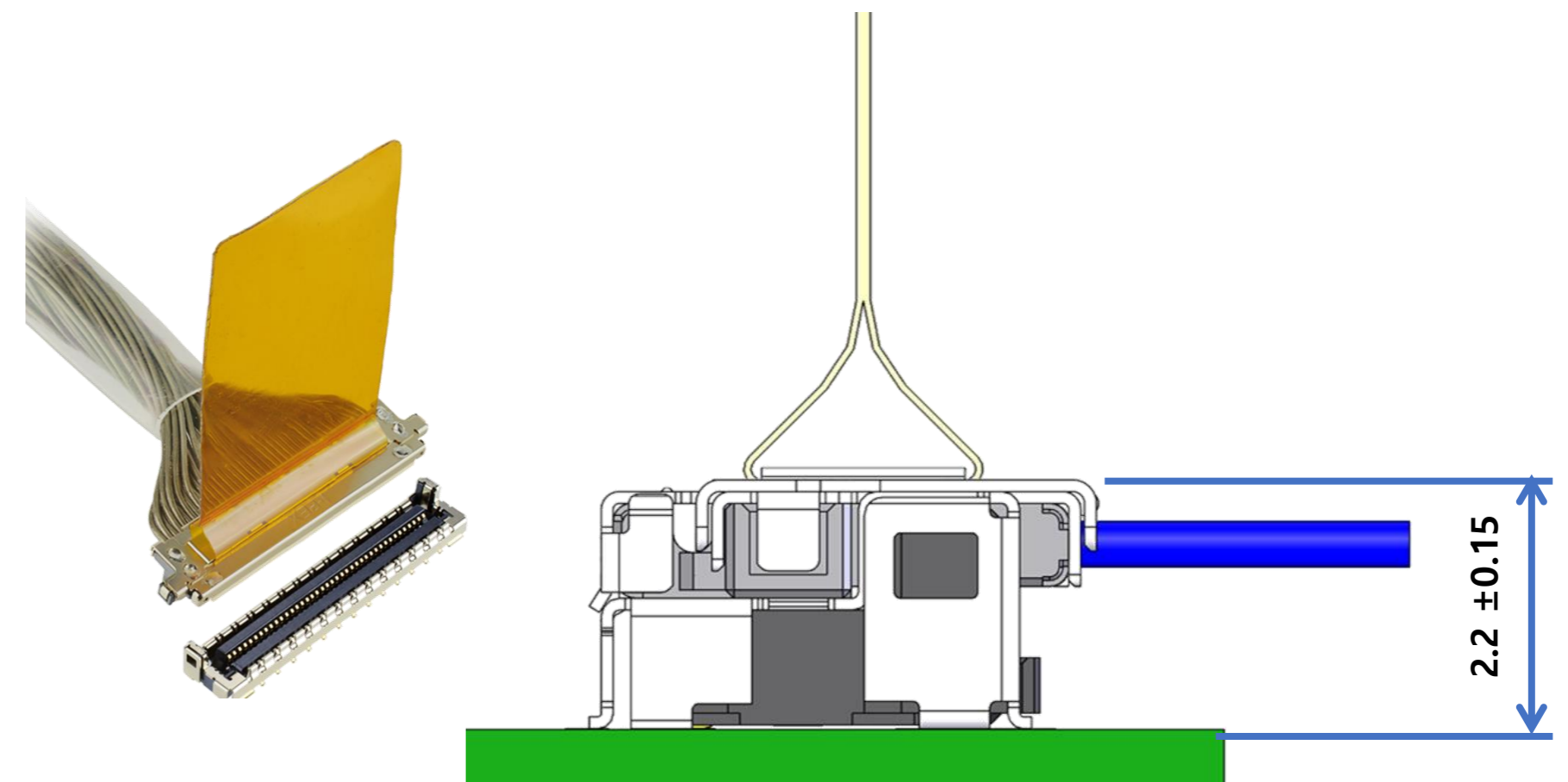
Lock Cover포함---체결 강도 증가



Lock Cover미사용 - - - 낮은 높이

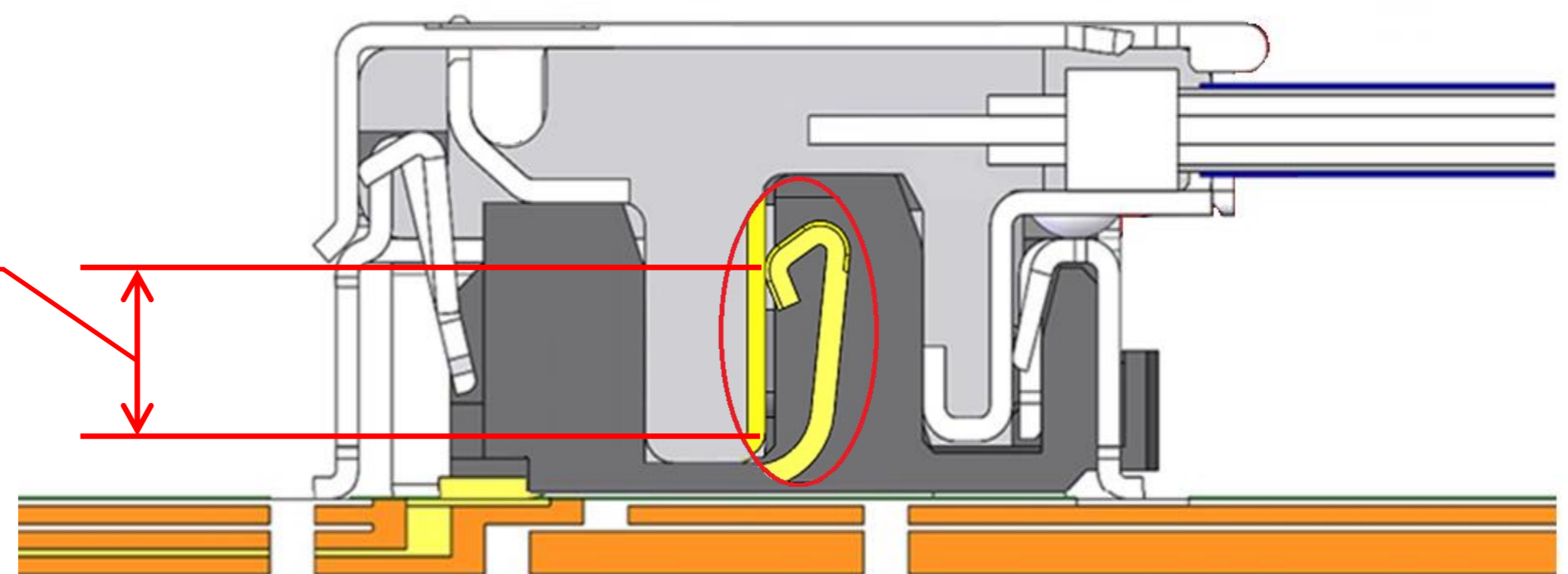


Pull tape holder사양---발거작업 효율향상



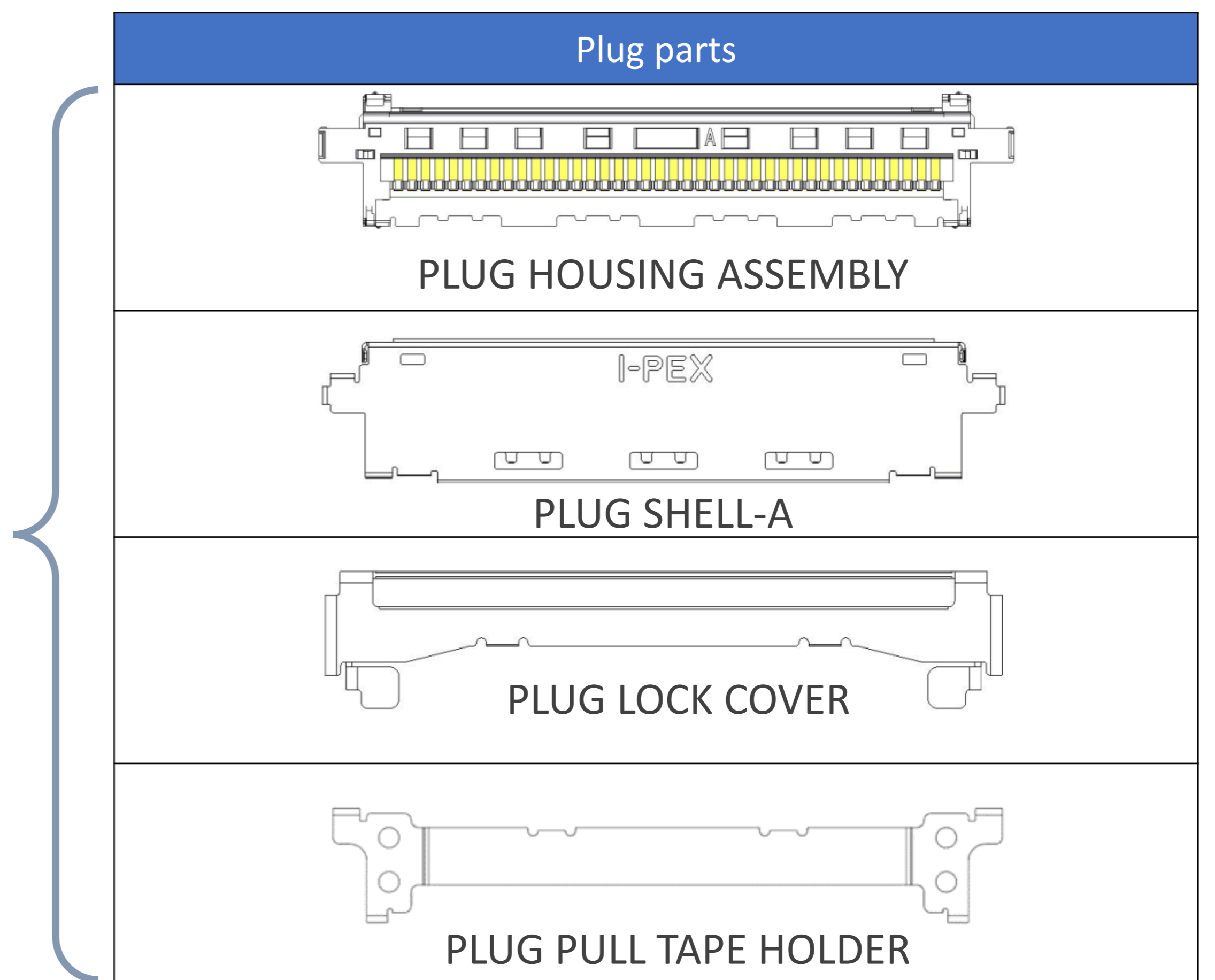
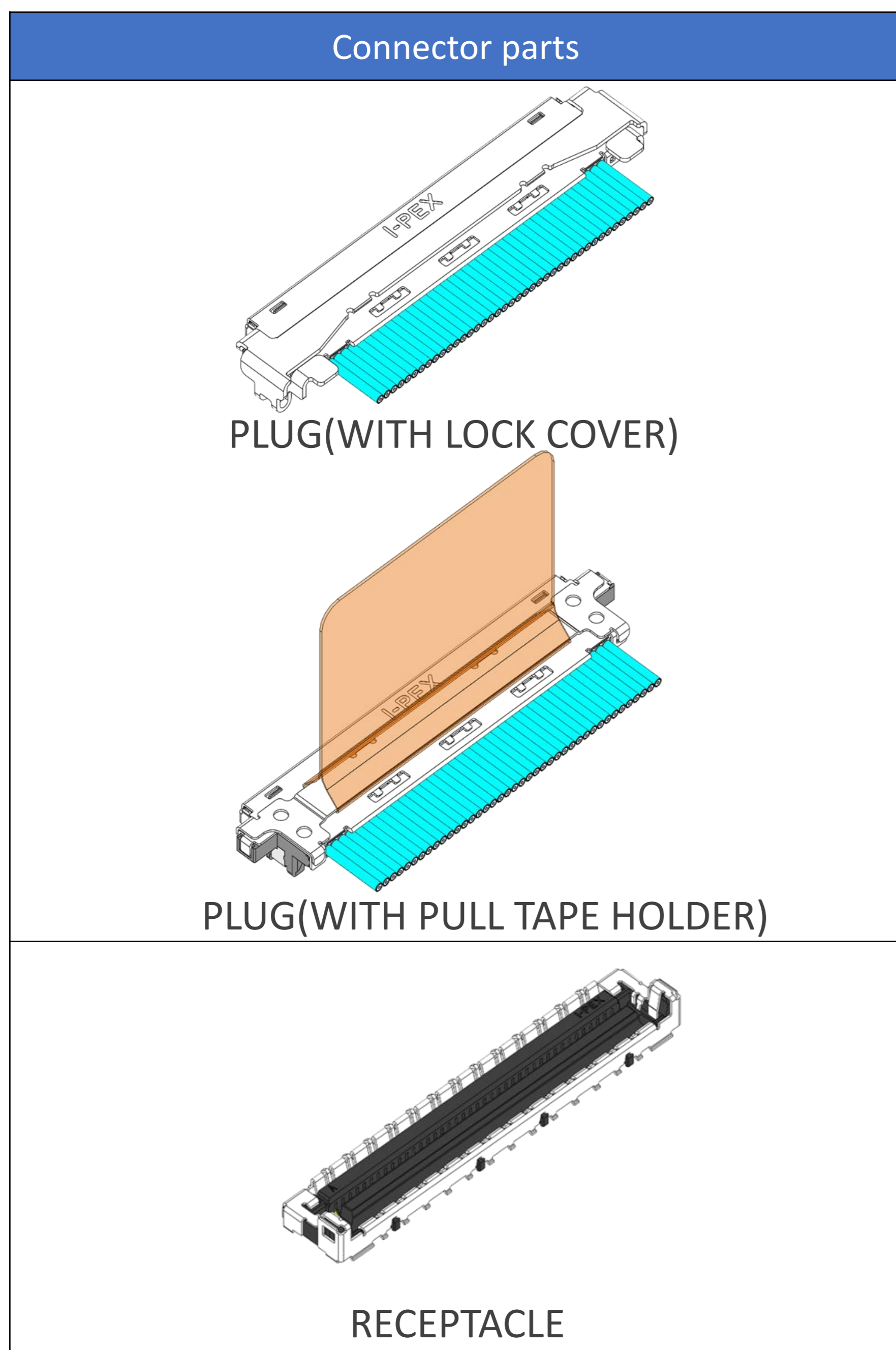
▶ 높은 단자 접촉 신뢰성

유효 결합 길이 : 0.65mm Min.



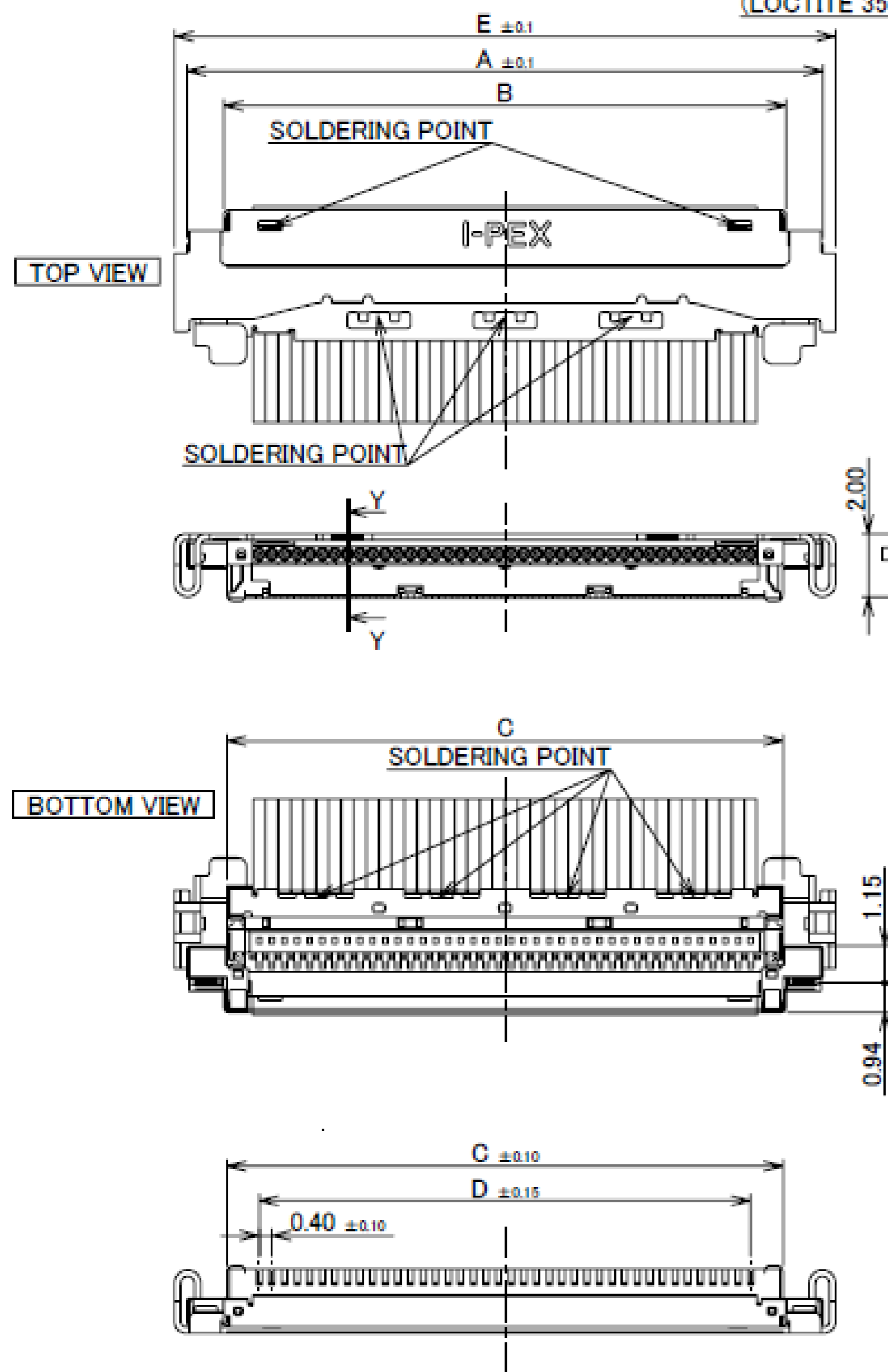
Component Parts Details

Component Parts



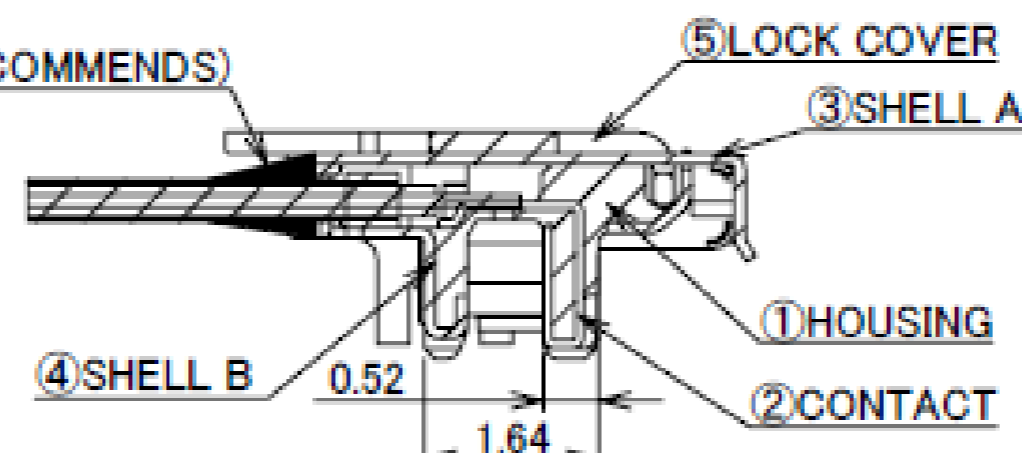
Plug for Cable Assembly

Recommended P/N		20877-0**T-01				
PART NO.	Pos.	A	B	C	D	E
20877-030T-01	30	16.20	13.85	13.65	11.60	17.00
20877-040T-01	40	20.20	17.85	17.65	15.60	21.00
20877-060T-01	60	28.20	25.85	25.65	23.60	29.00

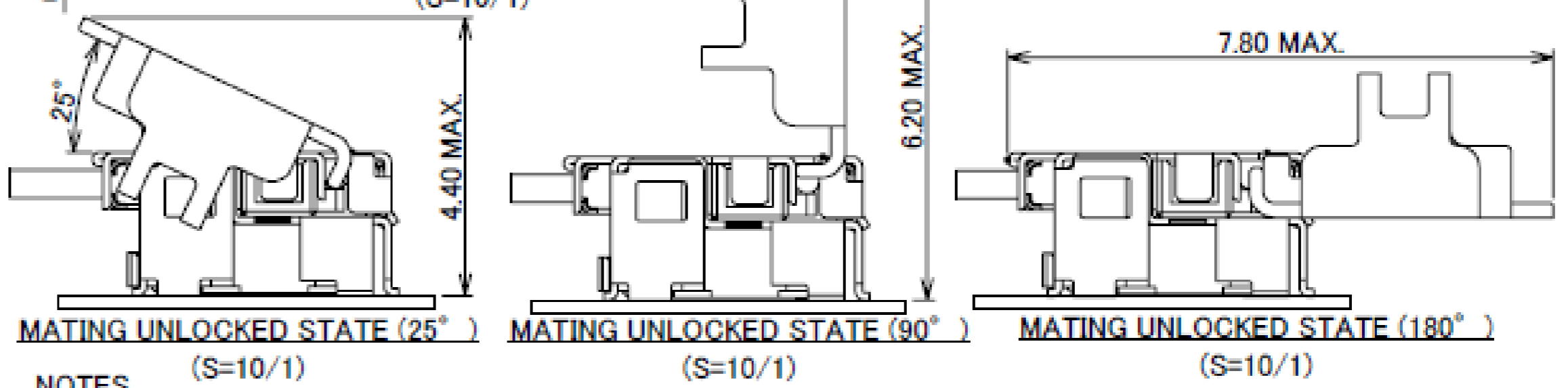
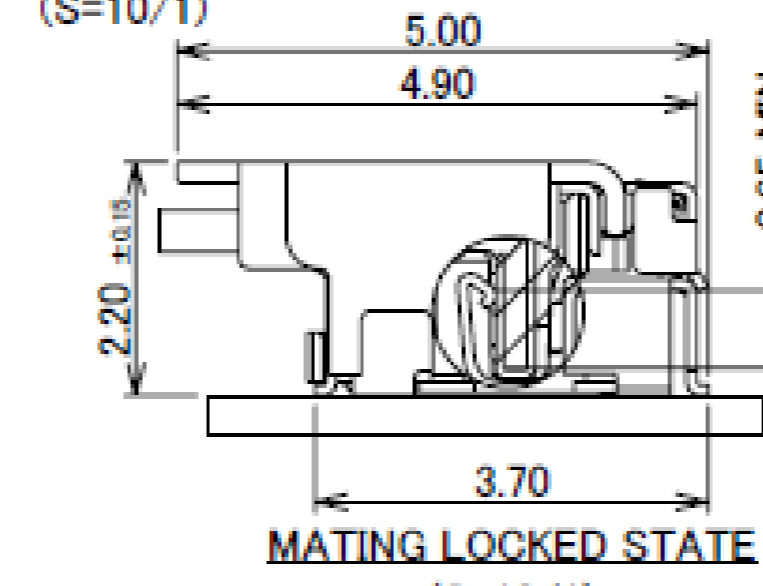


With LOCK COVER

BONDING
(LOCTITE 352 RECOMMENDS)



SECT. Y-Y
(S=10/1)



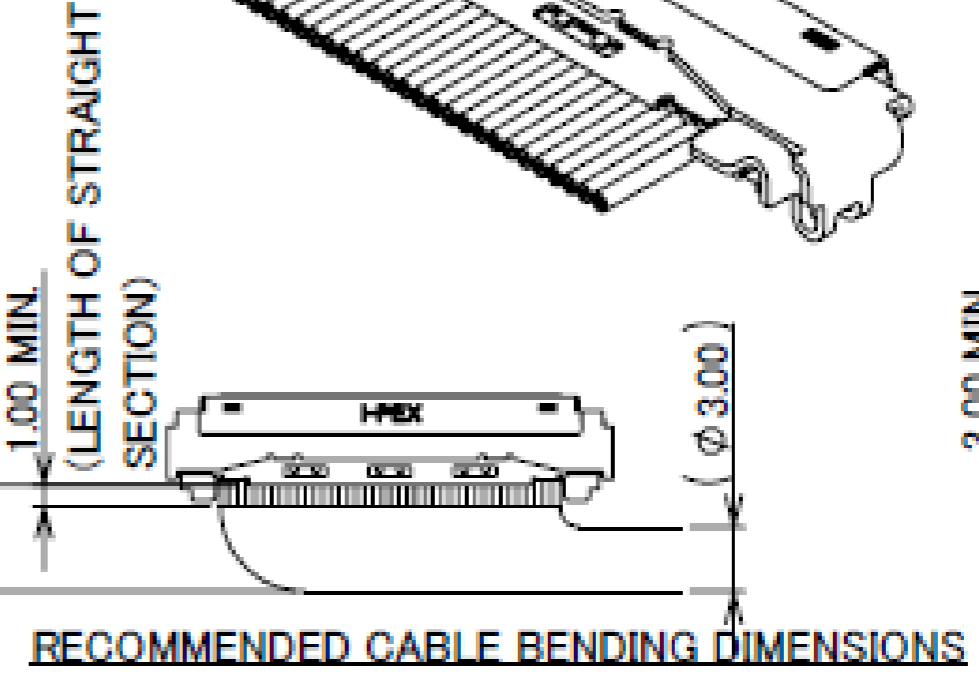
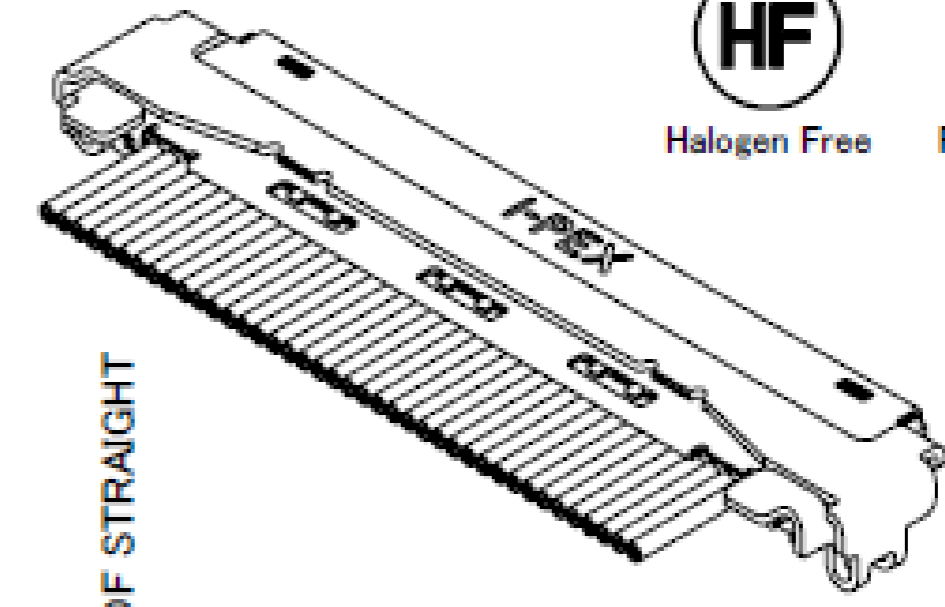
NOTES

1. THE LOCK COVER MUST BE OPENED AT LEAST 25° TO PROPERLY UNMATE THE PLUG/HARNESS.

5	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.0 μm MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

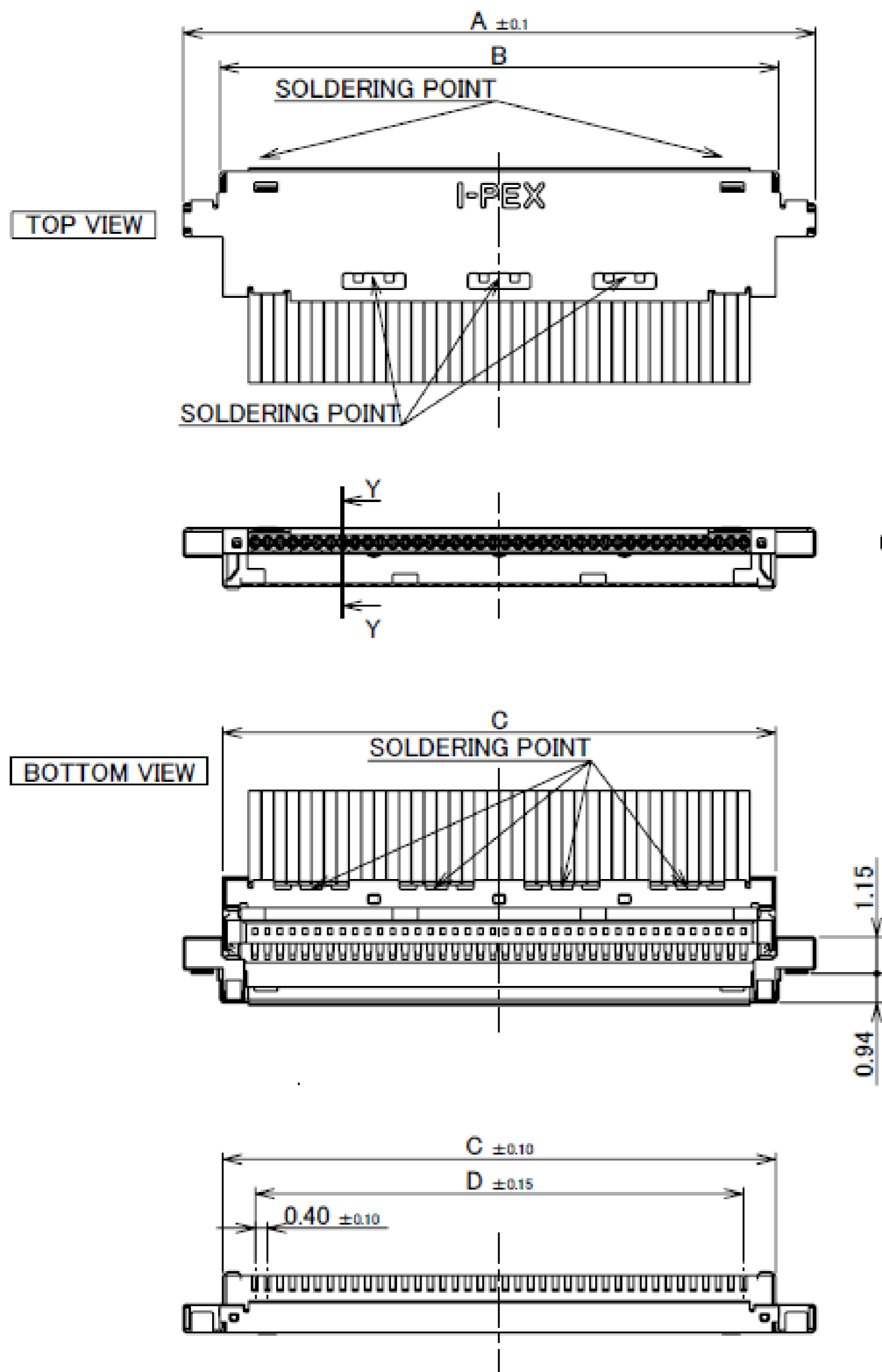


Halogen Free RoHS Compliant



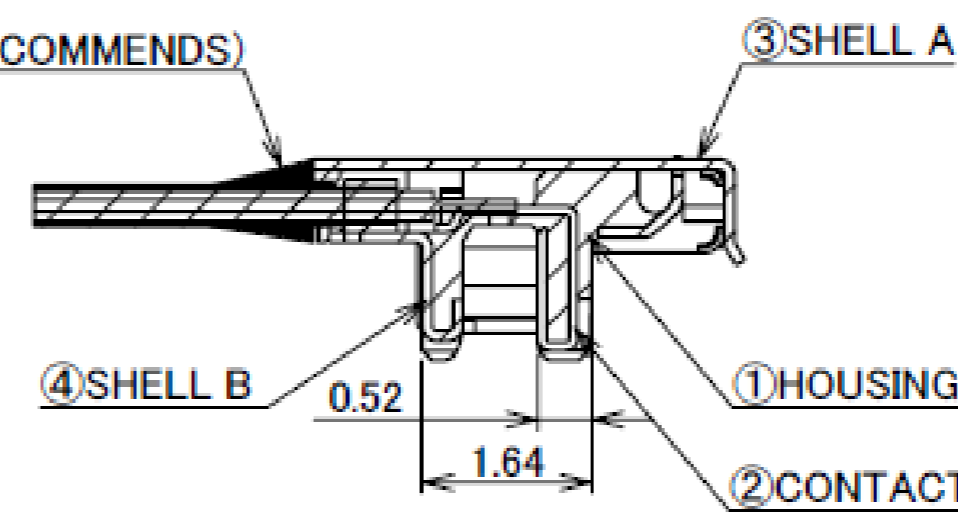
Rev.14

Recommended P/N		20877-0**T-01			
PART NO.	Pos.	A	B	C	D
20877-030T-02	30	16.20	13.85	13.65	11.60
20877-040T-02	40	20.20	17.85	17.65	15.60
20877-050T-02	50	24.20	21.85	21.65	19.60
20877-060T-02	60	28.20	25.85	25.65	23.60

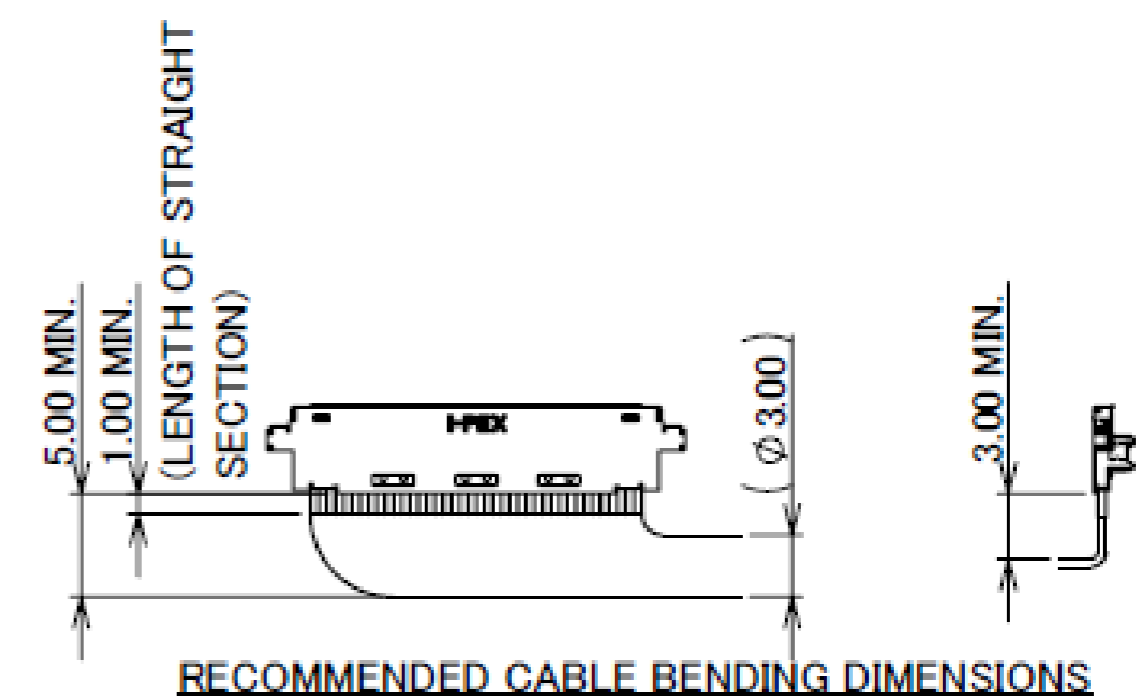
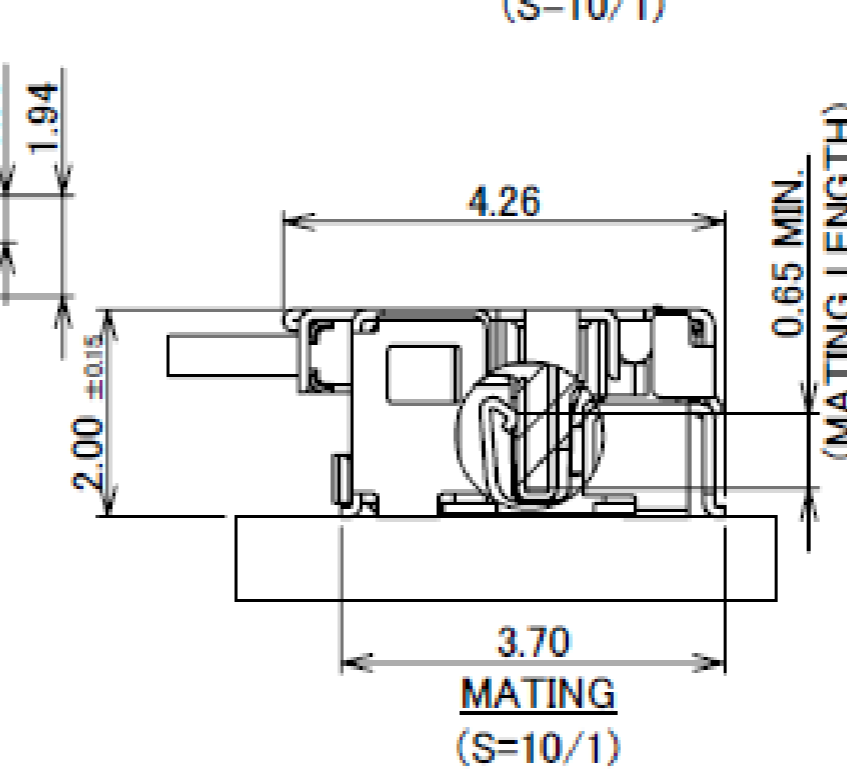


Without LOCK COVER

BONDING
(LOCTITE 352 RECOMMENDS)



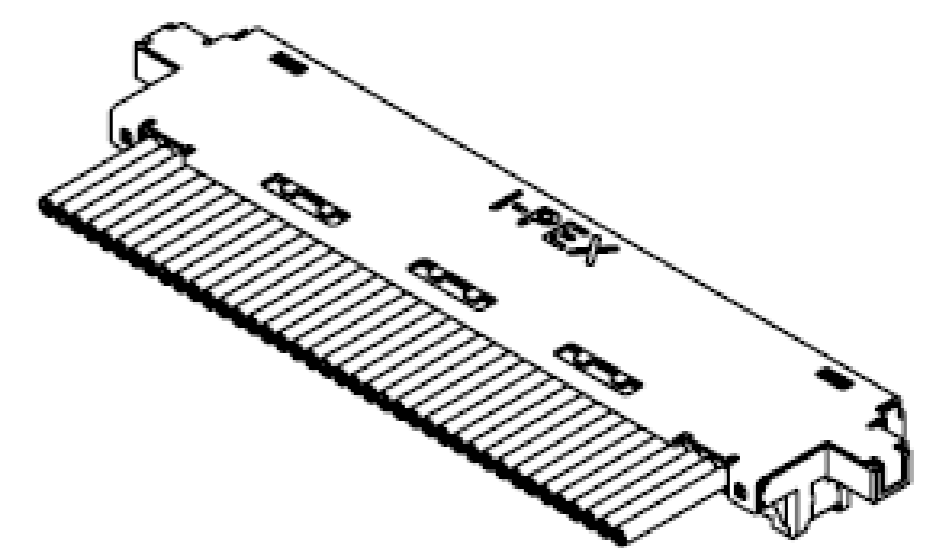
SECT. Y-Y
(S=10/1)



4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS



Halogen Free RoHS Compliant

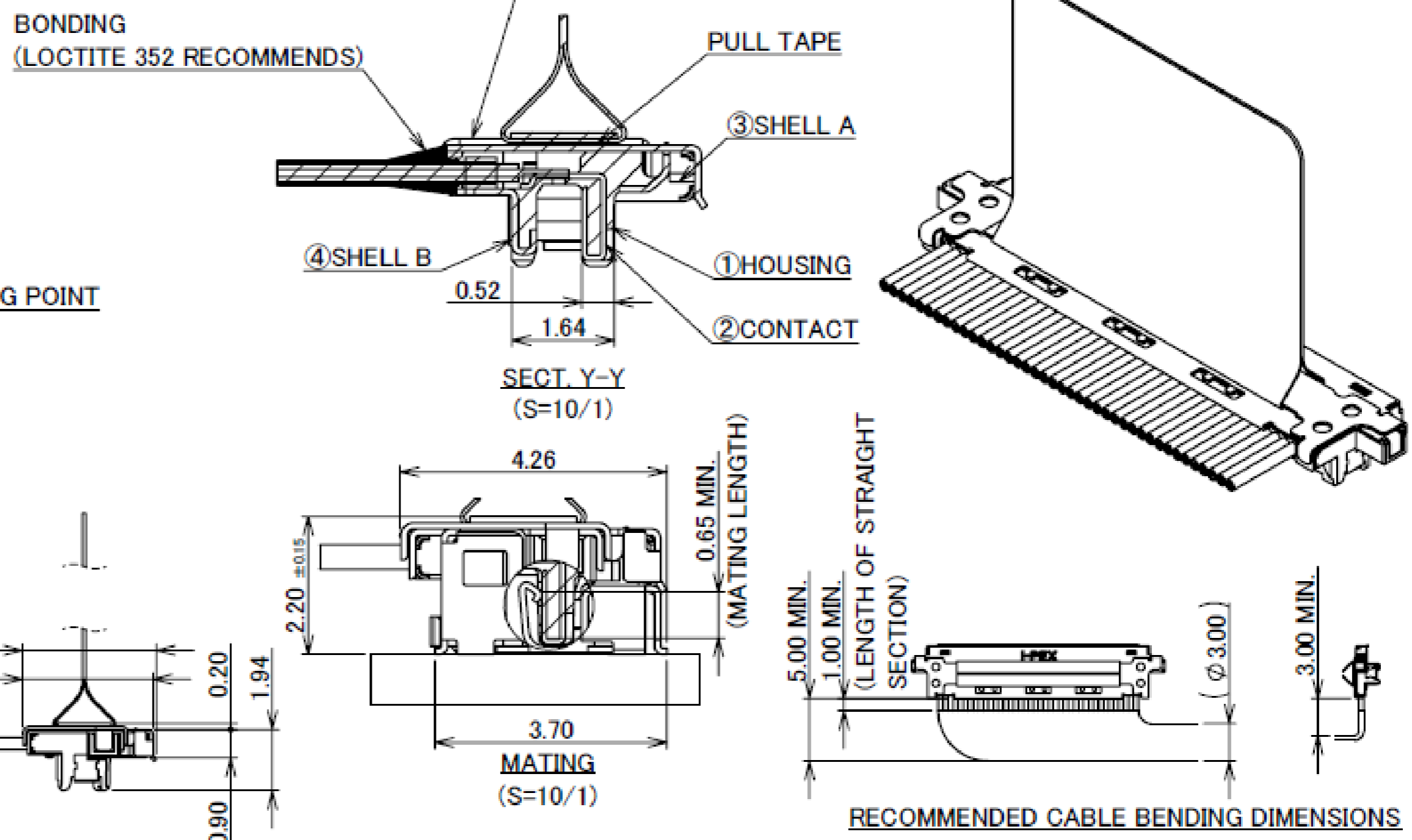
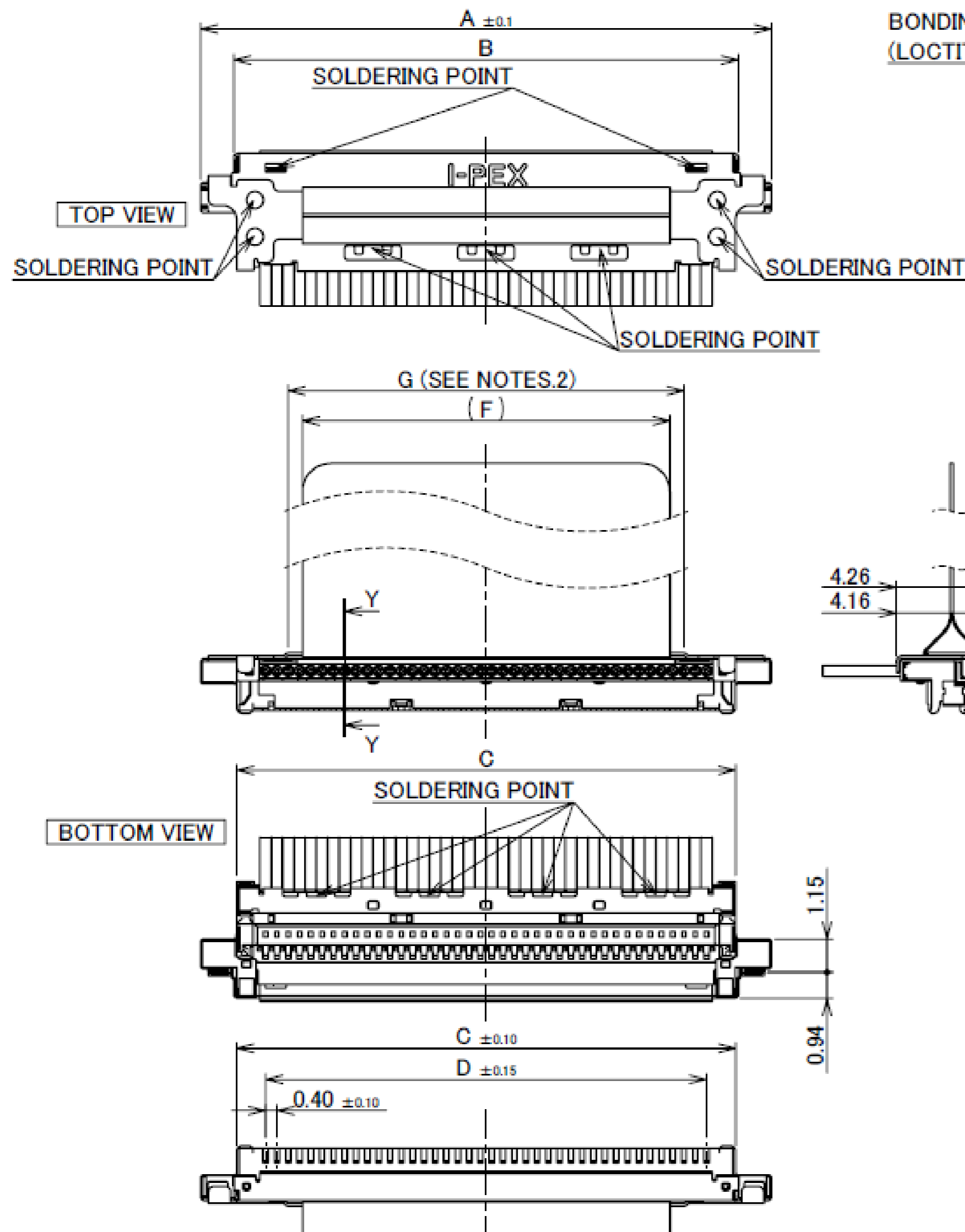


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Plug for Cable Assembly

Recommended P/N		20877-0**T-01					
PART NO.	Pos.	A	B	C	D	F	G
20877-030T-03	30	16.20	13.85	13.65	11.60	9.00	10.00
20877-040T-03	40	20.20	17.85	17.65	15.60	13.00	14.00
20877-050T-03	50	24.20	21.85	21.65	19.60	17.00	18.00
20877-060T-03	60	28.20	25.85	25.65	23.60	21.00	22.00

With PULL TAPE HOLDER

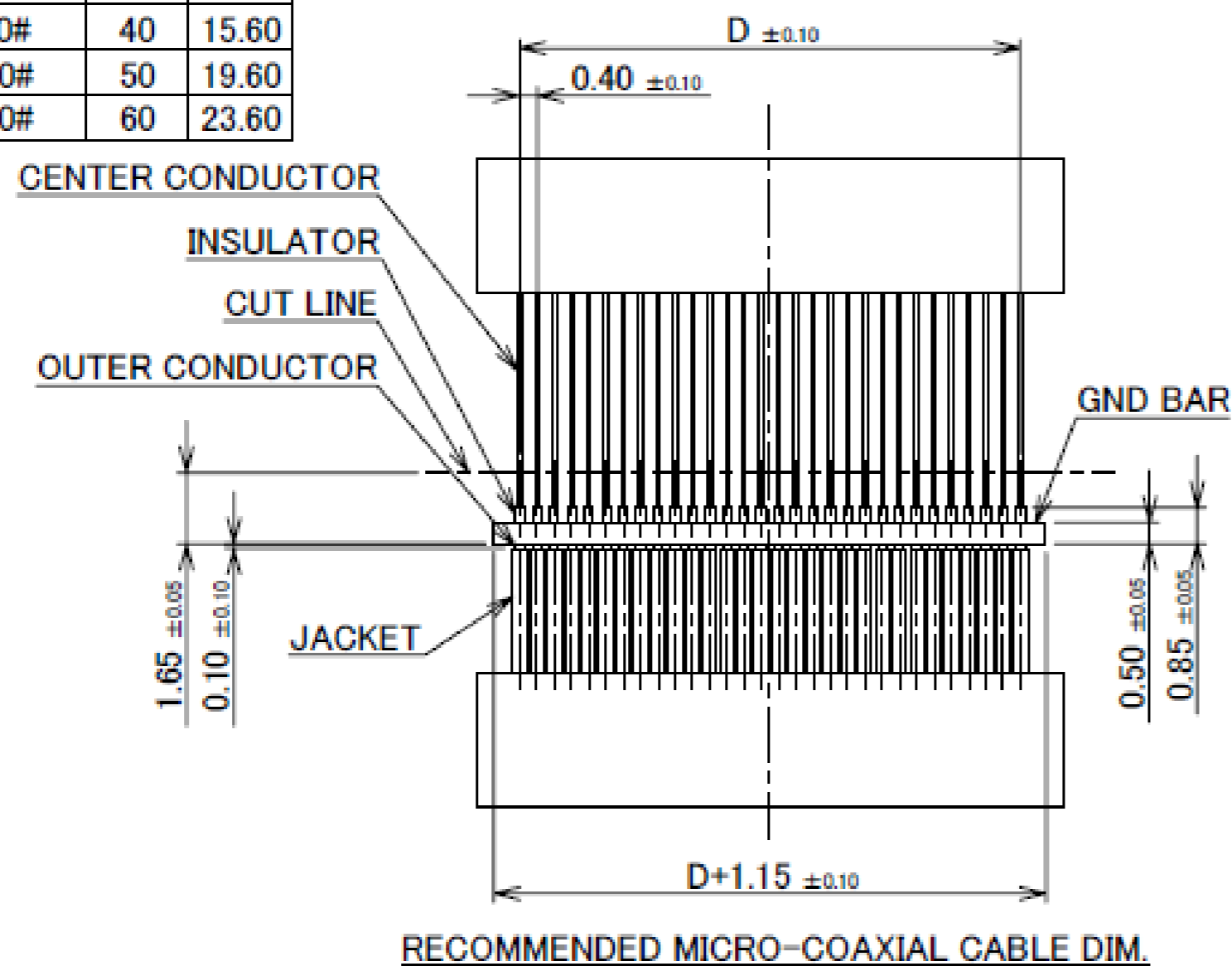


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
5	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

NOTES.
 2.RECOMMENDED PULL-TAPE
 PULL-TAPE : TERAOKA's INSULATION TAPE No.650S(#50) t=0.08
 3.PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRIAIGHT AREA.

Rev.14

PART NO.	Pos.	D
20877-030T-0#	30	11.60
20877-040T-0#	40	15.60
20877-050T-0#	50	19.60
20877-060T-0#	60	23.60



RECOMMENDED MICRO-COAXIAL CABLE DIM.

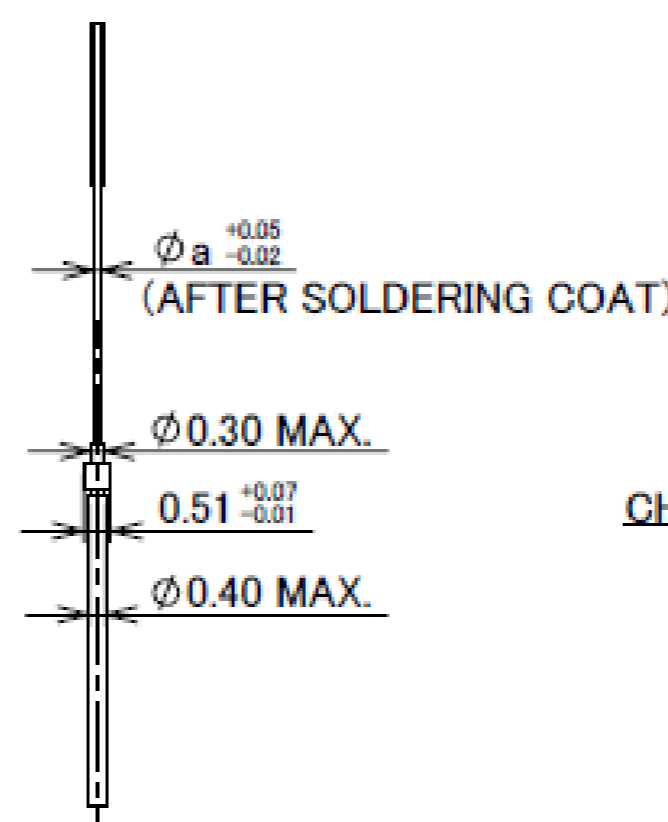
CHARACTERISTIC IMPEDANCE MATCHING MICRO-COAXIAL CABLE

	a
#38	0.12
#40	0.09
#42	0.075
#44	0.063

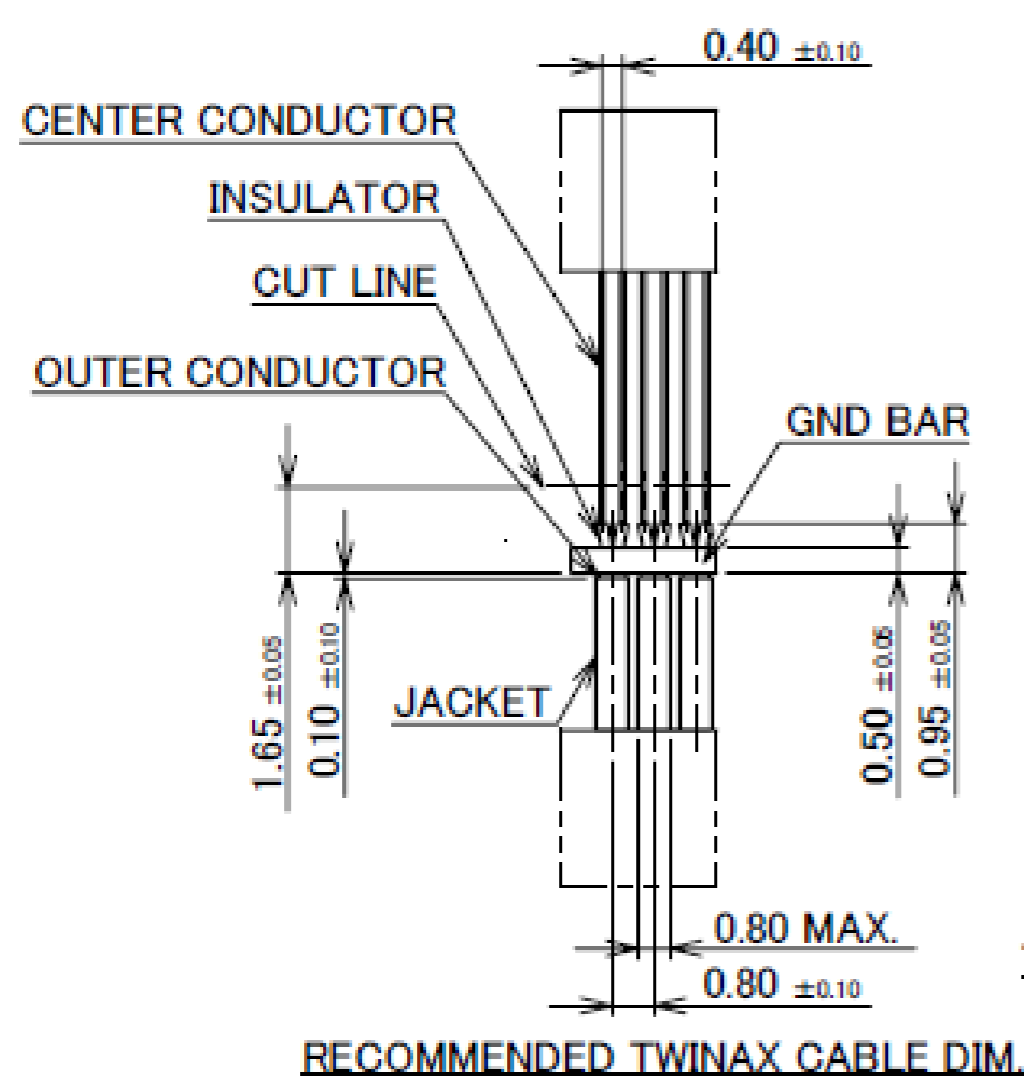
CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO-COAXIAL CABLE

	a
#36	0.15

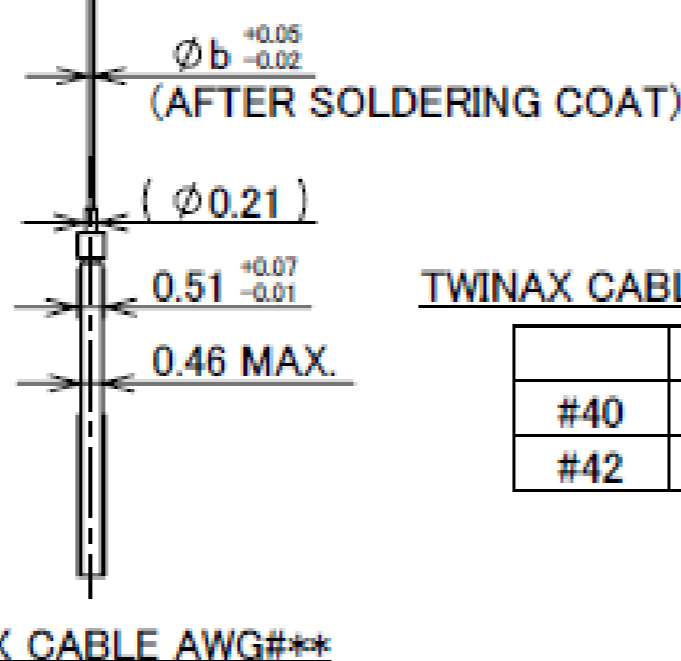
MICRO-COAXIAL CABLE #36 : NOT RECOMMENDED FOR HIGH SPEED SIGNAL TRANSFER



MICRO-COAXIAL CABLE AWG#**



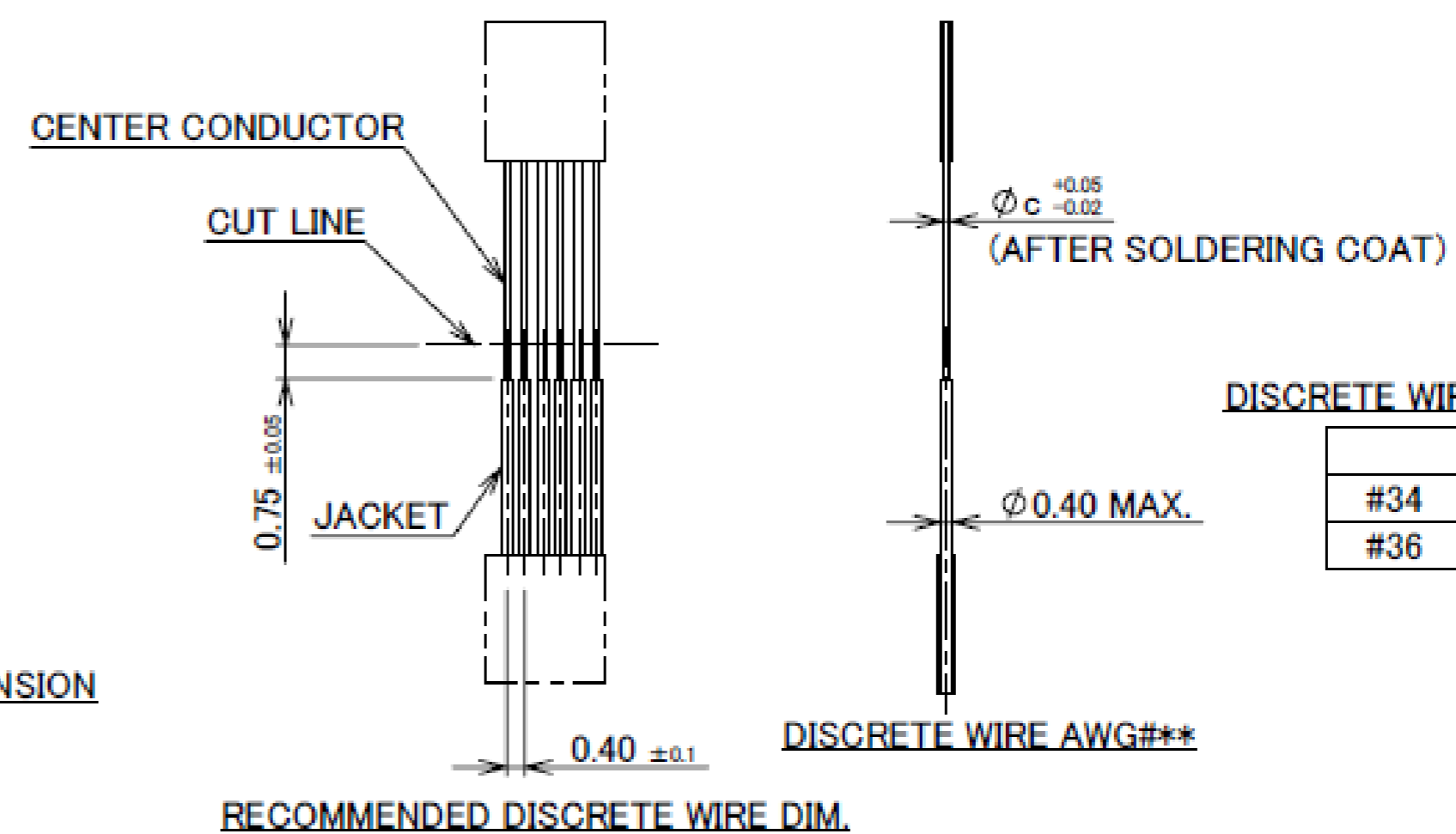
RECOMMENDED TWINAX CABLE DIM.



TWINAX CABLE DIMENSION

	b
#40	0.09
#42	0.075

TWINAX CABLE AWG#**



RECOMMENDED DISCRETE WIRE DIM.

DISCRETE WIRE DIMENSION

	c
#34	0.192
#36	0.15

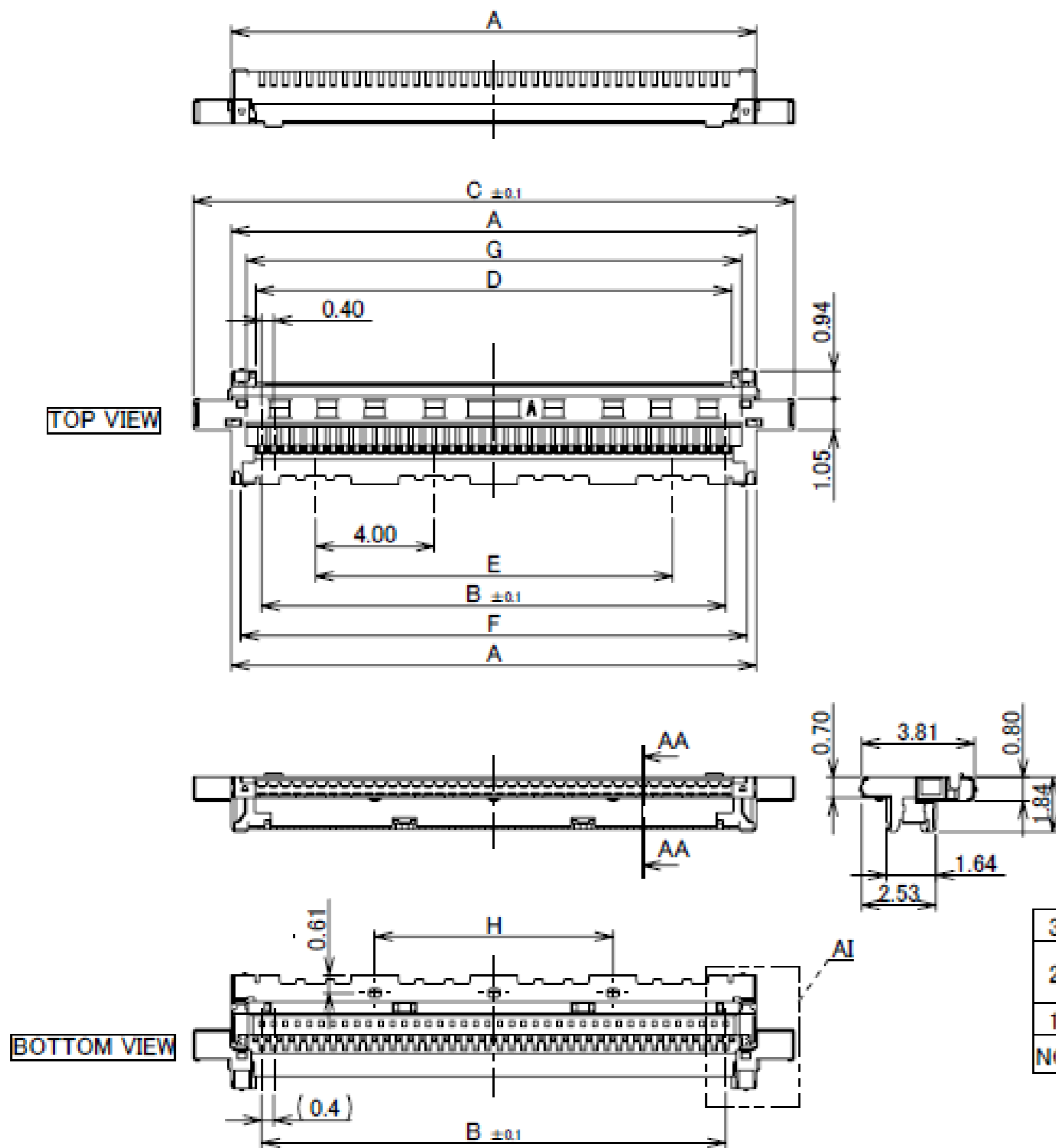
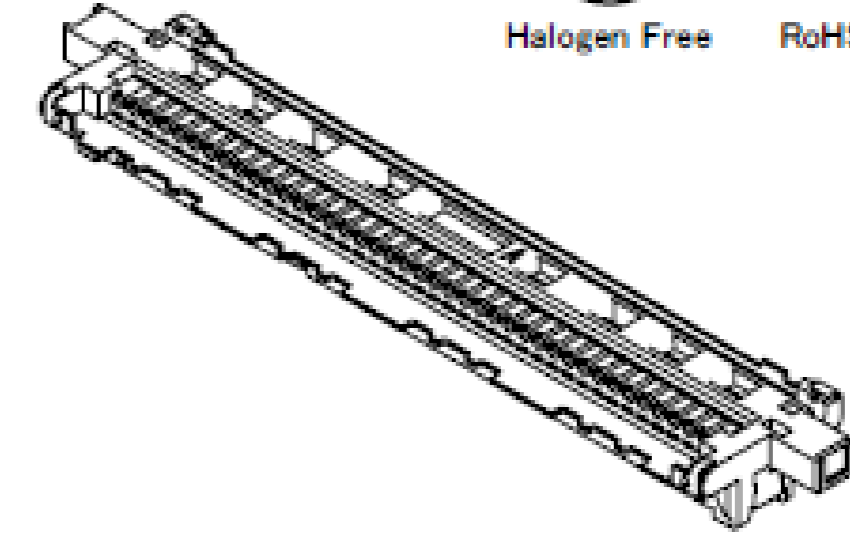
DISCRETE WIRE AWG#**

Rev.14

Plug Housing Assembly

Recommended P/N 20878-0**T-01

PART No.	Pos.	A	B	C	D	E	F	G	H
20878-030T-01	30	13.65	11.60	16.20	12.01	8.00	13.00	12.65	4.0
20878-040T-01	40	17.65	15.60	20.20	16.01	12.00	17.00	16.65	8.0
20878-060T-01	60	25.65	23.60	28.20	24.01	20.00	25.00	24.65	16.00



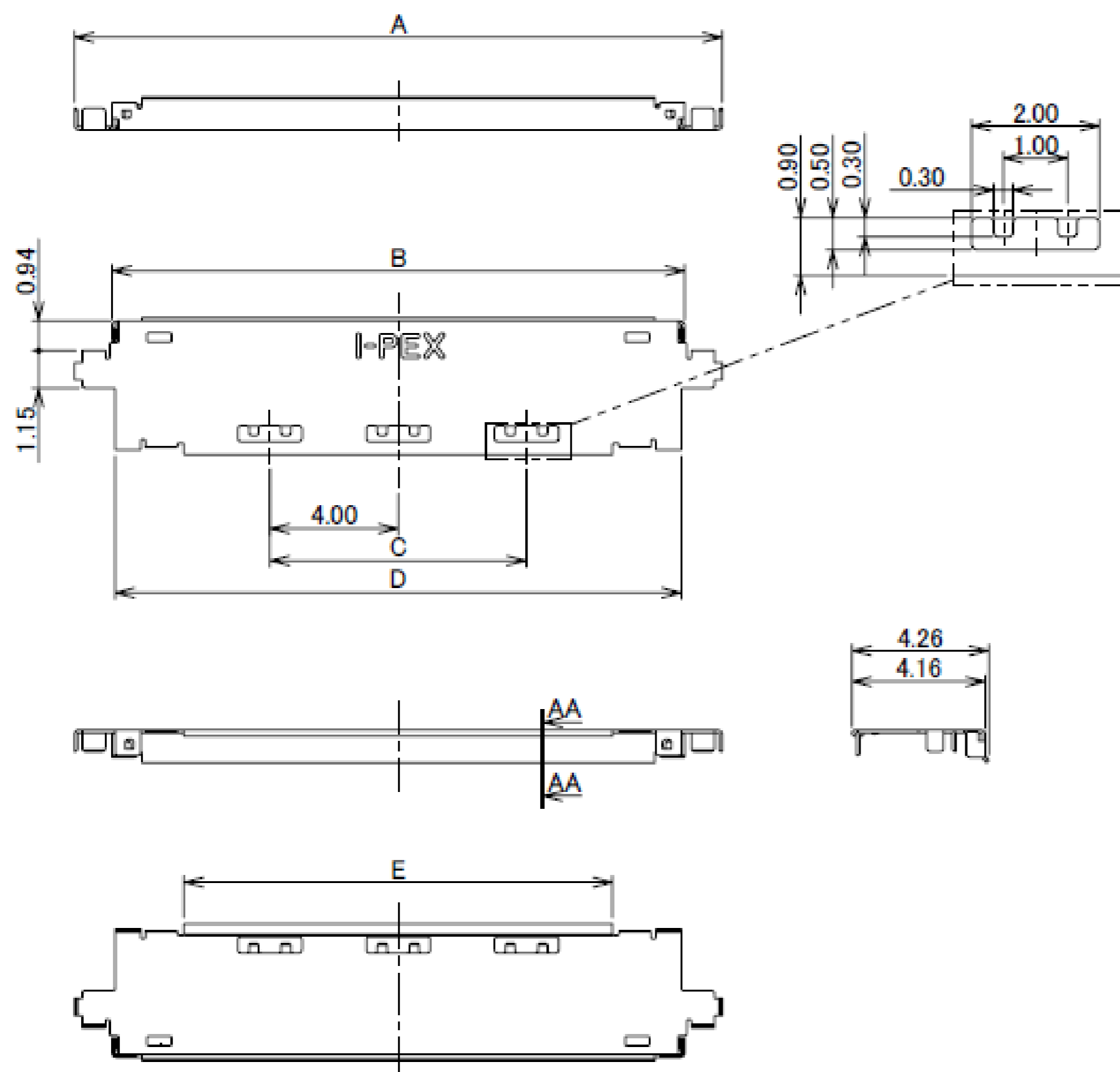
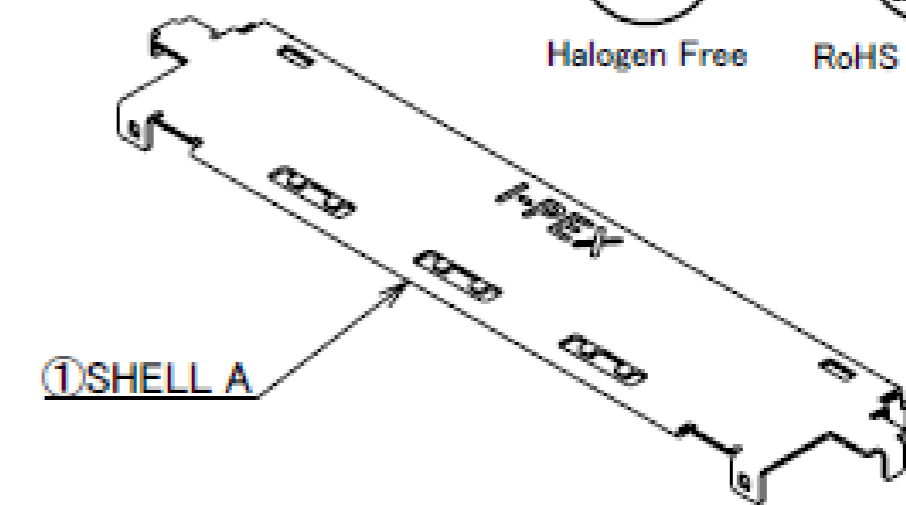
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 .BLACK

Rev.4

Plug Shell-A

Recommended P/N 3488-0**1

PART No.	Pos.	A	B	C	D	E
3488-0301	30	16.20	13.88	4.00	13.65	9.36
3488-0401	40	20.20	17.88	8.00	17.65	13.36
3488-0501	50	24.20	21.88	12.00	21.65	17.36
3488-0601	60	28.20	25.88	16.00	25.65	21.36

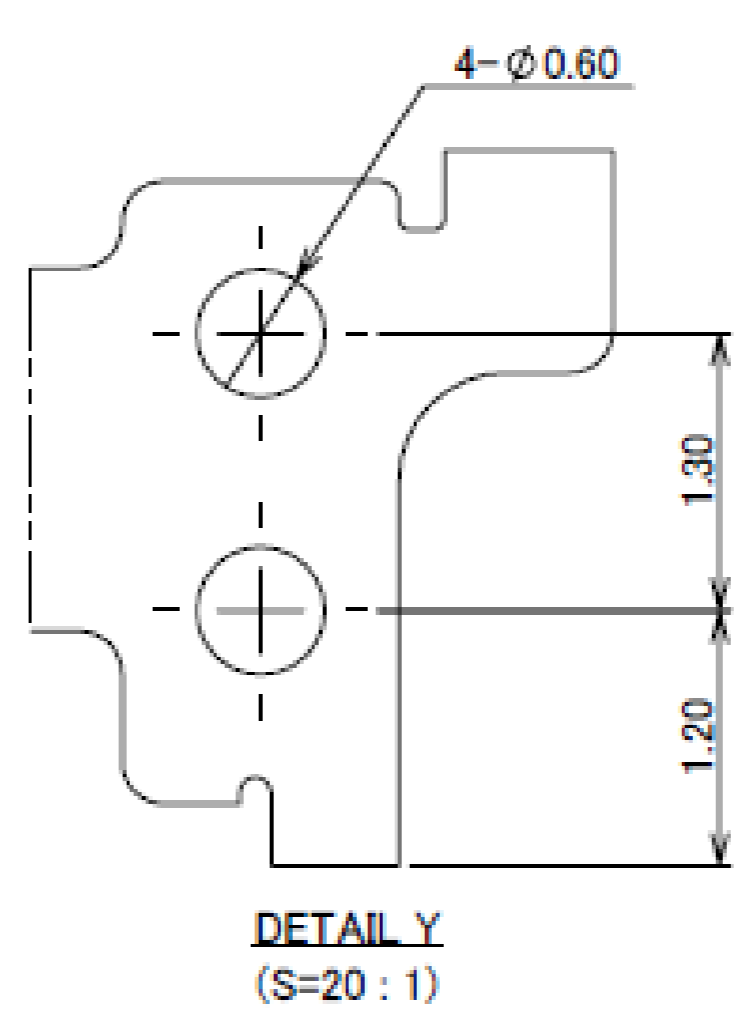
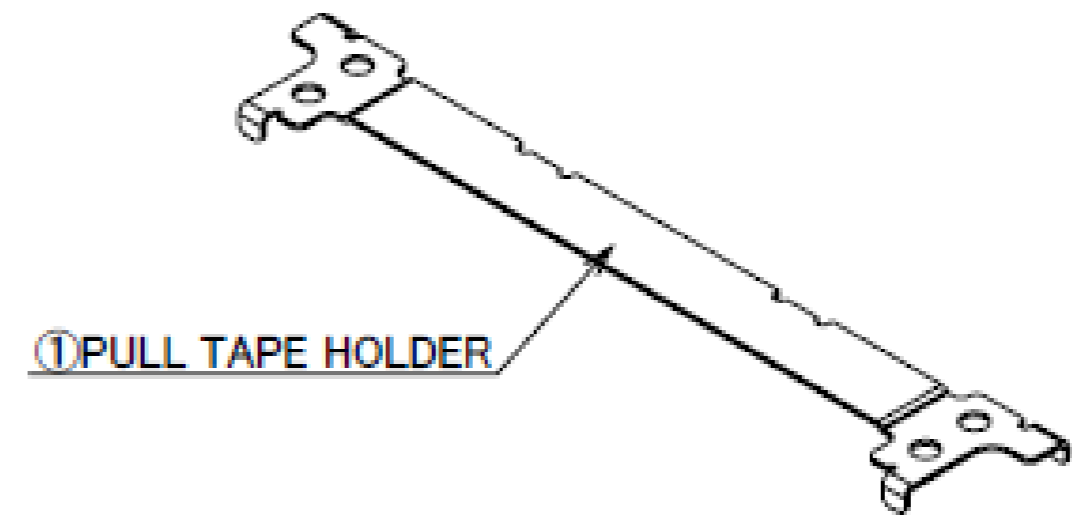
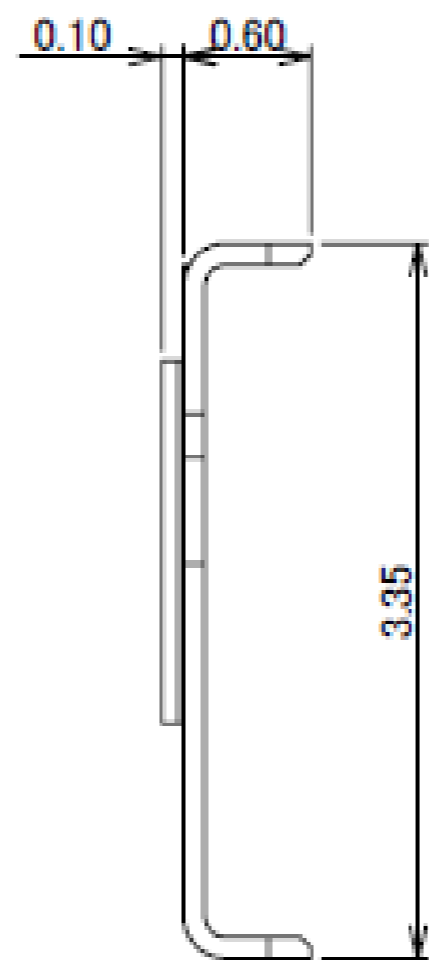
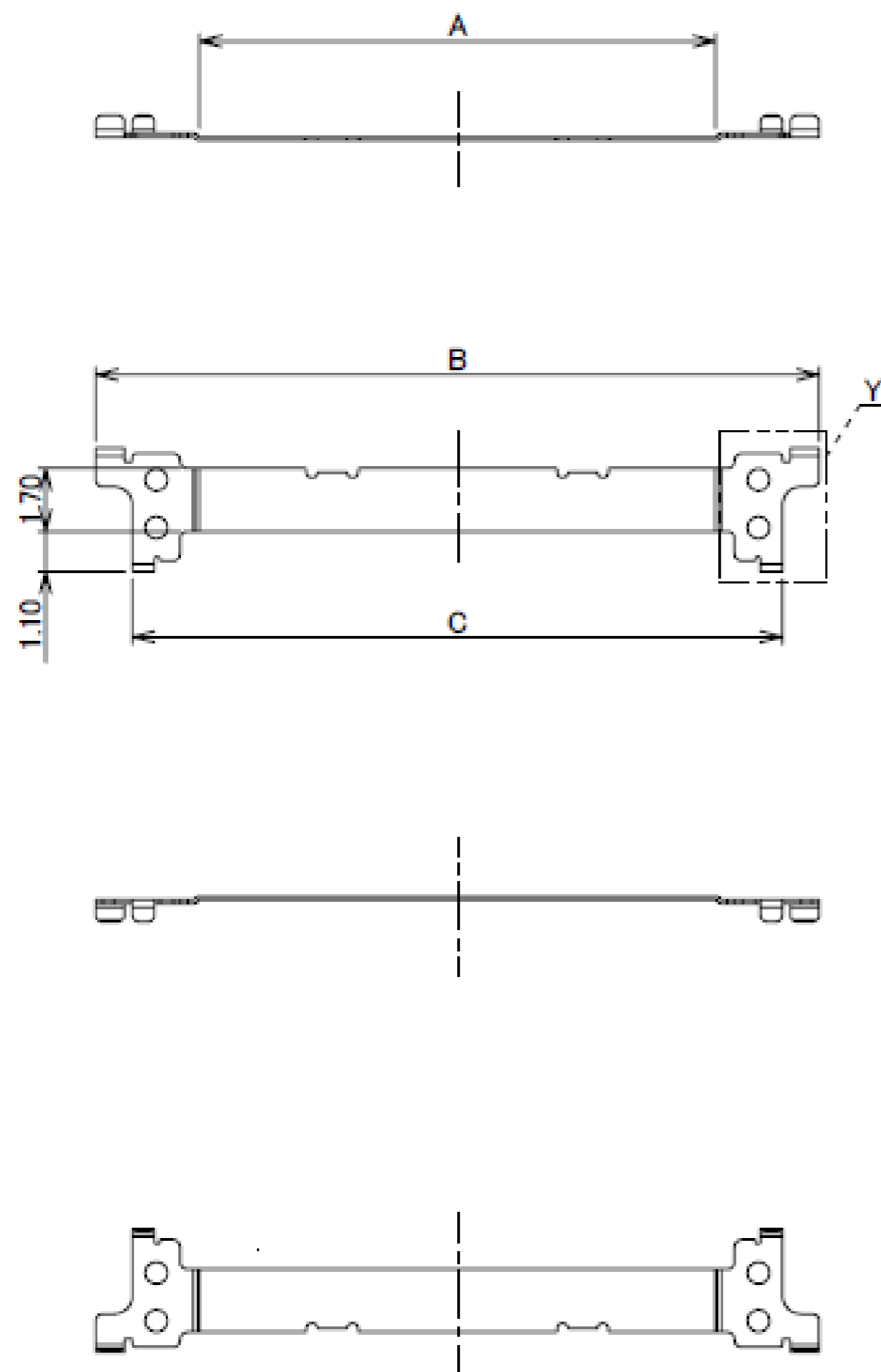


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.

Rev.4

Plug Pull Tape Holder

Recommended P/N		3588-0**1		
PART NO.	Pos.	A	B	C
3588-0301	30	10.00	15.65	13.65
3588-0401	40	14.00	19.65	17.65
3588-0501	50	18.00	23.65	21.65
3588-0601	60	22.00	27.65	25.65

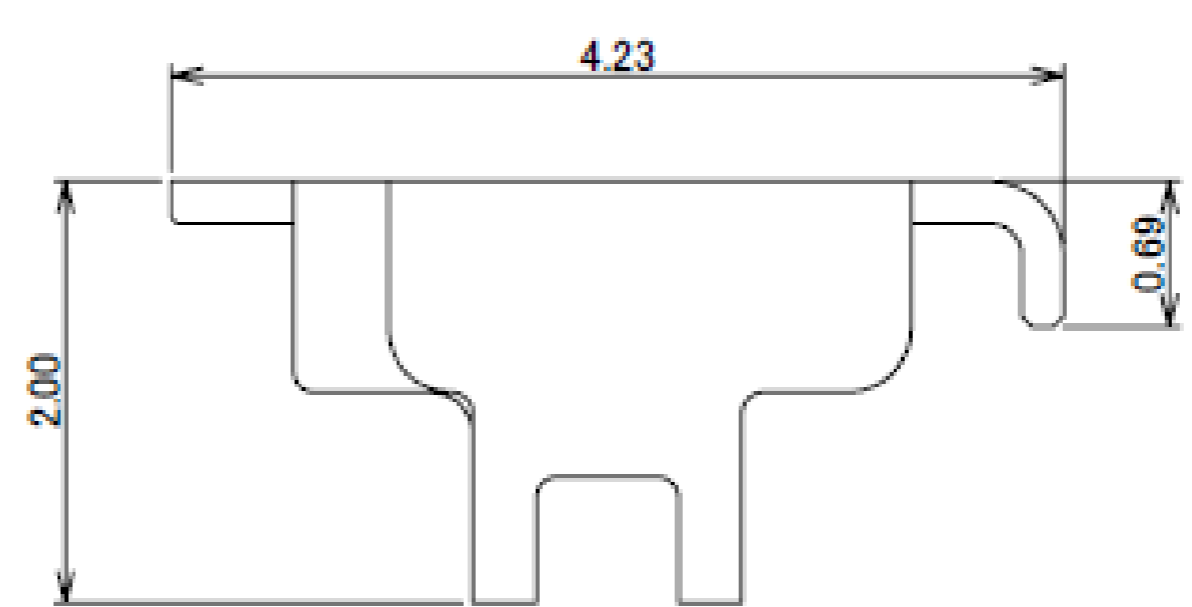
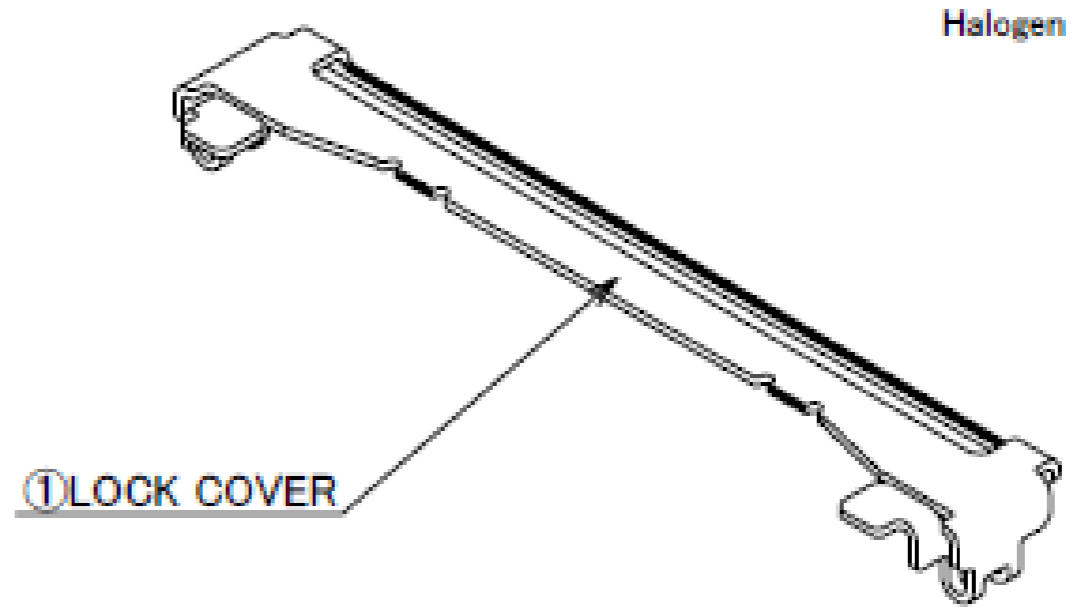
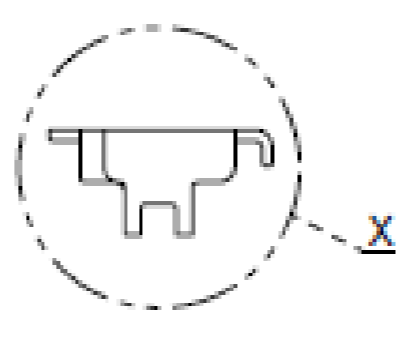
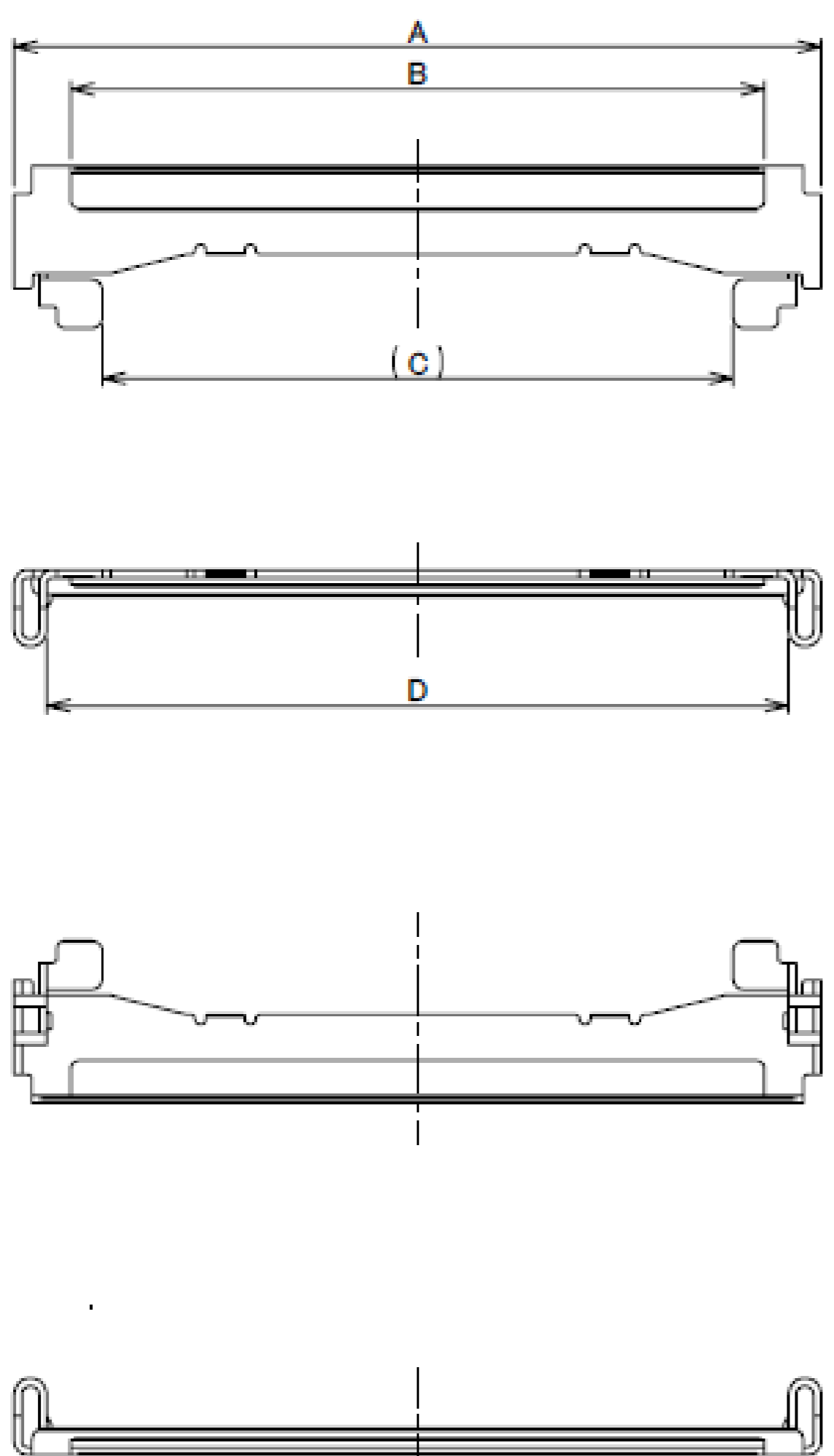


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.

Rev.4

Lock Cover

Recommended P/N		3493-0**1			
PART NO.	Pos.	A	B	C	D
3493-0301	30	17.00	14.05	12.40	15.30
3493-0401	40	21.00	18.05	16.40	19.30
3493-0601	60	29.00	26.05	24.40	27.30



NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN.

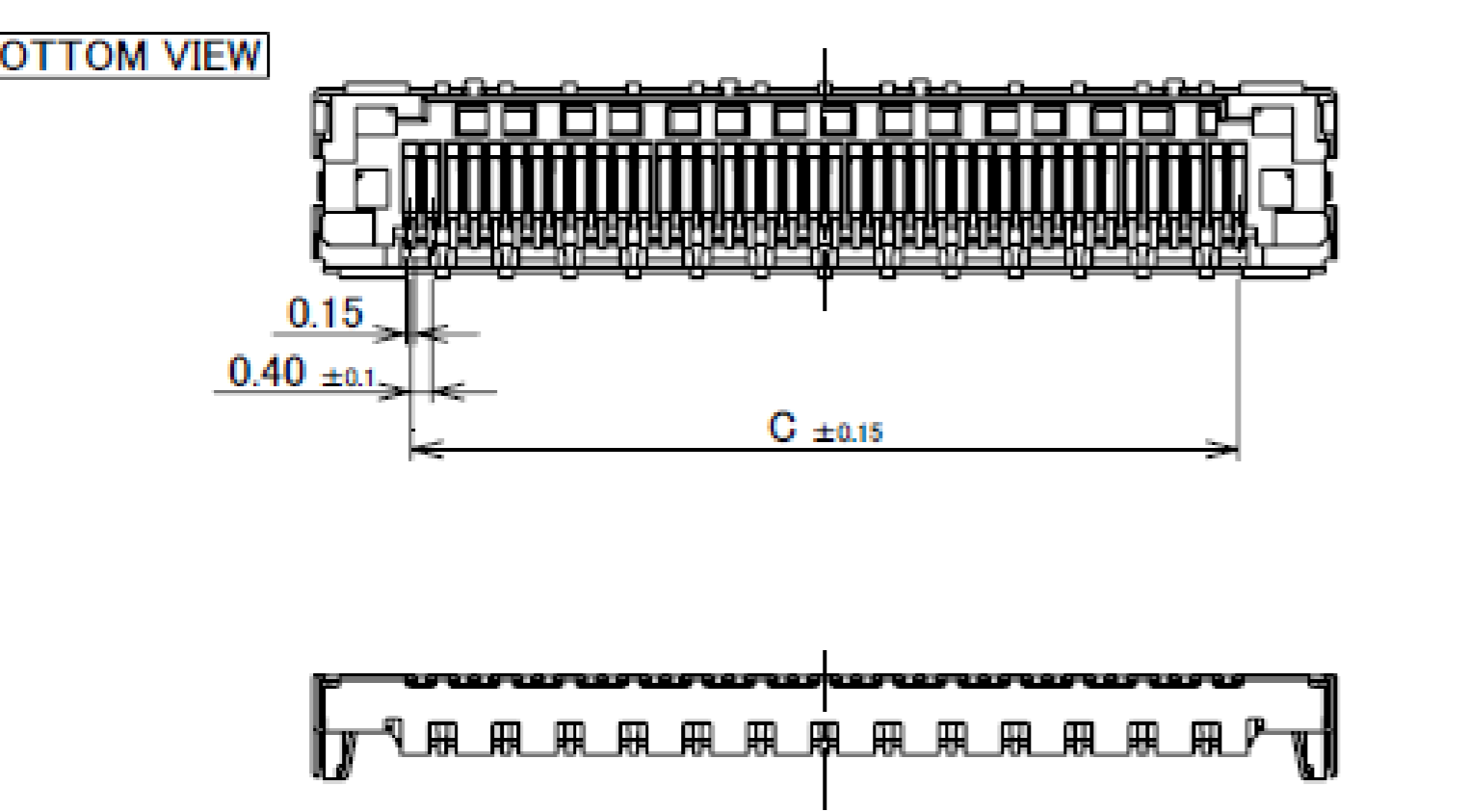
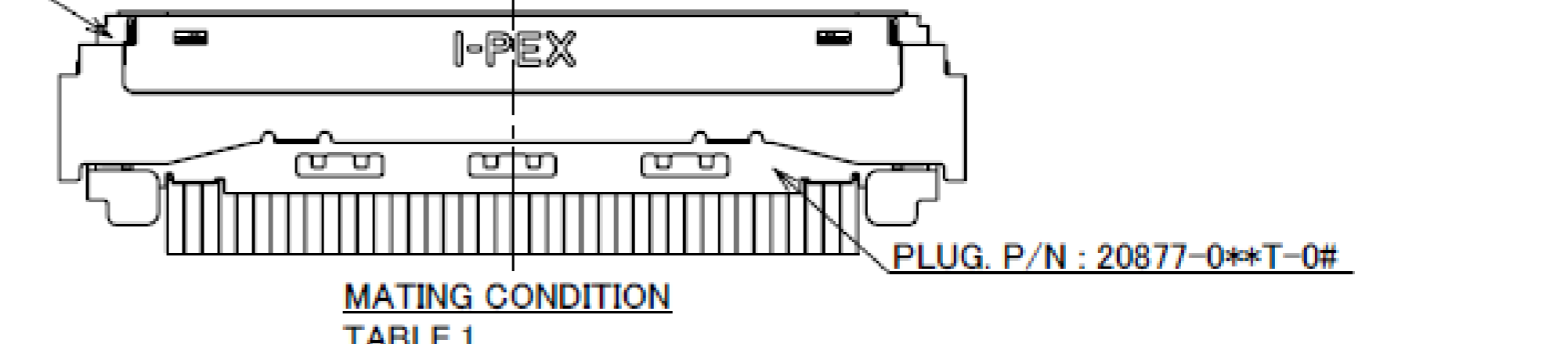
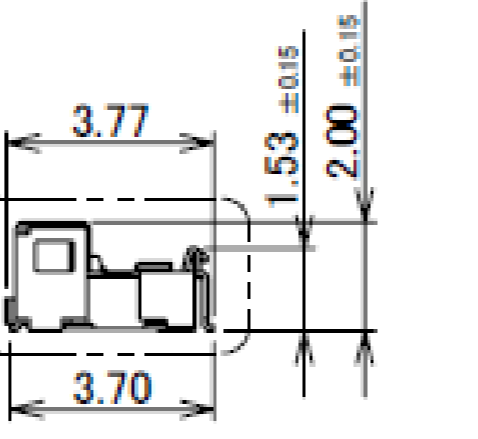
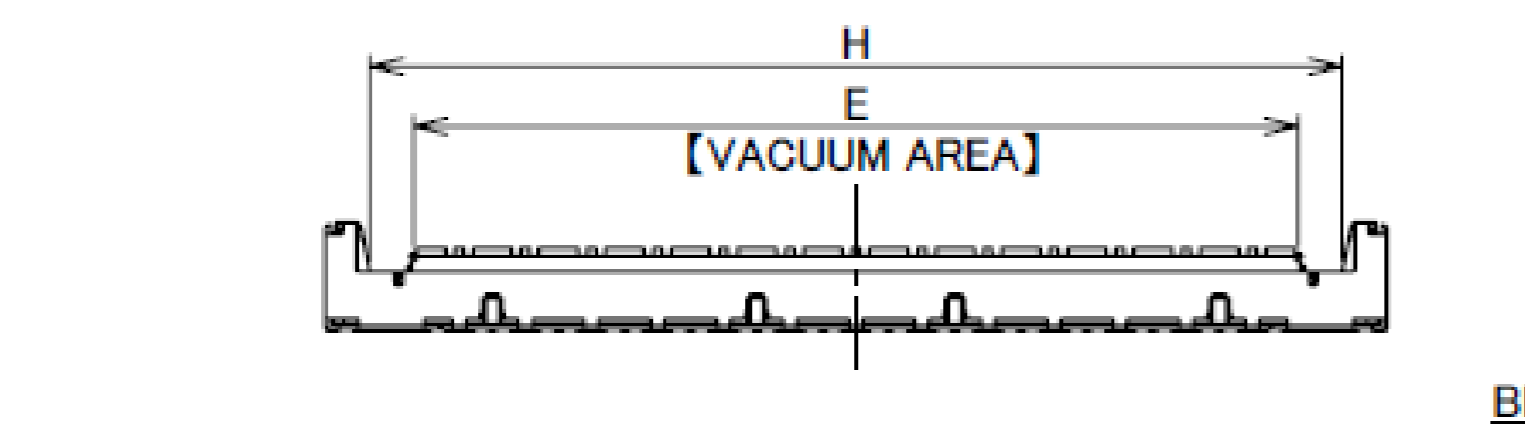
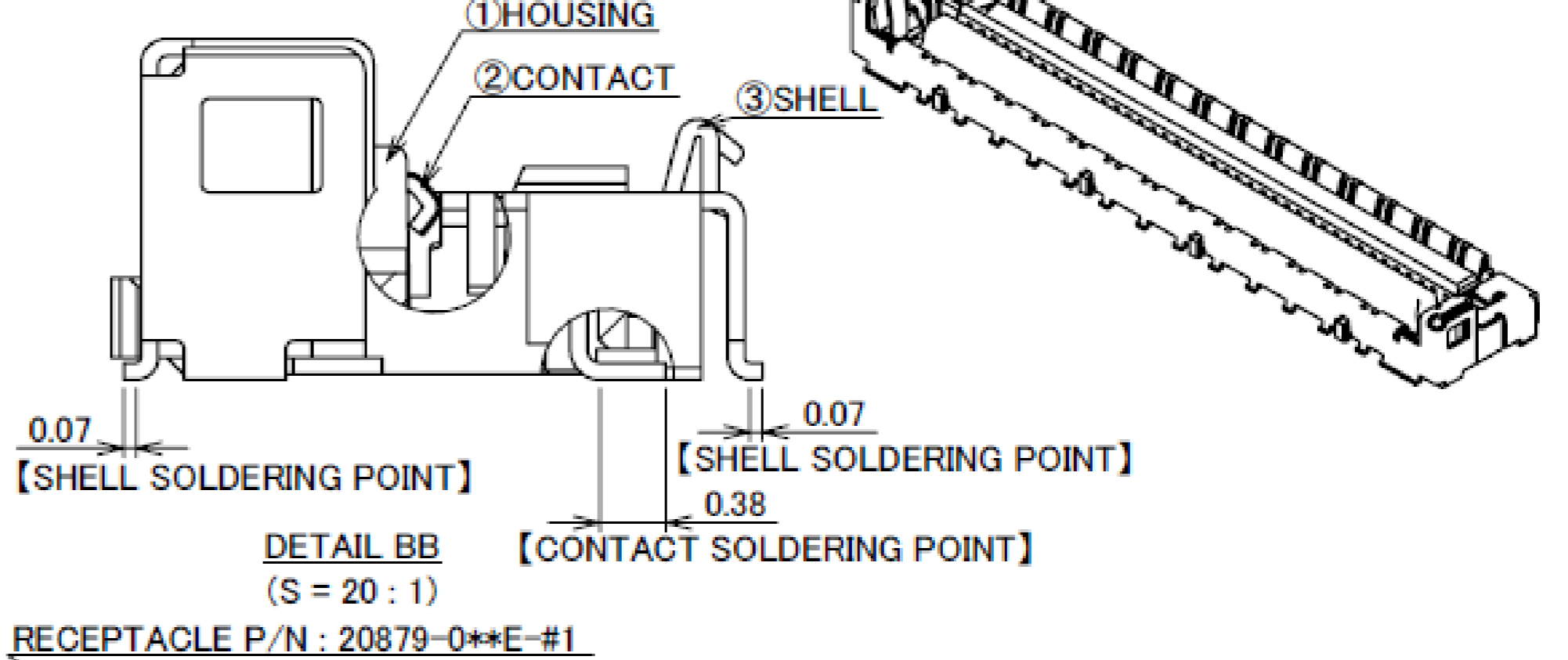
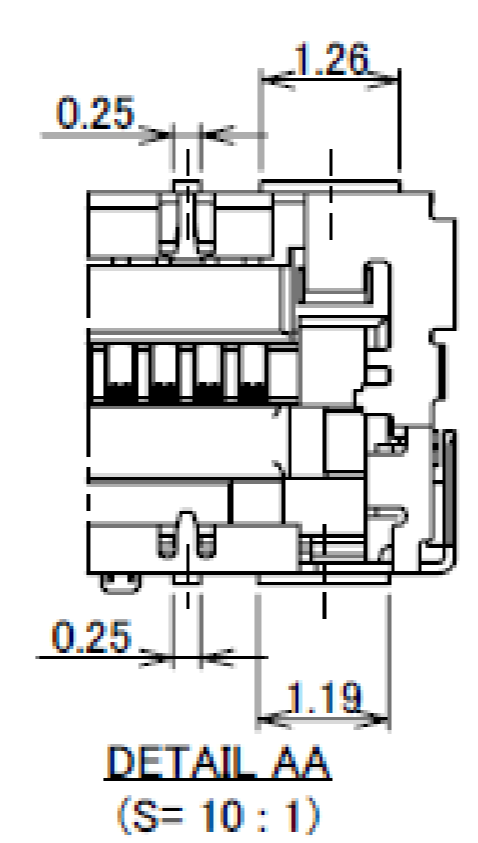
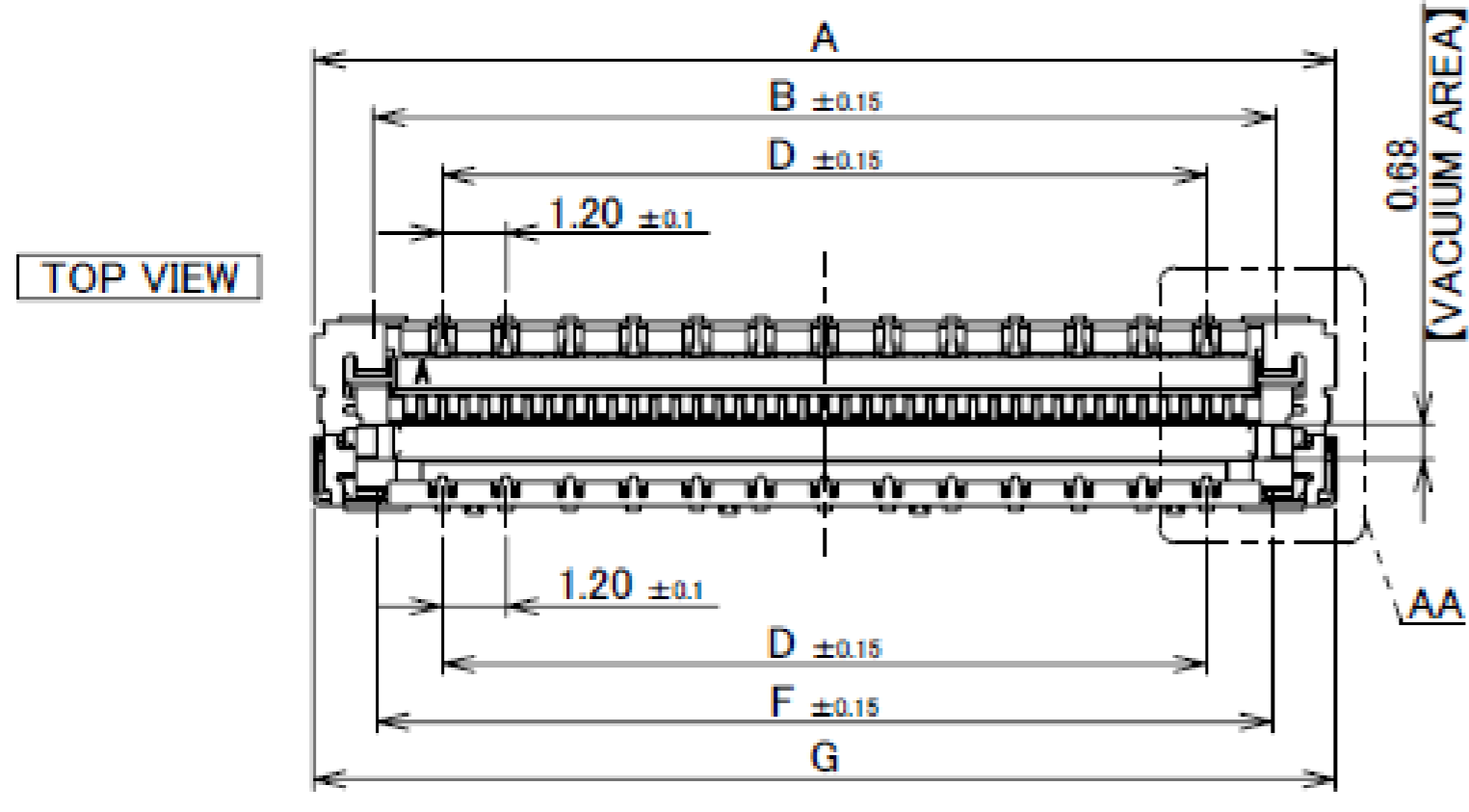
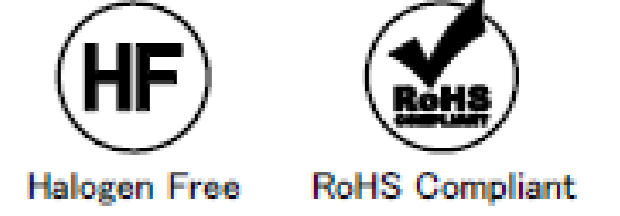
Rev.3

Receptacle Assembly

Recommended P/N		20879-0**E-01							
PART NO.	Pos.	A	B	C	D	E	F	G	H
20879-030E-#1	30	15.27	13.01	11.60	9.60	12.07	12.88	15.27	13.65
20879-040E-#1	40	19.27	17.01	15.60	14.40	16.07	16.88	19.27	17.65
20879-050E-11	50	23.27	21.01	19.60	17.60	20.07	20.88	23.27	21.65
20879-060E-#1	60	27.27	25.01	23.60	21.60	24.07	24.88	27.27	25.65

P/N : 20879-0**E-##
 1 : NARROW GROUND PIN TYPE
 2 : WIDER GROUND PIN TYPE
 SEE TABLE.1
 Pos.

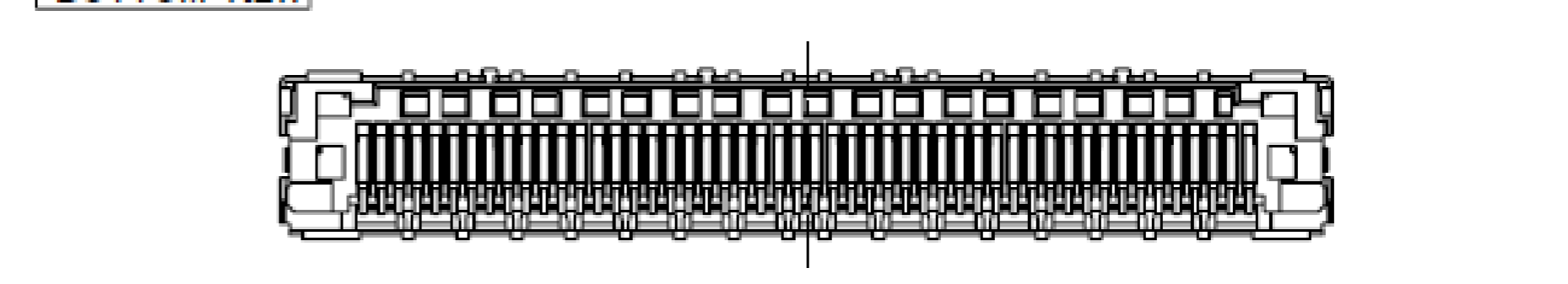
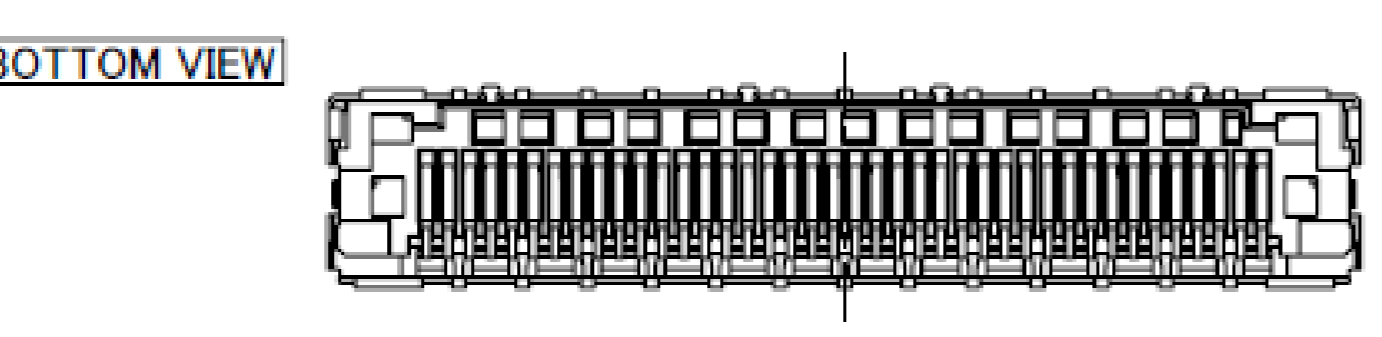
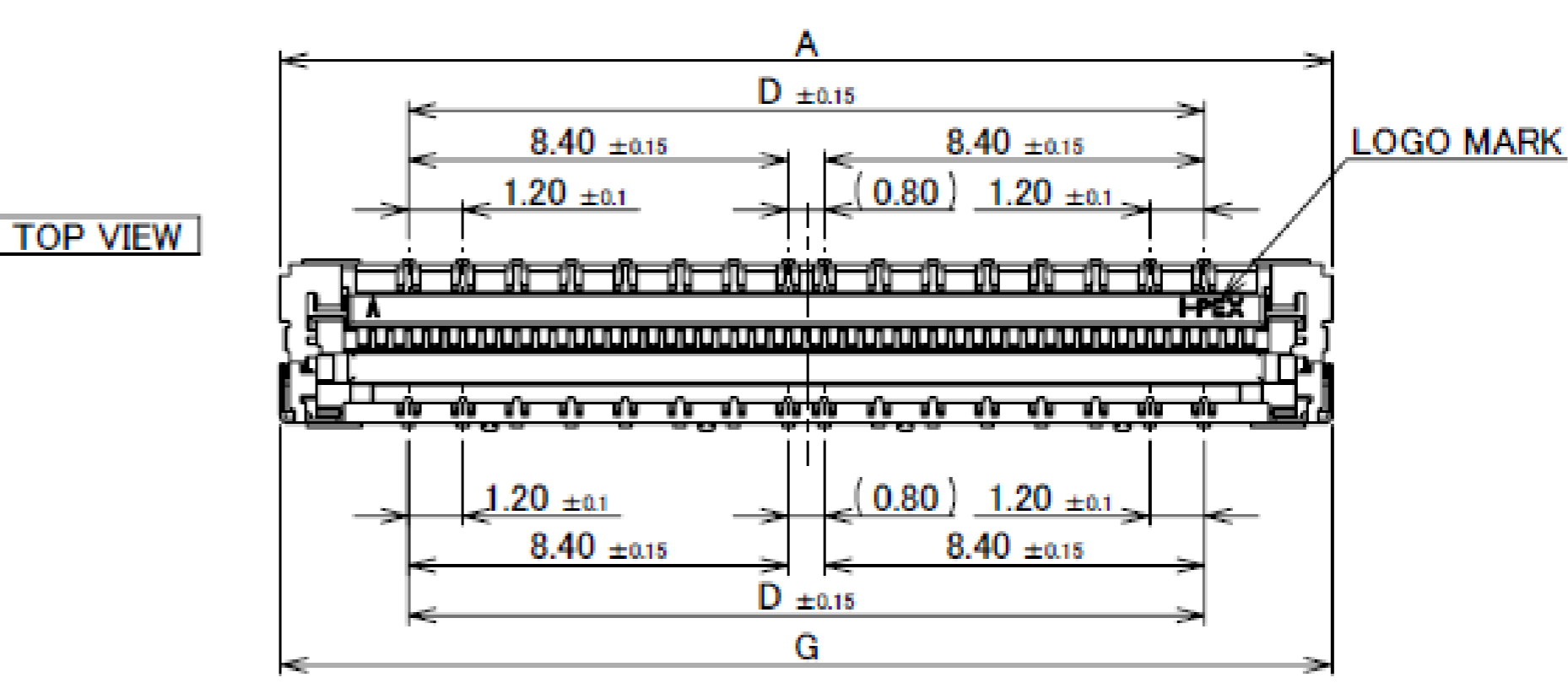
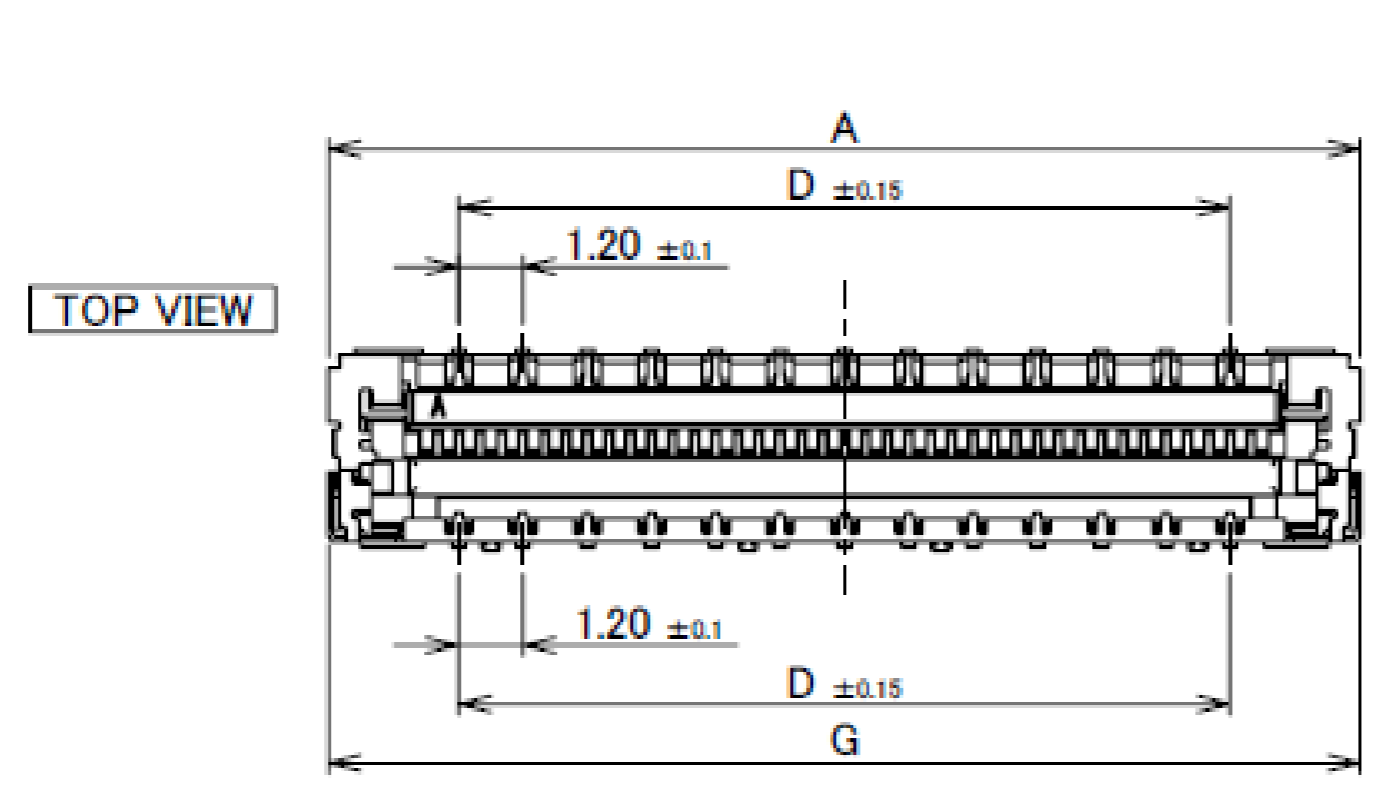
#1 TYPE



NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	SHELL	PHOSPHOR BRONZE	ALL OVER : Ni 1.00 μm MIN. SOLDERING AREA : Au 0.02 μm MIN.
2	CONTACT	CORSON ALLOY	SEE TABLE.1
1	HOUSING	LCP	UL94V-0, BLACK

Rev.13

Recommended P/N		20879-0**E-01		
PART NO.	Pos.	A	D	G
20879-030E-#1	30	15.27	9.60	15.27
20879-040E-#1	40	19.27	14.40	19.27
20879-050E-11	50	23.27	17.60	23.27
20879-060E-#1	60	27.27	21.60	27.27



30P, 40P, 60P

50P

Rev.13



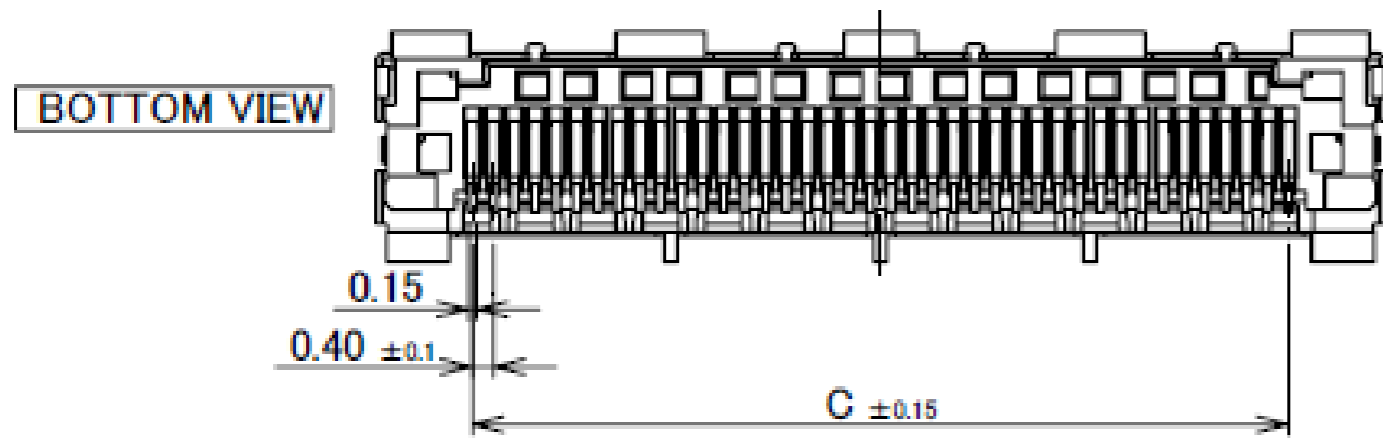
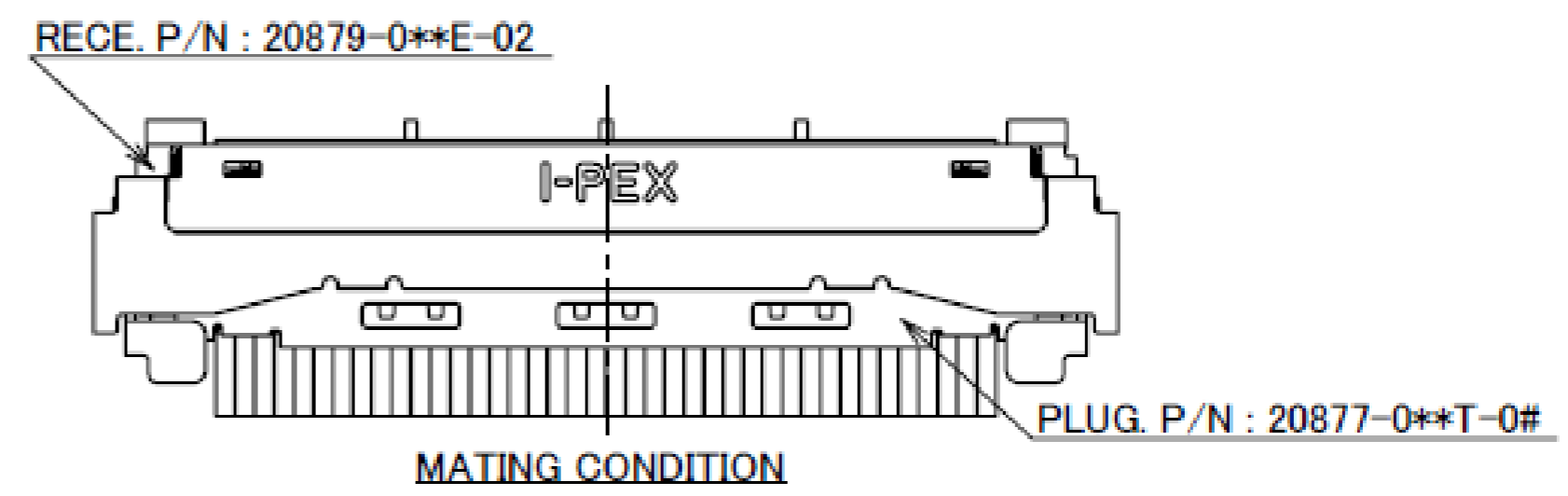
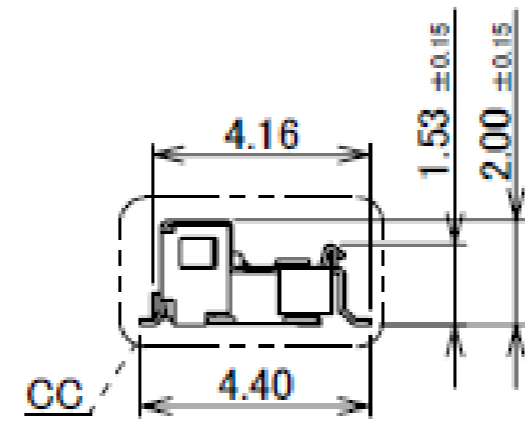
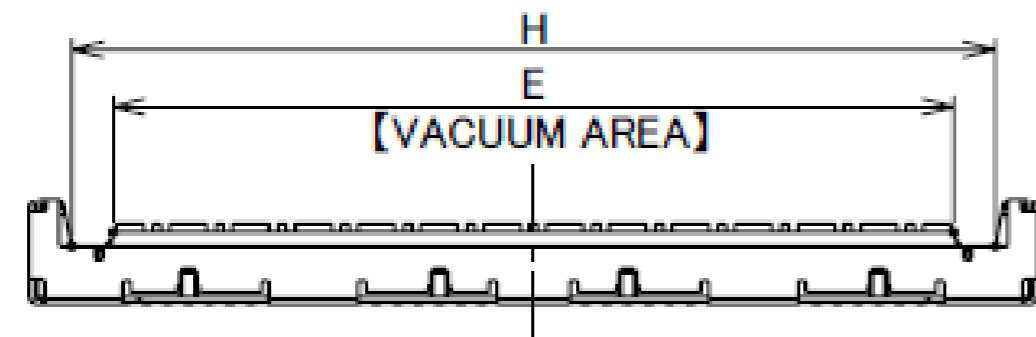
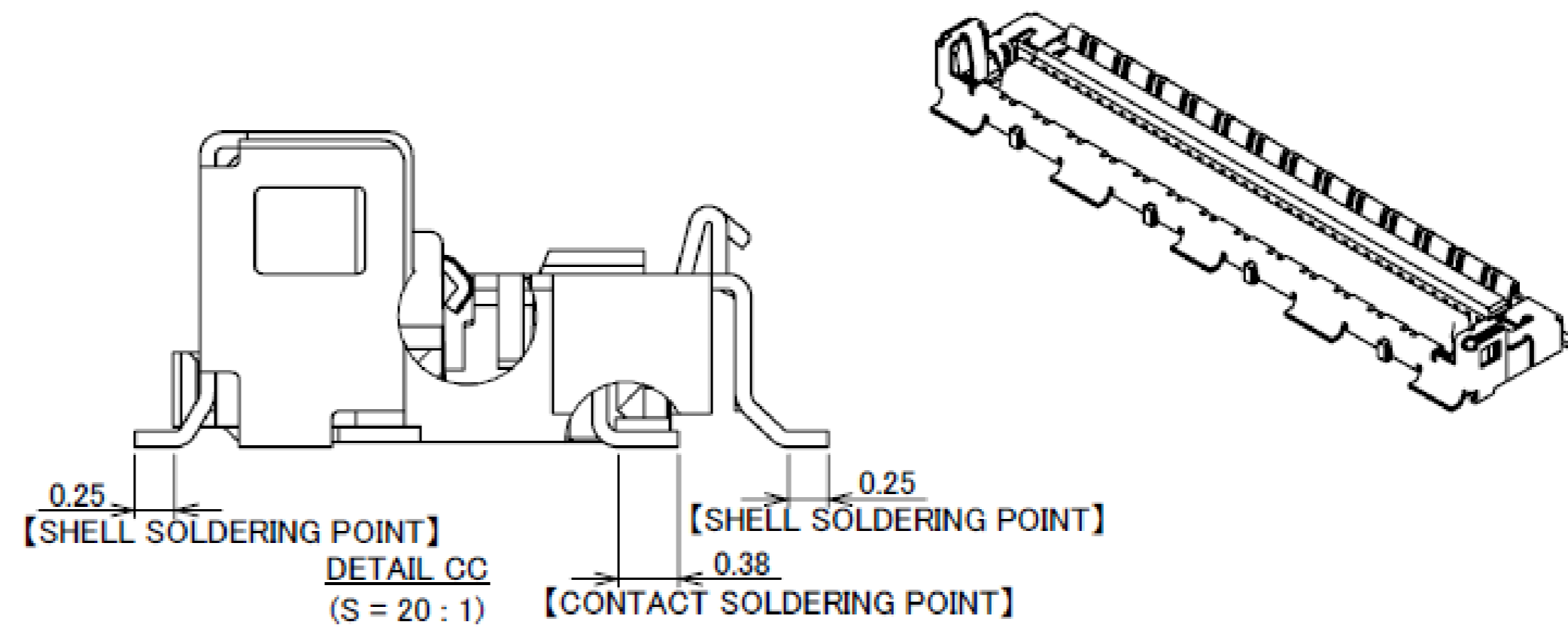
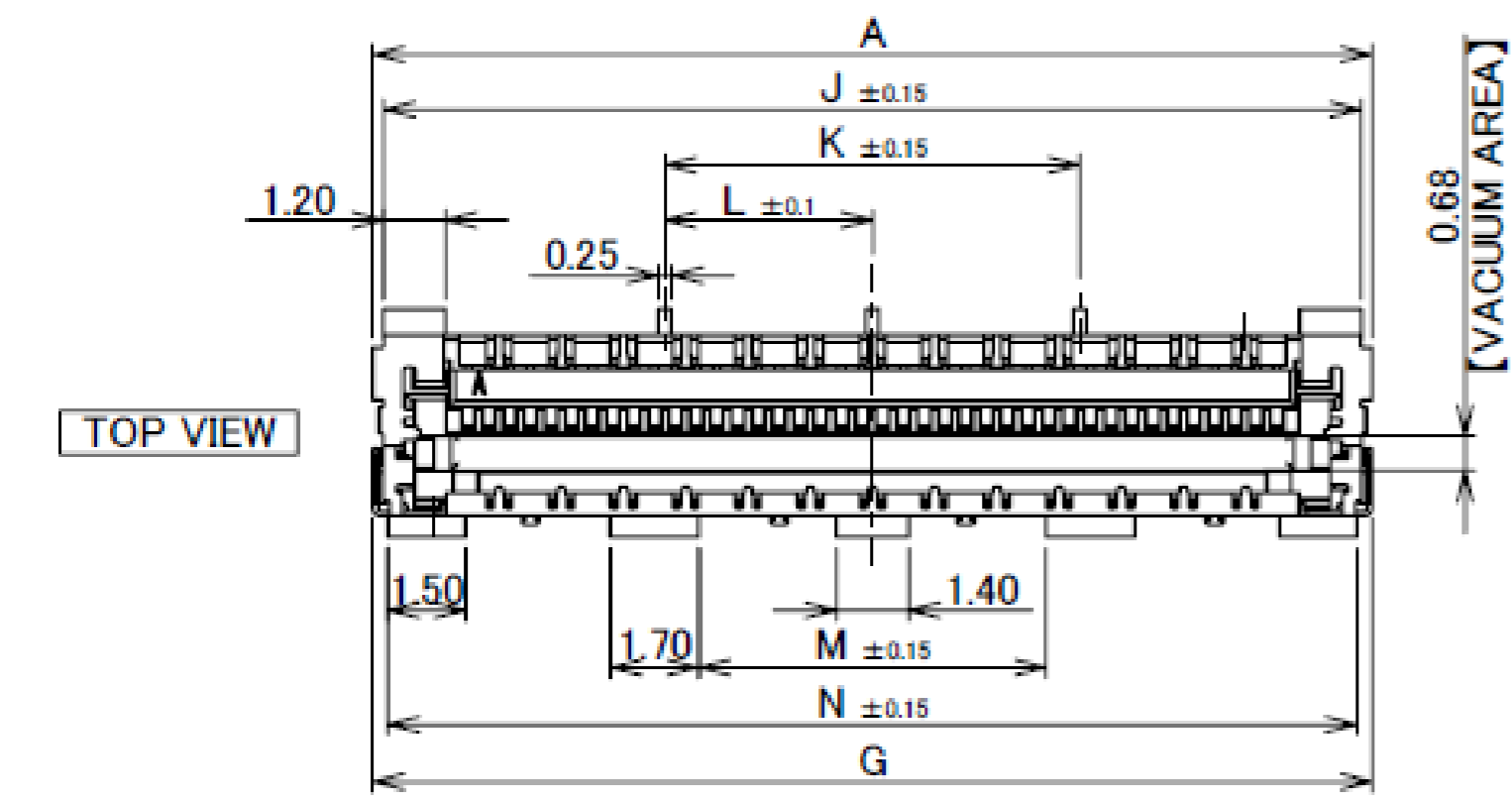
Contact your sales representative for more detailed information. www.i-pex.com

Receptacle Assembly

Recommended P/N 20879-0**E-01

PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N
20879-030E-02	30	15.27	11.60	12.07	15.27	13.65	14.87	4.00	-	7.09	14.69
20879-040E-02	40	19.27	15.60	16.07	19.27	17.65	18.87	8.00	4.00	6.70	18.69
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	11.20	10.70	26.69

02 TYPE

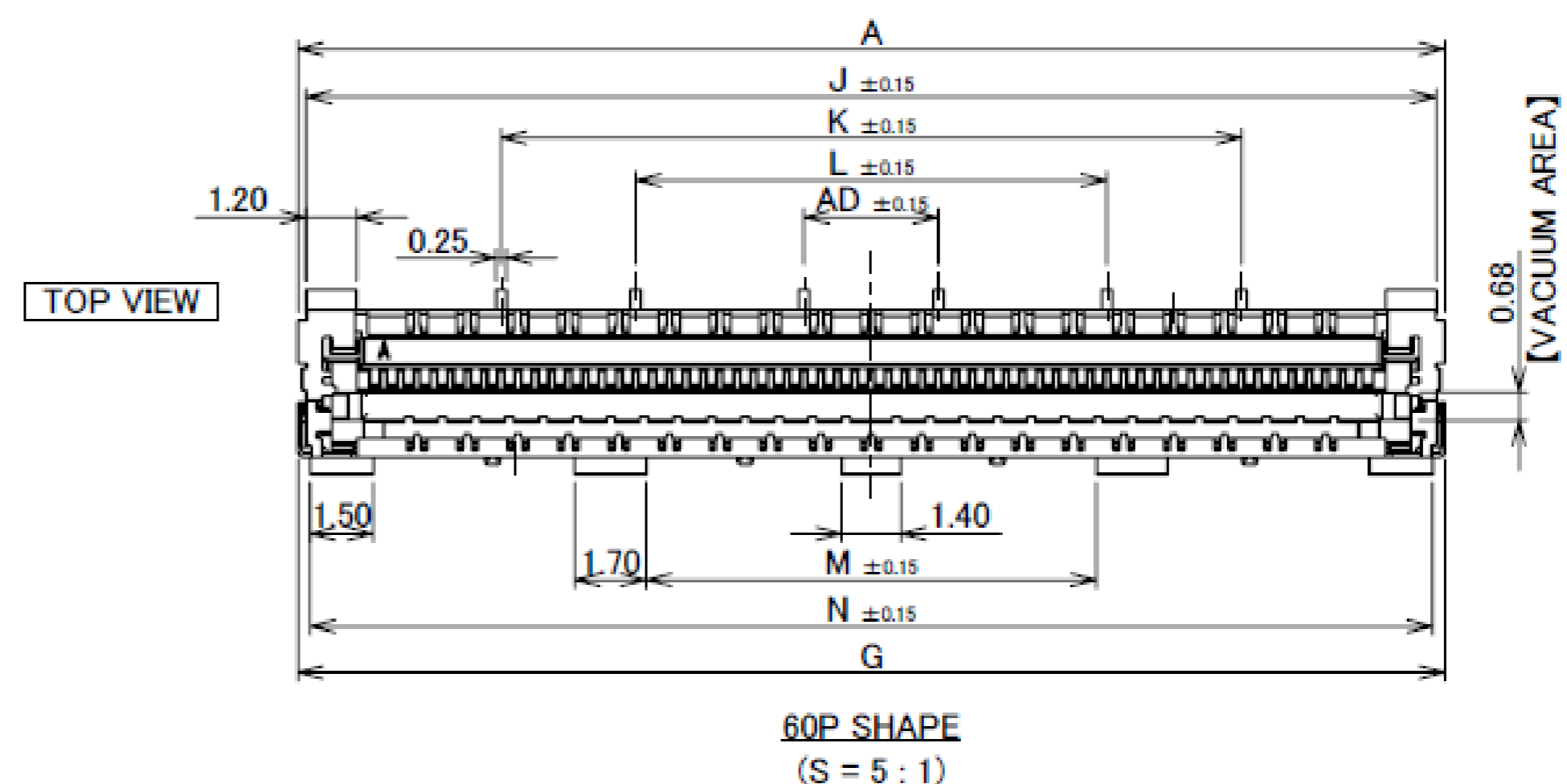
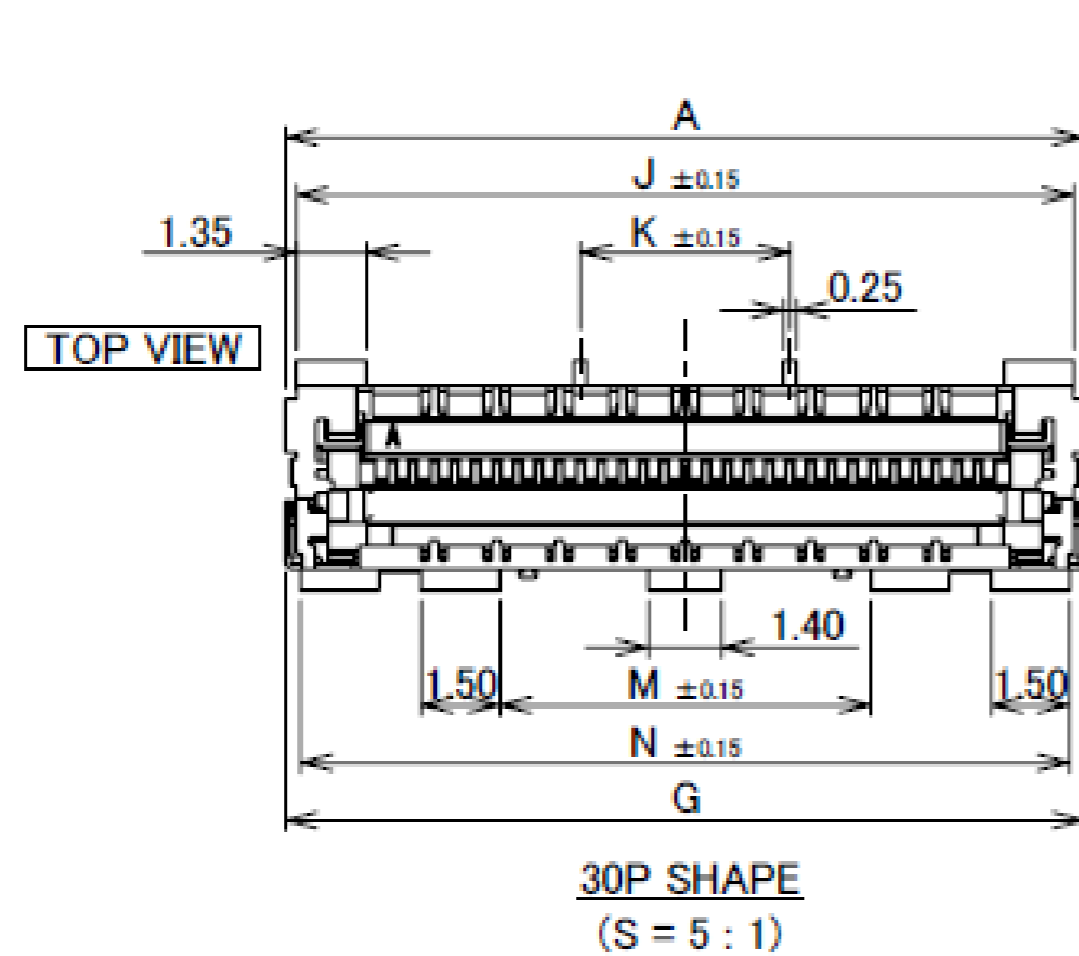
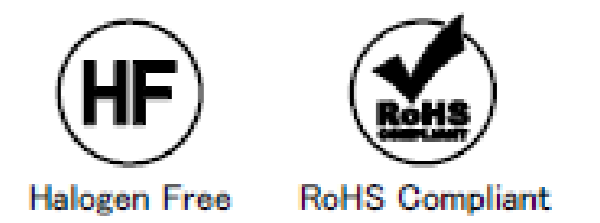


Rev.13

Recommended P/N 20879-0**E-01

PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N	AD
20879-030E-02	30	15.27	11.60	12.07	15.27	13.65	14.87	4.00	-	7.09	14.69	-
20879-040E-02	40	19.27	15.60	16.07	19.27	17.65	18.87	8.00	4.00	6.70	18.69	-
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	11.20	10.70	26.69	3.20

02 TYPE

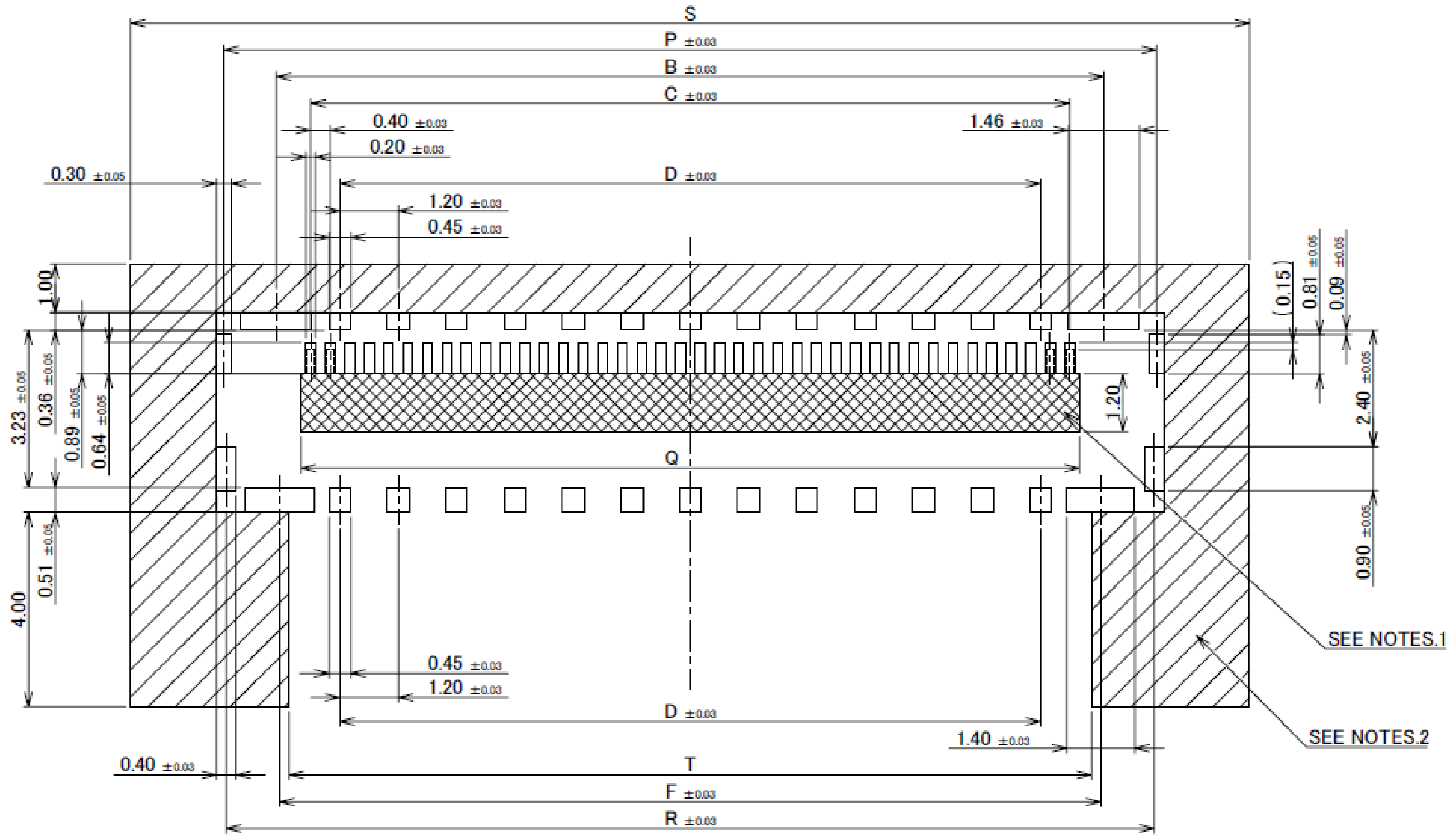


Rev.13

Receptacle Assembly

PART No.	Pos.	B	C	D	F	P	Q	R	S	T
20879-030E-#1	30	13.01	11.60	9.60	12.88	15.17	12.00	15.07	19.00	12.50
20879-040E-#1	40	17.01	15.60	14.40	16.88	19.17	16.00	19.07	23.00	16.50
20879-060E-#1	60	25.01	23.60	21.60	24.88	27.17	24.00	27.07	31.00	24.50

#1 TYPE



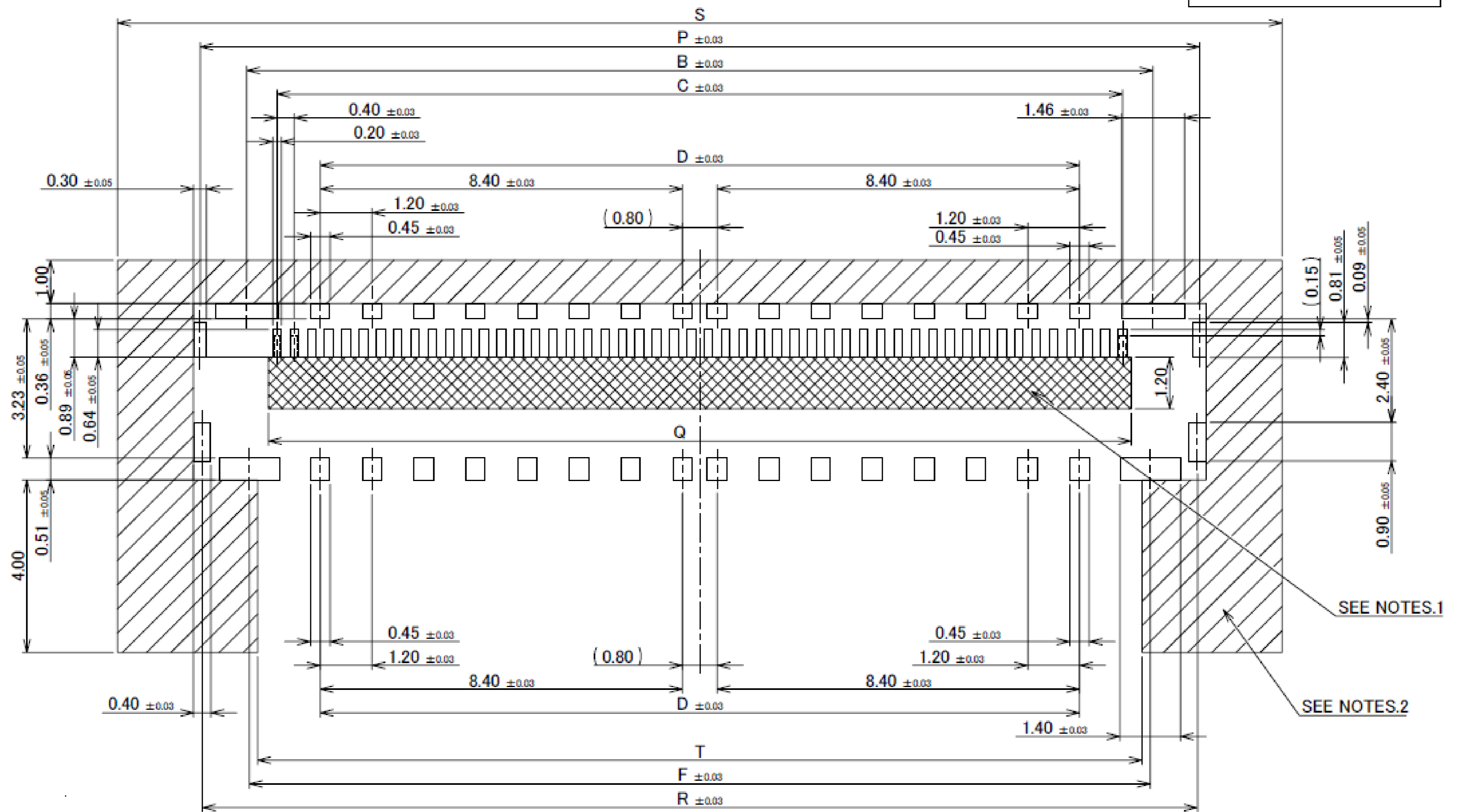
#1 TYPE 30P, 40P, 60P RECOMMENDED PCB LAYOUT
(S = 10 : 1)

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

Rev.13

PART No.	Pos.	B	C	D	F	P	Q	R	S	T
20879-050E-11	50	21.01	19.60	17.60	20.88	23.17	20.00	23.07	27.00	20.50

#1 TYPE



#1 TYPE 50P RECOMMENDED PCB LAYOUT
(S=10/1)

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

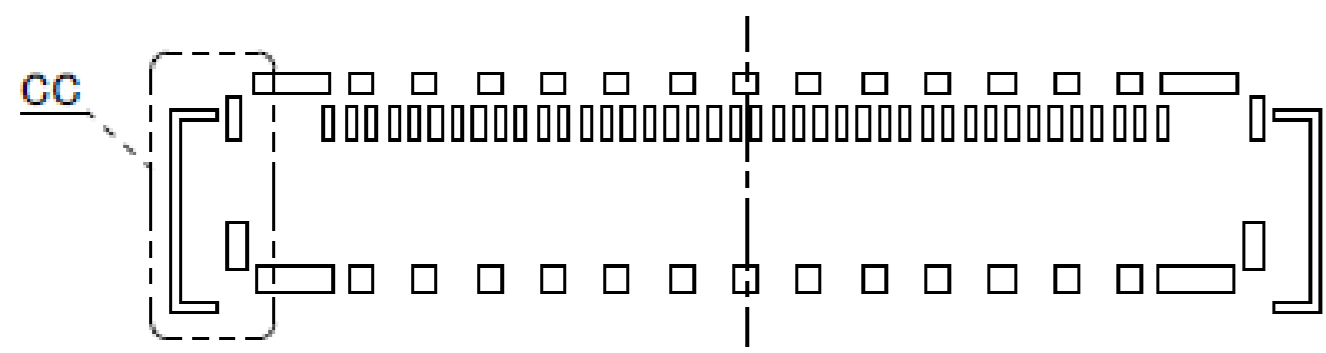
Rev.13

Receptacle Assembly

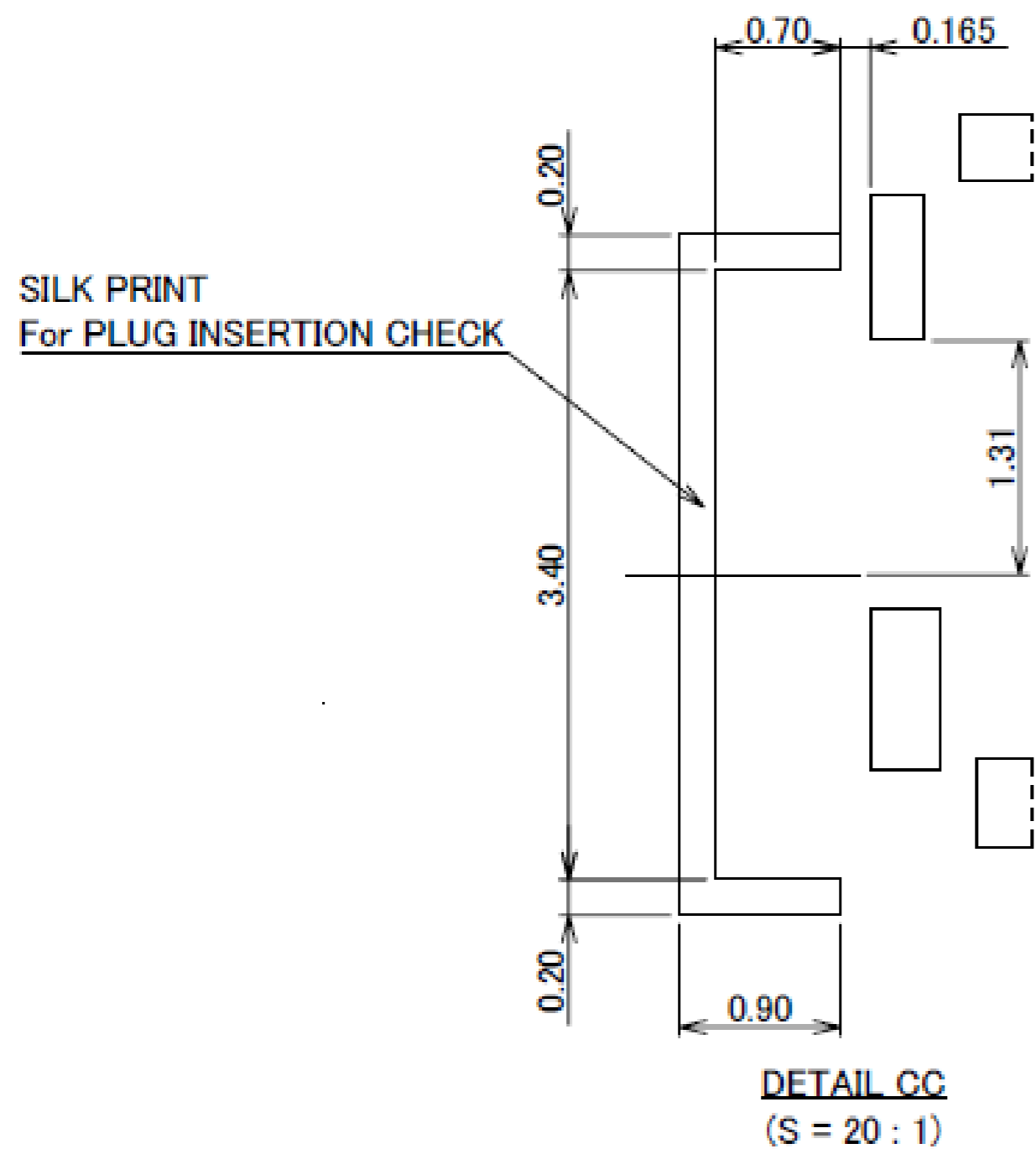
PART No.	Pos.
20879-030E-#1	30
20879-040E-#1	40
20879-060E-#1	60

#1 TYPE

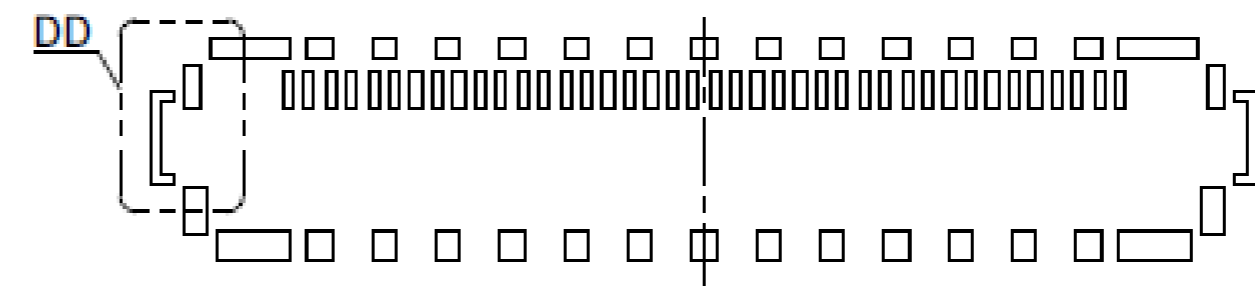
With LOCK COVER



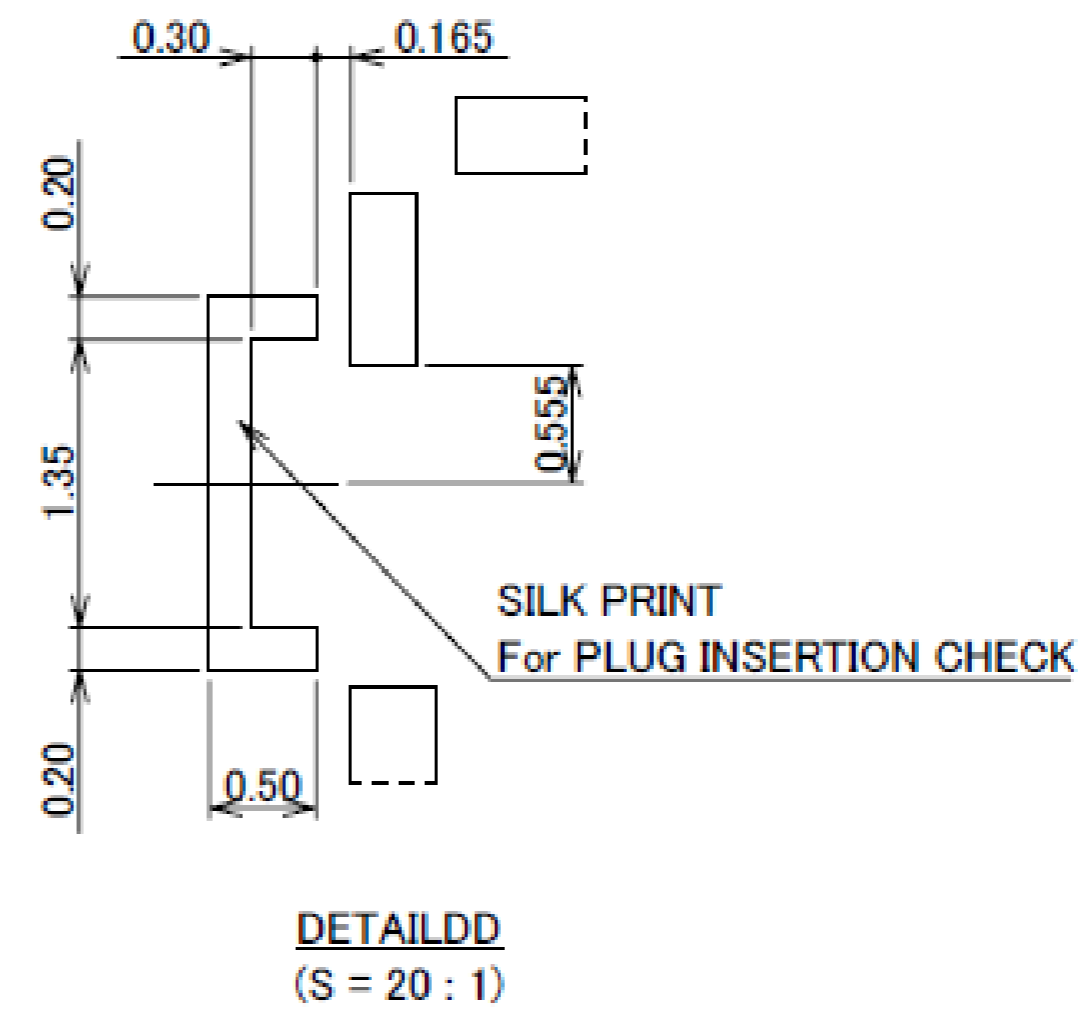
RECOMMENDED SILK PRINT For With LOCK COVER
(S = 5 : 1)



Without LOCK COVER & With PULL TAPE HOLDER



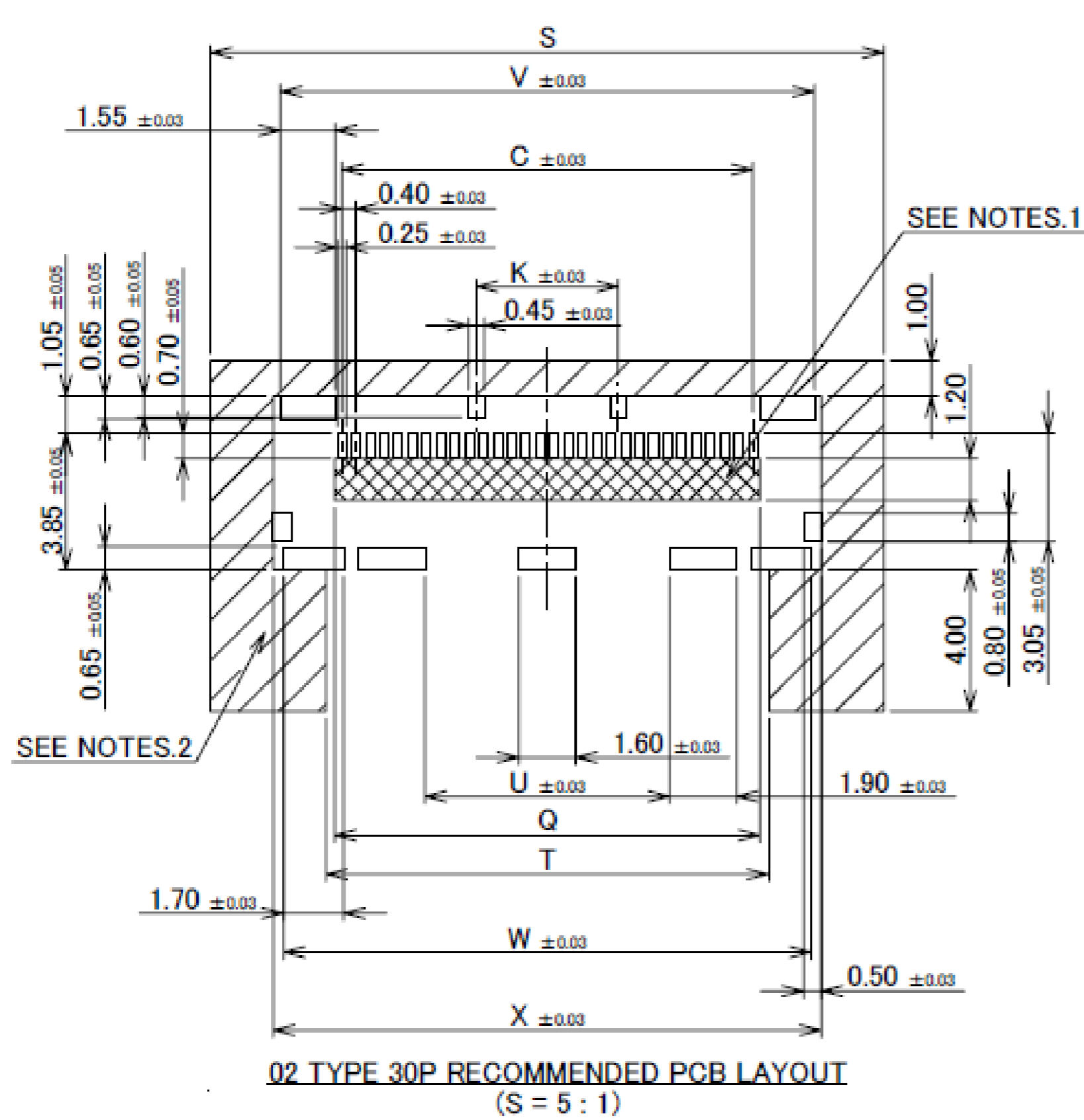
RECOMMENDED SILK PRINT For Without LOCK COVER
(S = 5 : 1)



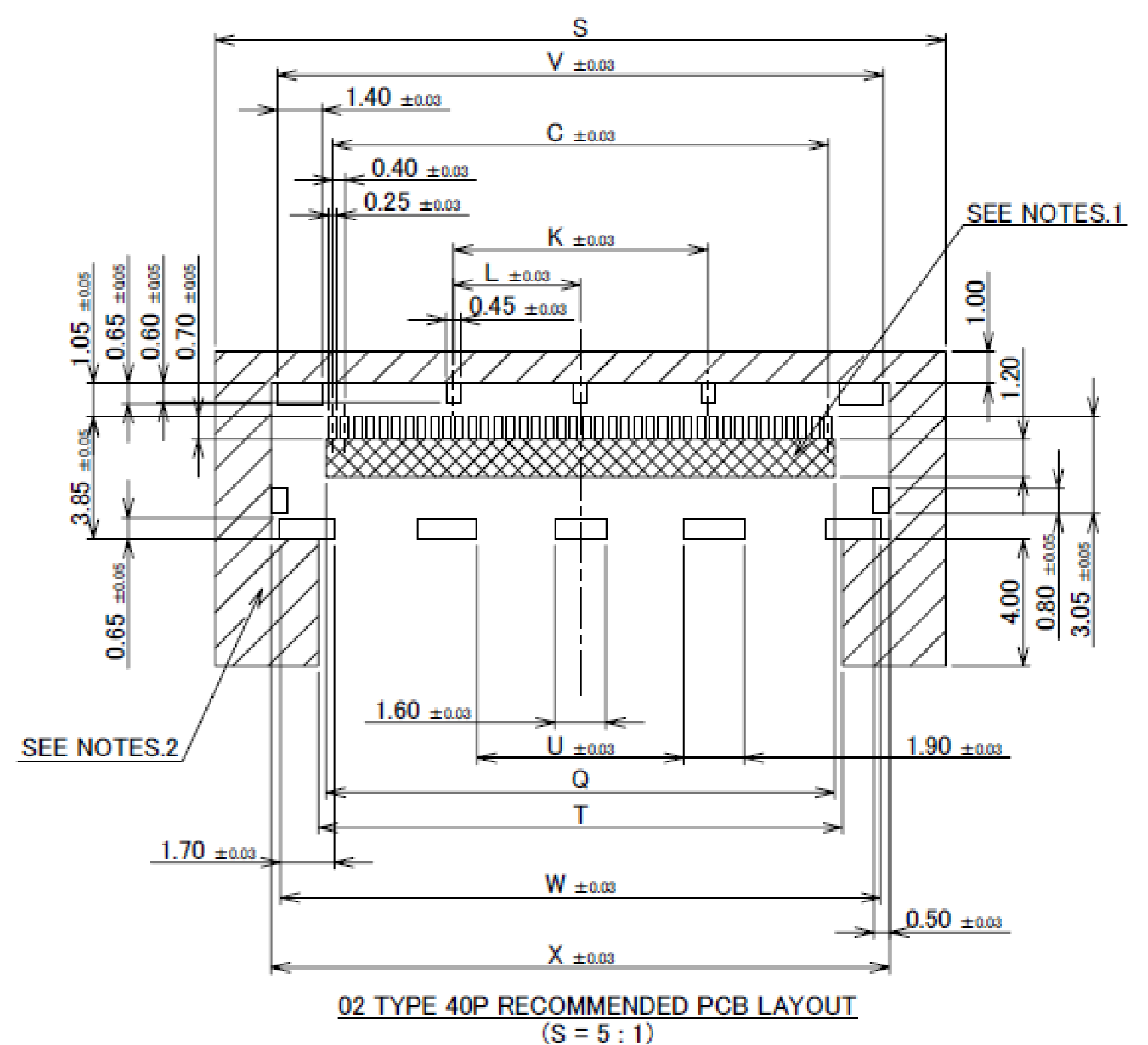
Rev.13

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X
20879-030E-02	30	11.60	4.00	-	12.00	19.00	12.50	6.89	15.07	14.89	15.47
20879-040E-02	40	15.60	8.00	4.00	16.00	23.00	16.50	6.50	19.07	18.89	19.47
20879-060E-02	60	23.60	17.60	11.20	24.00	31.00	24.50	10.50	27.07	26.89	27.47

02 TYPE



02 TYPE 30P RECOMMENDED PCB LAYOUT
(S = 5 : 1)



02 TYPE 40P RECOMMENDED PCB LAYOUT
(S = 5 : 1)

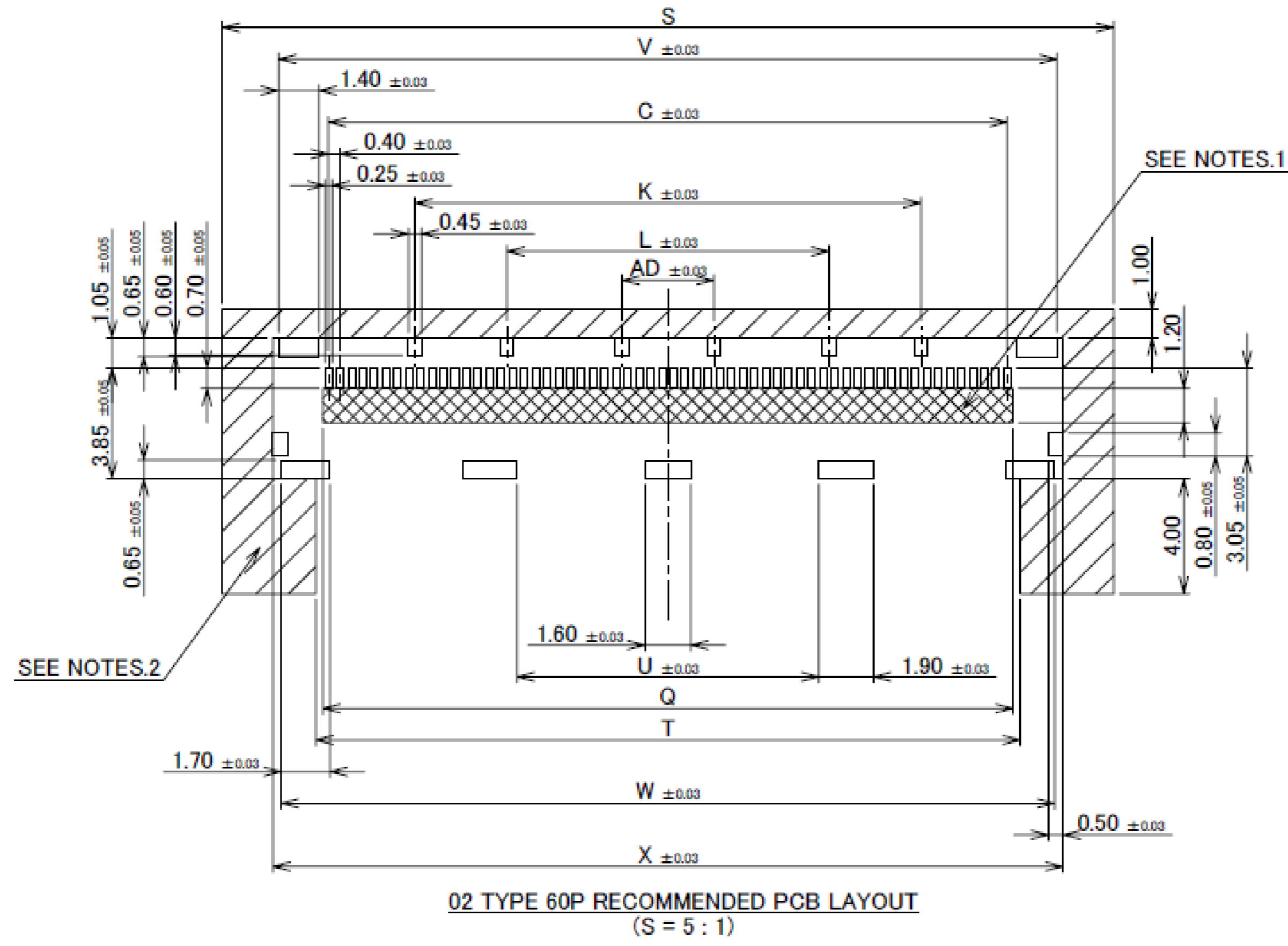
- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.13

Receptacle Assembly

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X	AD
20879-030E-02	30	11.60	4.00	-	12.00	19.00	12.50	6.89	15.07	14.89	15.47	-
20879-040E-02	40	15.60	8.00	4.00	16.00	23.00	16.50	6.50	19.07	18.89	19.47	-
20879-060E-02	60	23.60	17.60	11.20	24.00	31.00	24.50	10.50	27.07	26.89	27.47	3.20

02 TYPE

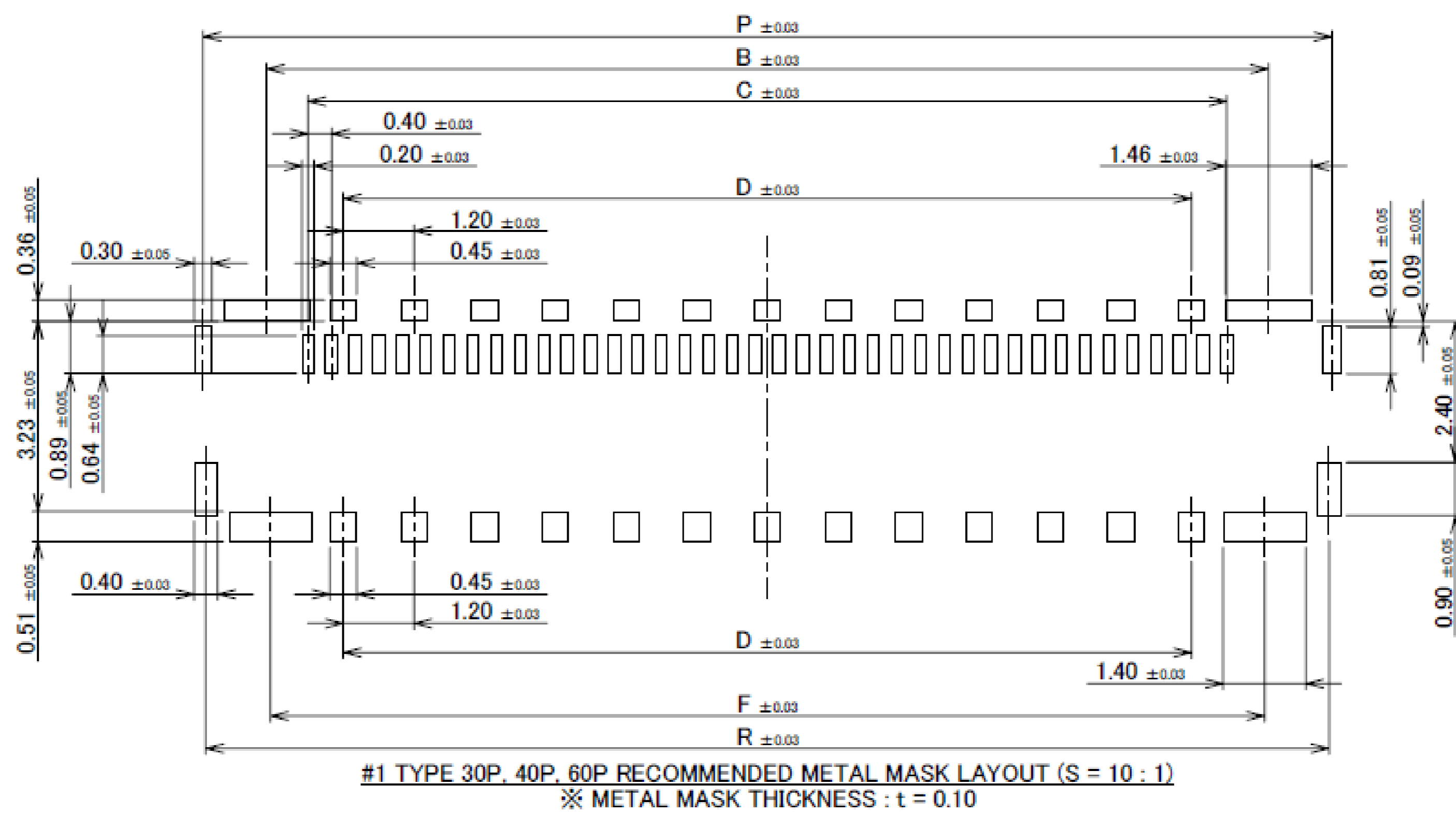


- NOTES.
 1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
 2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.13

PART No.	Pos.	B	C	D	F	P	R
20879-030E-#1	30	13.01	11.60	9.60	12.88	15.17	15.07
20879-040E-#1	40	17.01	15.60	14.40	16.88	19.17	19.07
20879-060E-#1	60	25.01	23.60	21.60	24.88	27.17	27.07

#1 TYPE

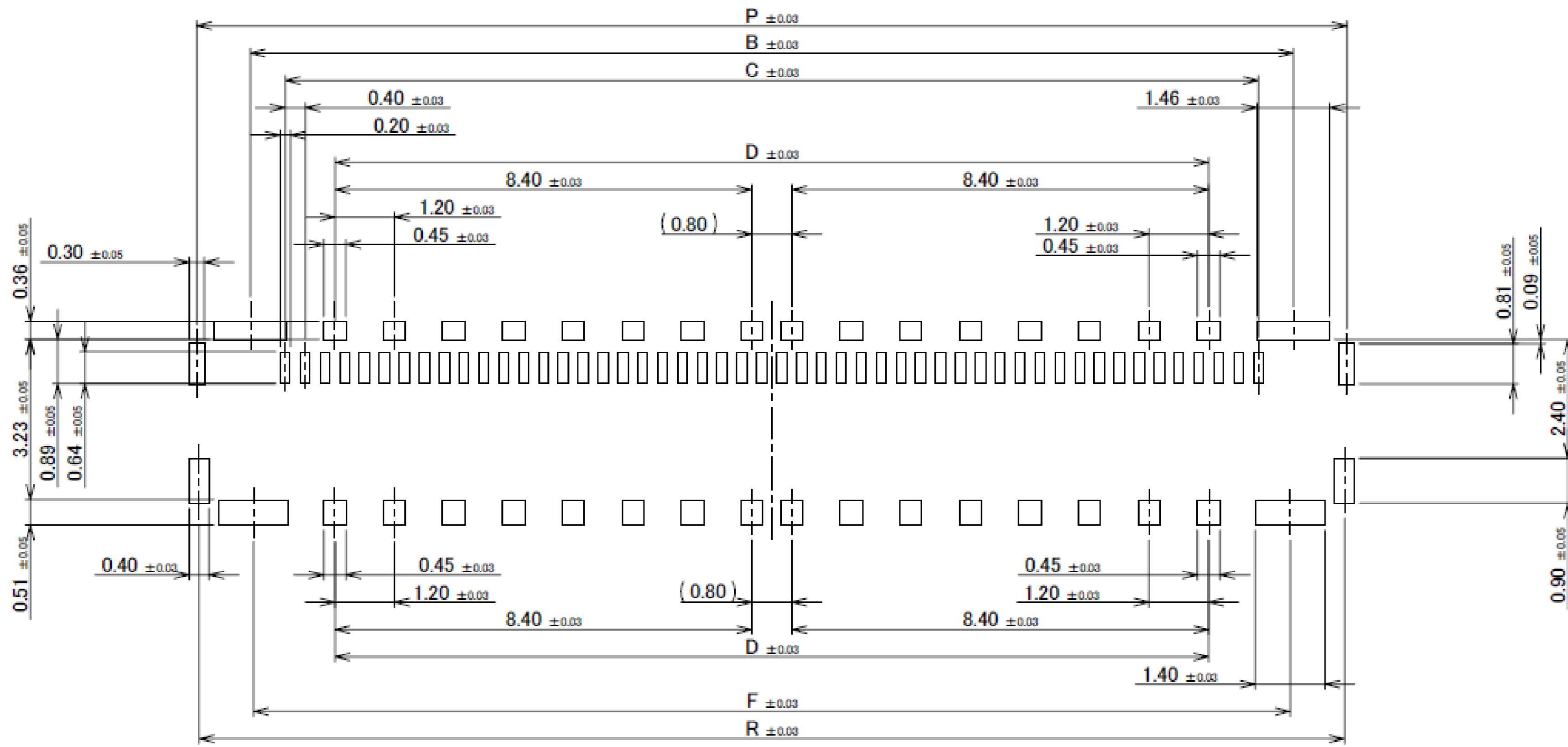


Rev.13

Receptacle Assembly

PART No.	Pos.	B	C	D	F	P	R
20879-050E-11	50	21.01	19.60	17.60	20.88	23.17	23.07

#1 TYPE



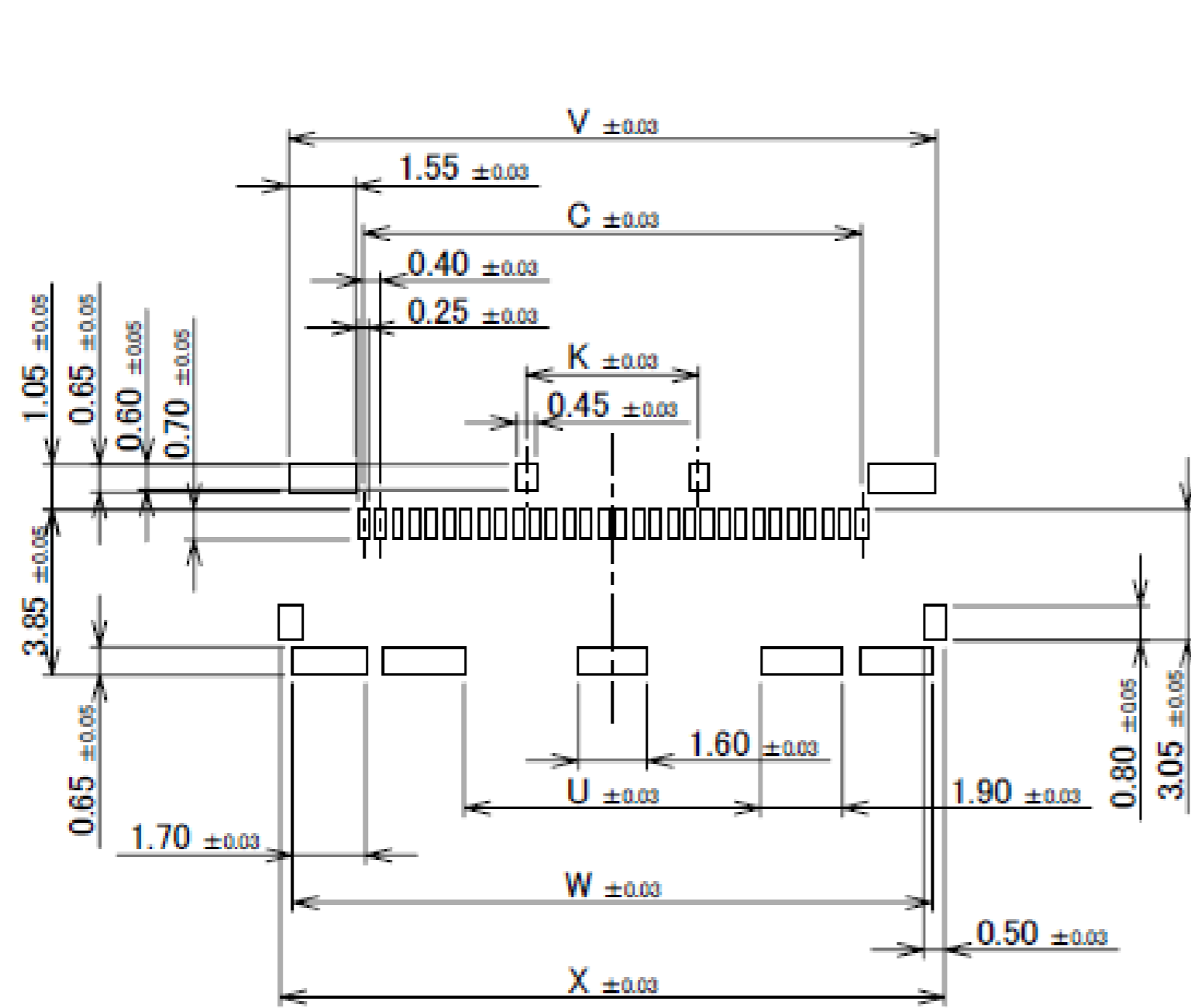
#1 TYPE 50P RECOMMENDED METAL MASK LAYOUT (S = 10 : 1)
※ METAL MASK THICKNESS : t = 0.10

Rev.13

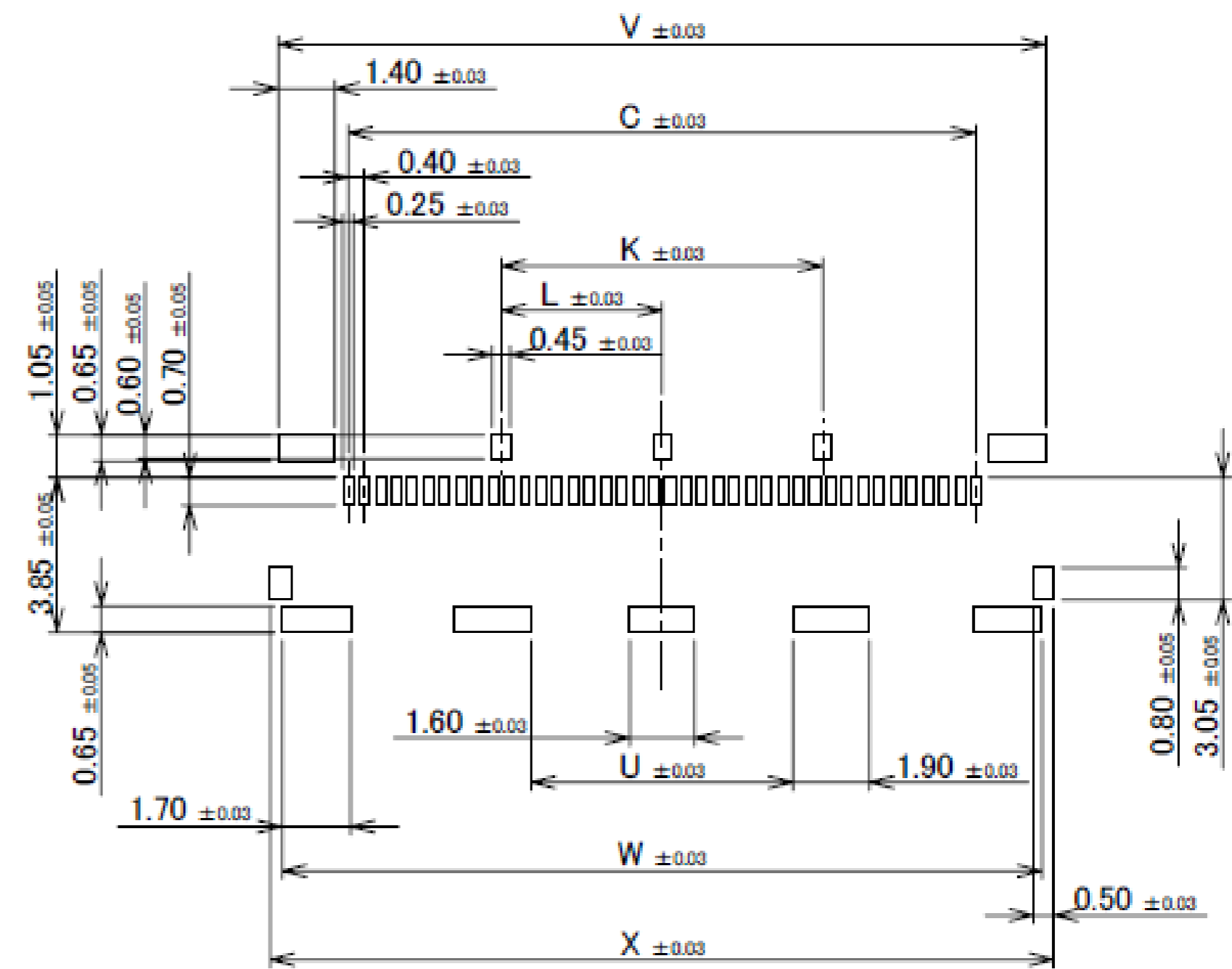
PART No.	Pos.	C	K	L	U	V	W	X
20879-030E-02	30	11.60	4.00	-	6.89	15.07	14.89	15.47
20879-040E-02	40	15.60	8.00	4.00	6.50	19.07	18.89	19.47
20879-060E-02	60	23.60	17.60	11.20	10.50	27.07	26.89	27.47

PATENT PENDING

02 TYPE



02 TYPE 30P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12



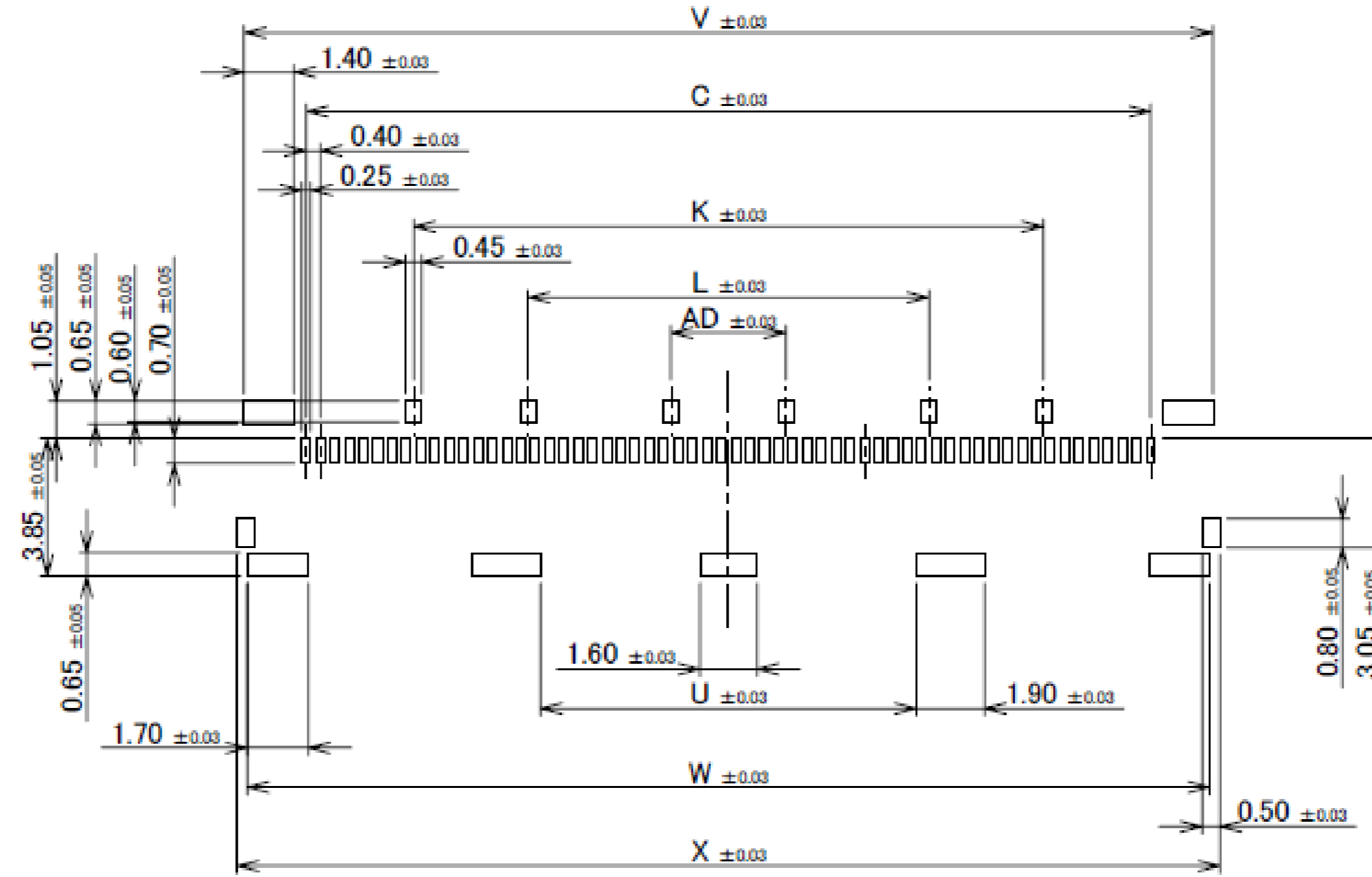
02 TYPE 40P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

Rev.13

Receptacle Assembly

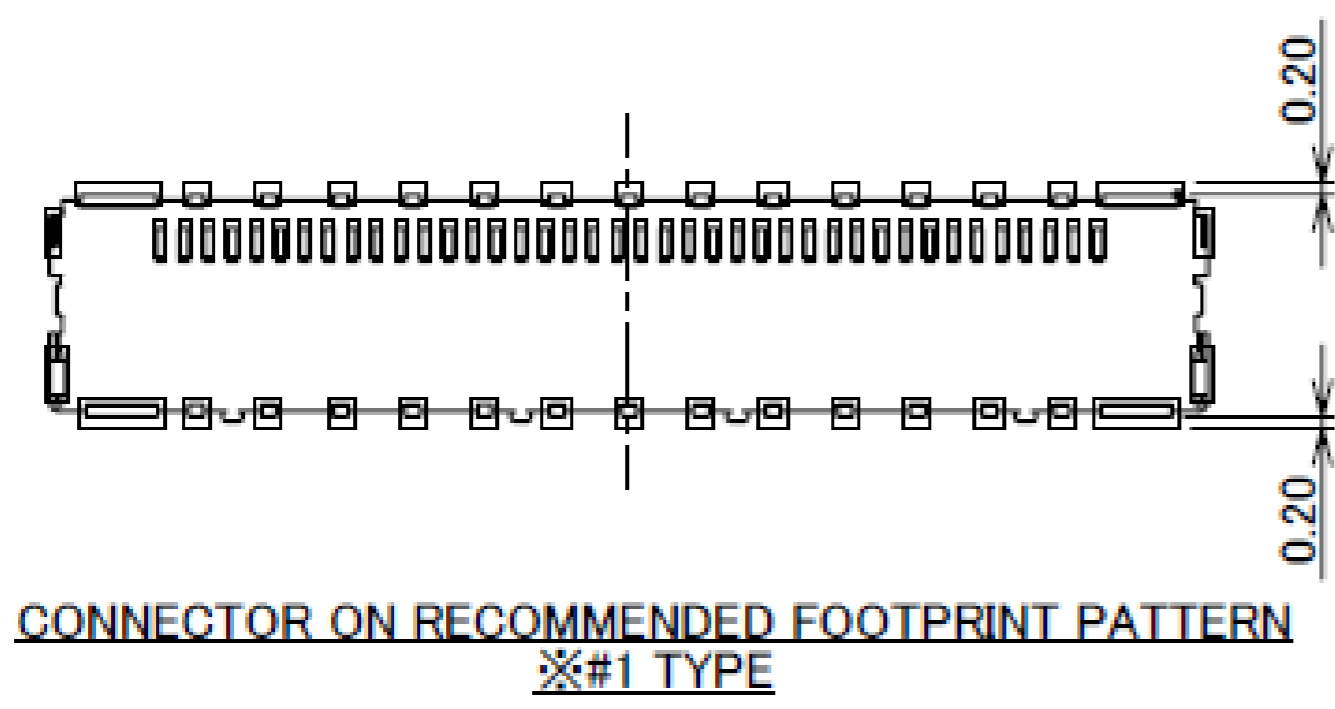
PART No.	Pos.	G	K	L	U	V	W	X	AD
20879-030E-02	30	11.60	4.00	-	6.89	15.07	14.89	15.47	-
20879-040E-02	40	15.60	8.00	4.00	6.50	19.07	18.89	19.47	-
20879-060E-02	60	23.60	17.60	11.20	10.50	27.07	26.89	27.47	3.20

02 TYPE

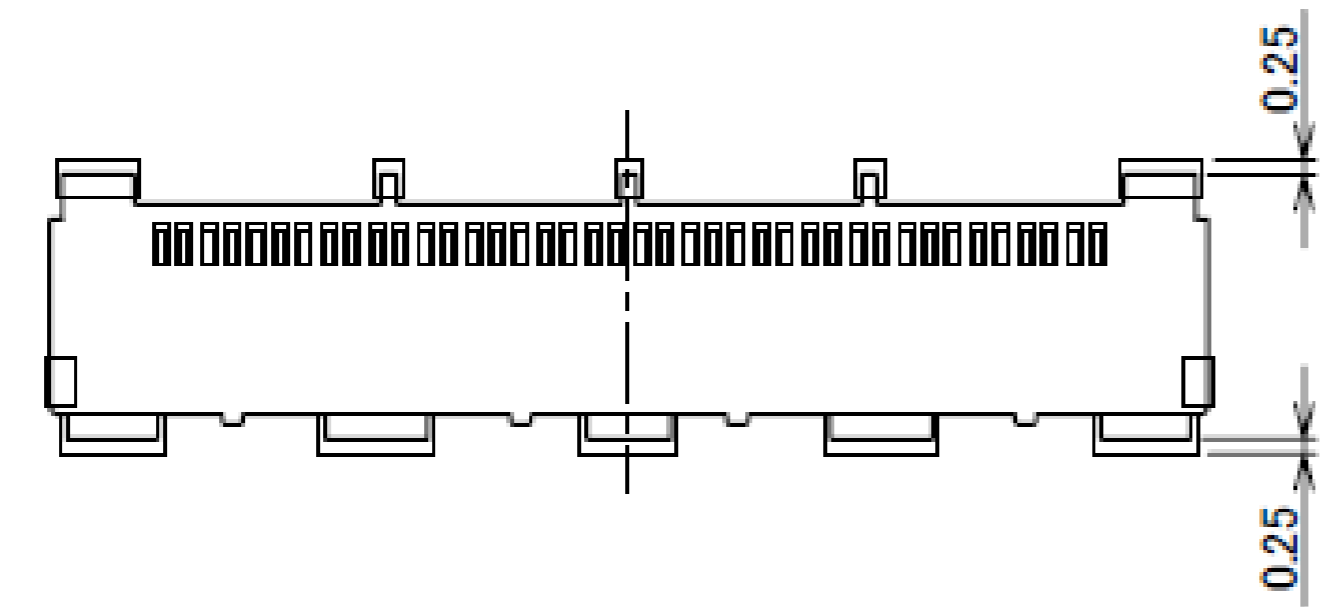


02 TYPE 60P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

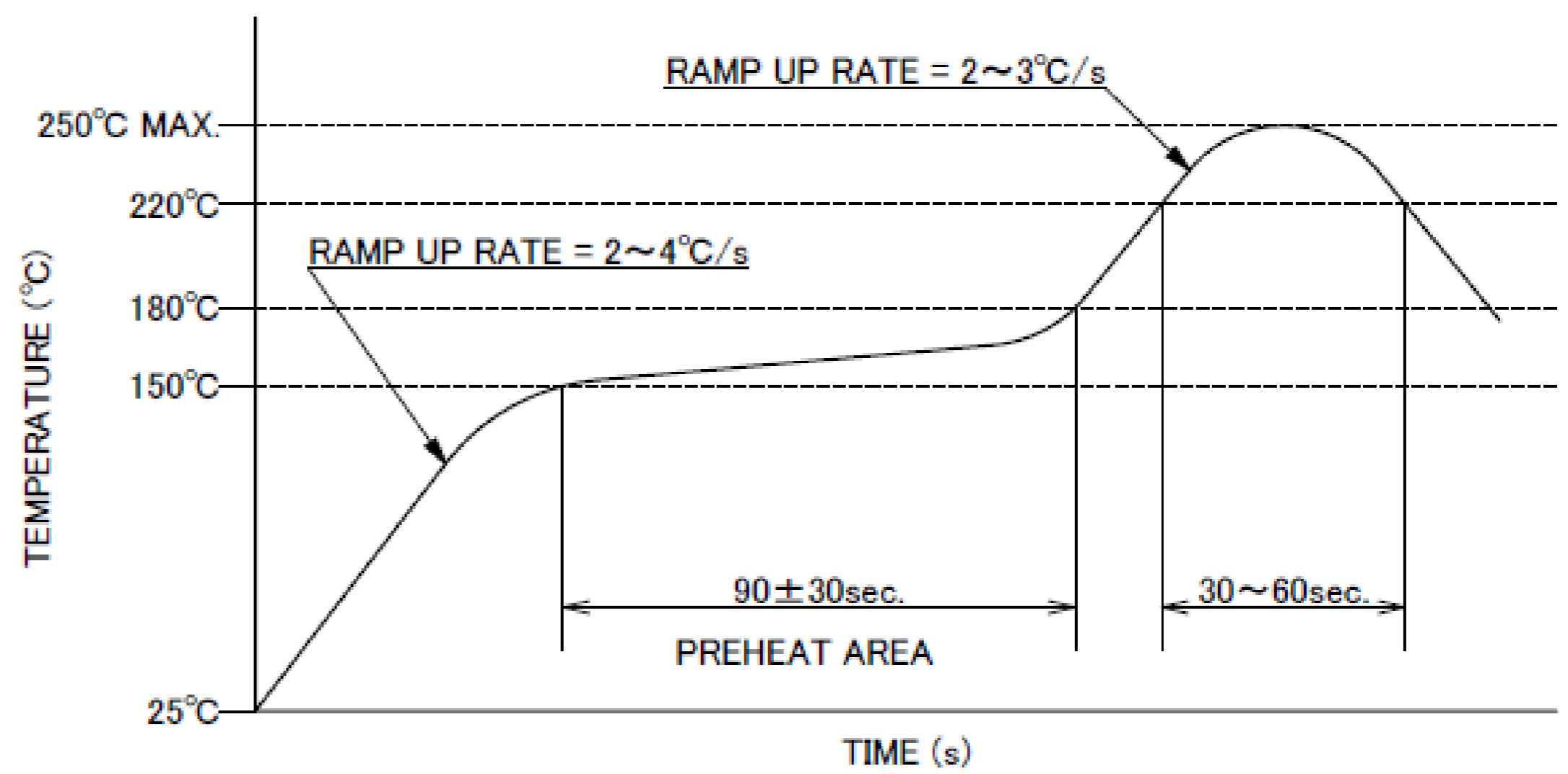
Rev.13



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※#1 TYPE



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※02 TYPE



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

Rev.13

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG# 36 , 34 TWINAX CABLE : AWG# 40 , 42
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 60 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN/UP TO 49 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 38 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 19 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN/UP TO 12 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT PIN/UP TO 10 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~378K(-40°C~+105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 180mohm MAX.(AWG#34) / AFTER TEST : \triangle 40mohm MAX. 275mohm MAX.(AWG#36) 380mohm MAX.(AWG#38) 600mohm MAX.(AWG#40) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \triangle 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 34.00N MAX. 50P : 46.00N MAX. 40P : 40.00N MAX. 60P : 52.00N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 3.0N MIN. 50P : 5.0N MIN. 40P : 4.0N MIN. 60P : 6.0N MIN.
CABLE RETENTION FORCE	30P : 14.70N MIN. 50P : 24.50N MIN. 40P : 19.60N MIN. 60P : 29.40N MIN.
PRODUCT SPECIFICATION	PRS-2514
TEST REPORT	TR-18067 (RECEPTACLE:20879-0**E-01) TR-18088 (RECEPTACLE:20879-0**E-02)
INSTRUCTION MANUAL	HIM-18033
ASSEMBLY MANUAL	ASM-18003
APPEARANCE CRITERIA No.	QLS-A***

Rev.14

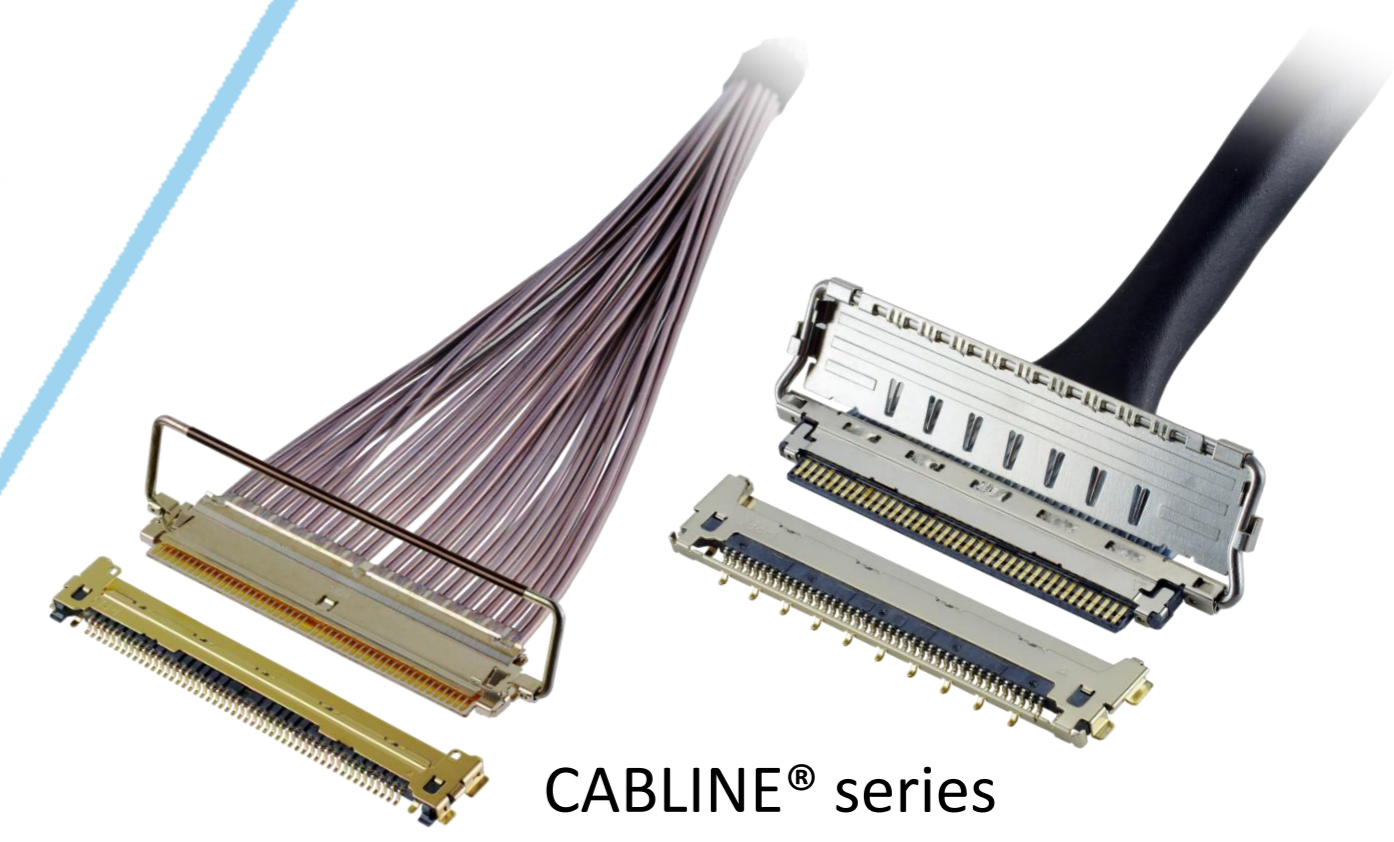
Custom Connectors Available

 RF Connector

MHF® series



CABLINÉ® series
Micro-coaxial/Twinax/
Discrete Wire Connector



Optical Module

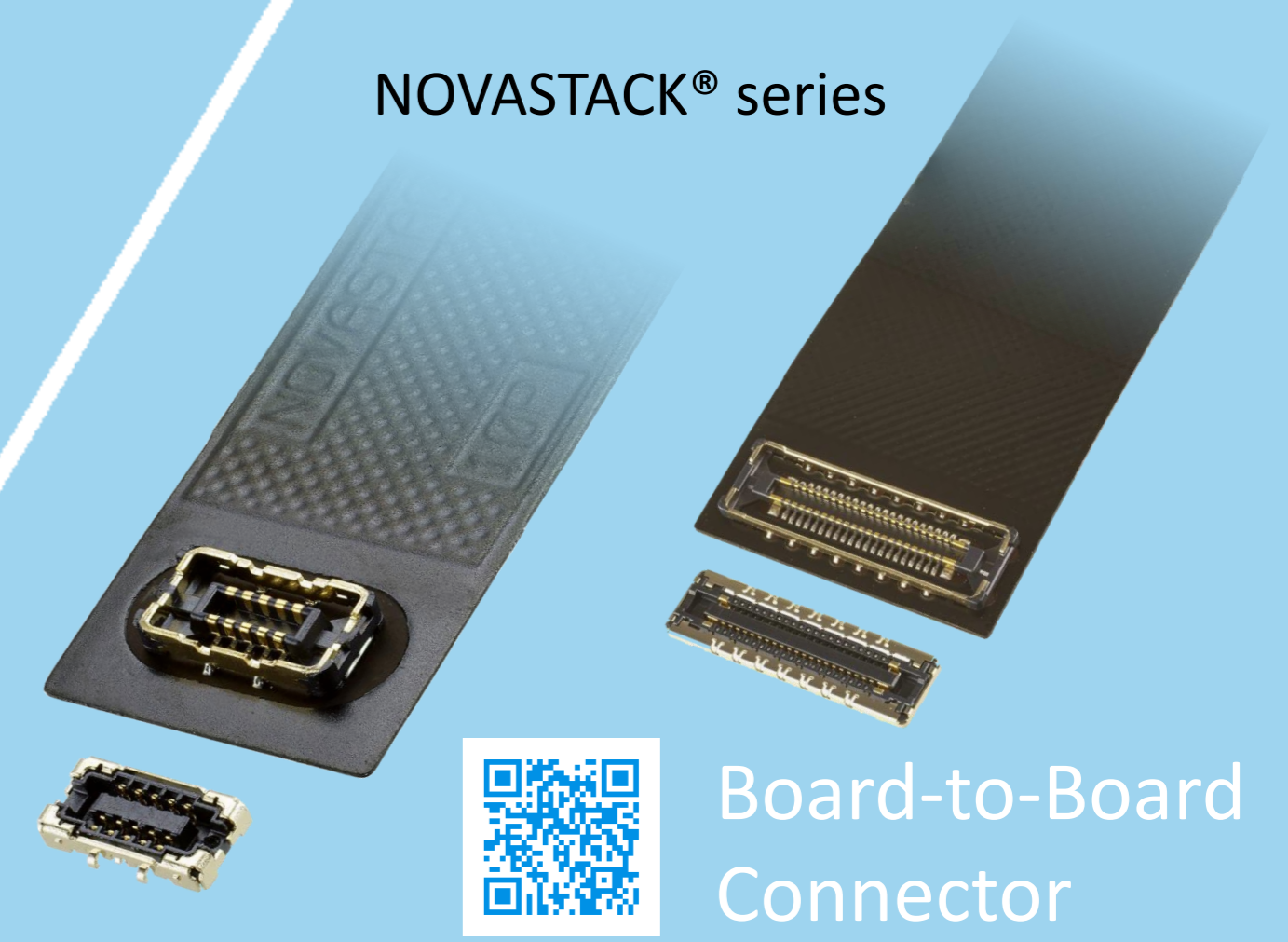
LIGHTPASS® series



NOVASTACK® series



Board-to-Board Connector



Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



FPC FFC Connector



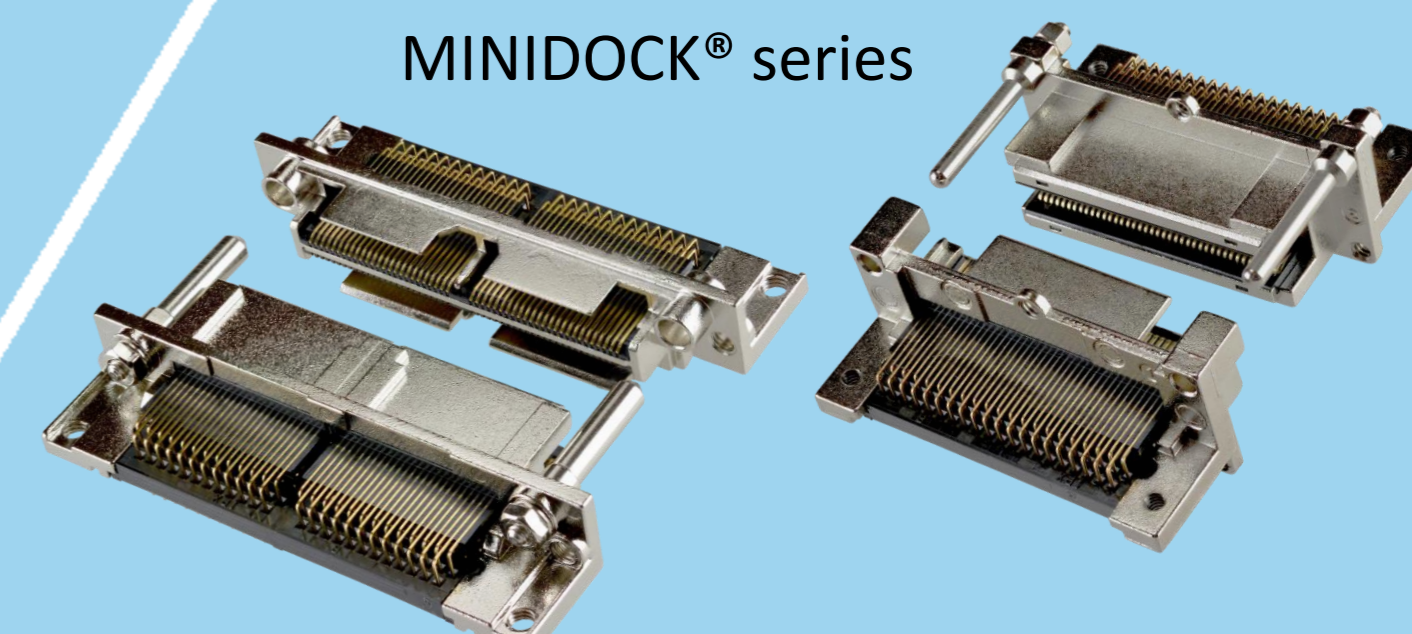
Inquiry



MINIDOCK® series



I/O Connector



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Contact your sales representative or more detailed information.

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