

# CABLINE® -UMF

Fully-shielded and multi-point ground, Mechanical lock, High-data-rate transfer (40 Gbps/lane PAM3), 0.4 mm pitch, Right angle vertical mating type FPC connector

**Product Specifications:**

Mating Type	Vertical (Right Angle)	
Board Pitch	0.4 mm	
Contact Mating Length	0.65 mm min.	
Mated Size	Height	2.2 +/- 0.15 mm
	Width	5.0 + (0.4 x pin count) mm
	Depth	5.0 mm
Pin Counts	Range	Up to 70
	Available	40, 70

**Applicable FPC:**

FPC Type	Shielded FPC / Non-shielded FPC
FPC Thickness	Contact Area: 0.34 +/-0.04 mm
	Ground Area: 0.34 +/-0.04 mm

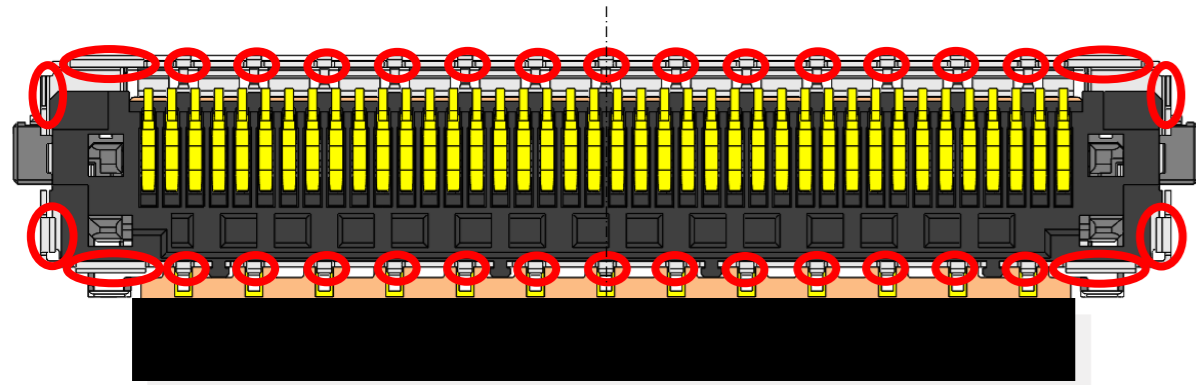
**Applicable Standards (Reference Only):**

USB4 Gen4 (40 Gbps/Lane PAM3), DP UHBR20 (20 Gbps/Lane), V-By-One US (16 Gbps/Lane)



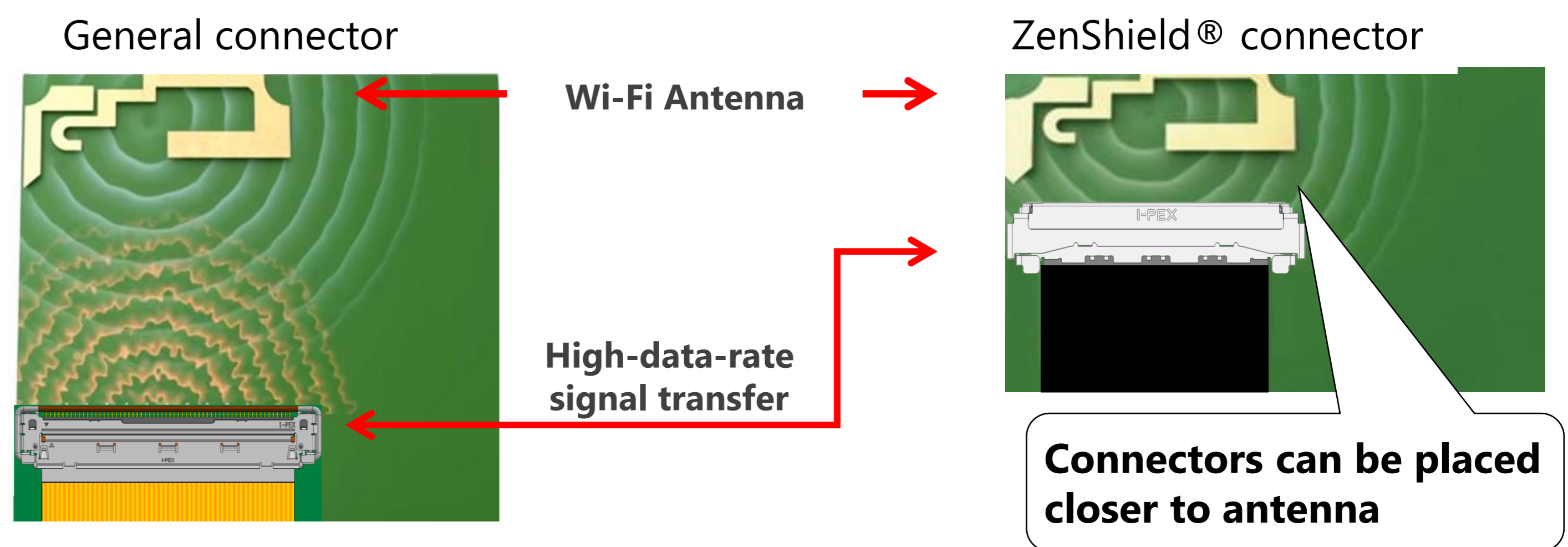
\* Please inquire for pin counts not listed or outside of the pin count range.

## ZenShield® fully-shielded with multi-point grounds is ideal for EMC solutions



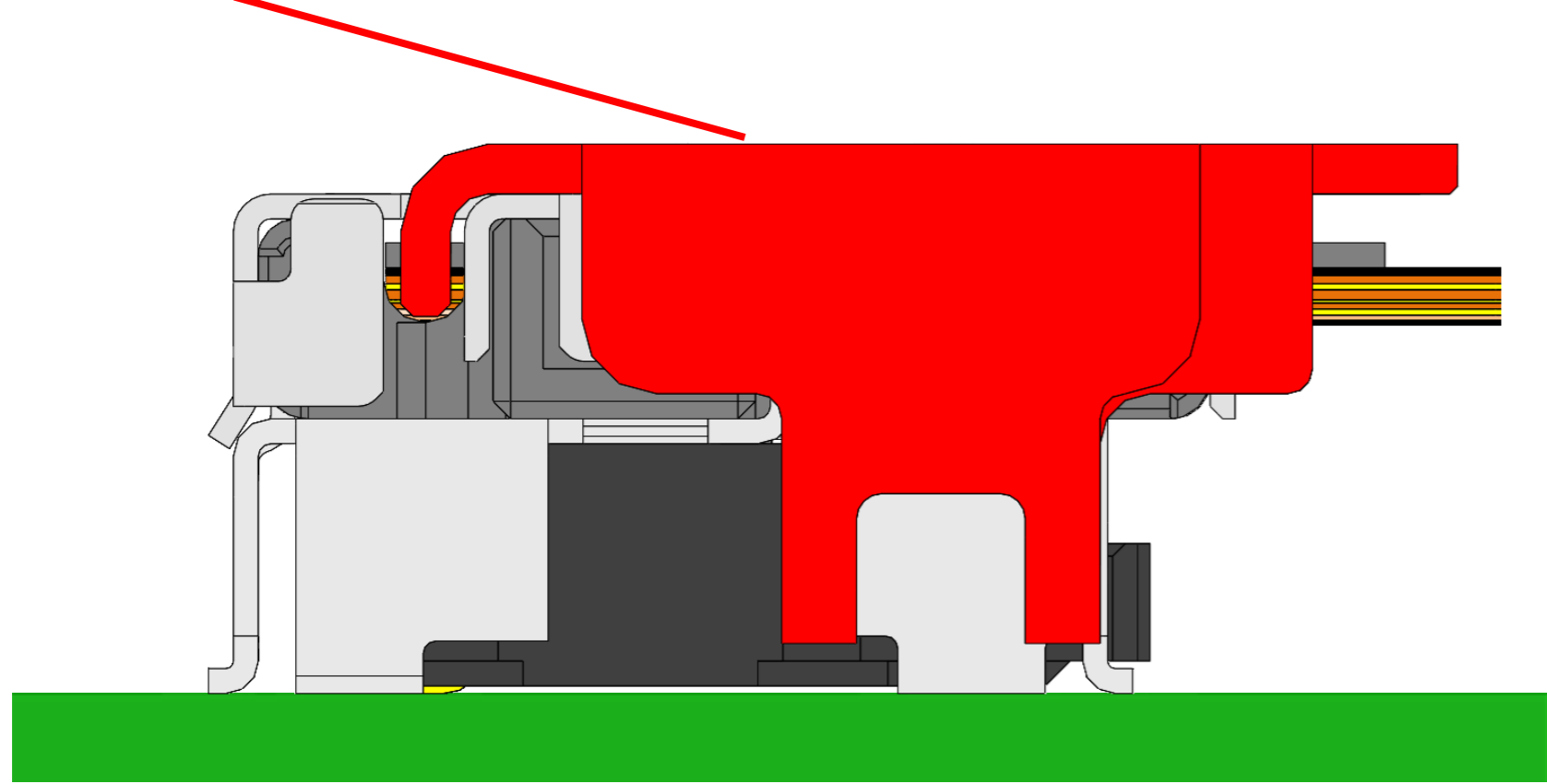
View From Underside

○ Ground SMT points

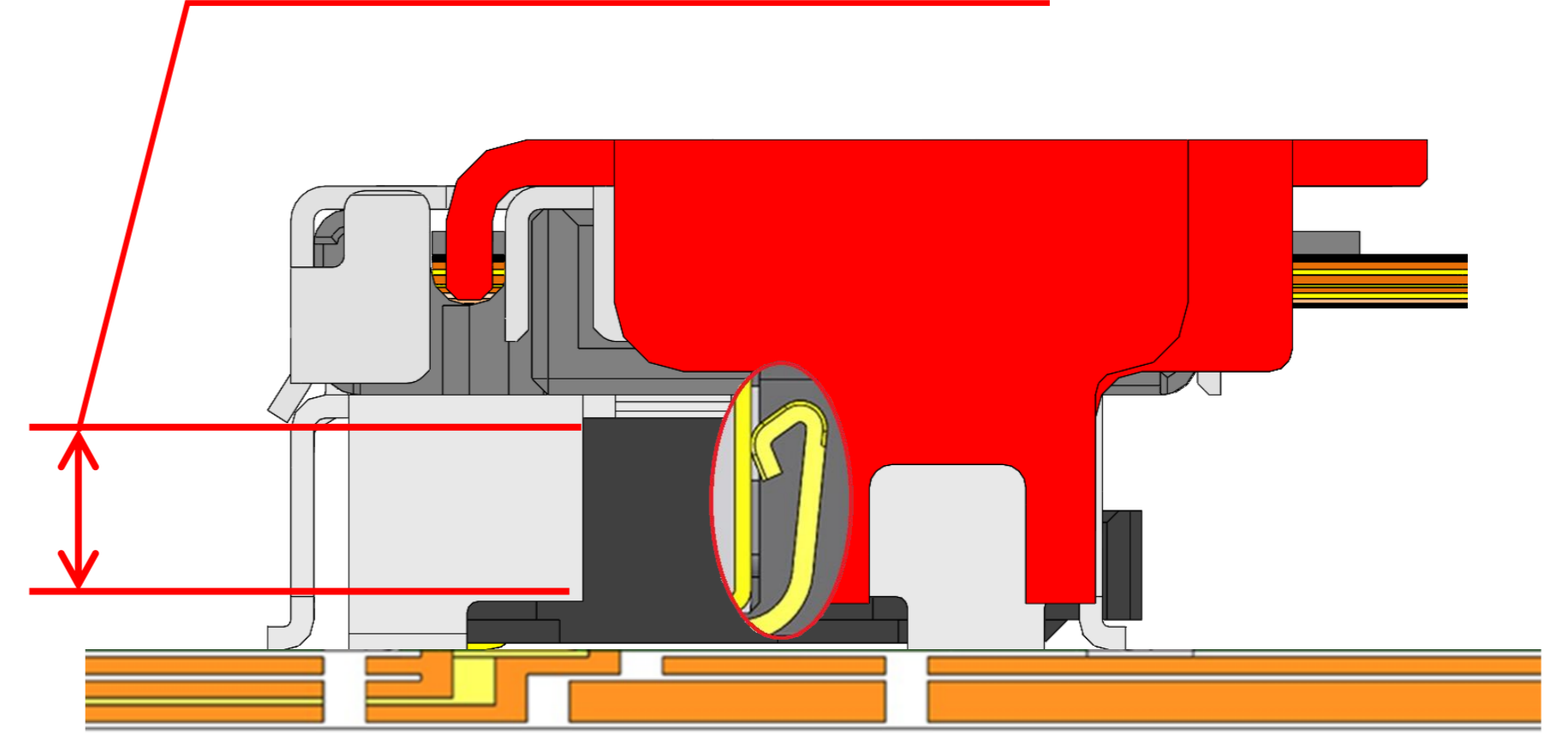


## Lock cover and 0.65 mm min. contact mating length provides high contact reliability

With Lock Cover ---enhanced mating retention force



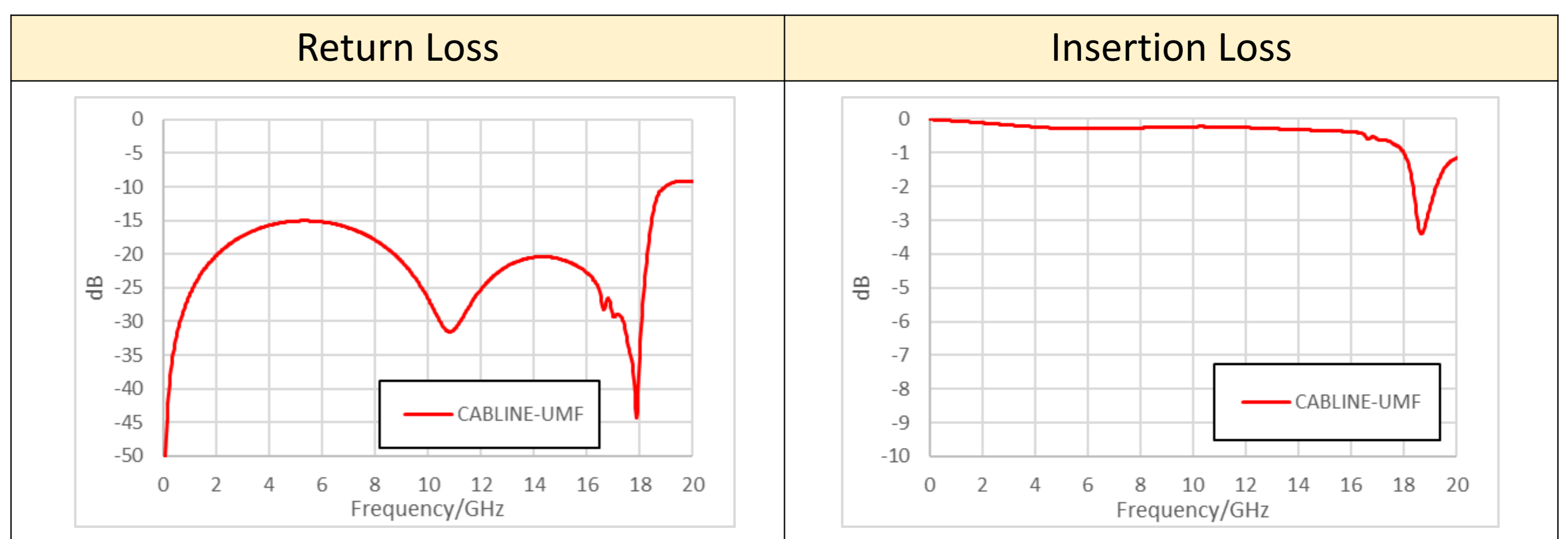
Contact mating length: 0.65 mm min.



## High-data-rate transfer, ideal for 40 Gbps/lane PAM3 applications

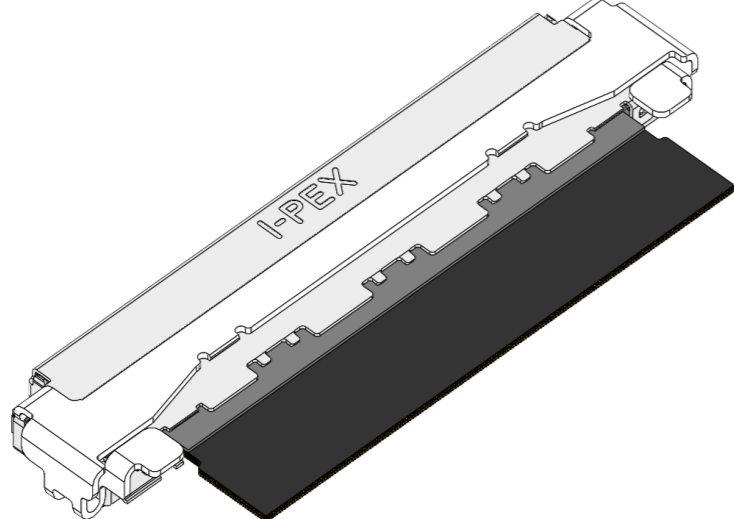
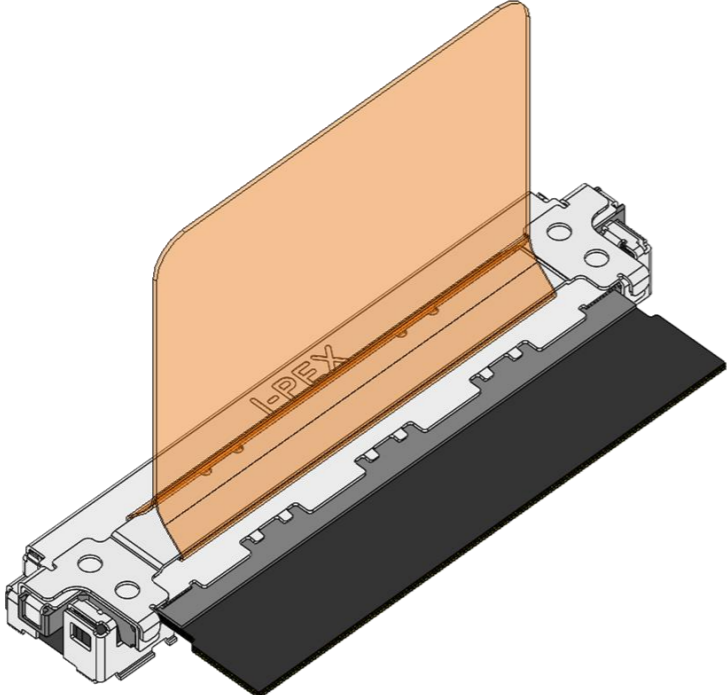
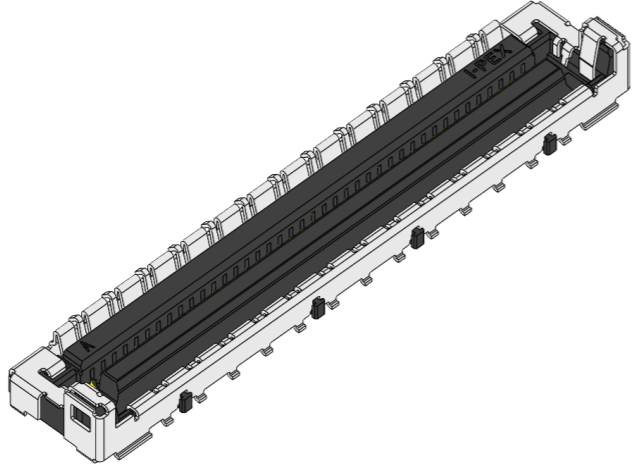
**Simulation results**

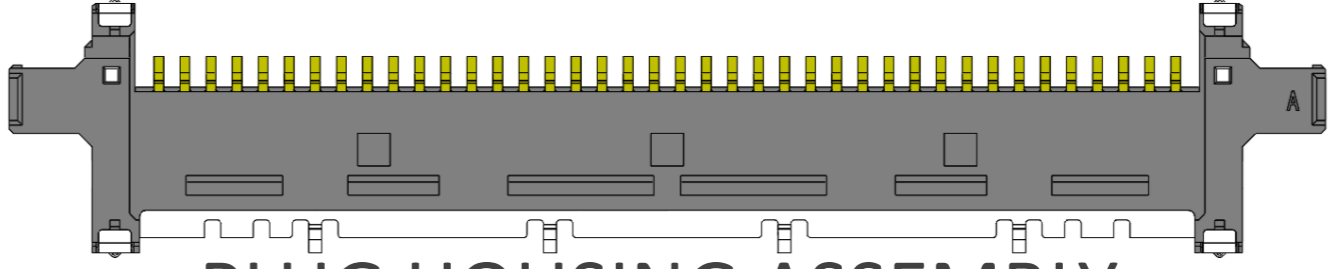


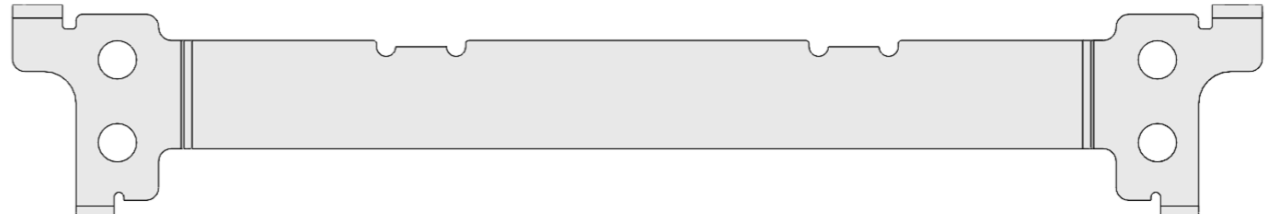
Connector:  
 PLUG: CABLINE-UMF  
 RECEPTACLE: CABLINE-UM  
 Pin Assignment: GSSGSSG



# Component Parts Details

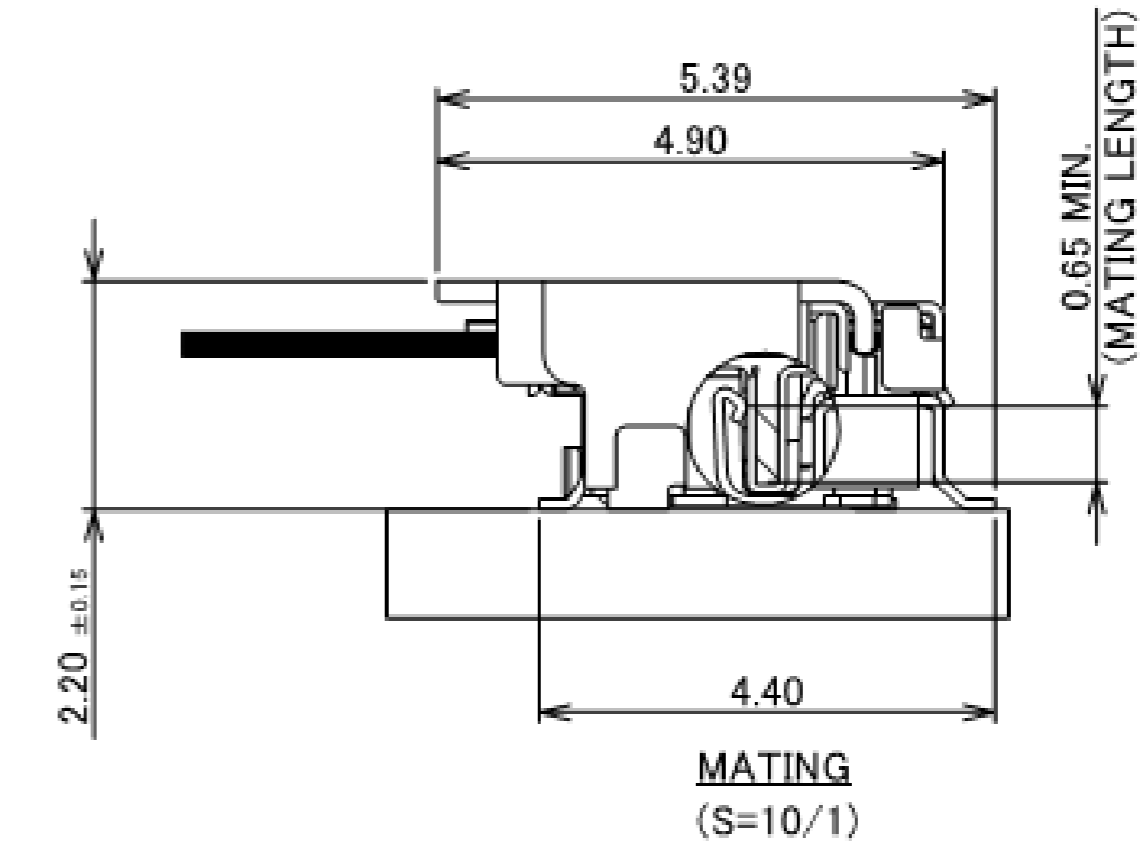
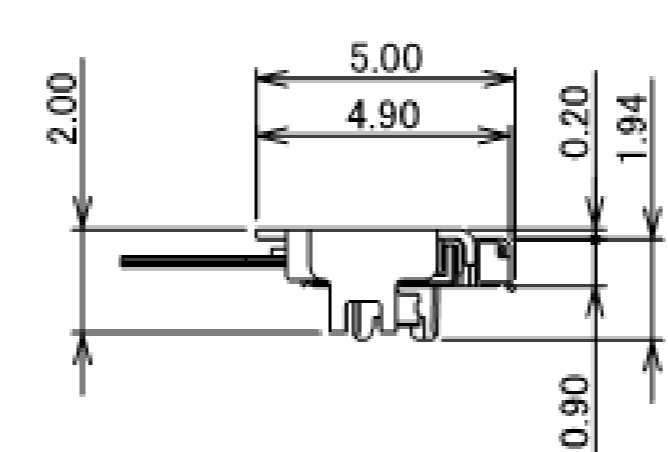
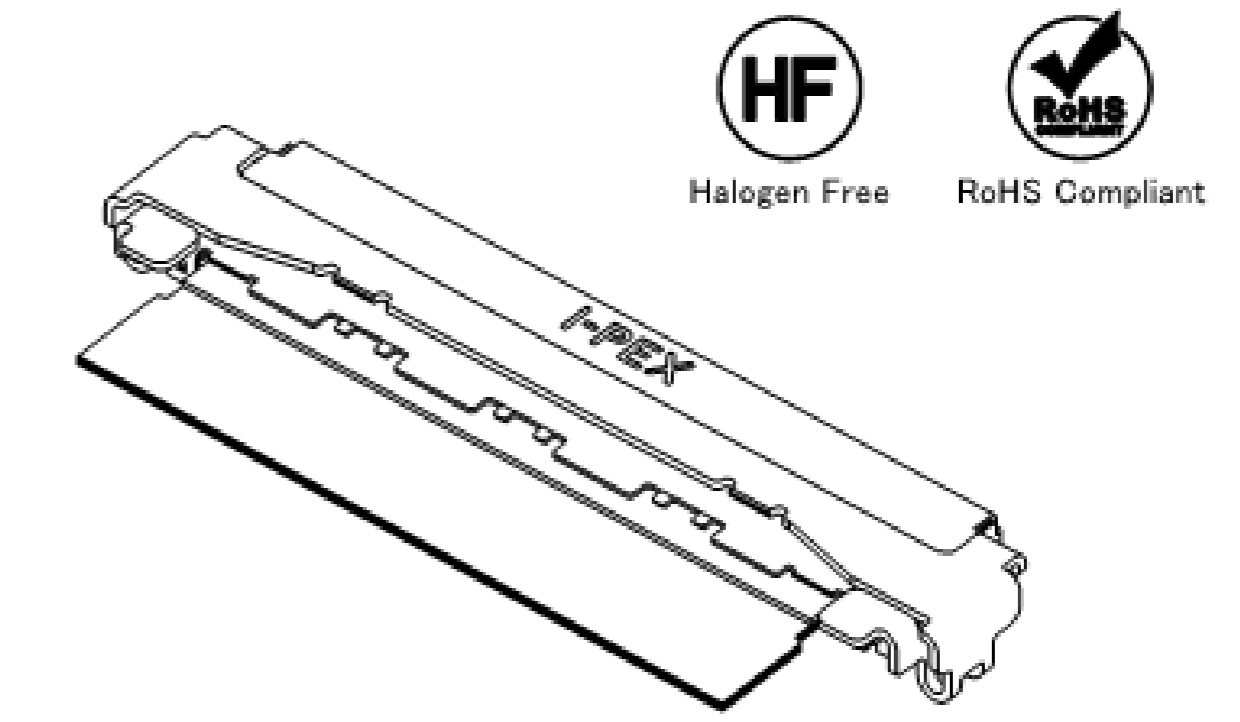
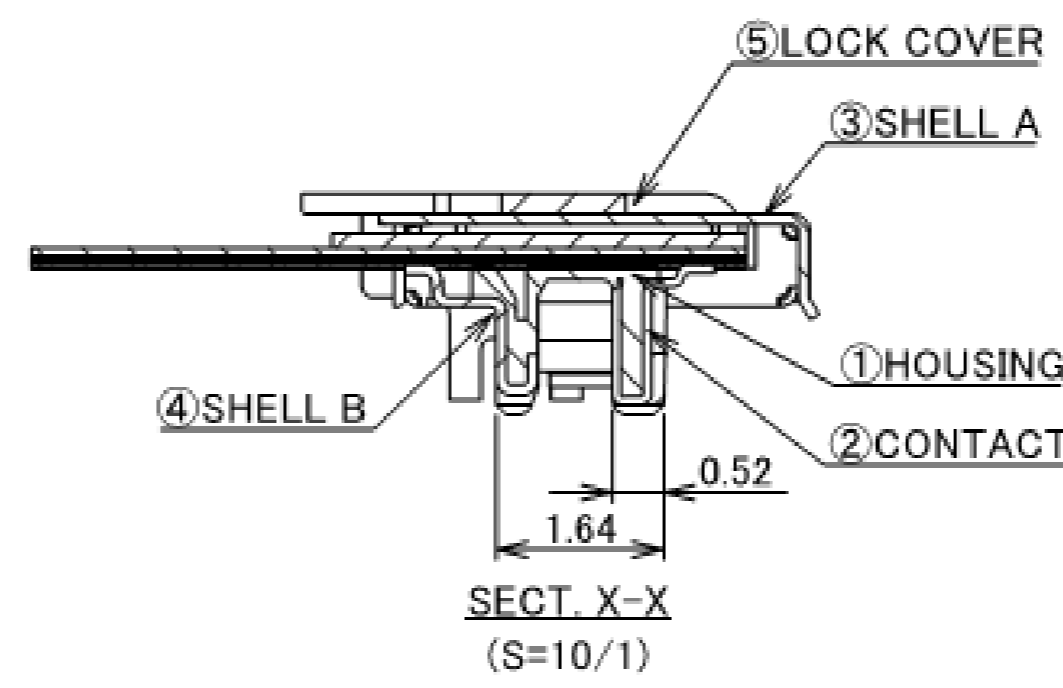
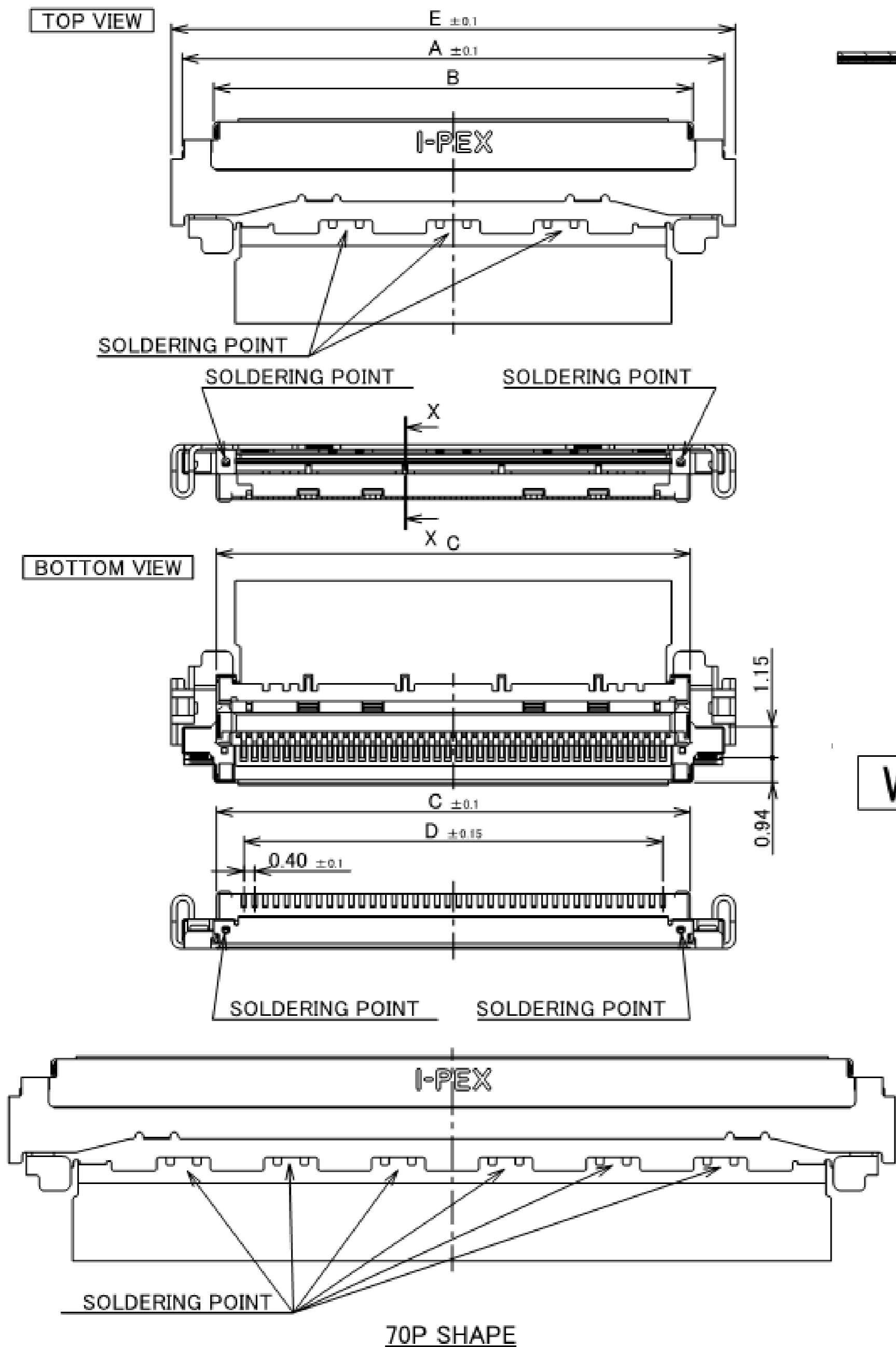
## Component Parts

Connector parts
 <p>PLUG(WITH LOCK COVER)</p>
 <p>PLUG(WITH PULL TAPE HOLDER)</p>
 <p>RECEPTACLE</p>

Plug parts
 <p>PLUG HOUSING ASSEMBLY</p>
 <p>PLUG SHELL-A</p>
 <p>PLUG LOCK COVER</p>
 <p>PLUG PULL TAPE HOLDER</p>

# Plug FPC Assembly

Recommended P/N		21102-0**E-21				
PART NO.	Pos.	A	B	C	D	E
21102-040E-21	40	20.20	17.85	17.65	15.60	21.00
21102-070E-21	70	32.20	29.85	29.65	27.60	33.00

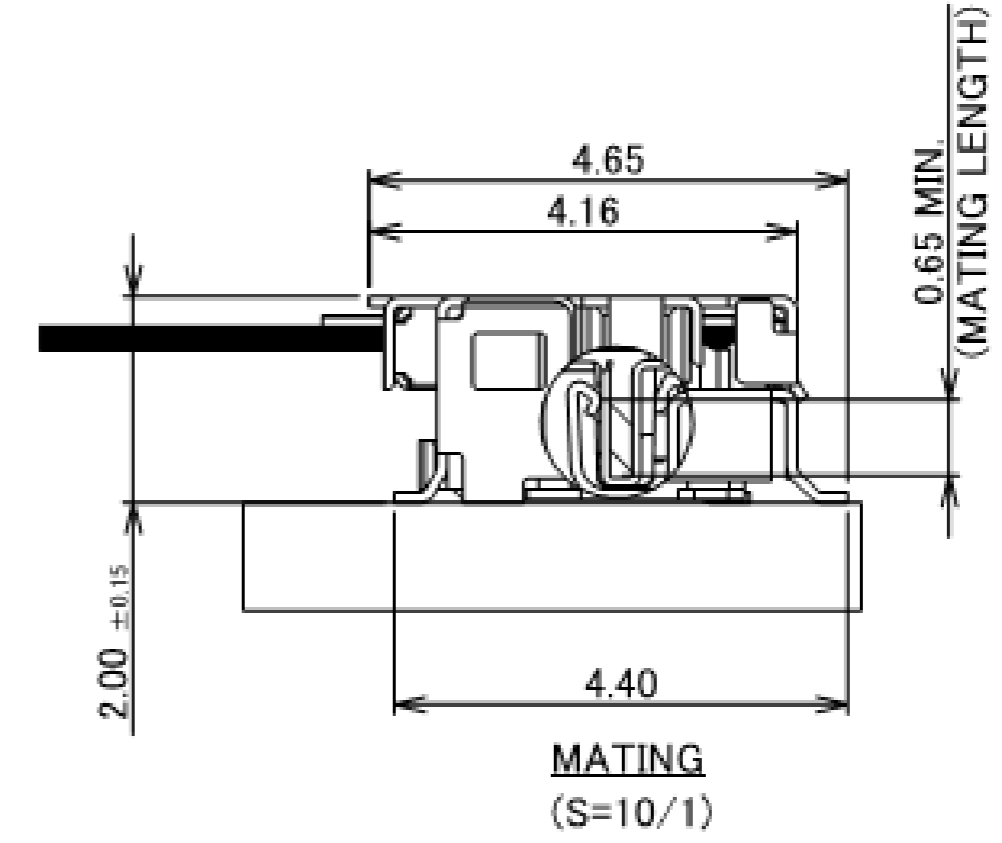
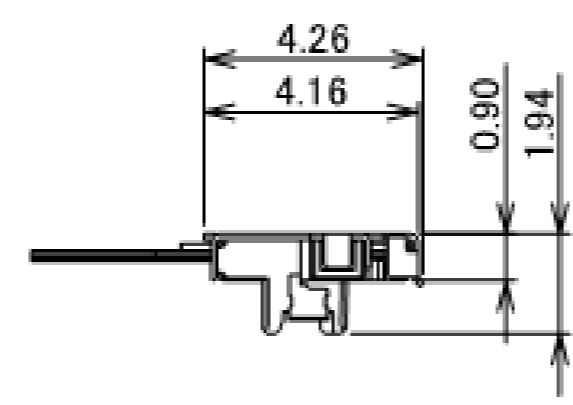
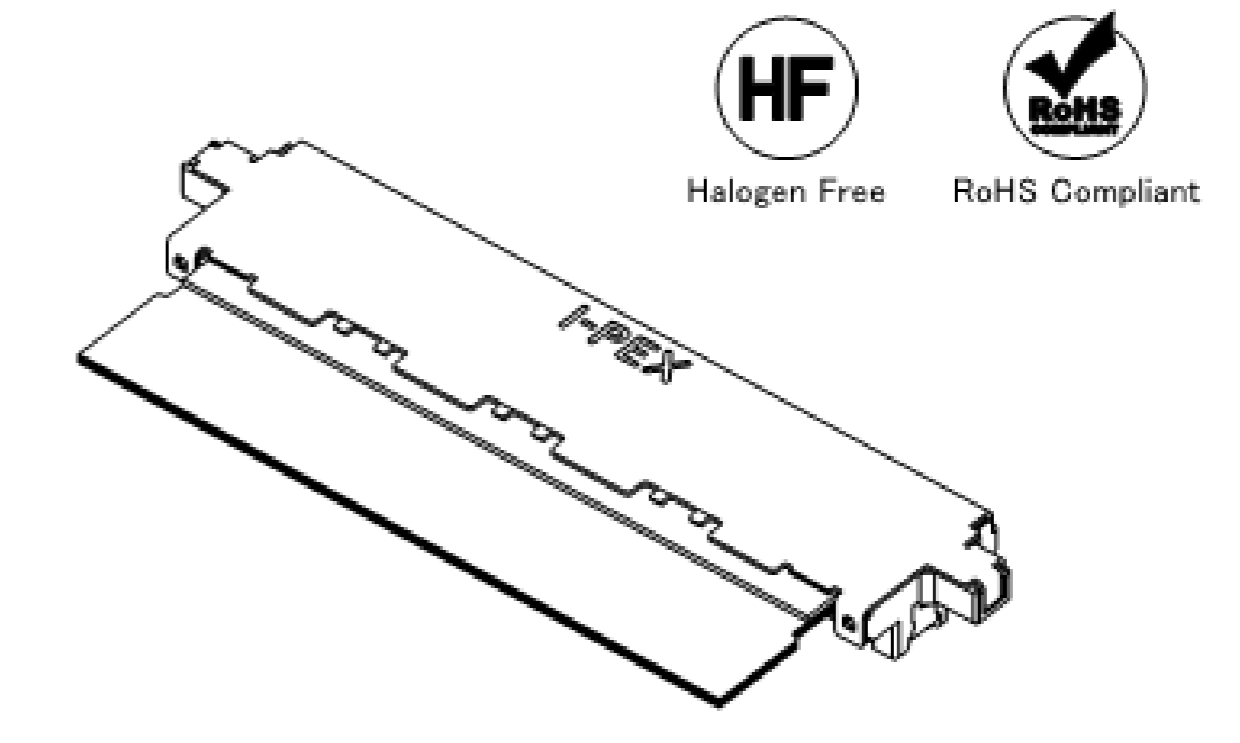
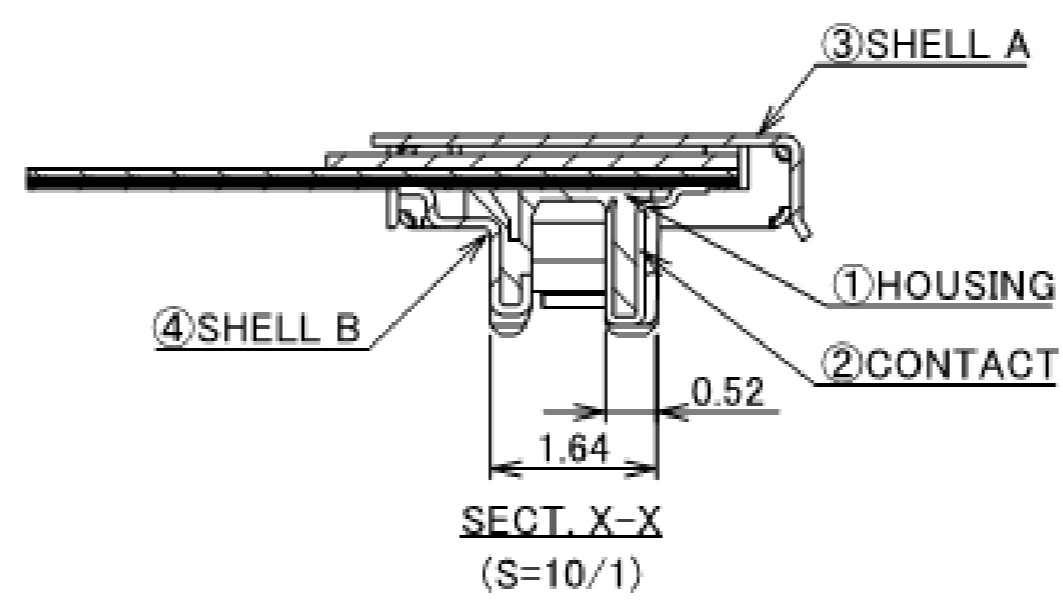
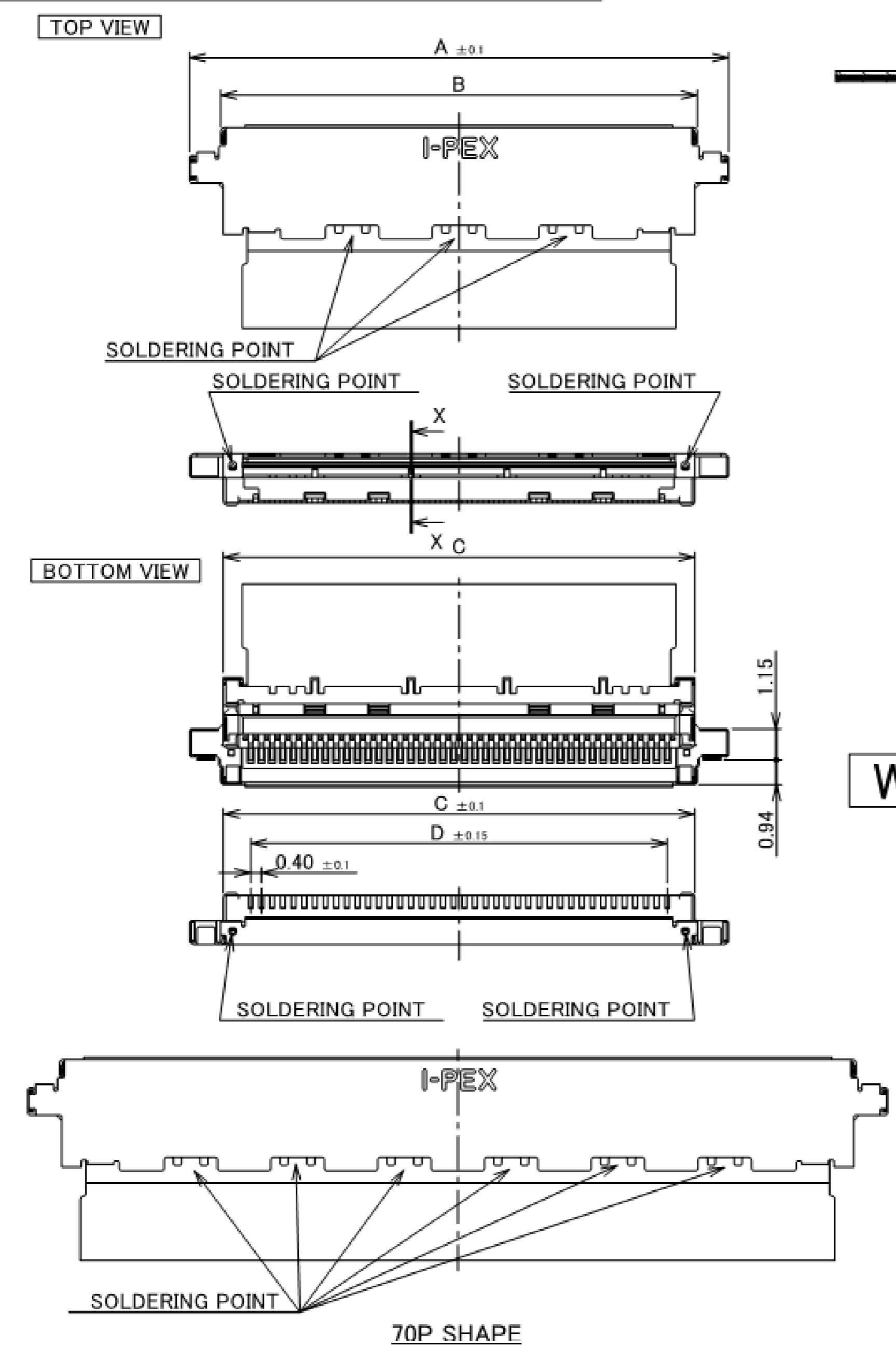


## With LOCK COVER

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
5	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.0 μm MIN.
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μm MIN. OVER Ni 1.00 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 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

Rev.0

Recommended P/N		21102-0**E-21			
PART NO.	Pos.	A	B	C	D
21102-040E-22	40	20.20	17.85	17.65	15.60
21102-070E-22	70	32.20	29.85	29.65	27.60



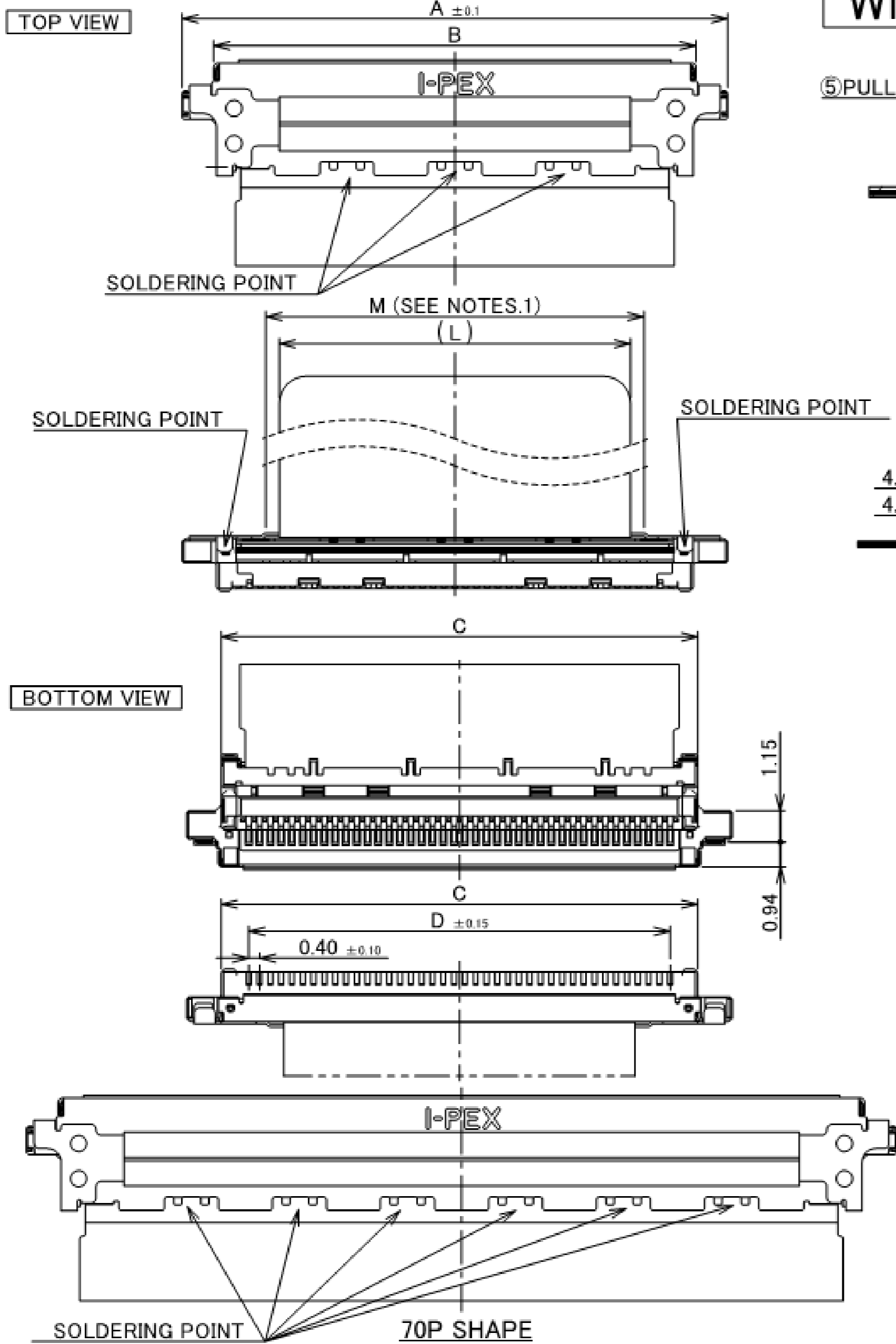
## Without LOCK COVER

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μm MIN. OVER Ni 1.00 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 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

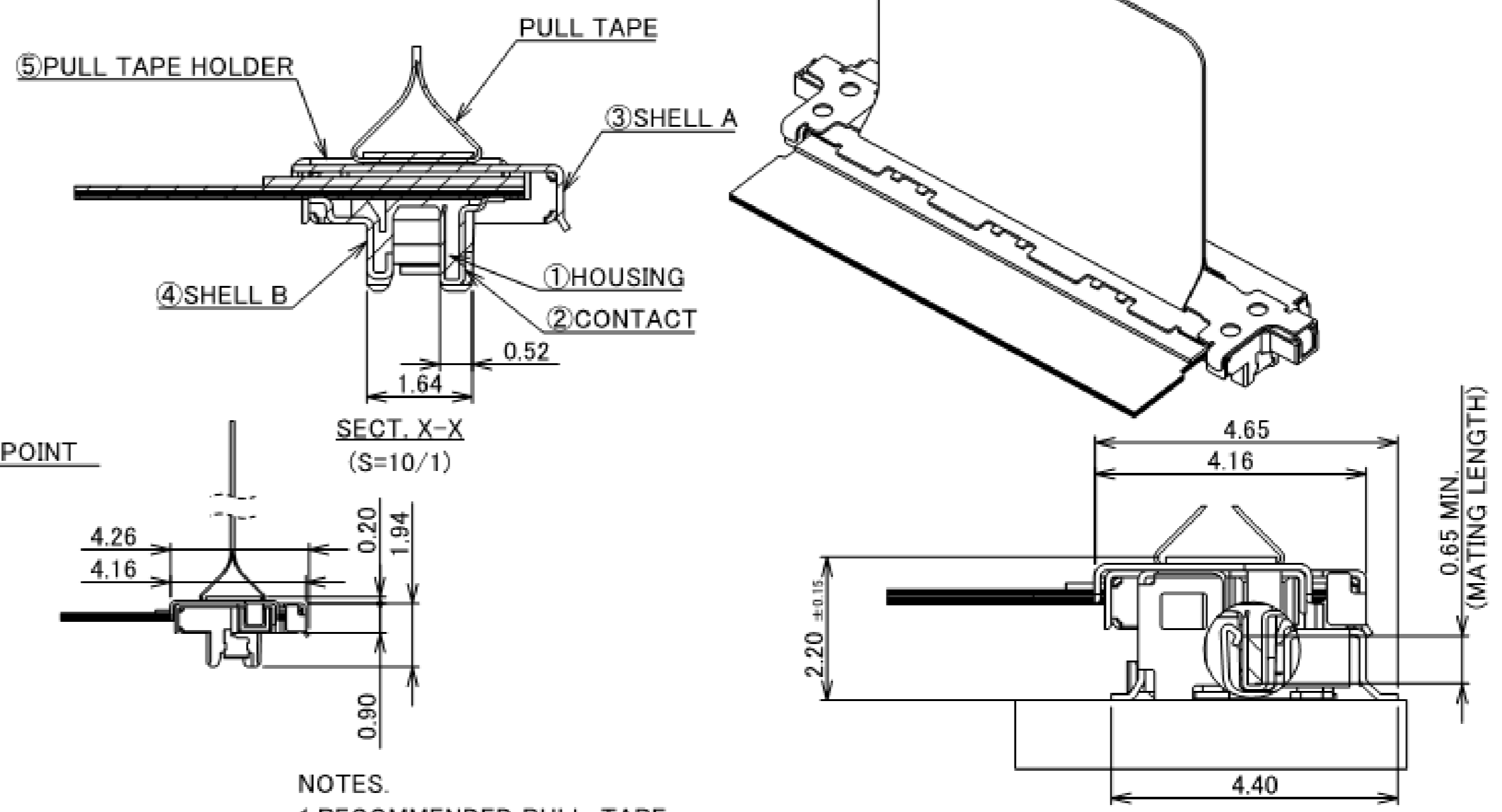
Rev.0

# Plug FPC Assembly

Recommended P/N		21102-0**E-21					
PART NO.	Pos.	A	B	C	D	L	M
21102-040E-23	40	20.20	17.85	17.65	15.60	13.00	14.00
21102-070E-23	70	32.20	29.85	29.65	27.60	25.00	26.00



## With PULL TAPE HOLDER

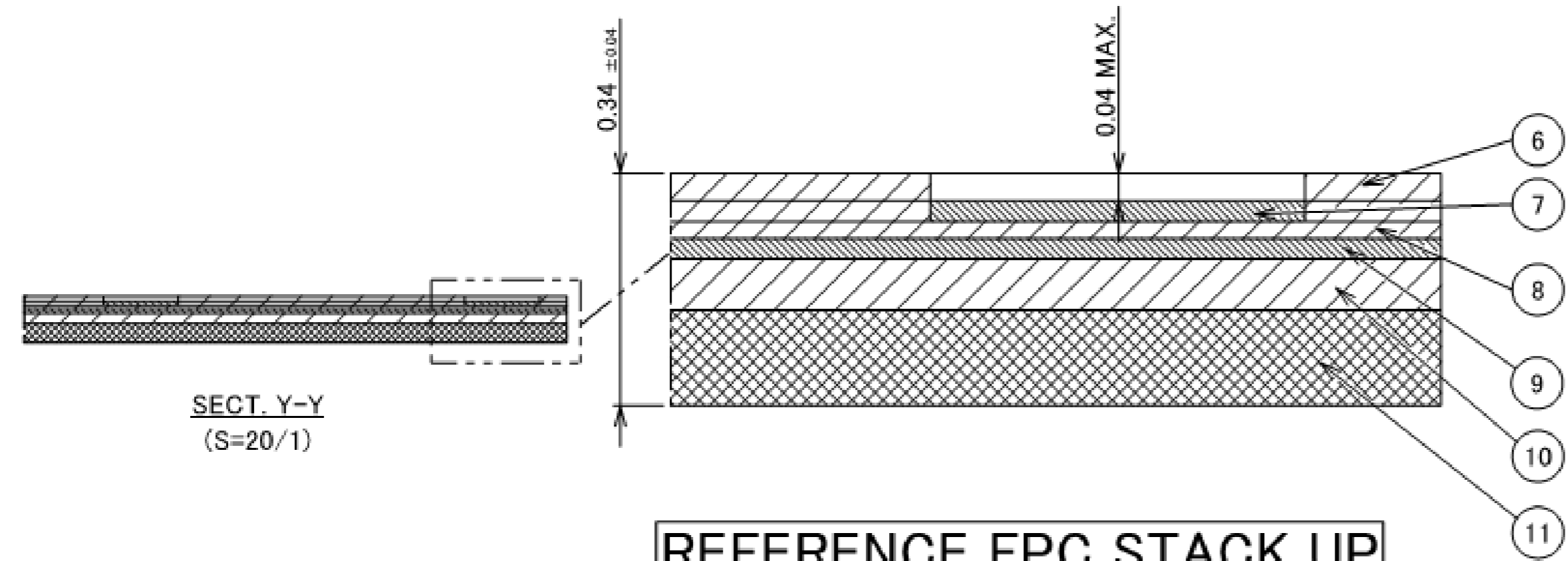
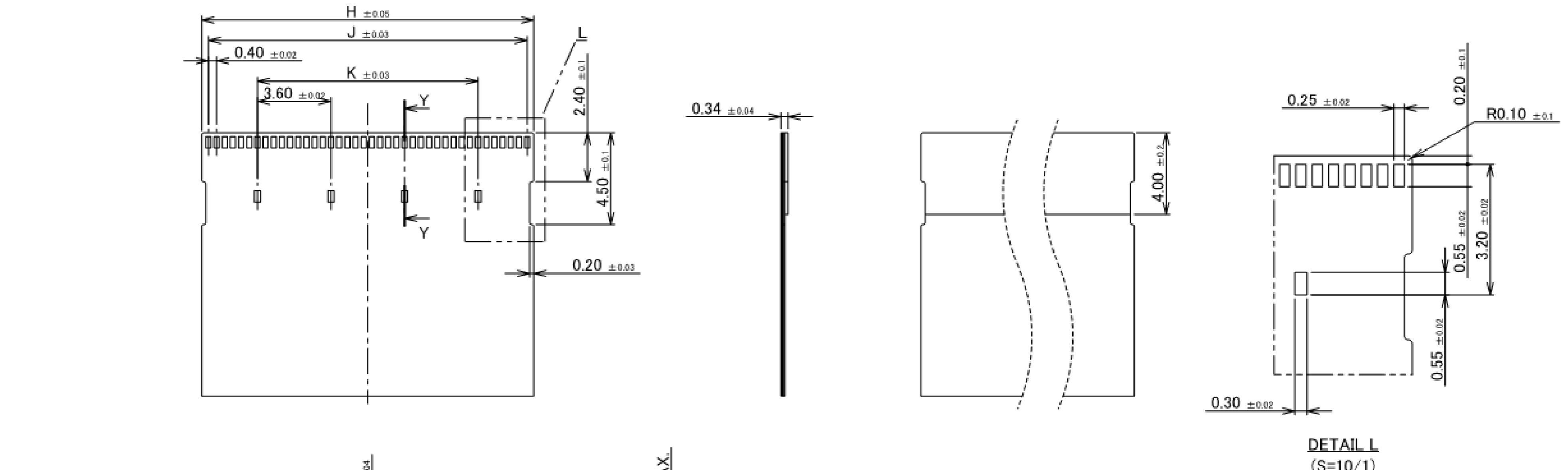


NOTES.  
 1. RECOMMENDED PULL-TAPE  
 PULL-TAPE : TERAOKA's INSULATION TAPE No.650S(#50) t=0.08  
 2. PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRIAIGHT AREA.

No.	DISCRIPTION	MATERIAL	FINISH . REMARKS
5	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μ m MIN. OVER Ni 1.00 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

PART NO.	Pos.	H	J	K
21103-040E-02	40	16.25	15.60	10.80
21103-070E-02	70	28.25	27.60	25.20

## RECOMMENDED FPC FOOT PATTERN



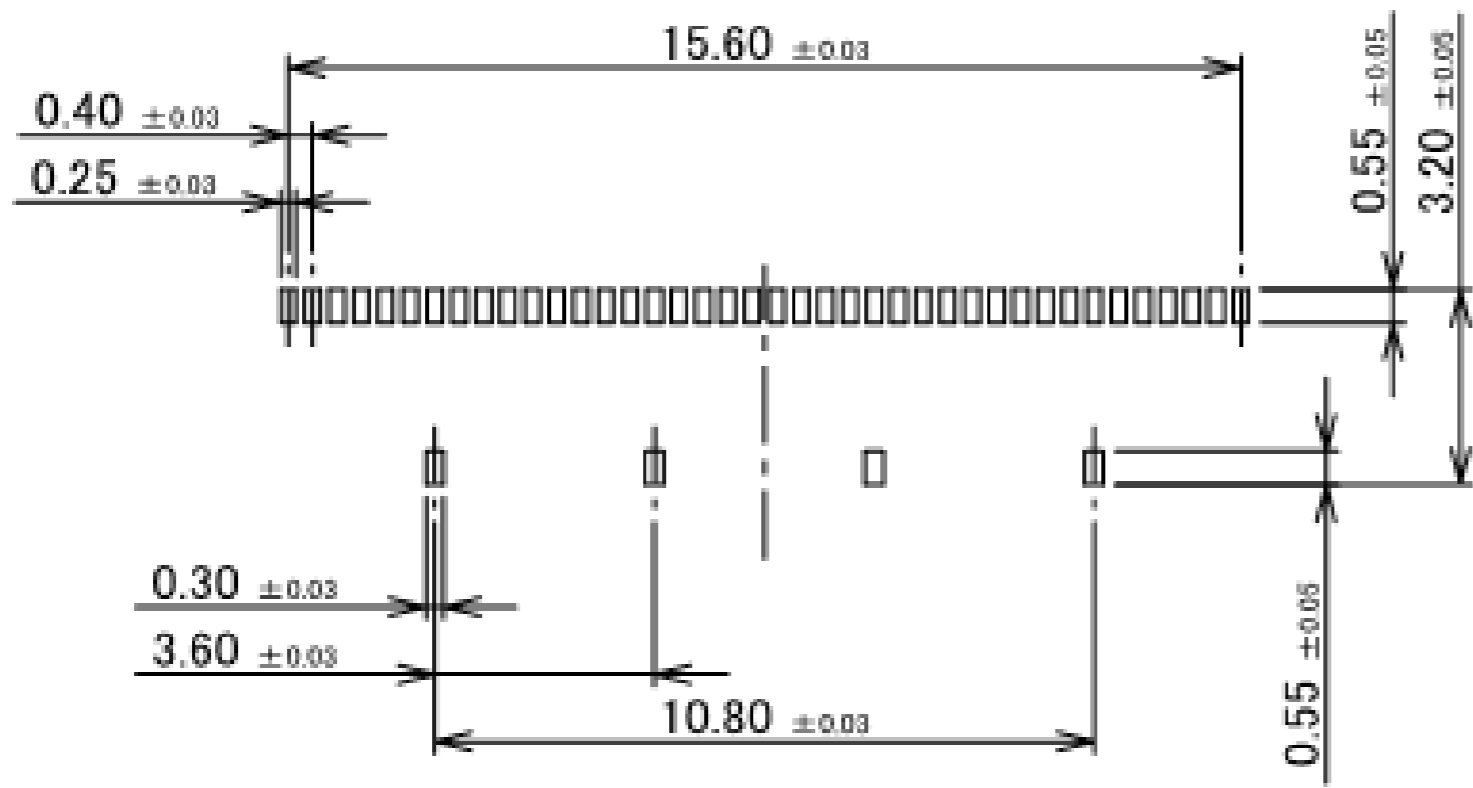
No.	DESCRIPTION	MATERIAL	PLATING
11	STIFFENER	SUS	Ni, Au
10	INSULATOR	-	-
9	CONDUCTOR (GROUND)	Cu	Ni, Au
8	INSULATOR	-	-
7	CONDUCTOR (SIGNAL,GROUND)	Cu	Ni, Au
6	INSULATOR	-	-

NOTE.  
 1. NO.7 CONDUCTOR(GROUND) AND NO.9 CONDUCTOR (GROUND) ARE CARRYING OUT THE ELECTRICAL CONNECTION.  
 2. IT IS RECOMMENDED TO ELECTRICALLY CONNECT NO.9 CONDUCTOR (GROUND) AND NO.11 STIFFENER.

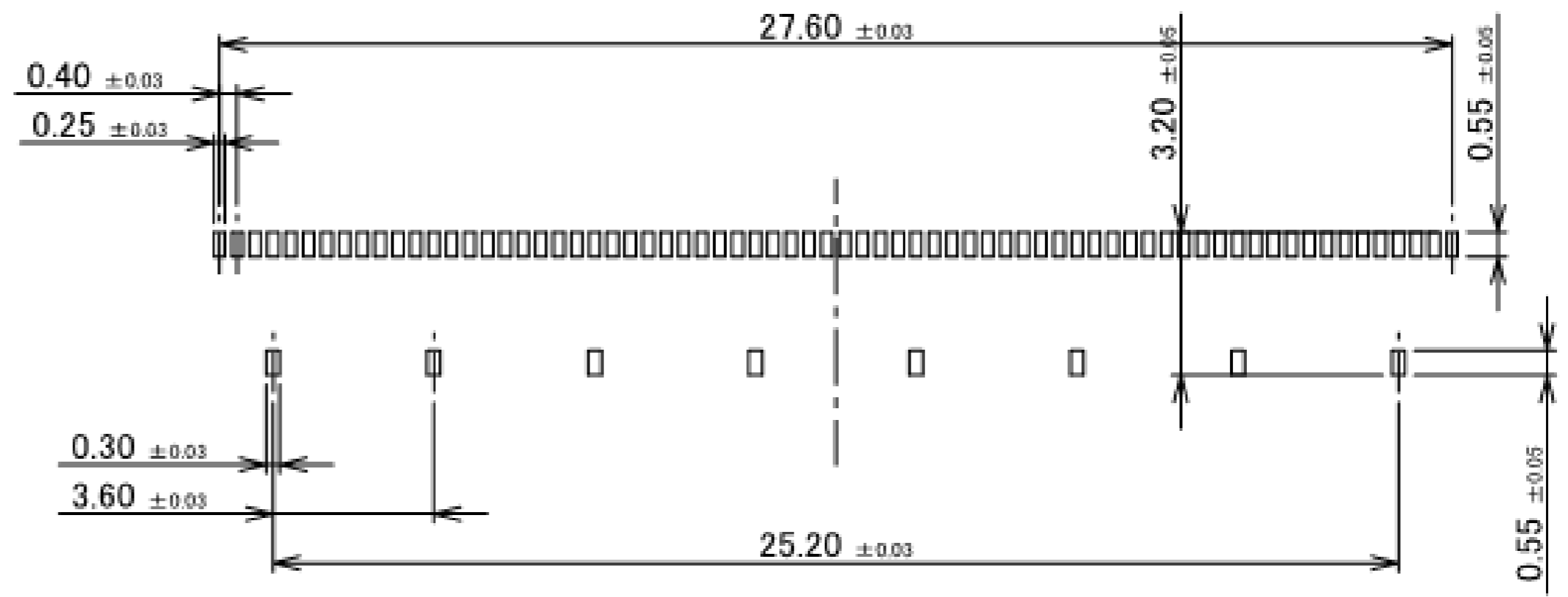
Rev.0

Rev.0

# Plug FPC Assembly

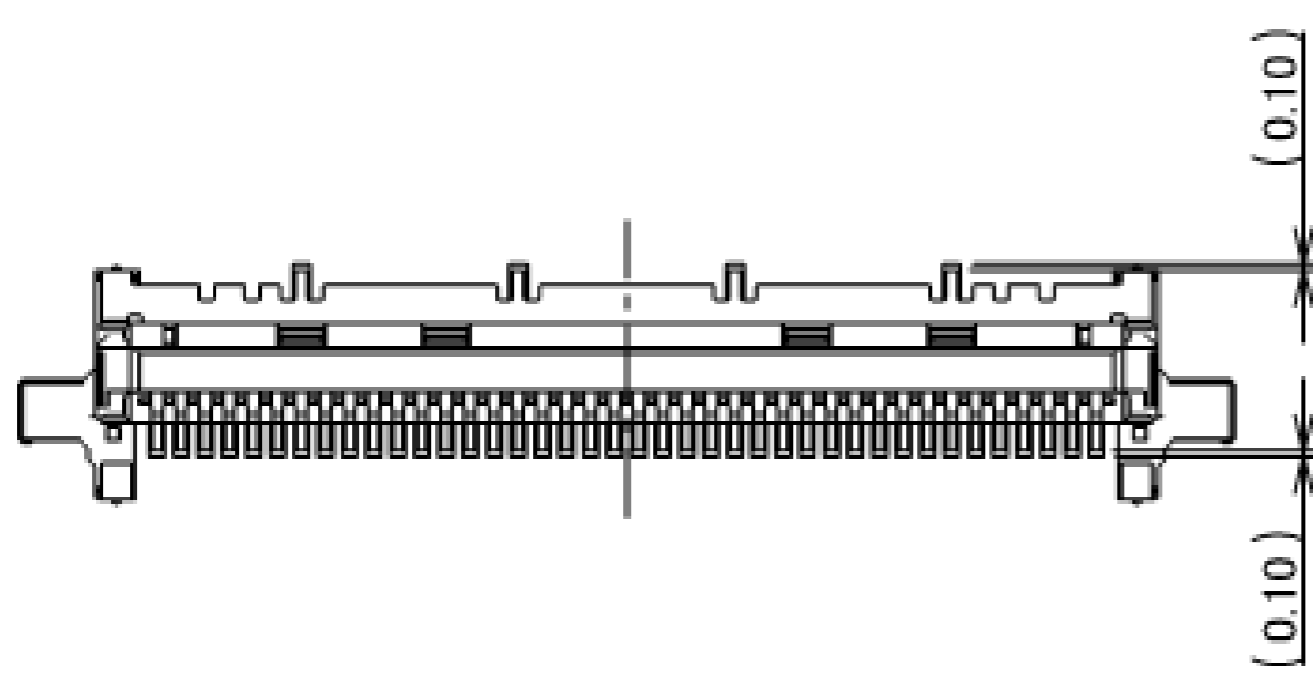


40P RECOMMENDED METAL MASK LAYOUT (S=5/1)  
※ METAL MASK THICKNESS : t = 0.12

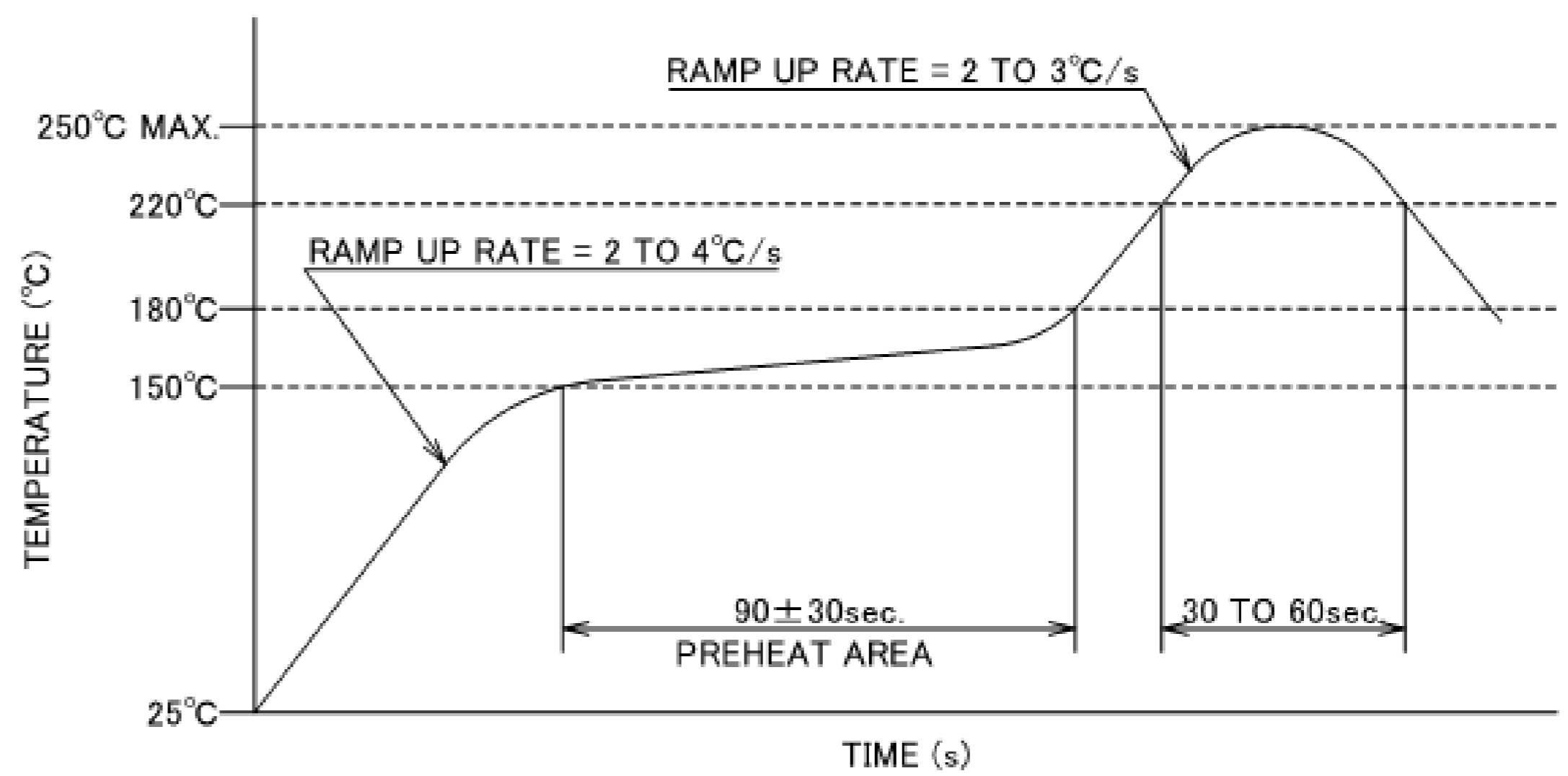


70P RECOMMENDED METAL MASK LAYOUT (S=5/1)  
※ METAL MASK THICKNESS : t = 0.12

Rev.0



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.0

# Plug FPC Assembly

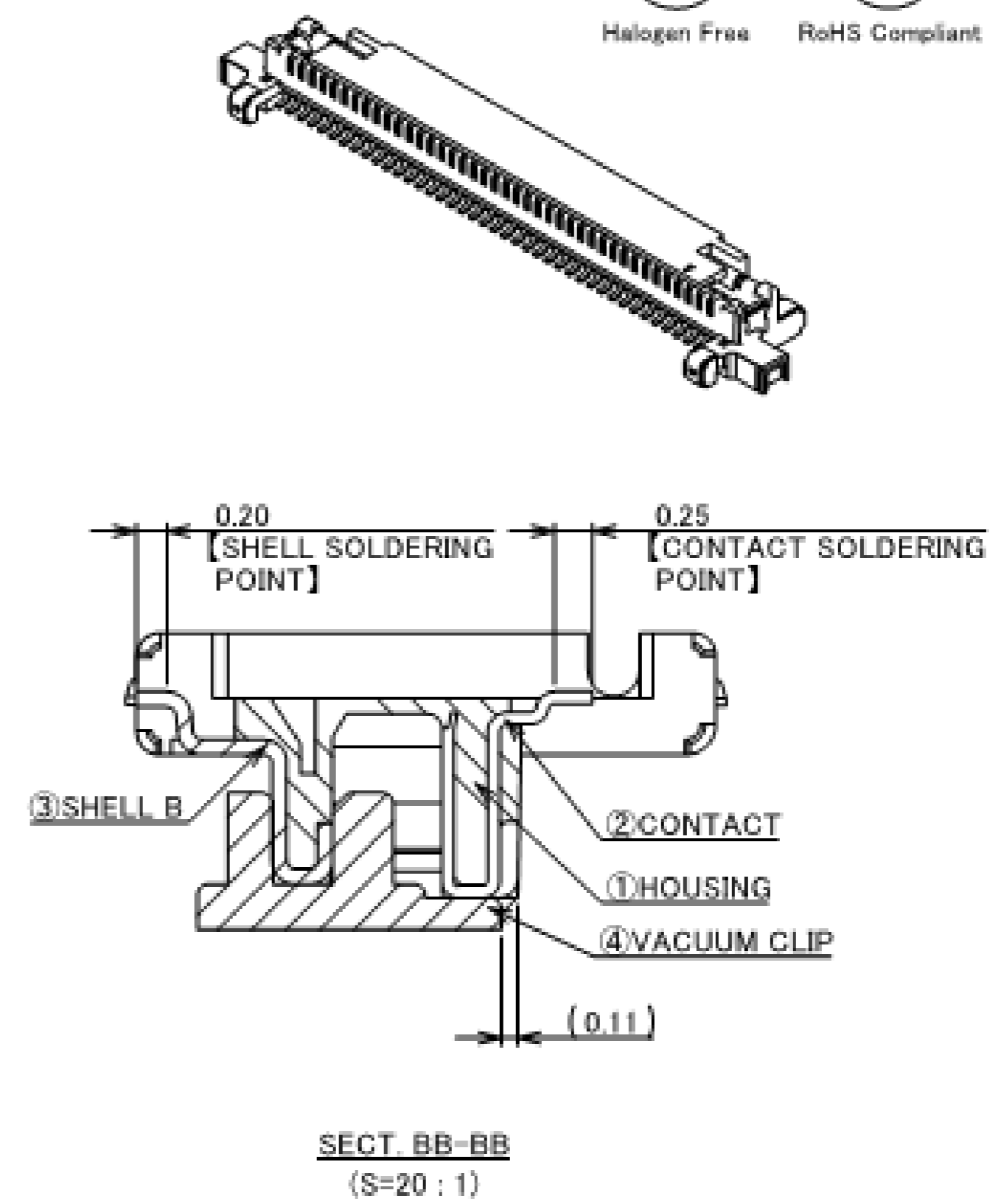
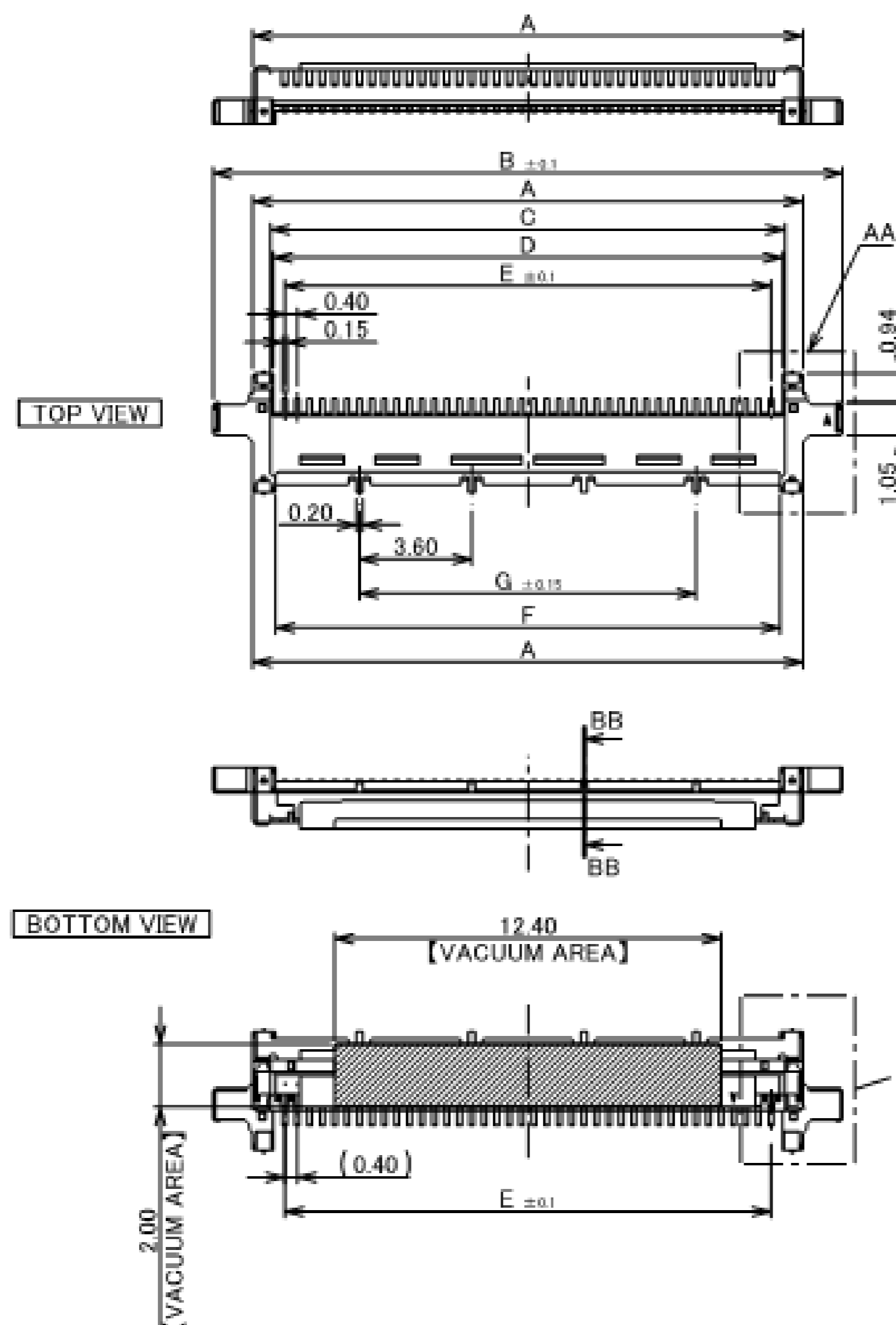
ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR.
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.5A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO 31PIN 0.3A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO ALL PIN ※TO BE DETERMINED BY PROTOTYPE EVALUATION ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233 TO 378K (-40°C TO +105°C)
OPERATING HUMIDITY	85% MAX.
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : <math>\angle 140\text{mohm}</math> MAX.
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : <math>\angle 140\text{mohm}</math> MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	40P : 40.0N MAX. / 70P : 58.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	40P : 4.0N MIN. / 70P : 7.0N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2997
TEST REPORT	TR-26009
INSTRUCTION MANUAL	HIM-25007
ASSEMBLY MANUAL	ASM-26001
APPEARANCE CRITERIA No.	QLS-A***

※Only the single-hook pull jig is permitted  
The dual-hook pull jig is not allowed

Rev.0

# Plug Housing Assembly

Recommended P/N		21103-0**E-02							
PART NO.	Pos.	A	B	C	D	E	F	G	
21103-040E-02	40	17.65	20.20	16.50	16.33	15.60	16.19	10.80	
21103-070E-02	70	29.65	32.20	28.50	28.33	27.60	28.19	25.20	



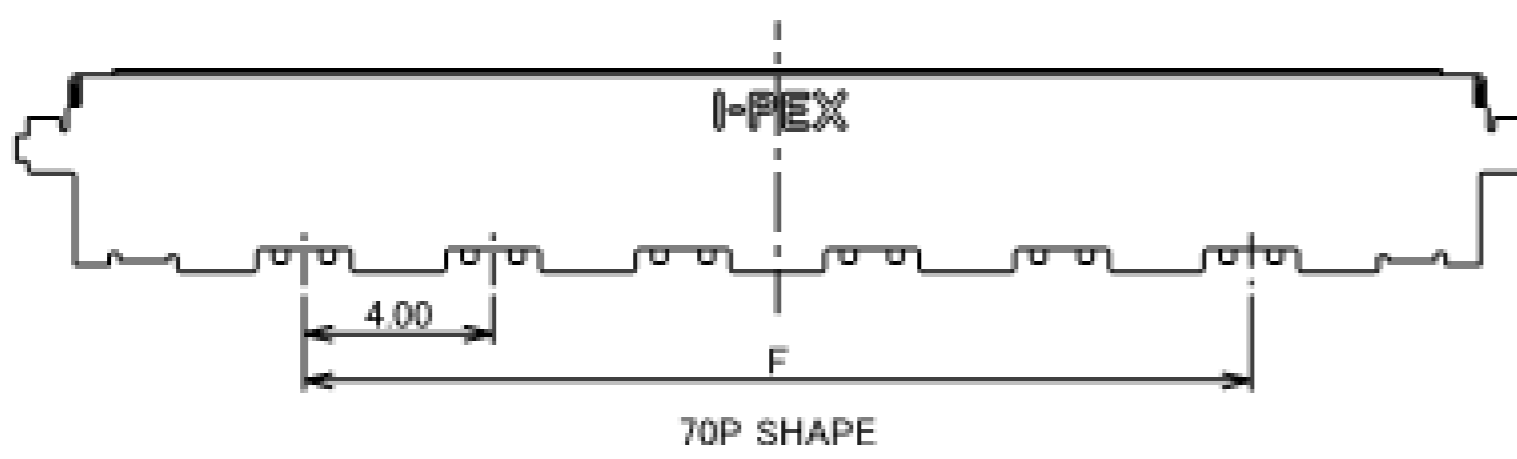
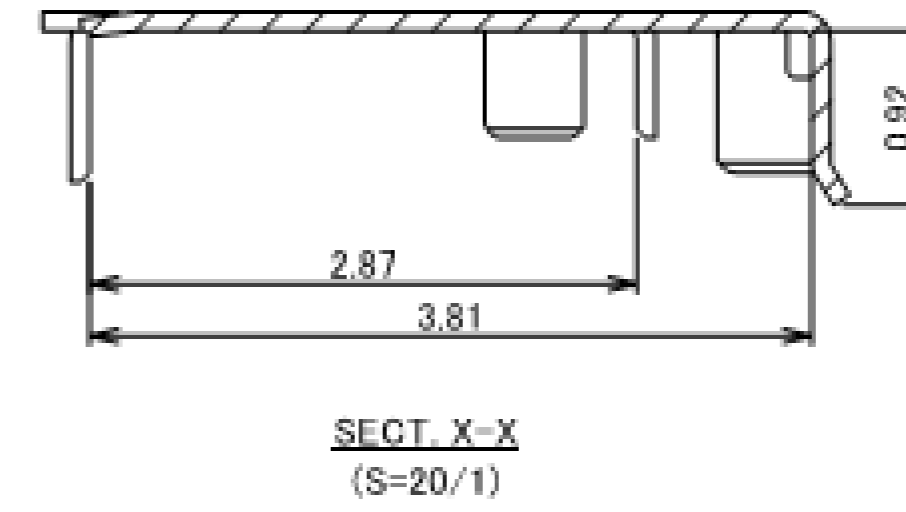
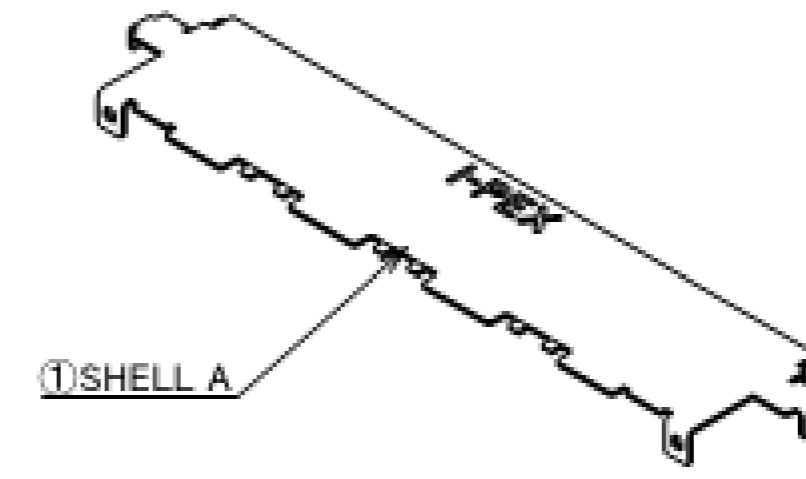
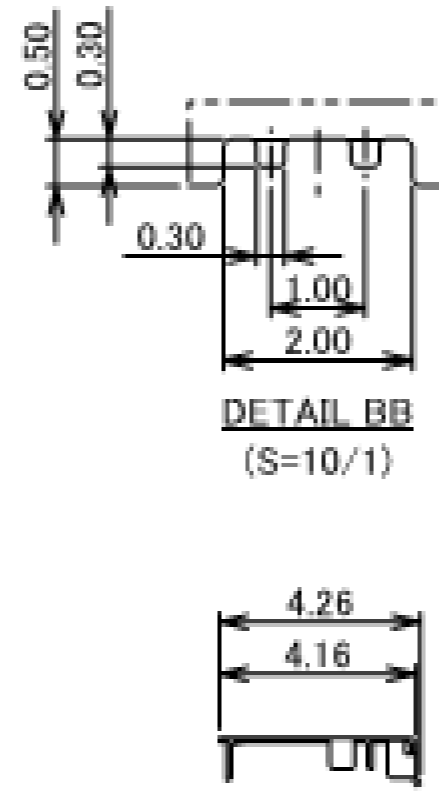
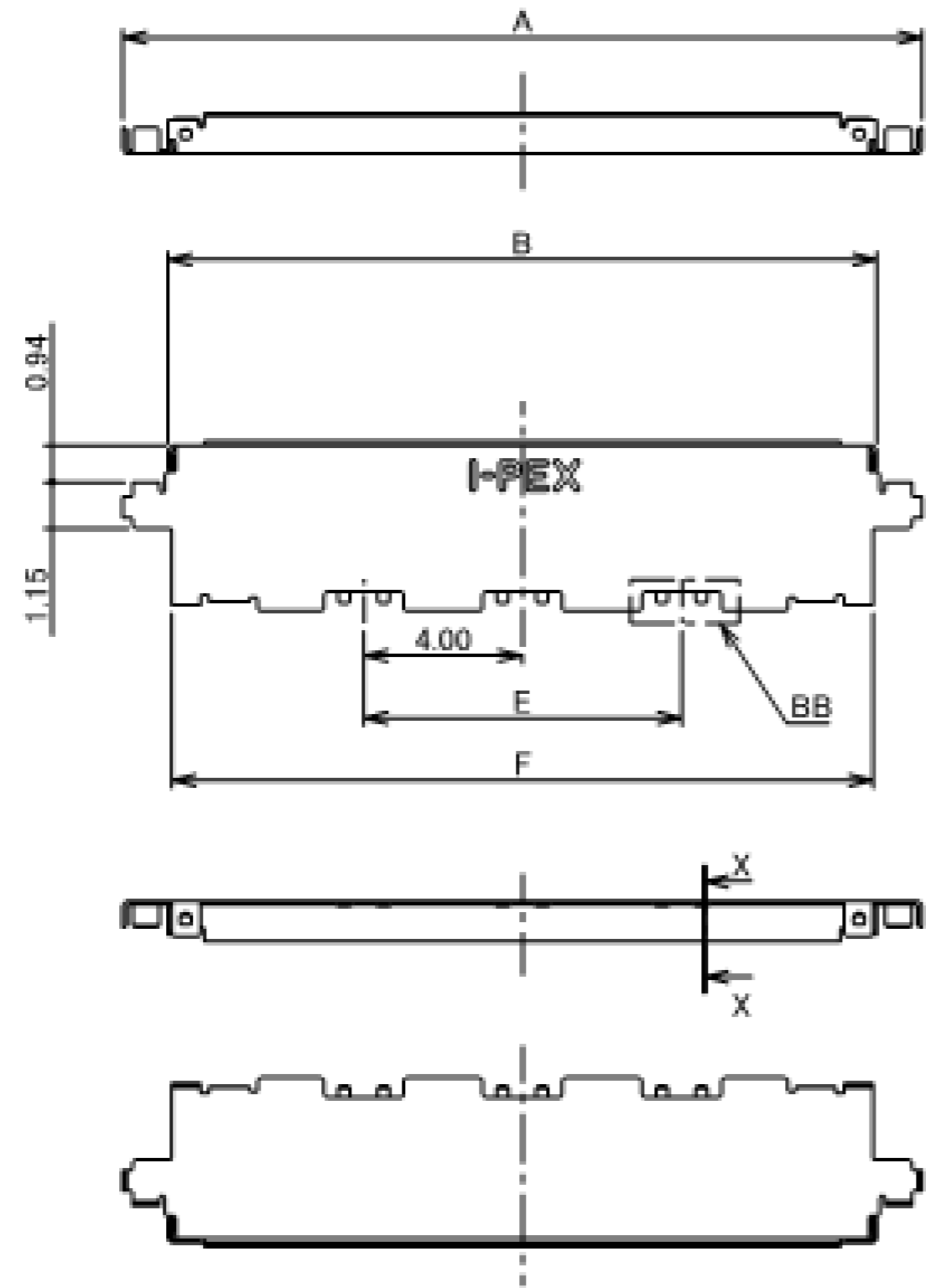
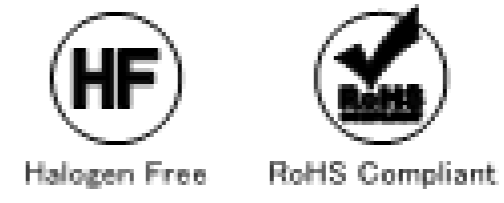
NO.	DISCRPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CLIP	LCP	-
3	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 $\mu\text{m}$ MIN. OVER Ni 1.00 $\mu\text{m}$ MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 $\mu\text{m}$ MIN. CONTACT & SOLDERING AREA : Au 0.03 $\mu\text{m}$ MIN
1	HOUSING	LCP	UL94V-0 .BLACK

Rev.1

# Shell A

Recommended P/N		3912-0**1			
PART NO.	Pos.	A	B	E	F
3912-0401	40	20.13	17.88	8.00	17.65
3912-0701	70	32.13	29.88	20.00	29.65

**PATENT PENDING**

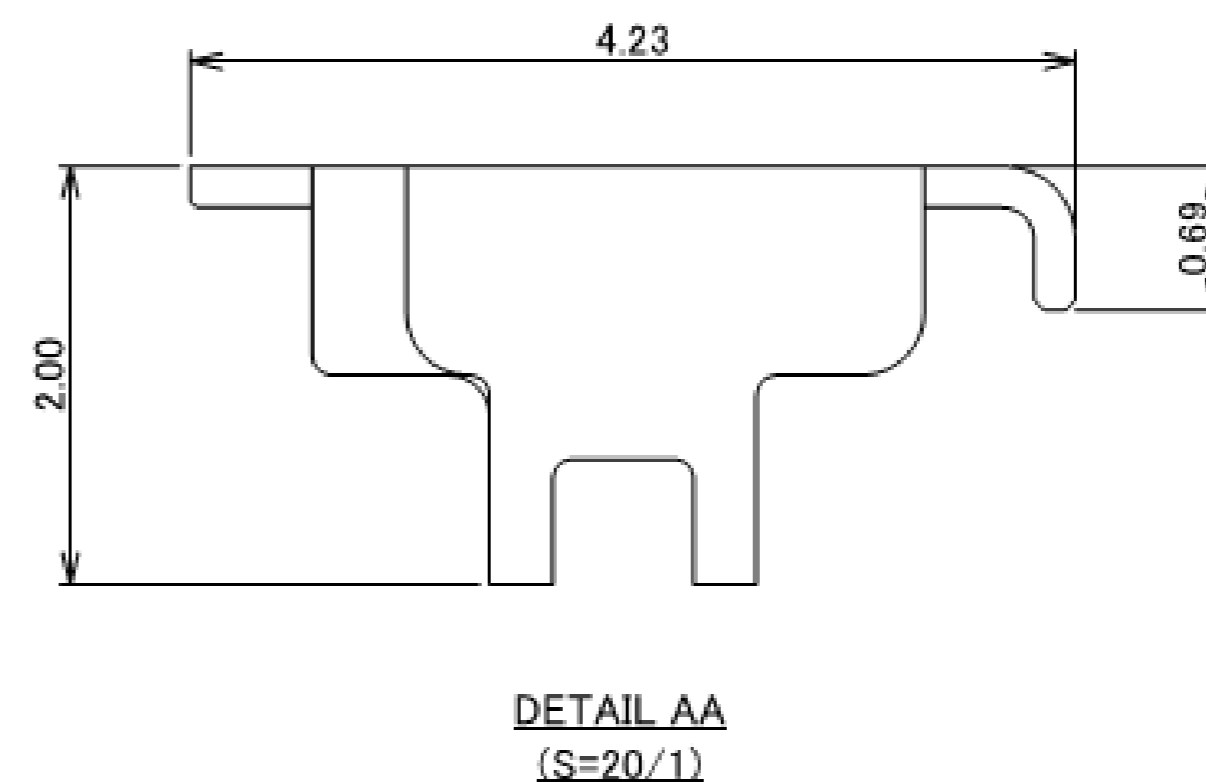
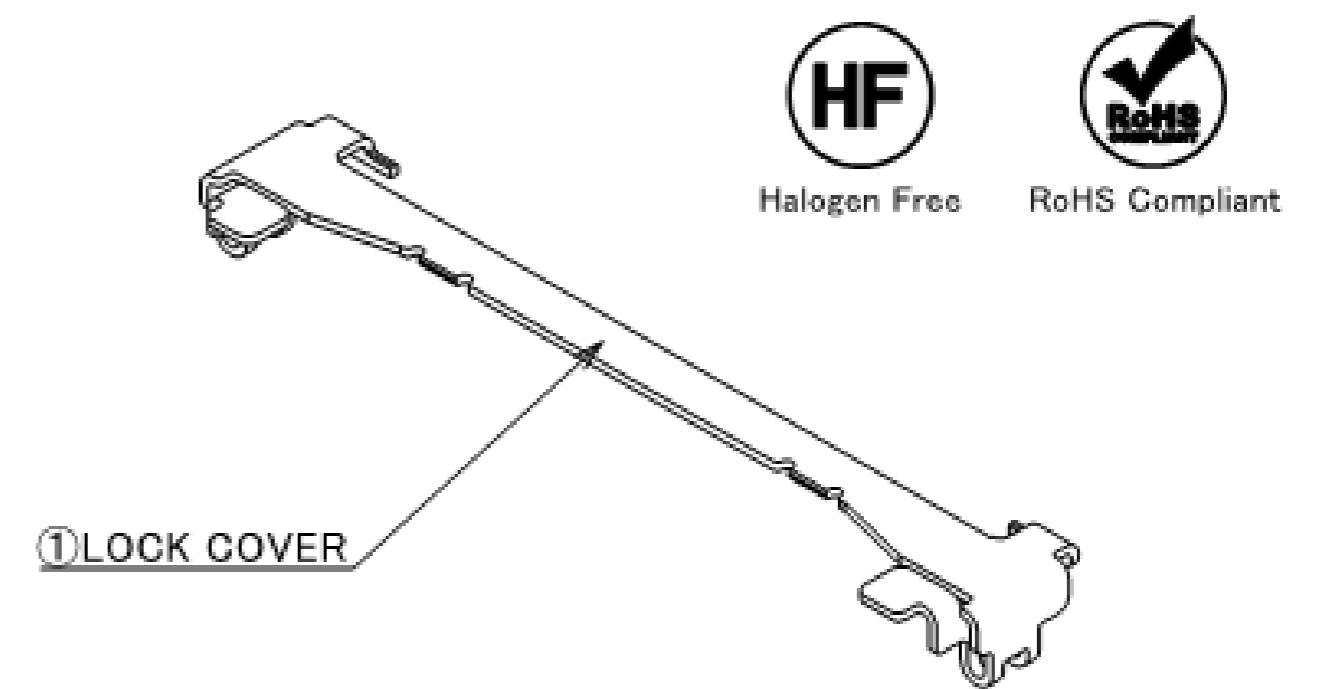
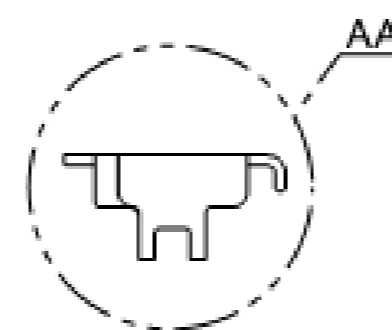
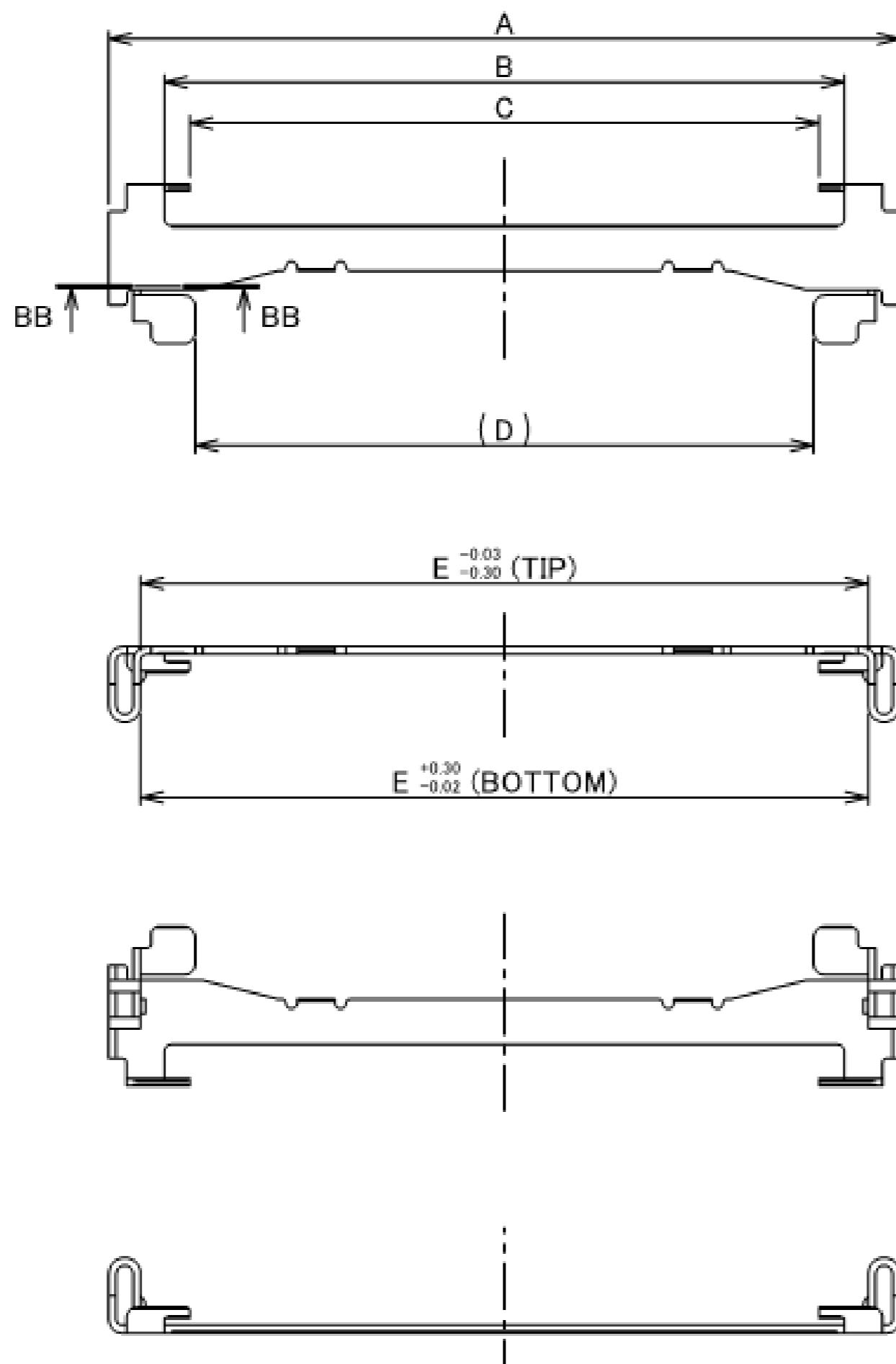


NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN

Rev.1

# Lock Cover

Recommended P/N		3914-0**1				
PART NO.	Pos.	A	B	C	D	E
3914-0401	40	21.00	18.05	16.70	16.40	19.30
3914-0701	70	33.00	30.05	28.70	28.40	31.30

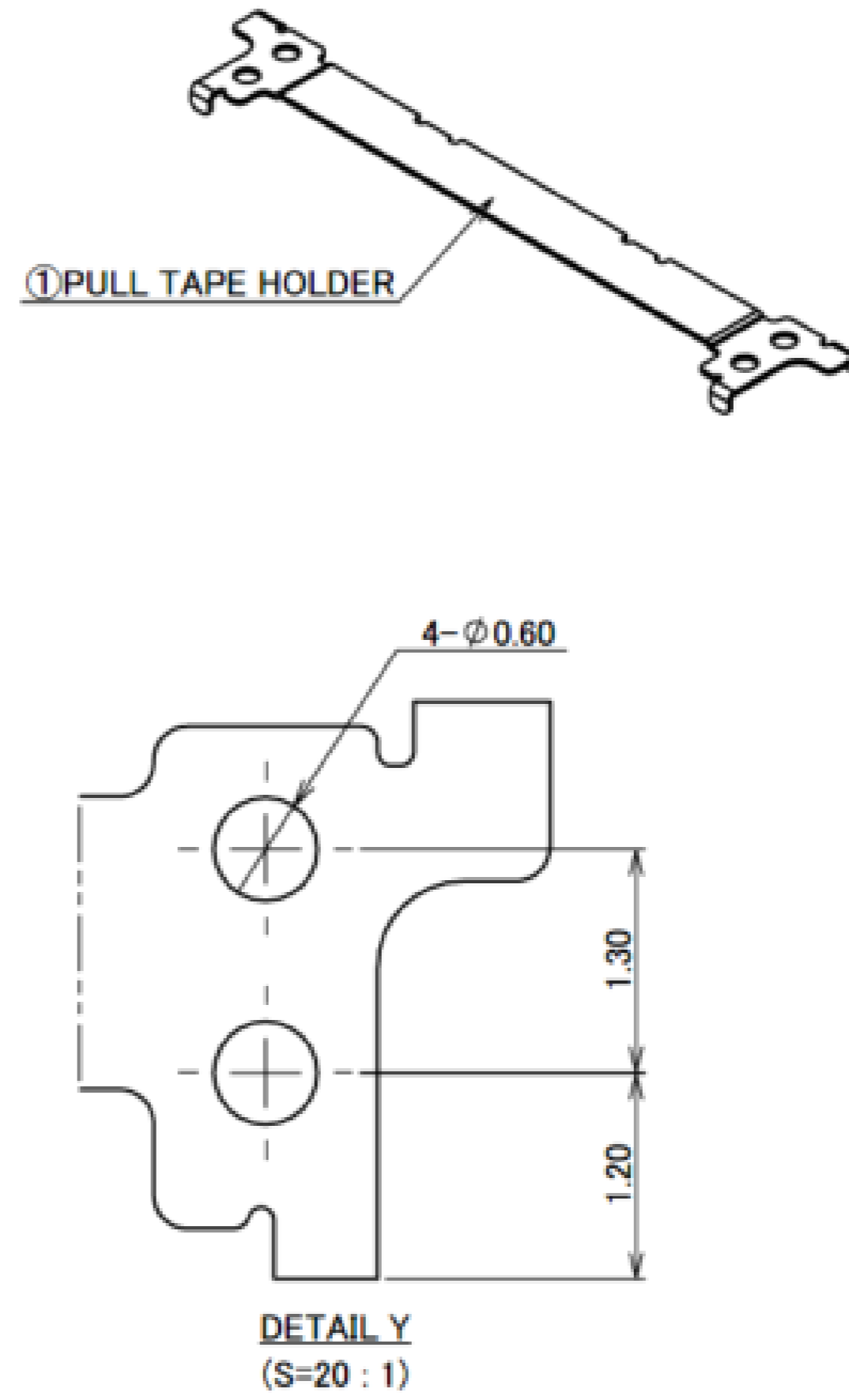
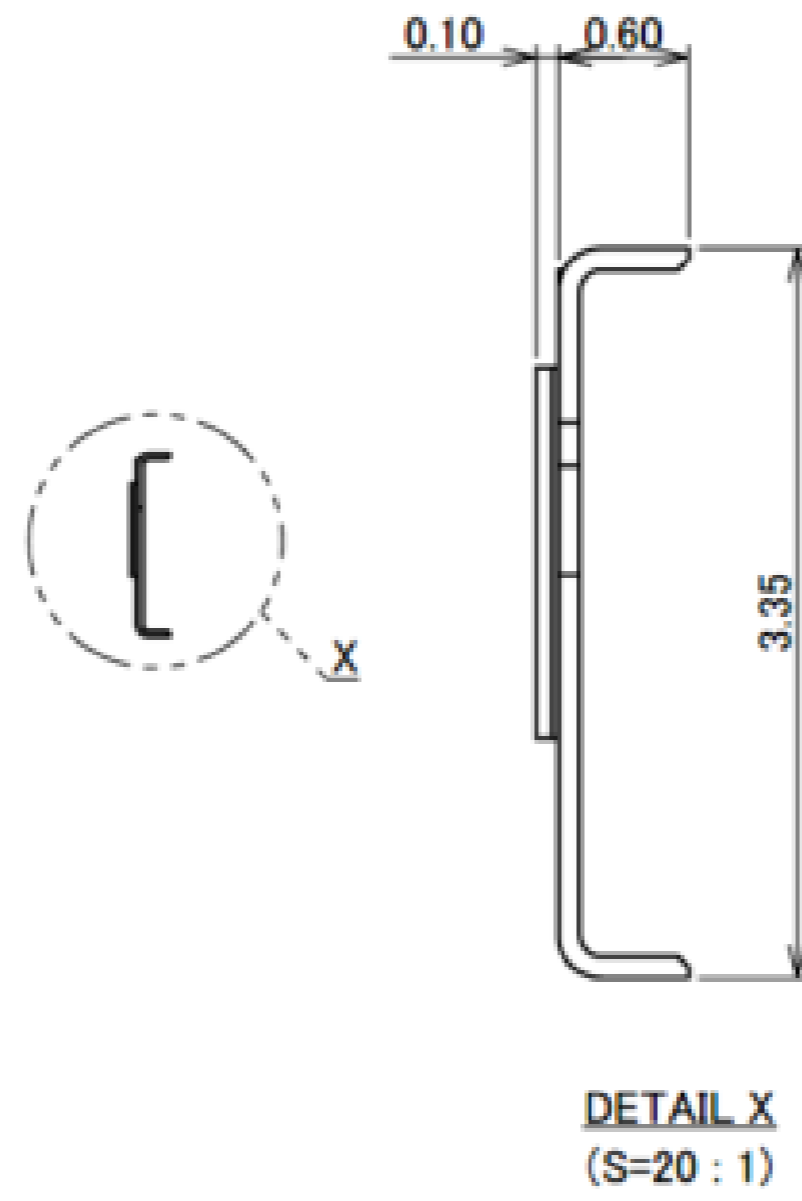
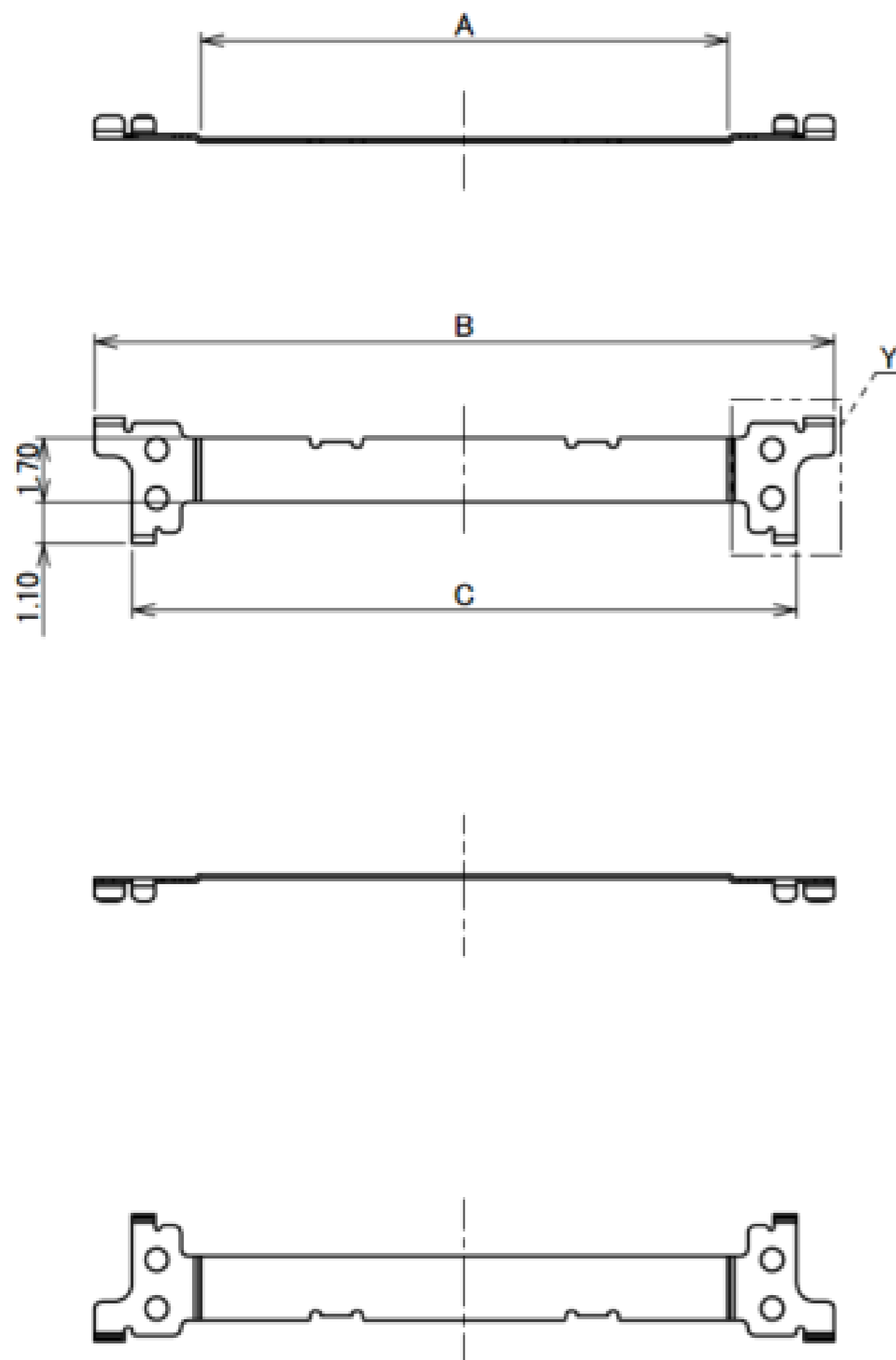


NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
1	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN

Rev.0

# 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
3588-0701	70	26.00	31.65	29.65



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

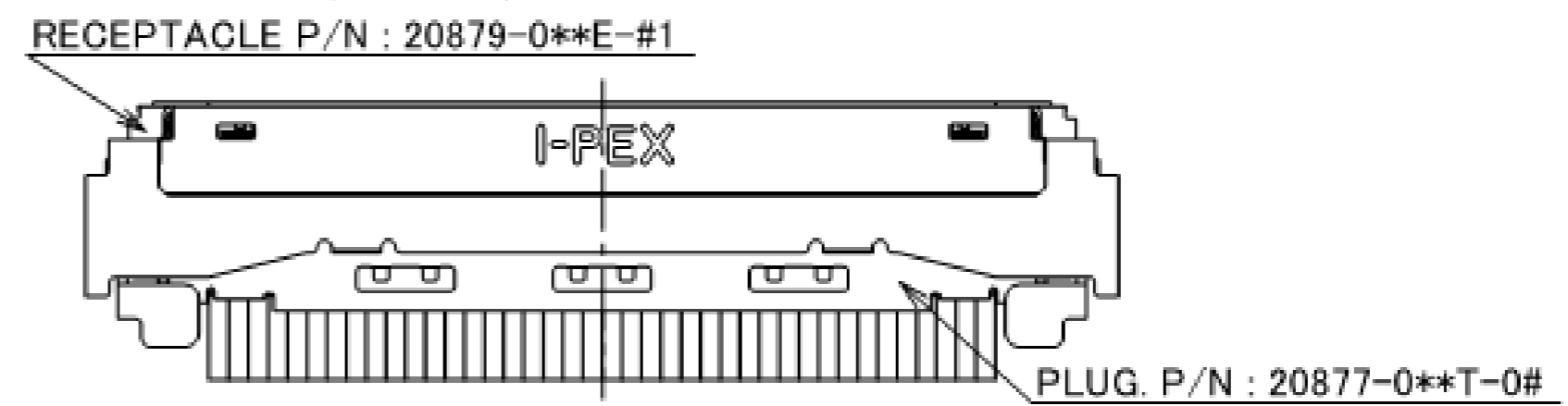
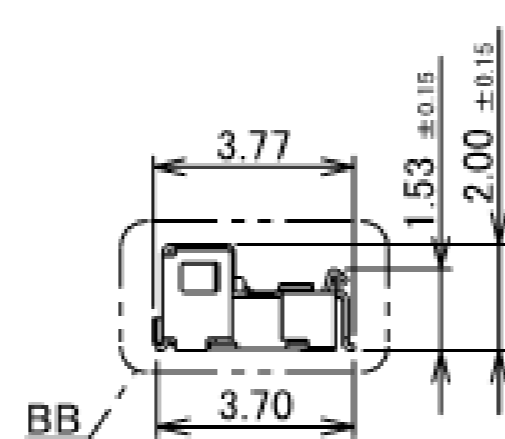
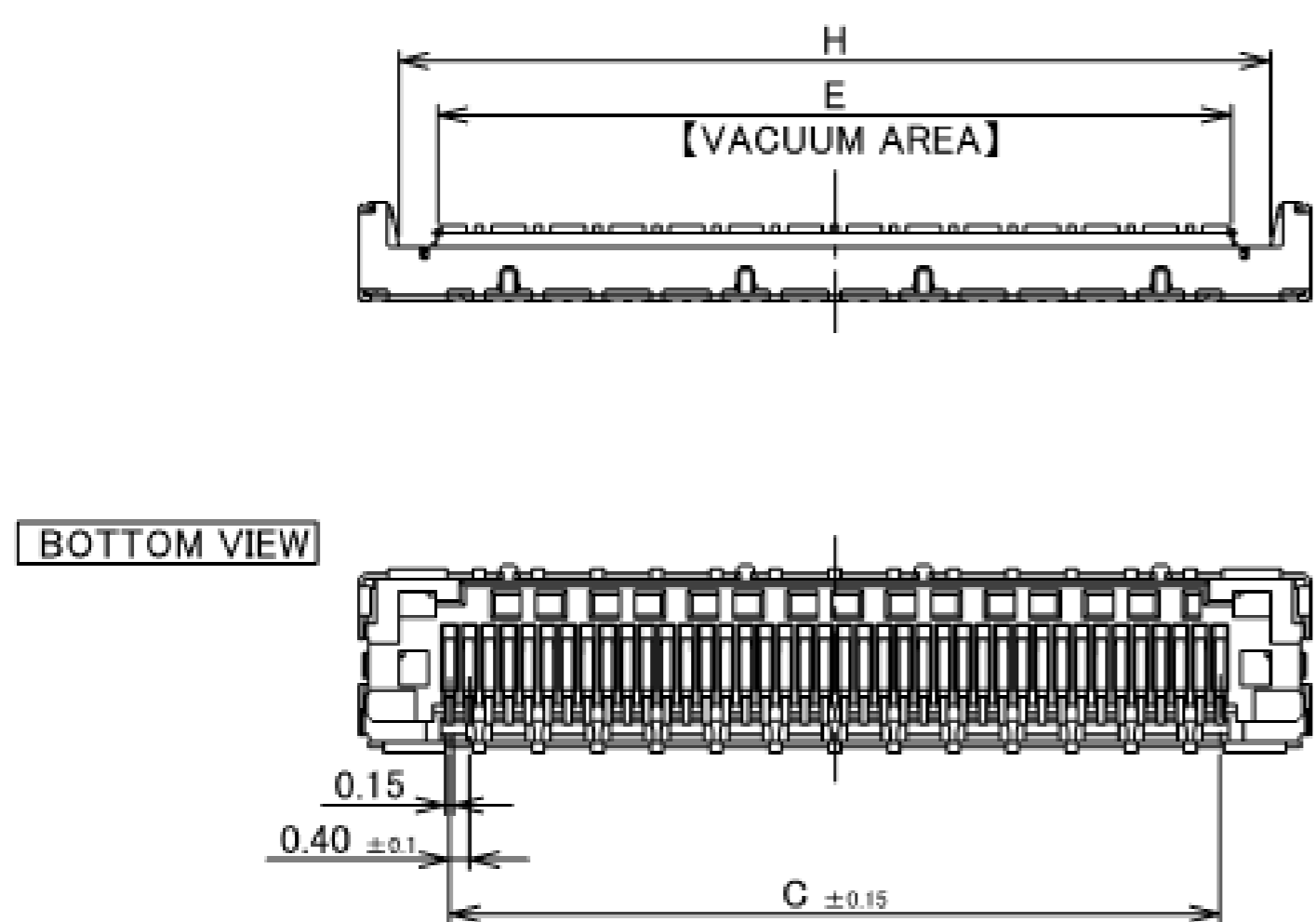
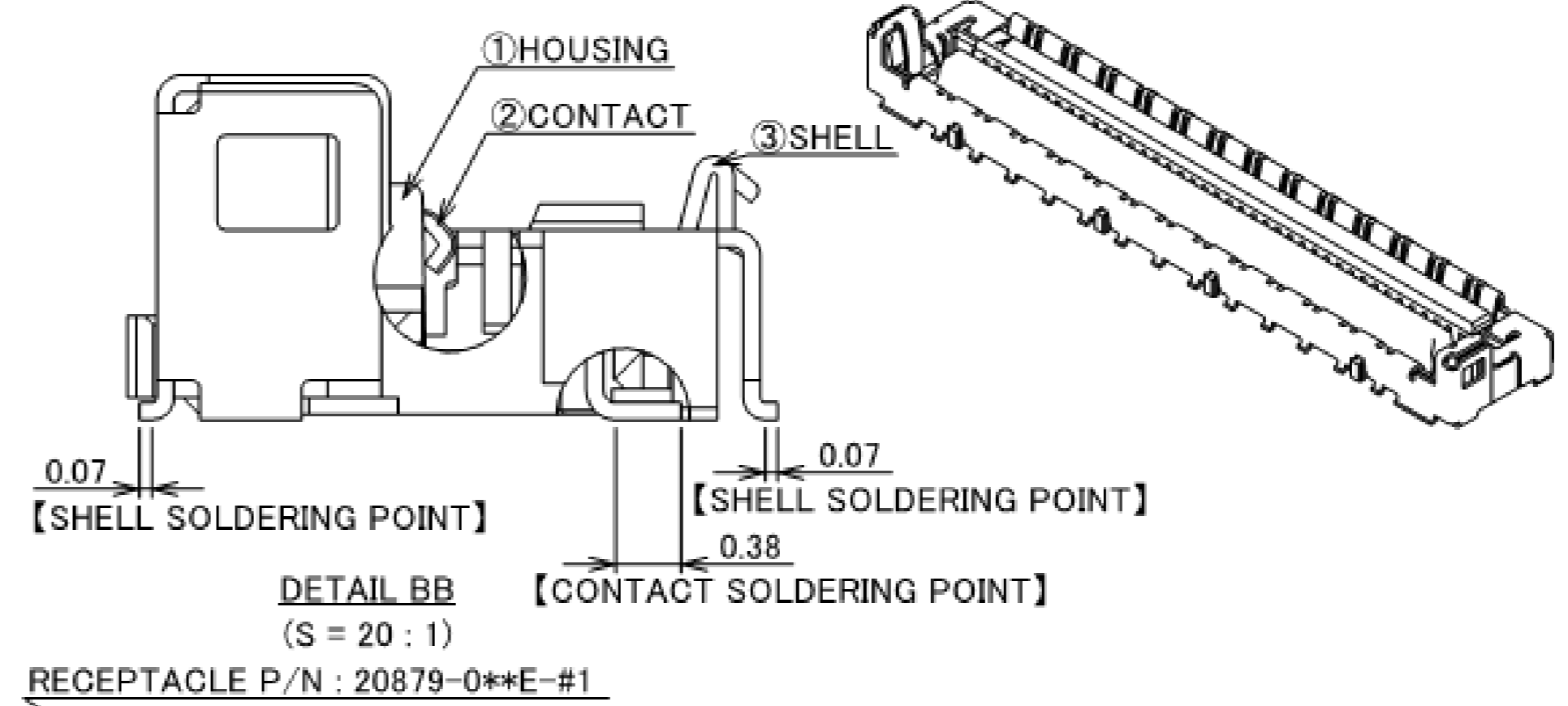
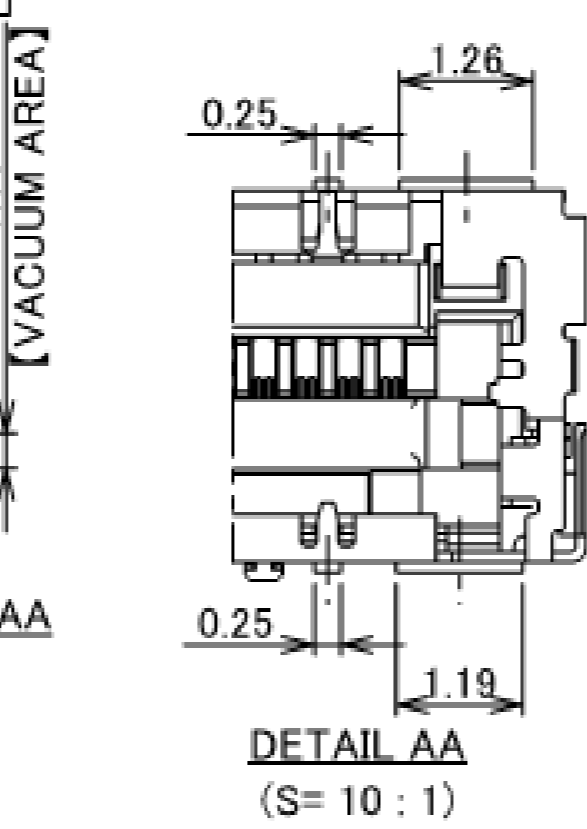
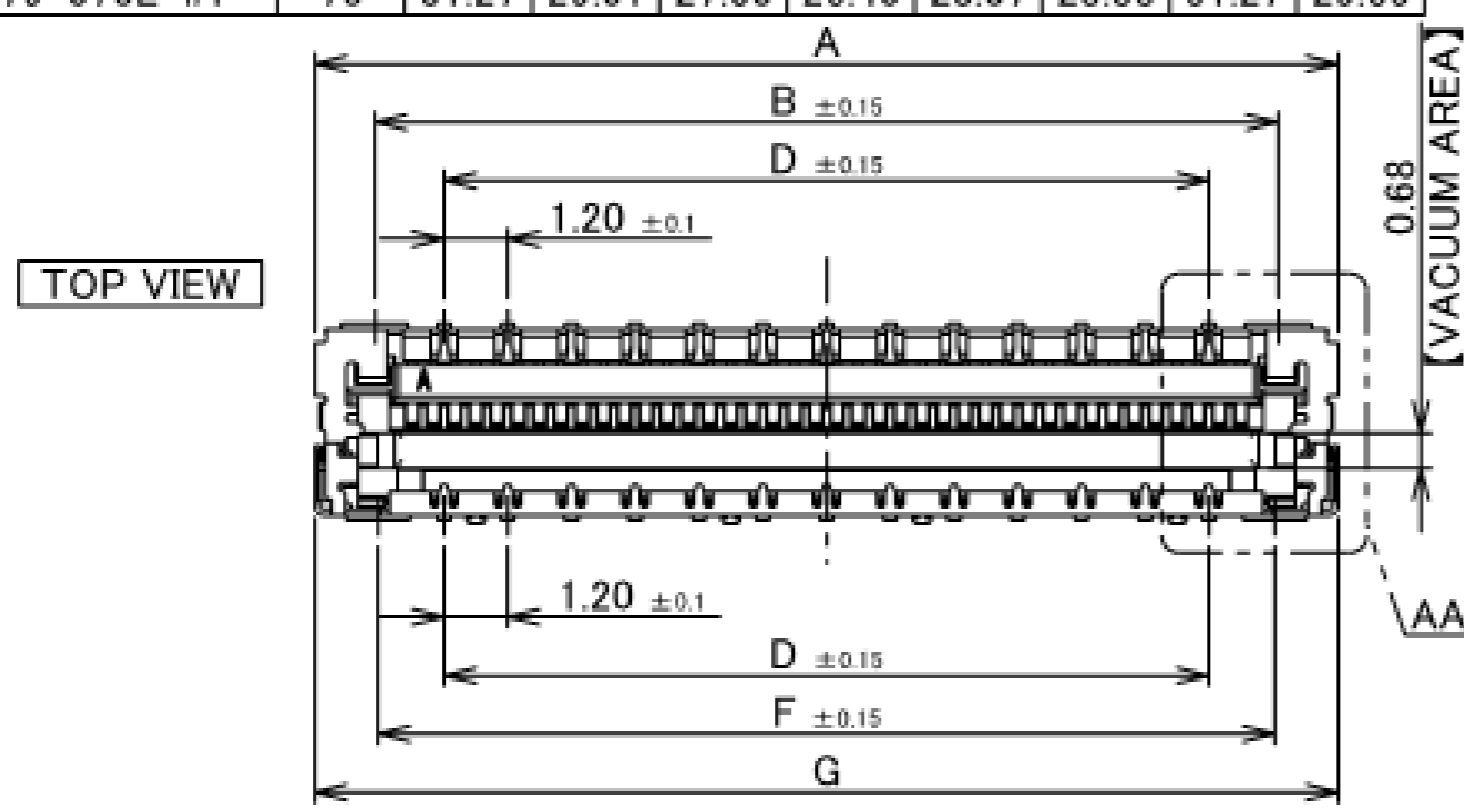
Rev.5

# 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-#1	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
20879-070E-#1	70	31.27	29.01	27.60	26.40	28.07	28.88	31.27	29.65

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

#1 TYPE



MATING CONDITION TABLE.1

PART NO.	CONTACT FINISH
20879-0**E-01	ALL OVER Ni 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
20879-0**E-11	ALL OVER Ni 1.27 μm MIN. CONTACT AREA : Au 0.254 μm MIN. SOLDERING AREA : Au 0.03 μm MIN.

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.20

# Receptacle Assembly

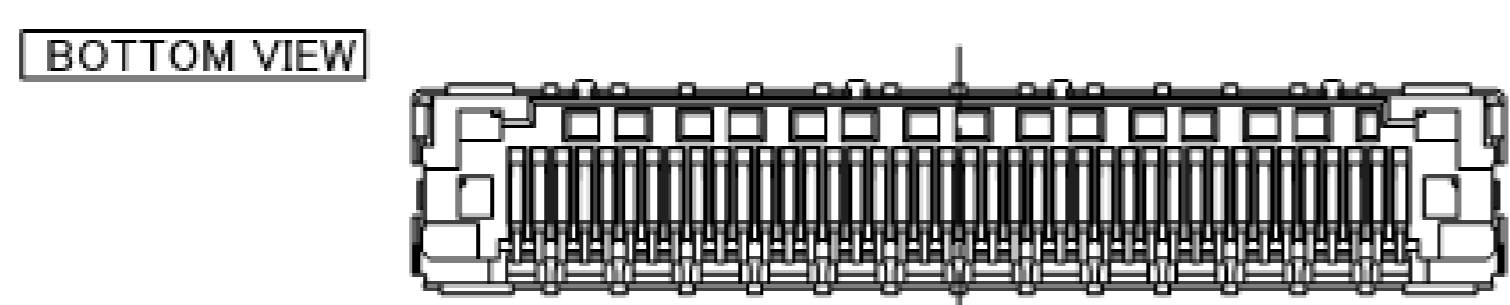
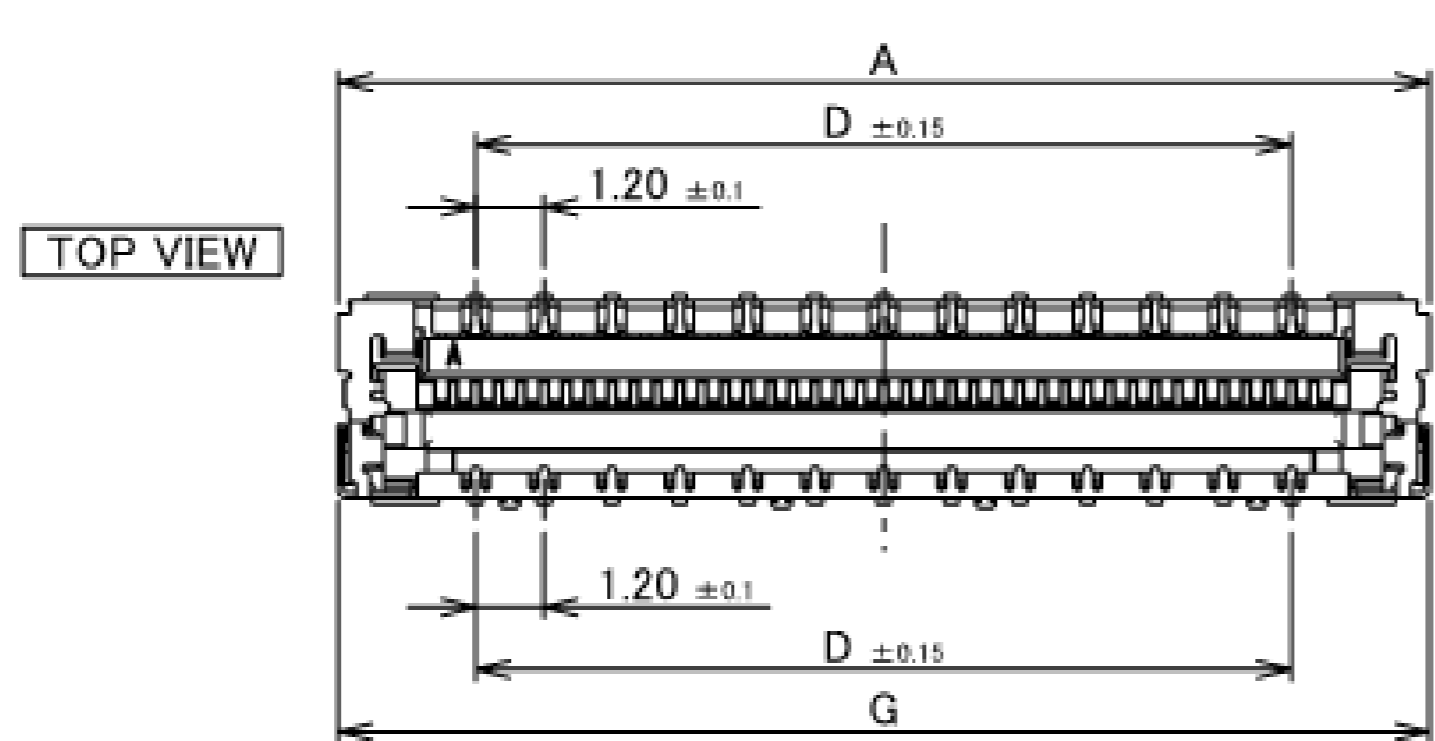
Recommended P/N		20879-0**E-01			
PART NO.	Pos.	A	D	G	
20879-030E-#1	30	15.27	9.60	15.27	
20879-040E-#1	40	19.27	14.40	19.27	
20879-050E-#1	50	23.27	17.60	23.27	
20879-060E-#1	60	27.27	21.60	27.27	
20879-070E-#1	70	31.27	26.40	31.27	



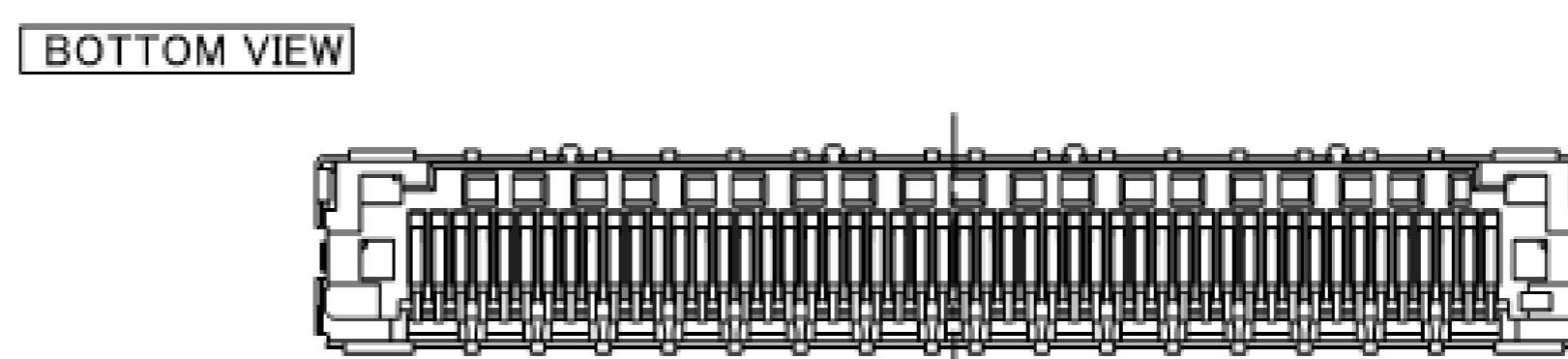
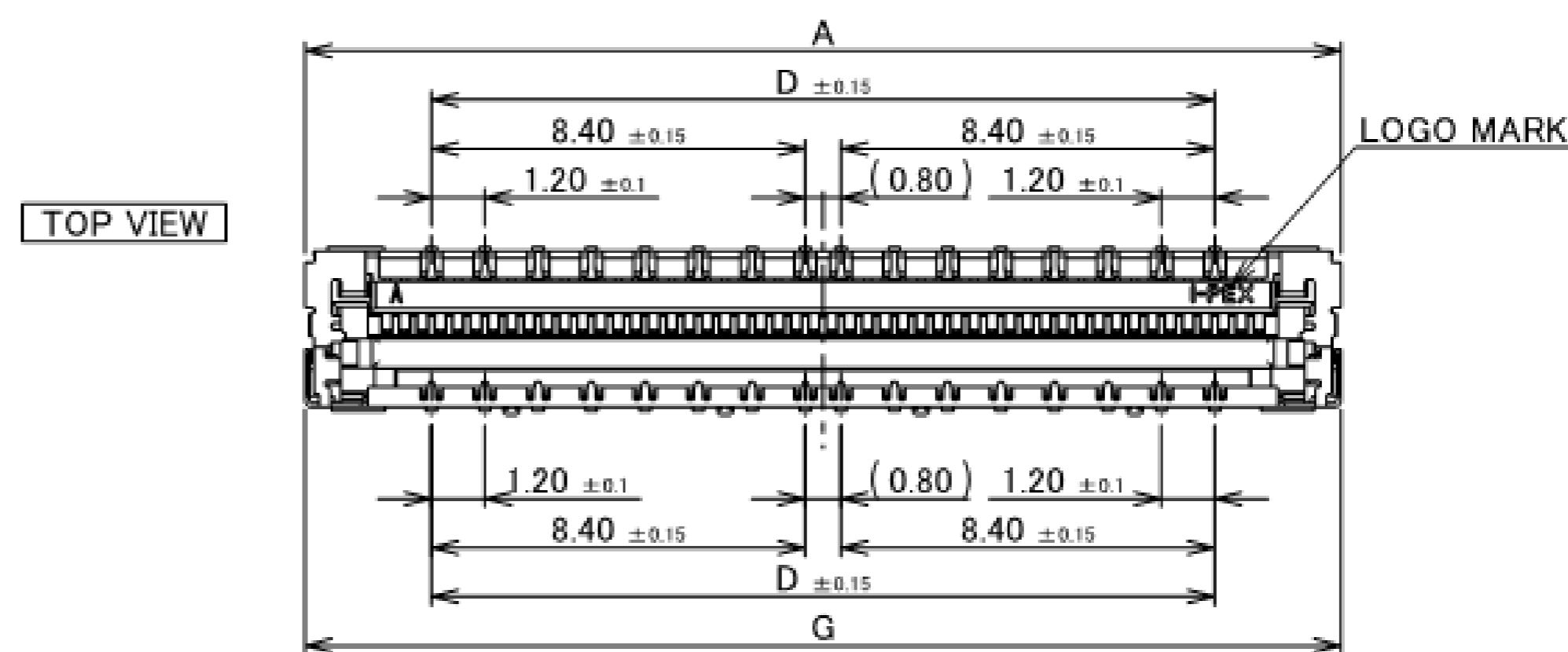
Halogen Free



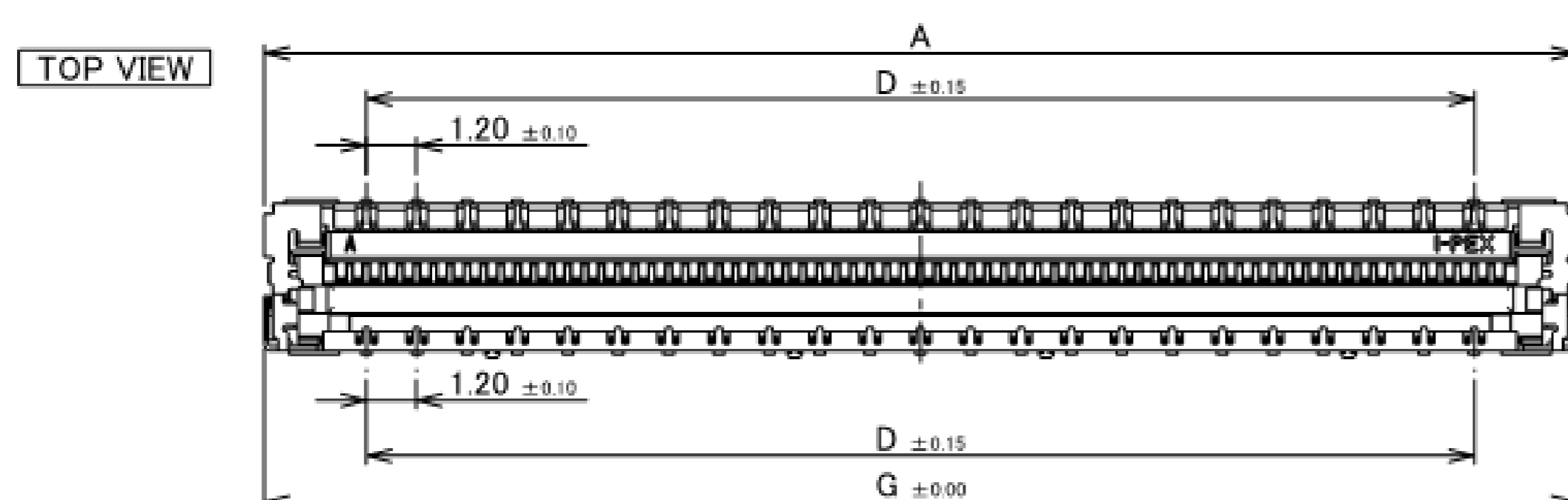
RoHS Compliant



30P, 40P, 60P



50P



70P

Rev.20

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	
20879-050E-02	50	23.27	19.60	20.07	23.27	21.65	22.87	14.40	3.60	8.70	22.69	
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	-	10.70	26.69	
20879-070E-02	70	31.27	27.60	28.07	31.27	29.65	30.87	20.00	-	11.50	30.69	

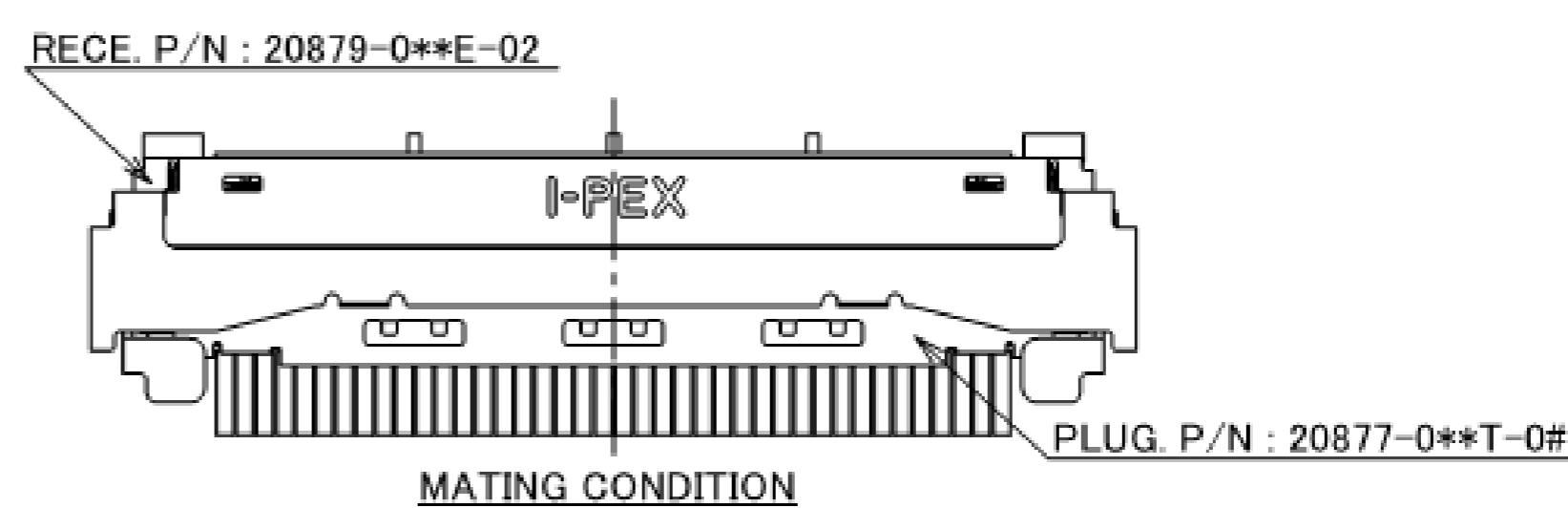
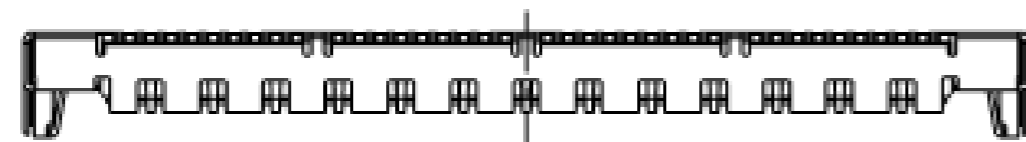
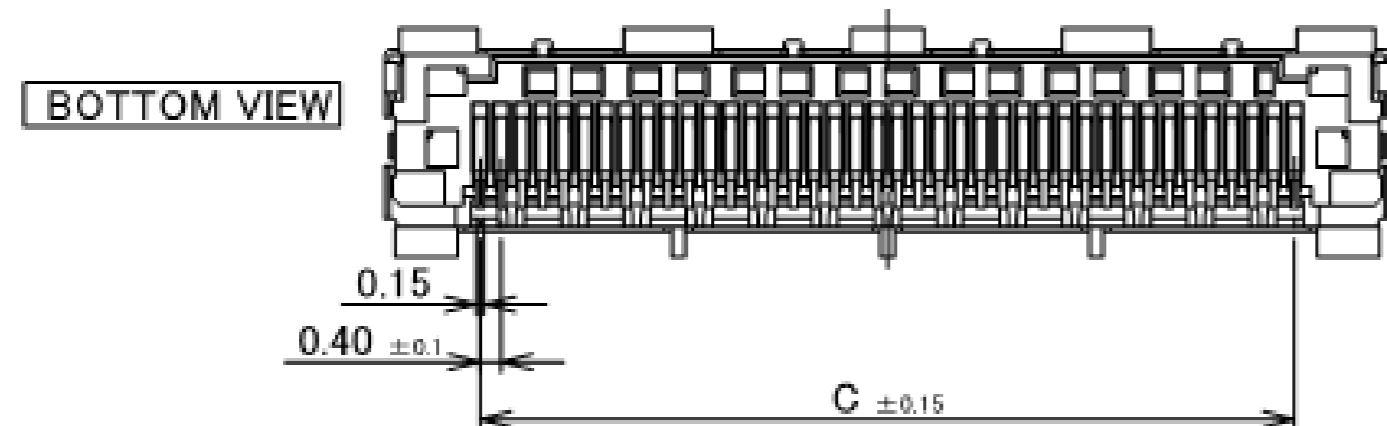
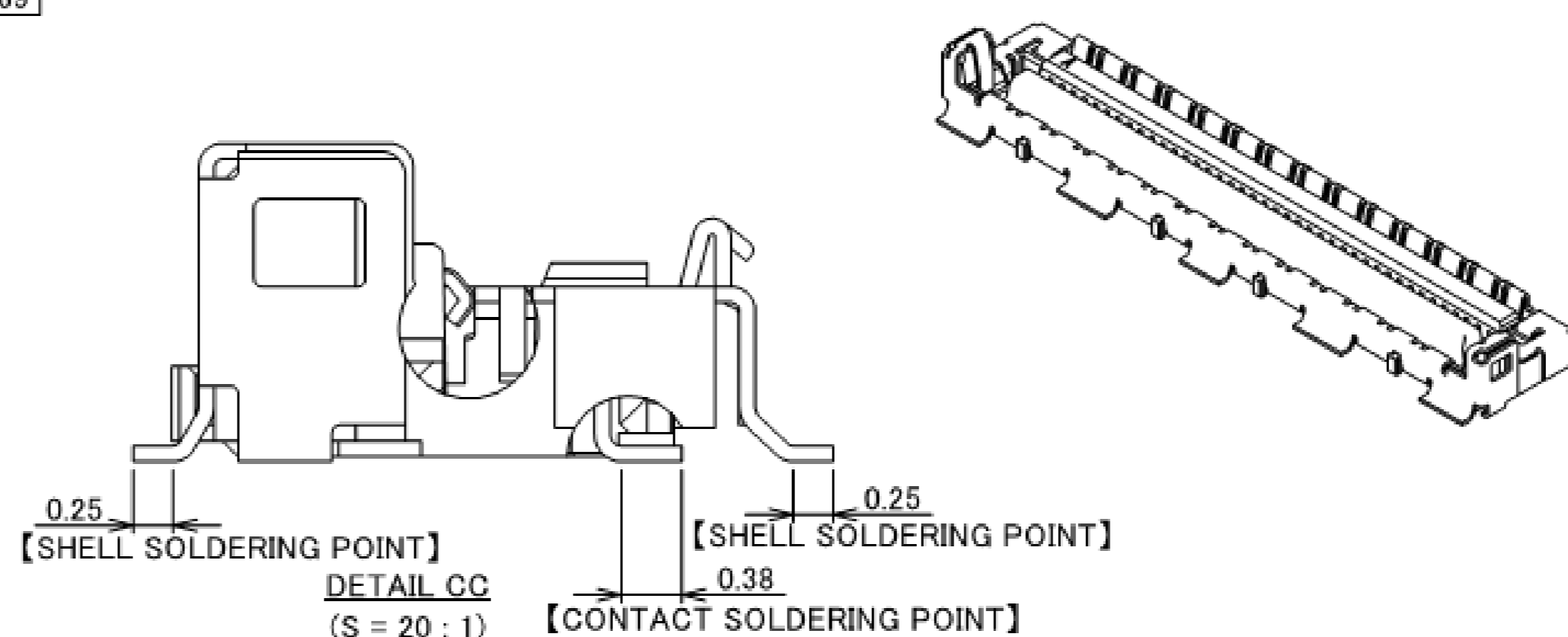
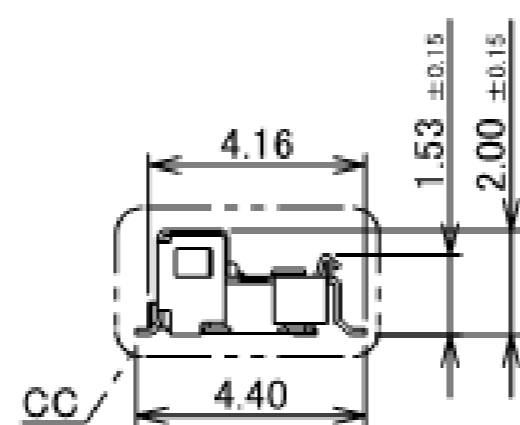
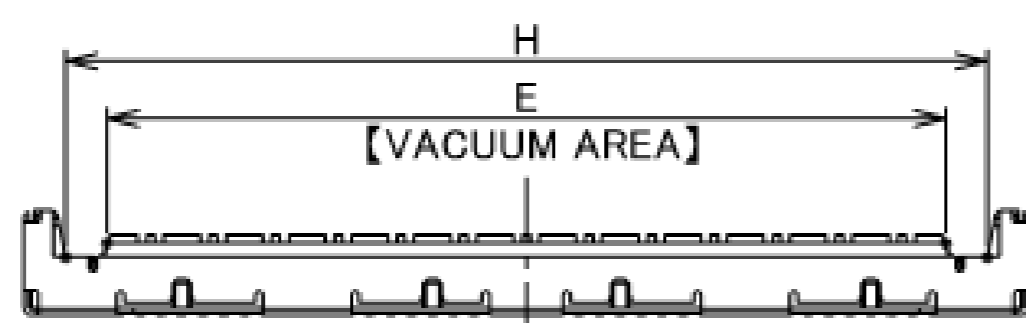
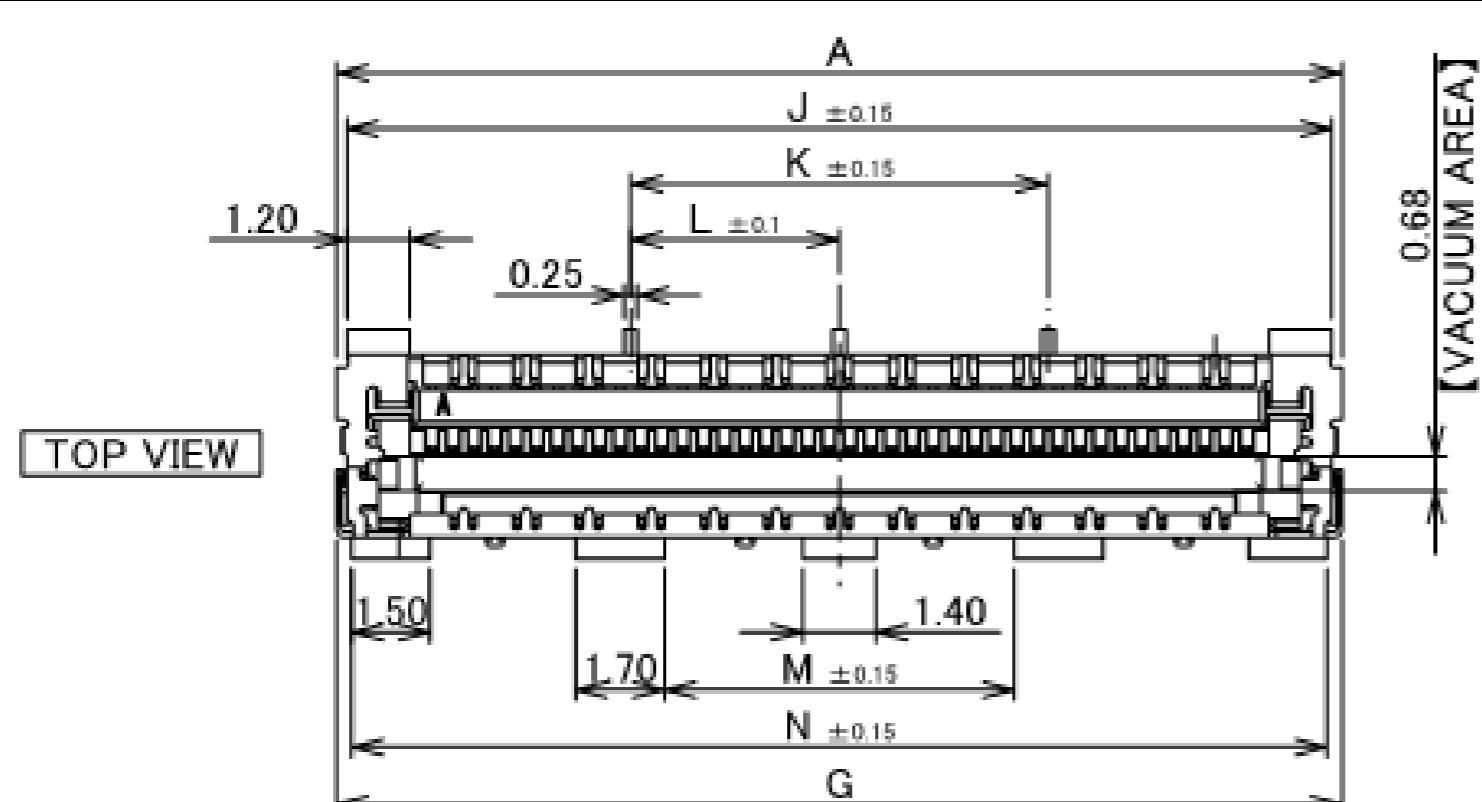
02 TYPE



Halogen Free



RoHS Compliant



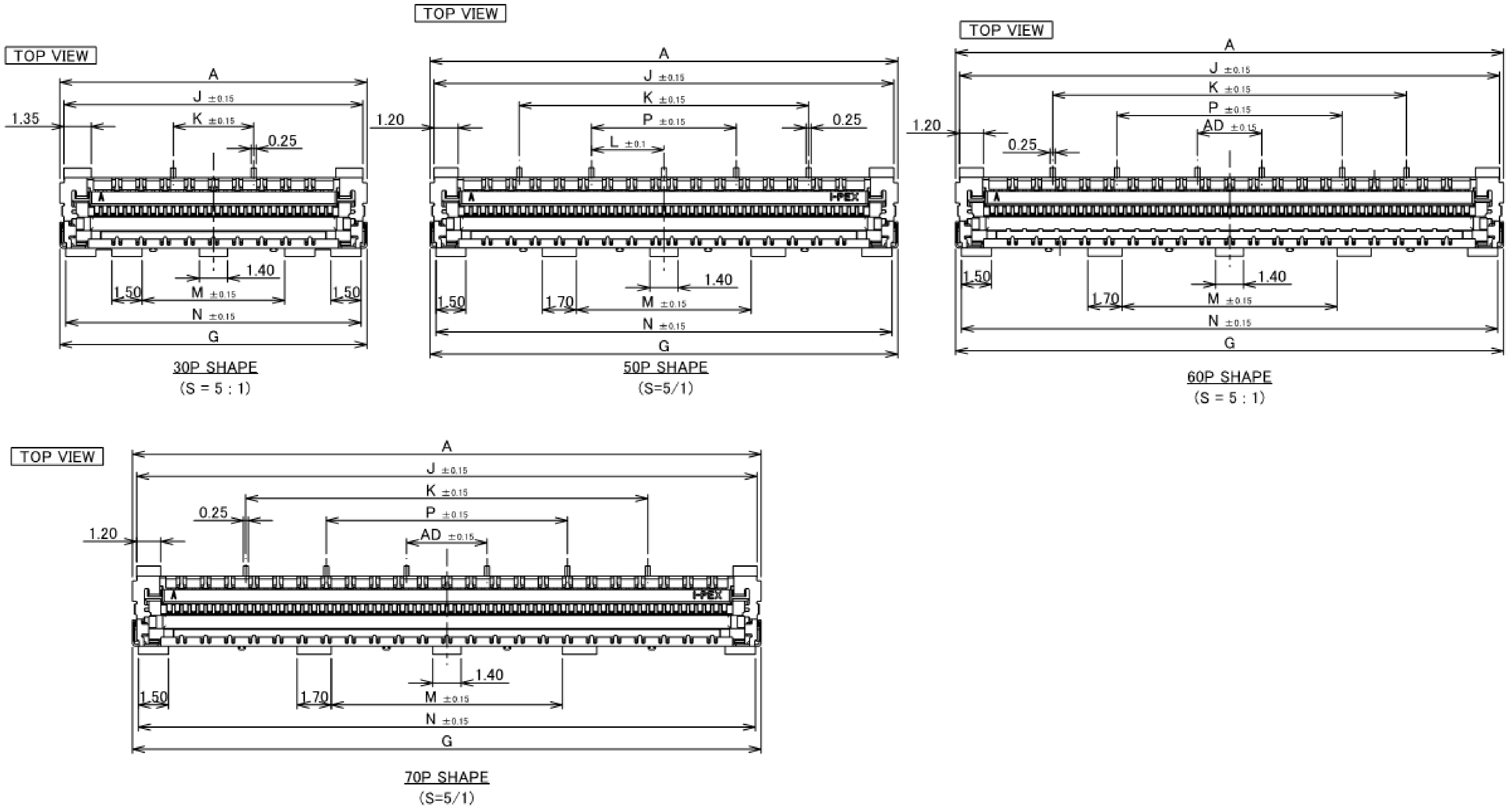
Rev.20

# Receptacle Assembly

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

PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N	P	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	-	-
20879-050E-02	50	23.27	19.60	20.07	23.27	21.65	22.87	14.40	3.60	8.70	22.69	7.20	-
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	-	10.70	26.69	11.20	3.20
20879-070E-02	70	31.27	27.60	28.07	31.27	29.65	30.87	20.00	-	11.50	30.69	12.00	4.00

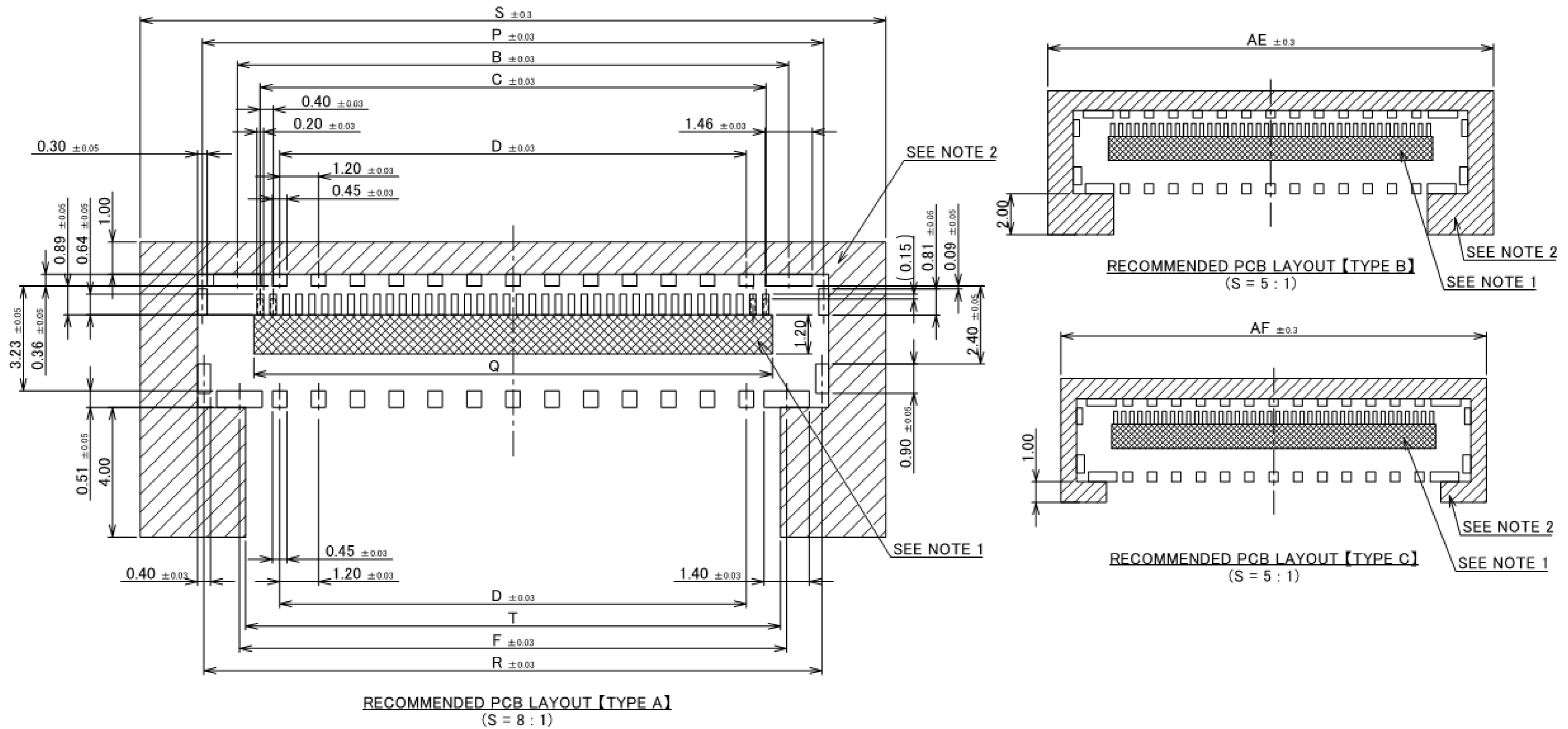
02 TYPE



Rev.20

PART No.	Pos.	B	C	D	F	P	Q	R	S	T	AE	AF
20879-030E-#1	30	13.01	11.60	9.60	12.88	15.17	12.00	15.07	19.00	12.50	18.00	17.00
20879-040E-#1	40	17.01	15.60	14.40	16.88	19.17	16.00	19.07	23.00	16.50	22.00	21.00
20879-060E-#1	60	25.01	23.60	21.60	24.88	27.17	24.00	27.07	31.00	24.50	30.00	29.00
20879-070E-#1	70	29.01	27.60	26.40	28.88	31.17	28.00	31.07	35.00	28.50	34.00	33.00

PLUG PART No.	DUAL-HOOK PULL JIG	PCB LAYOUT
20877-0##T-01	USE	TYPE A
	UNUSED	TYPE B
20877-0##T-02	USE	TYPE A
	UNUSED	TYPE C
20877-0##T-03	-	TYPE C



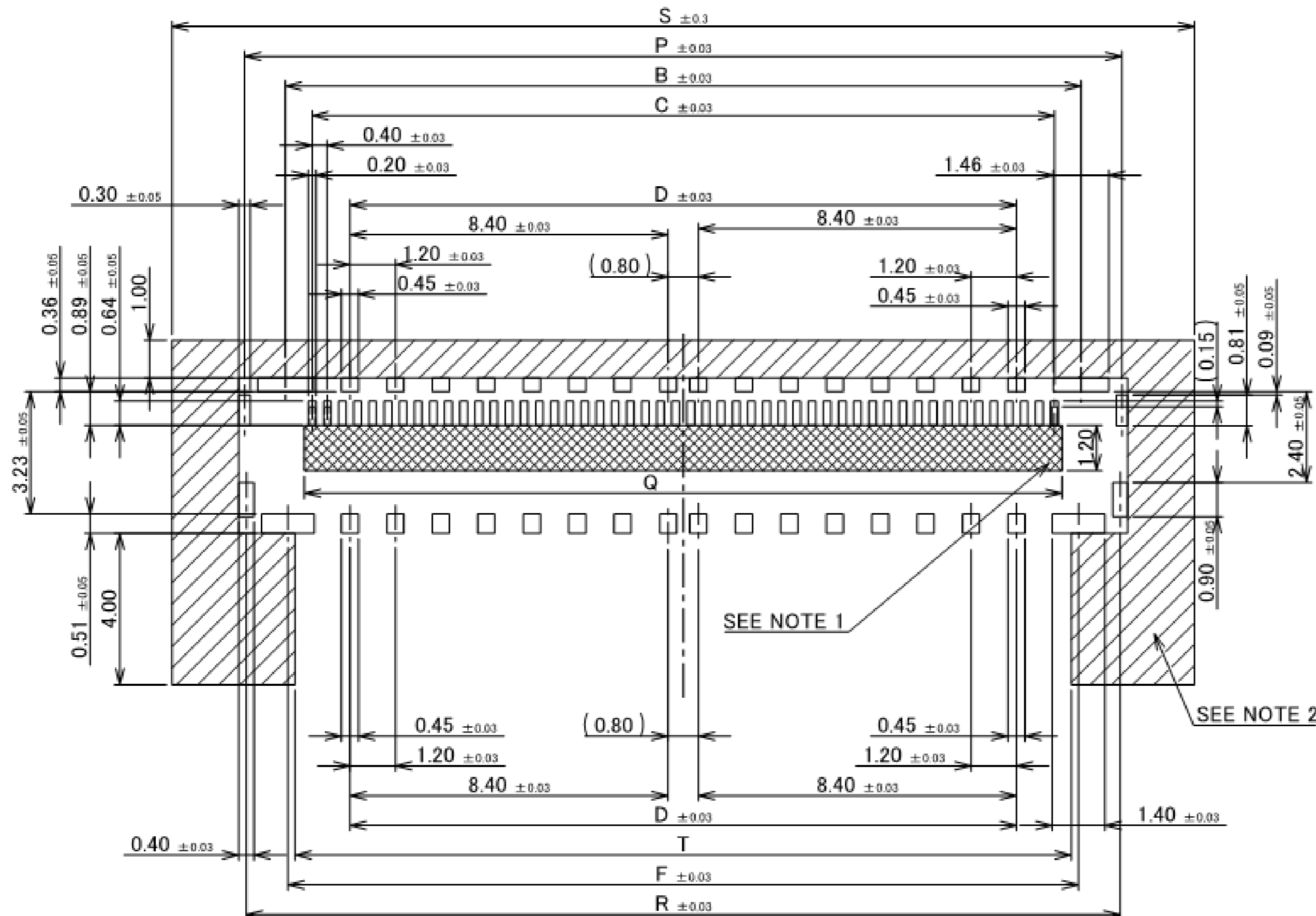
NOTES:  
 1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.  
 2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.  
 THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED,  
 AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED.  
 FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

Rev.20

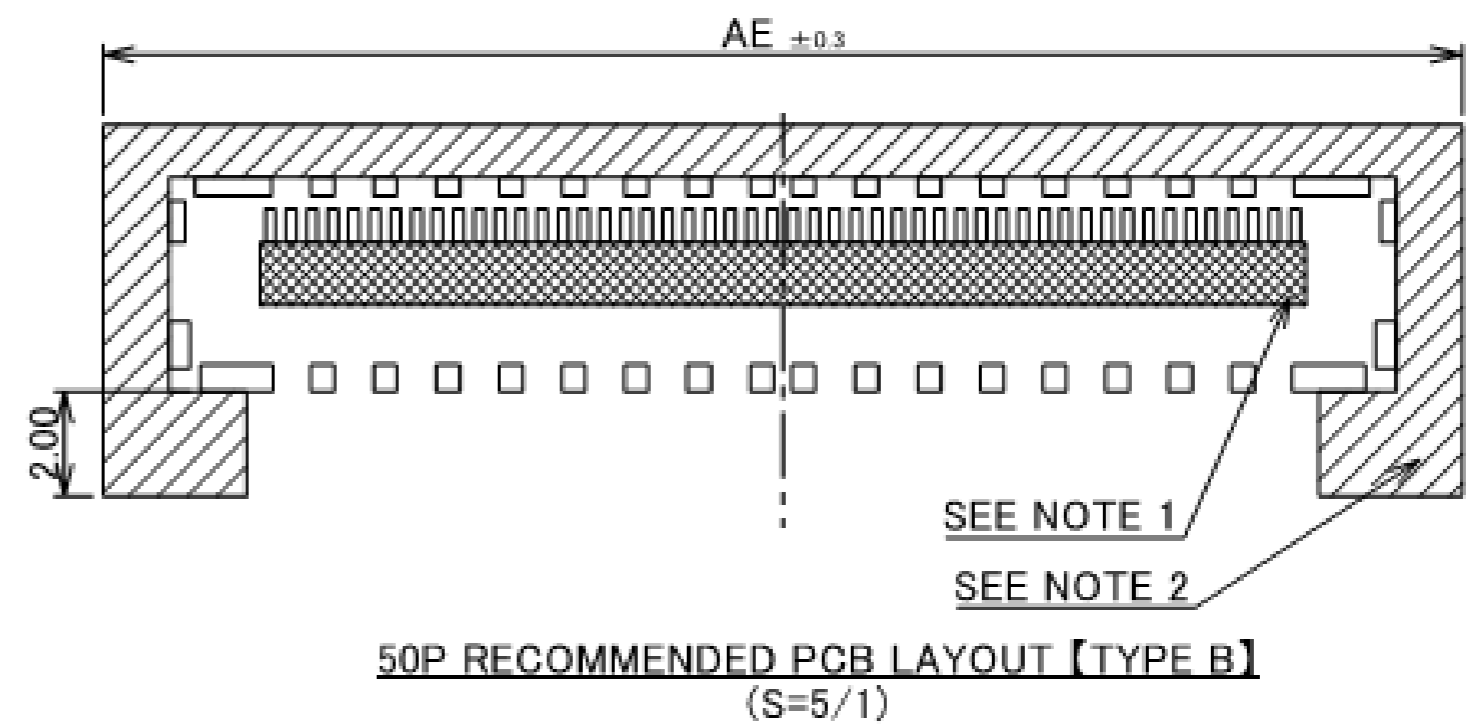
# Receptacle Assembly

PART No.	Pos.	B	C	D	F	P	Q	R	S	T	AE	AF
20879-050E-#1	50	21.01	19.60	17.60	20.88	23.17	20.00	23.07	27.00	20.50	26.00	25.00

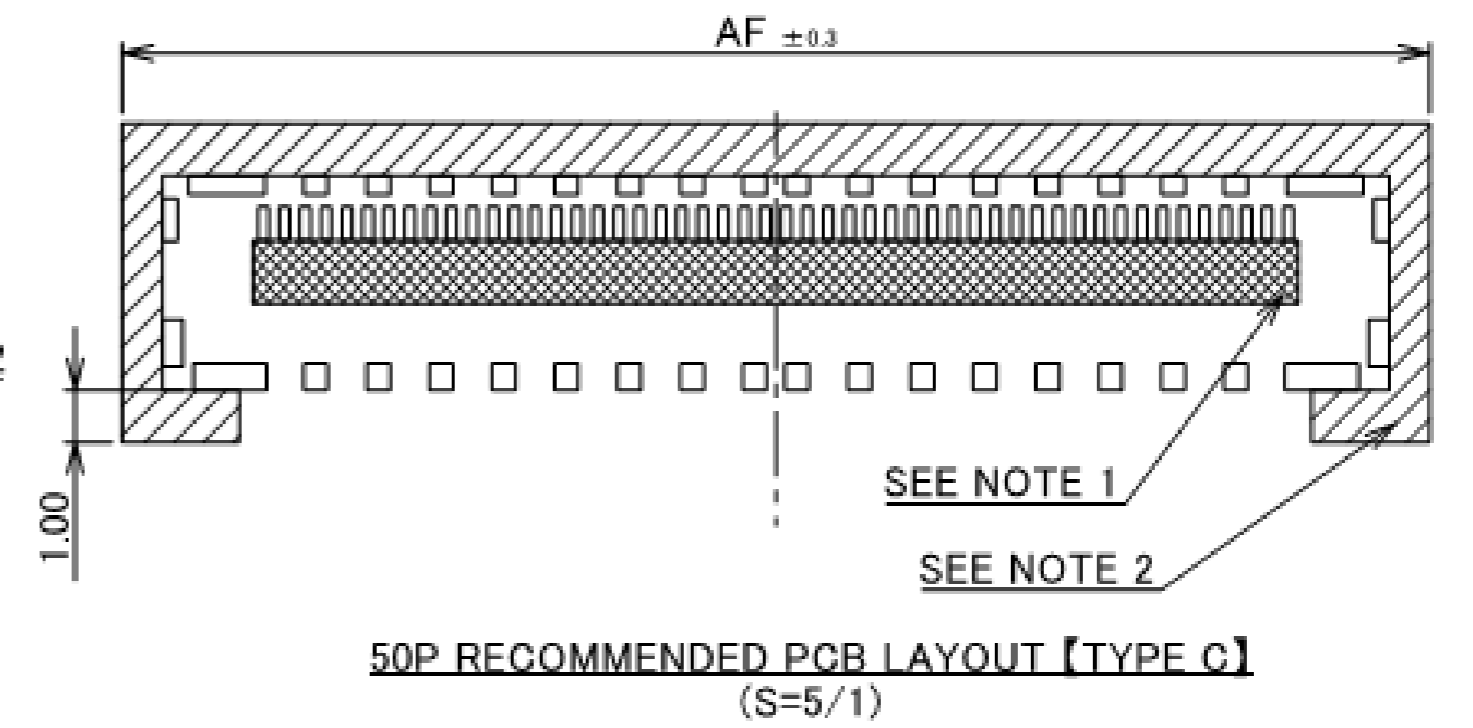
PLUG PART No.	DUAL-HOOK PULL JIG	PCB LAYOUT
20877-0##T-01	USE	TYPE A
	UNUSED	TYPE B
20877-0##T-02	USE	TYPE A
	UNUSED	TYPE C
20877-0##T-03	-	TYPE C
	-	



50P RECOMMENDED PCB LAYOUT [TYPE A]  
(S=7/1)



50P RECOMMENDED PCB LAYOUT [TYPE B]  
(S=5/1)



50P RECOMMENDED PCB LAYOUT [TYPE C]  
(S=5/1)

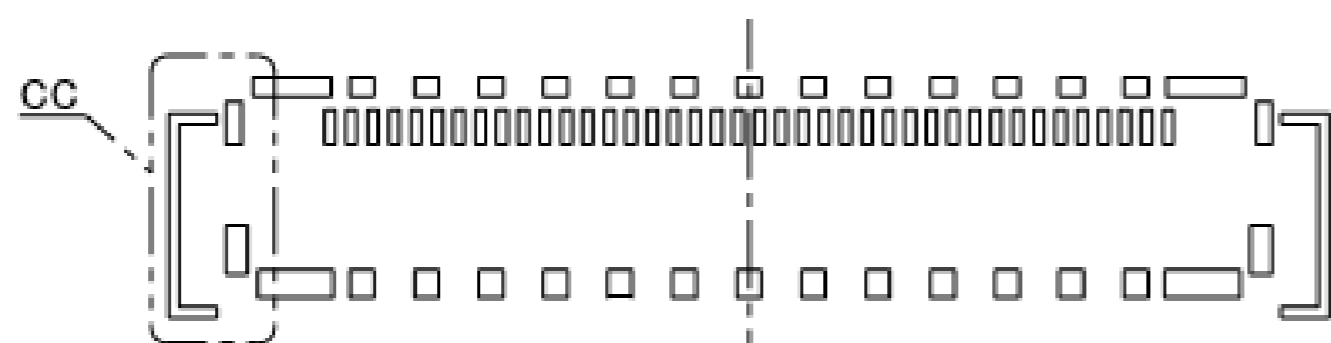
Rev.20

PART No.	Pos.
20879-030E-#1	30
20879-040E-#1	40
20879-050E-#1	50
20879-060E-#1	60
20879-070E-#1	70

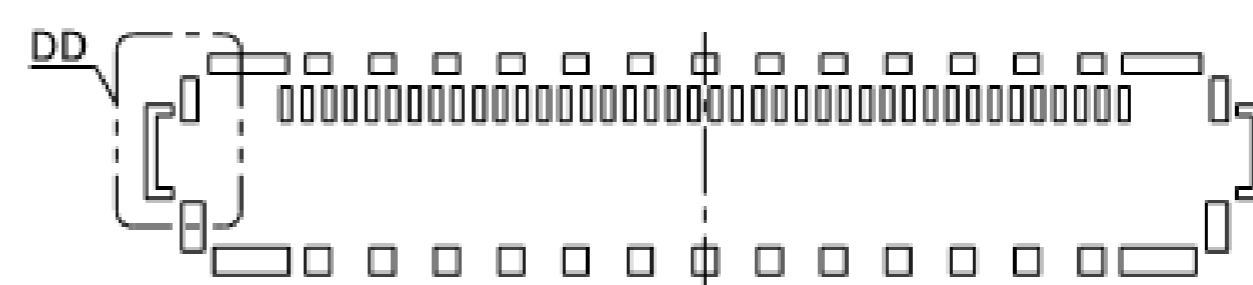
#1 TYPE

With LOCK COVER

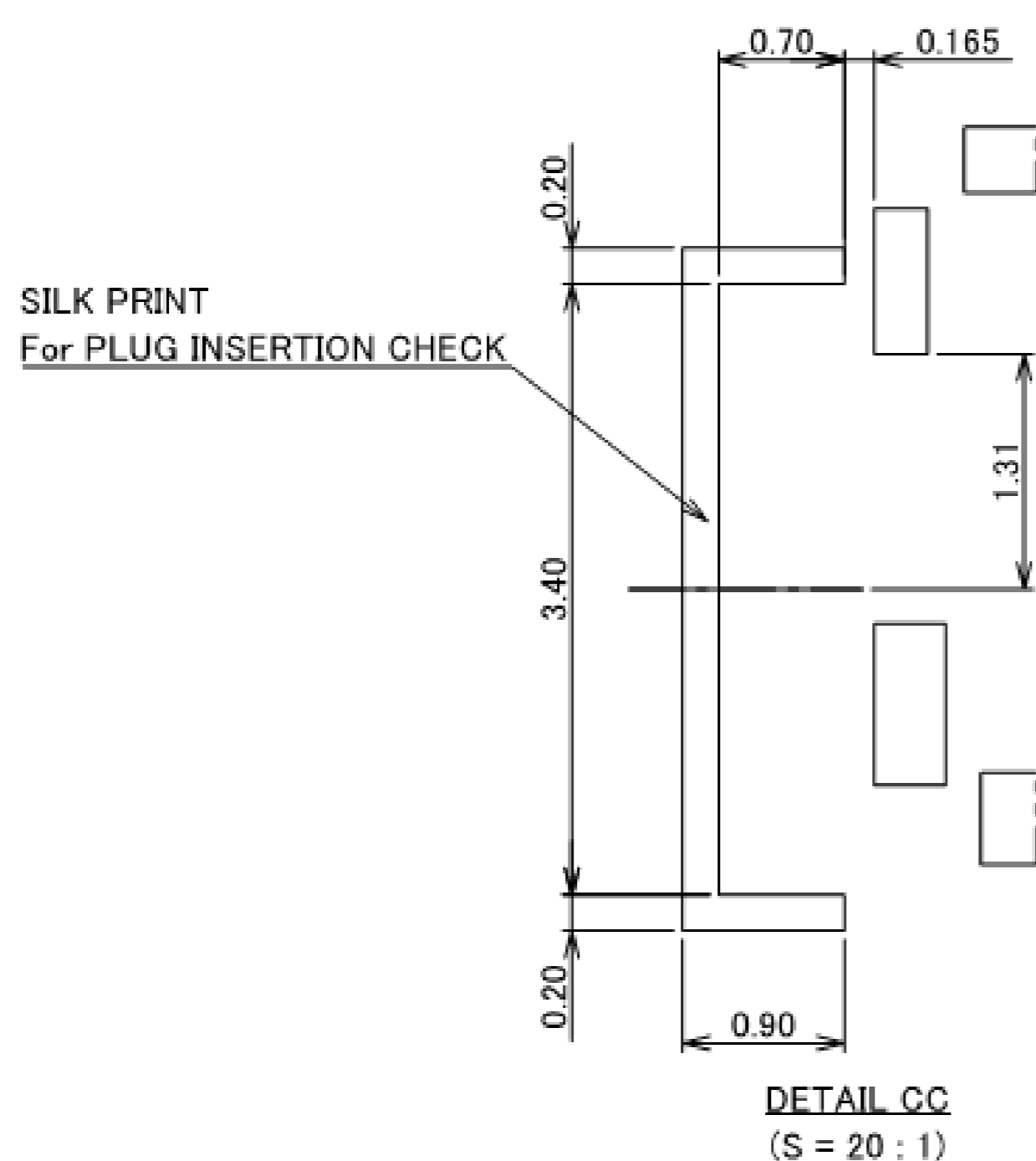
Without LOCK COVER &  
With PULL TAPE HOLDER



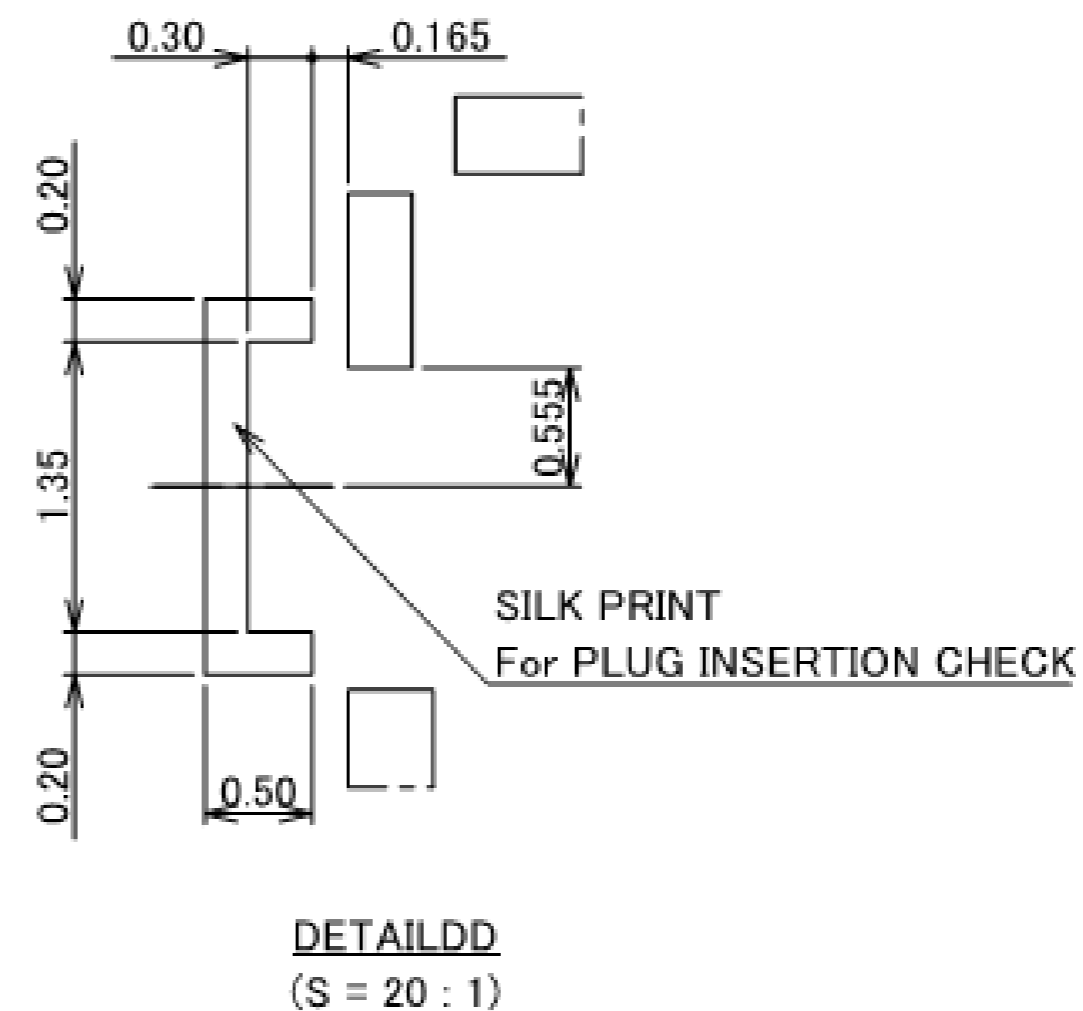
RECOMMENDED SILK PRINT For With LOCK COVER  
(S = 5 : 1)



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



DETAIL CC  
(S = 20 : 1)



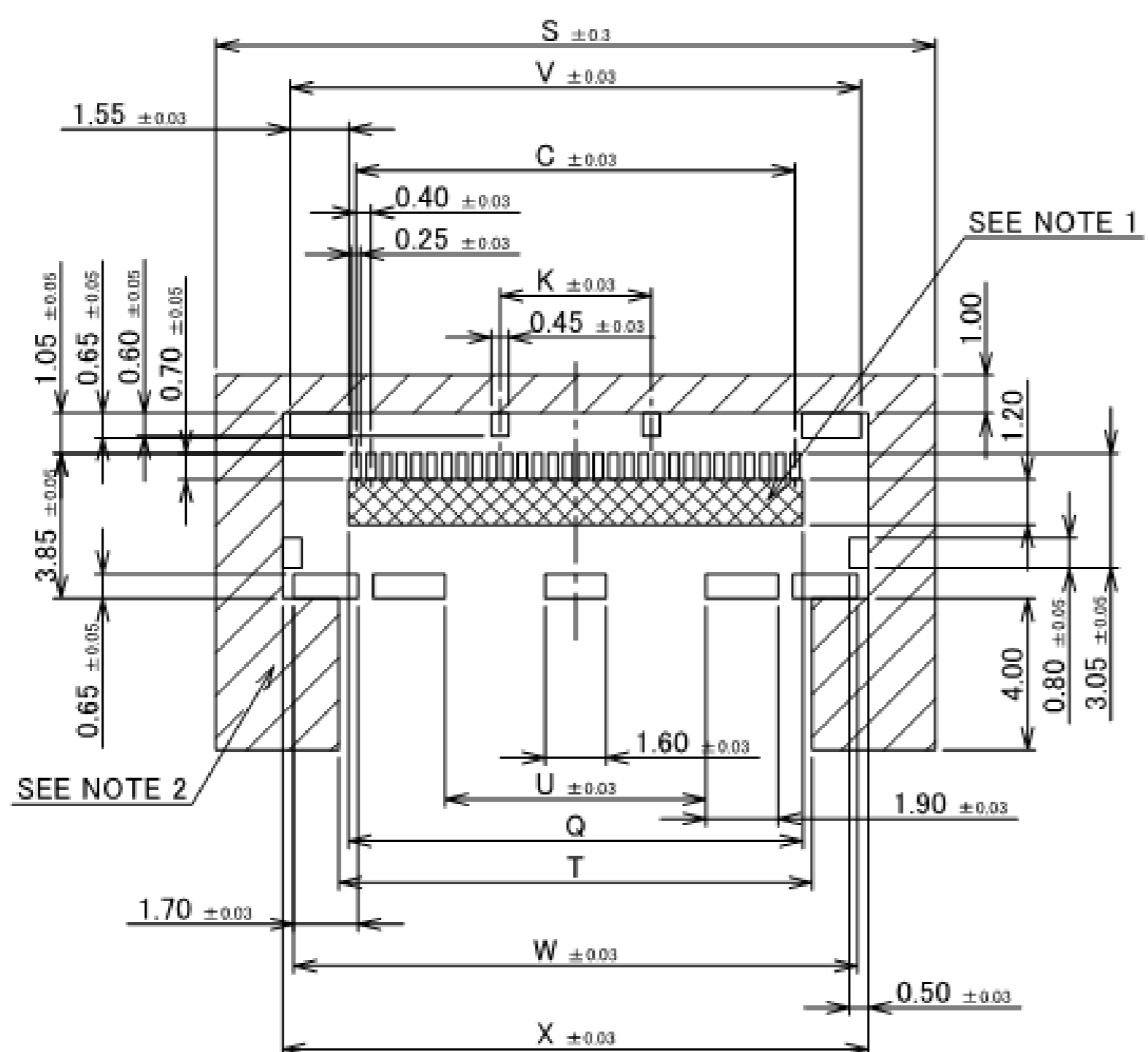
DETAIL DD  
(S = 20 : 1)

Rev.20

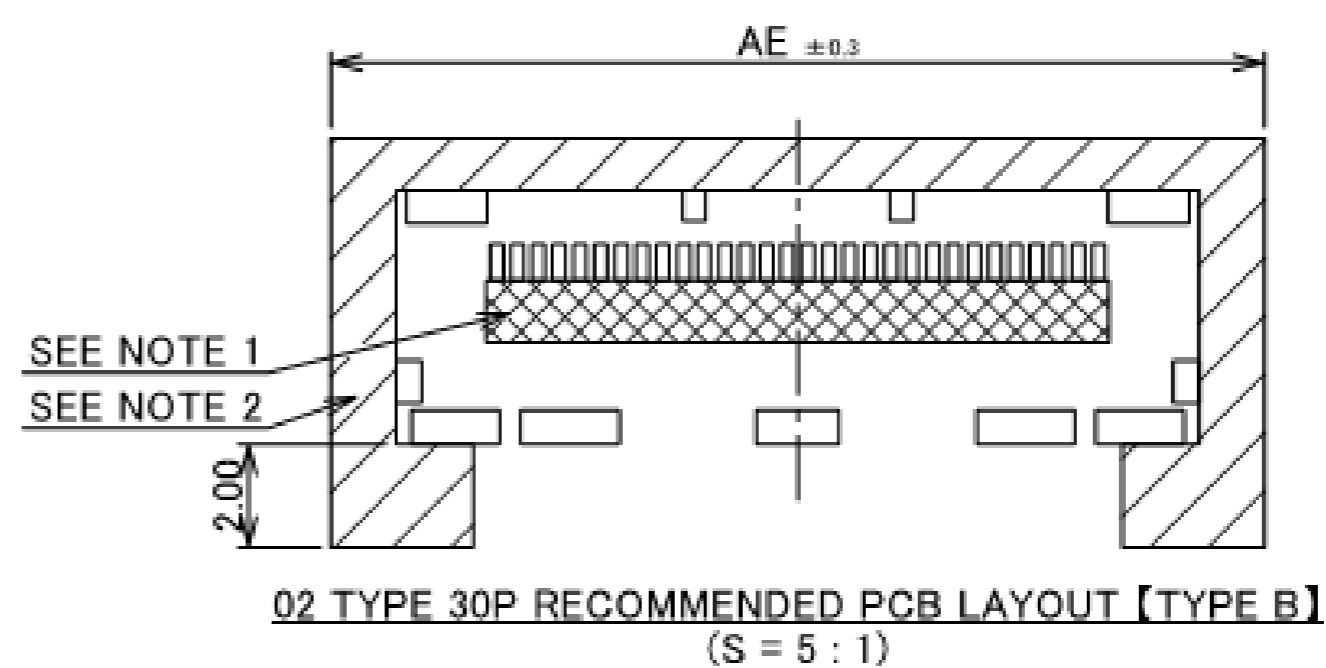
# Receptacle Assembly

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X	AE	AF
20879-030E-02	30	11.60	4.00	-	12.00	19.00	12.50	6.89	15.07	14.89	15.47	18.00	17.00

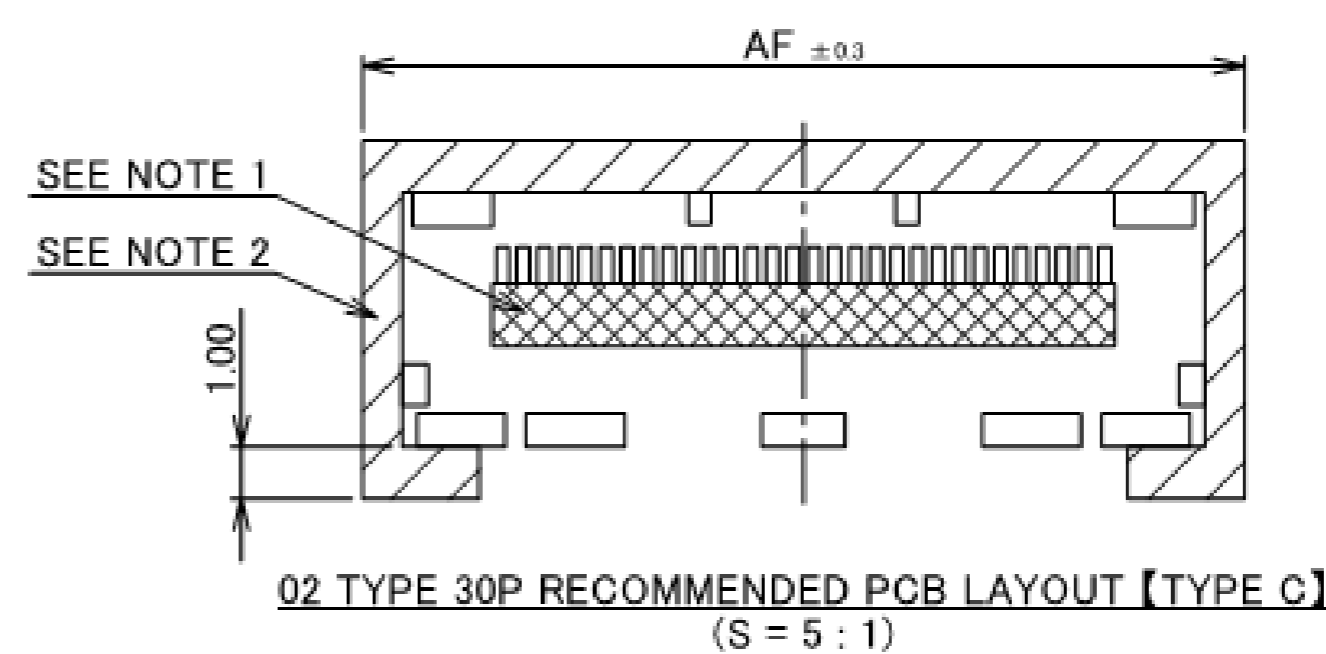
## 02 TYPE



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



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



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

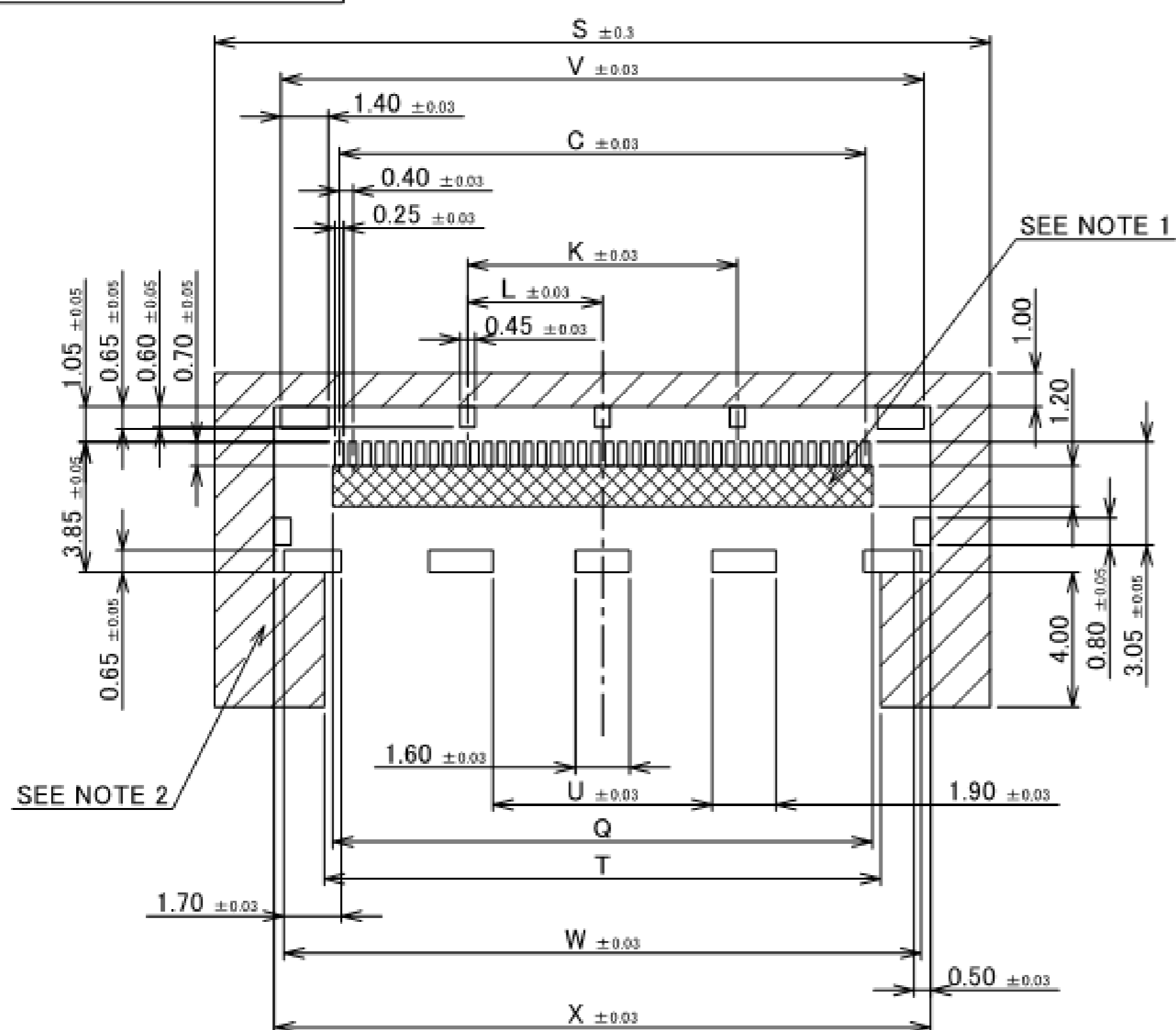
NOTES.

1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
  2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
- THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED,  
AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED.  
FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

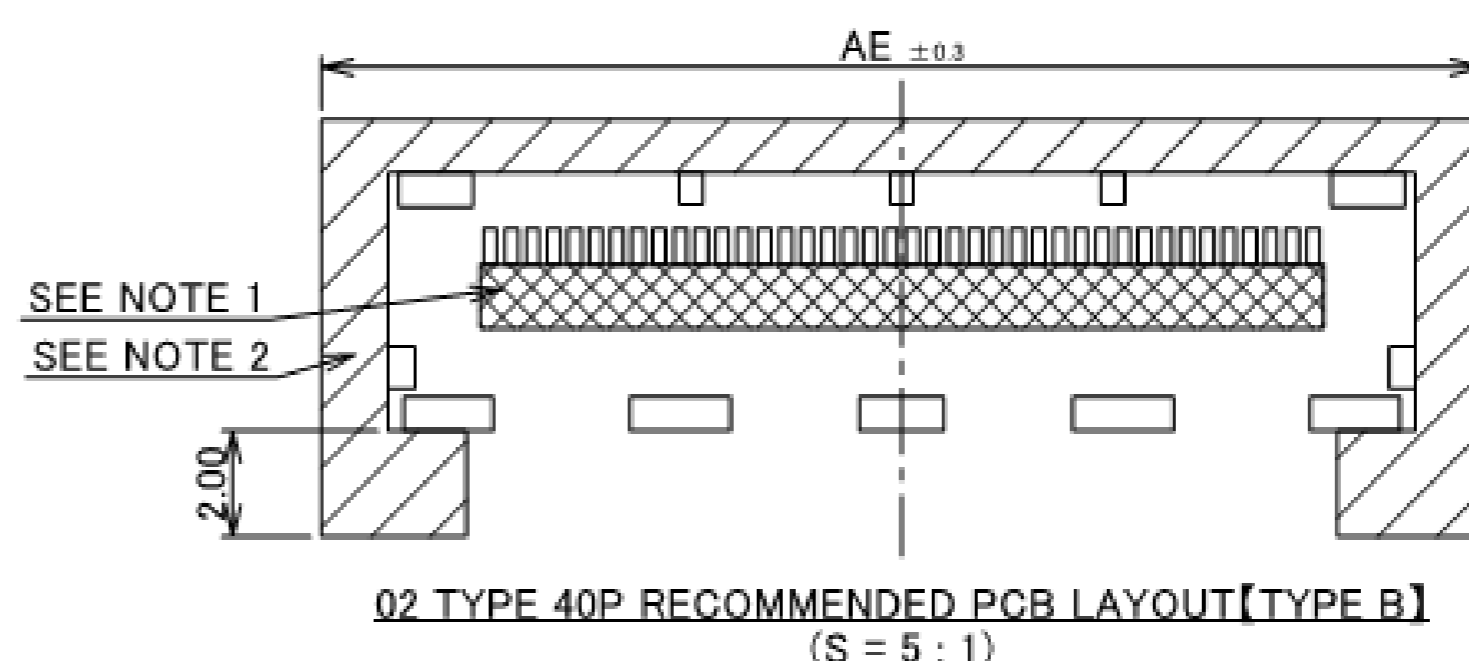
Rev.20

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X	AE	AF
20879-040E-02	40	15.60	8.00	4.00	16.00	23.00	16.50	6.50	19.07	18.89	19.47	22.00	21.00

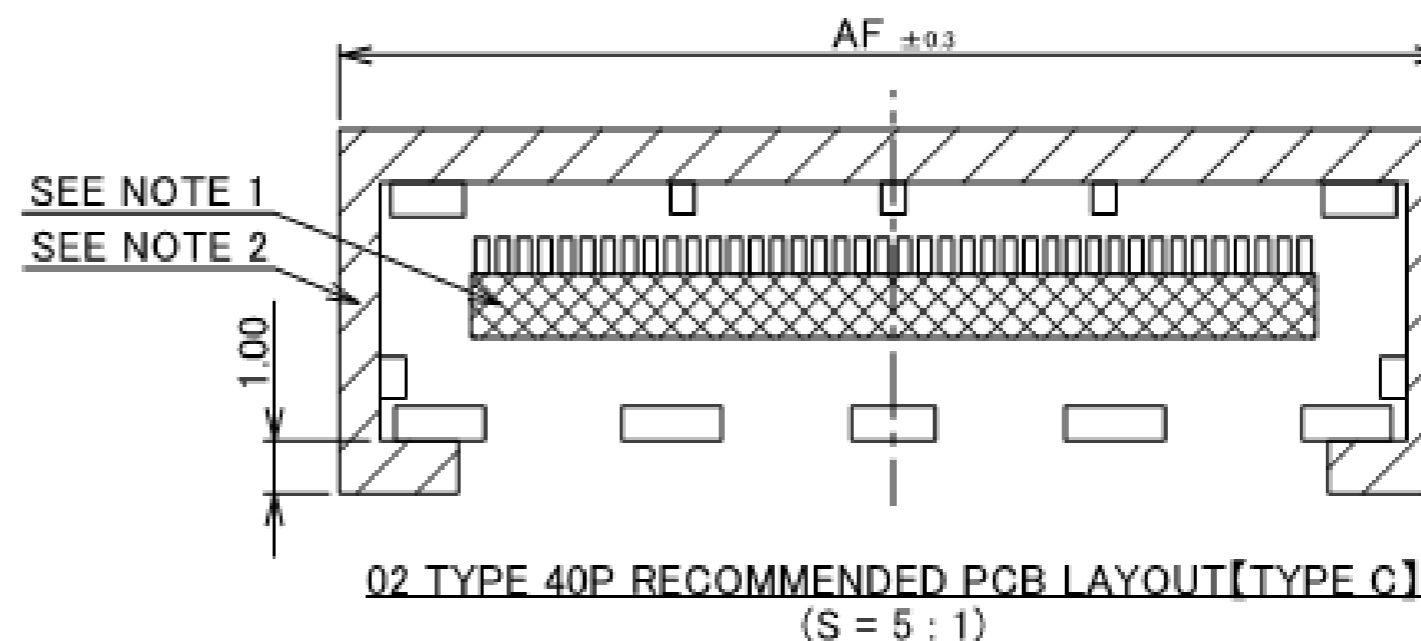
## 02 TYPE



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



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



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

NOTES.

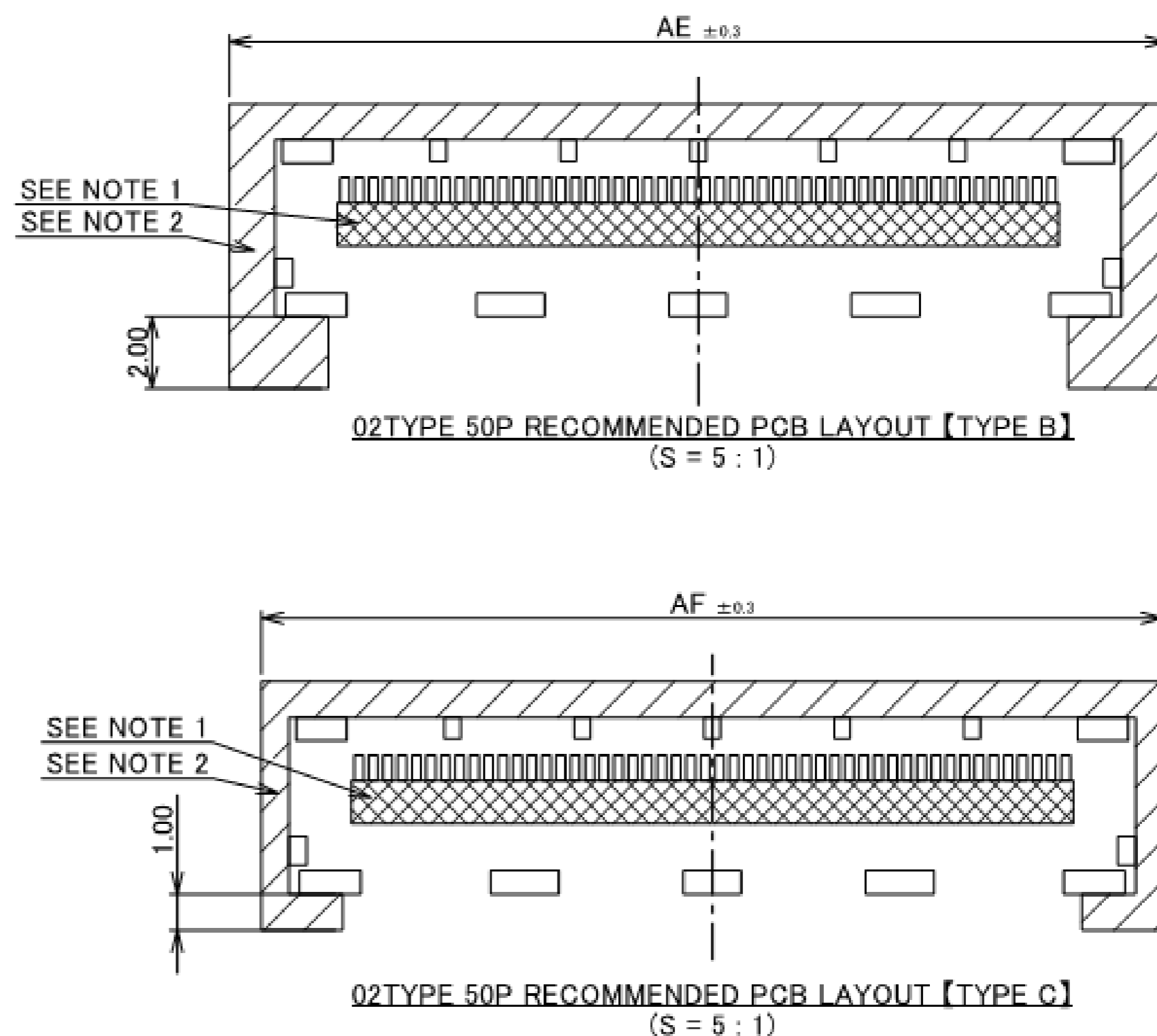
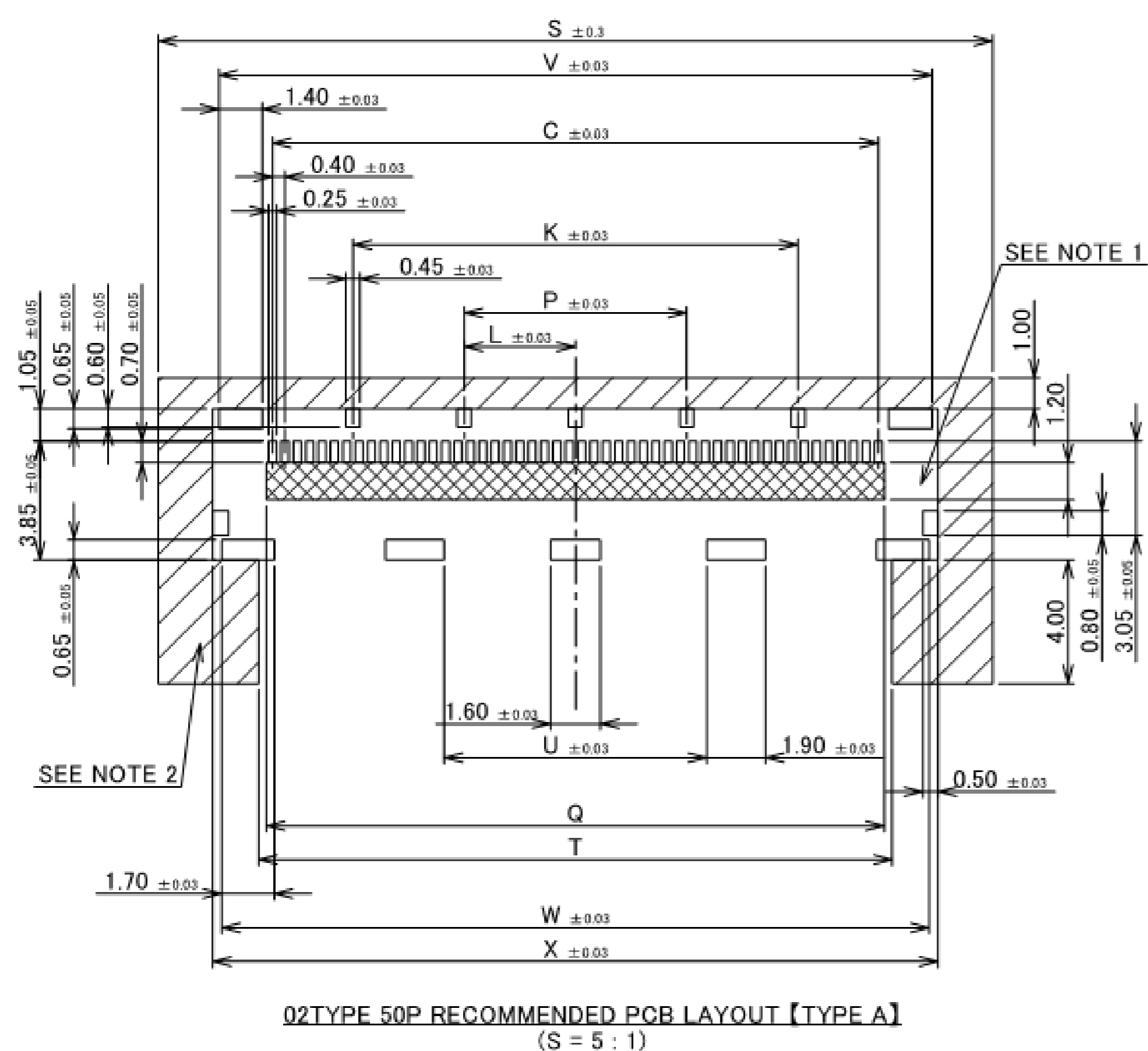
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
  2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
- THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED,  
AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED.  
FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

Rev.20

# Receptacle Assembly

PART No.	Pos.	C	K	L	P	Q	S	T	U	V	W	X	AE	AF
20879-050E-02	50	19.60	14.40	3.60	7.20	20.00	27.00	20.50	8.50	23.07	22.89	23.47	26.00	25.00

## 02 TYPE



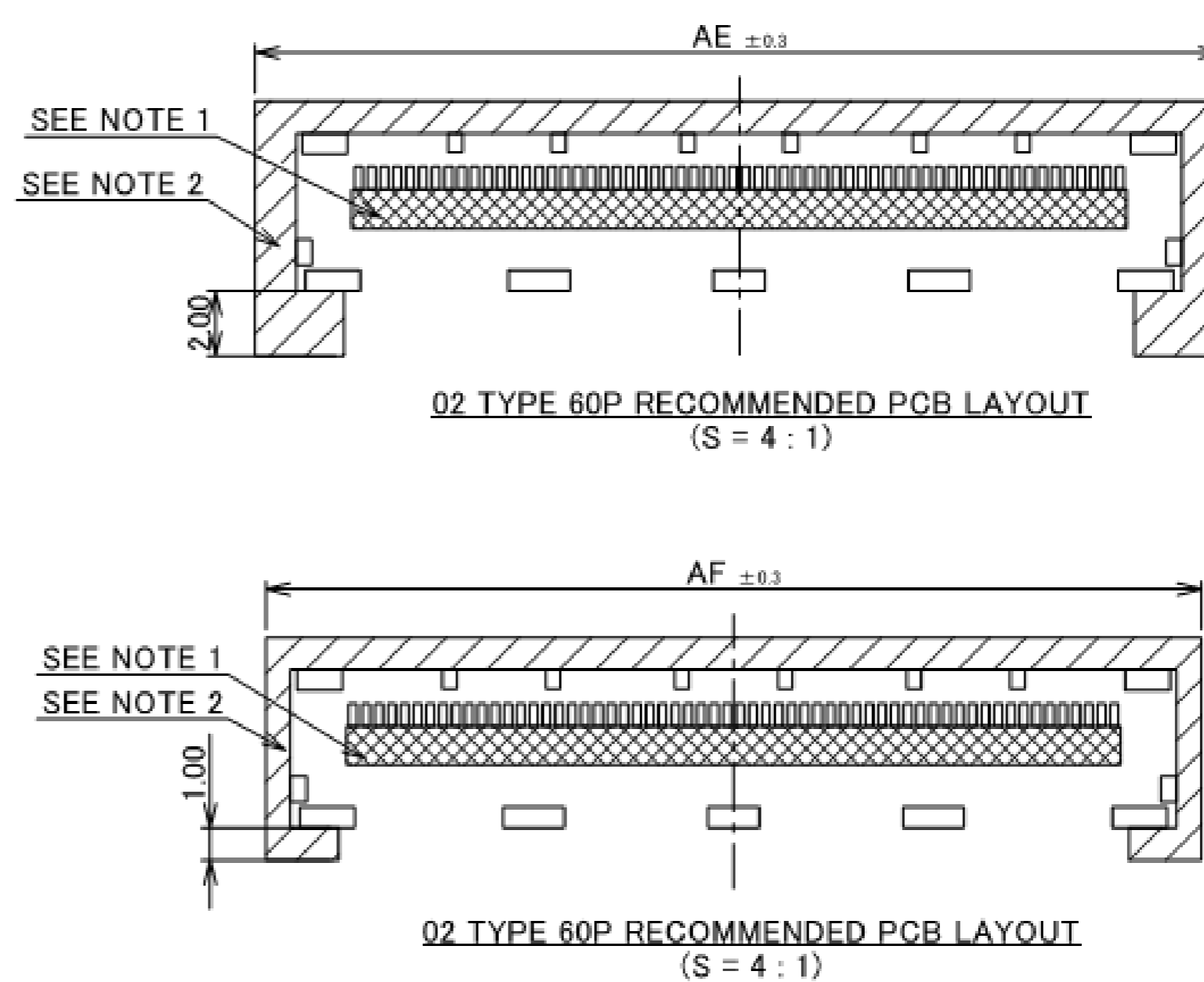
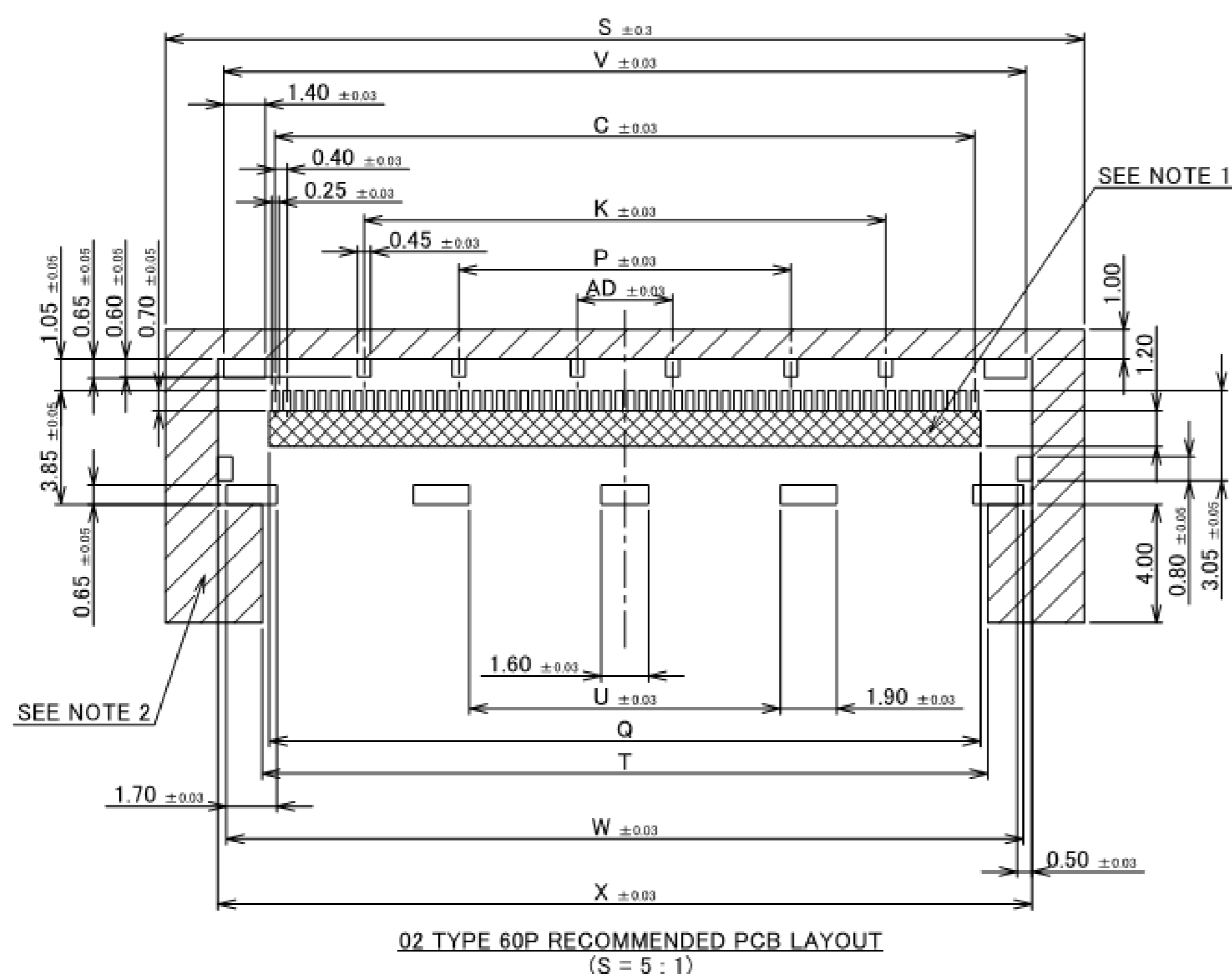
### NOTES.

1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
  2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
- THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED, AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED. FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

Rev.20

PART No.	Pos.	C	K	L	P	Q	S	T	U	V	W	X	AD	AE	AF
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	30.00	29.00

## 02 TYPE



### NOTES.

1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
  2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
- THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED, AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED. FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

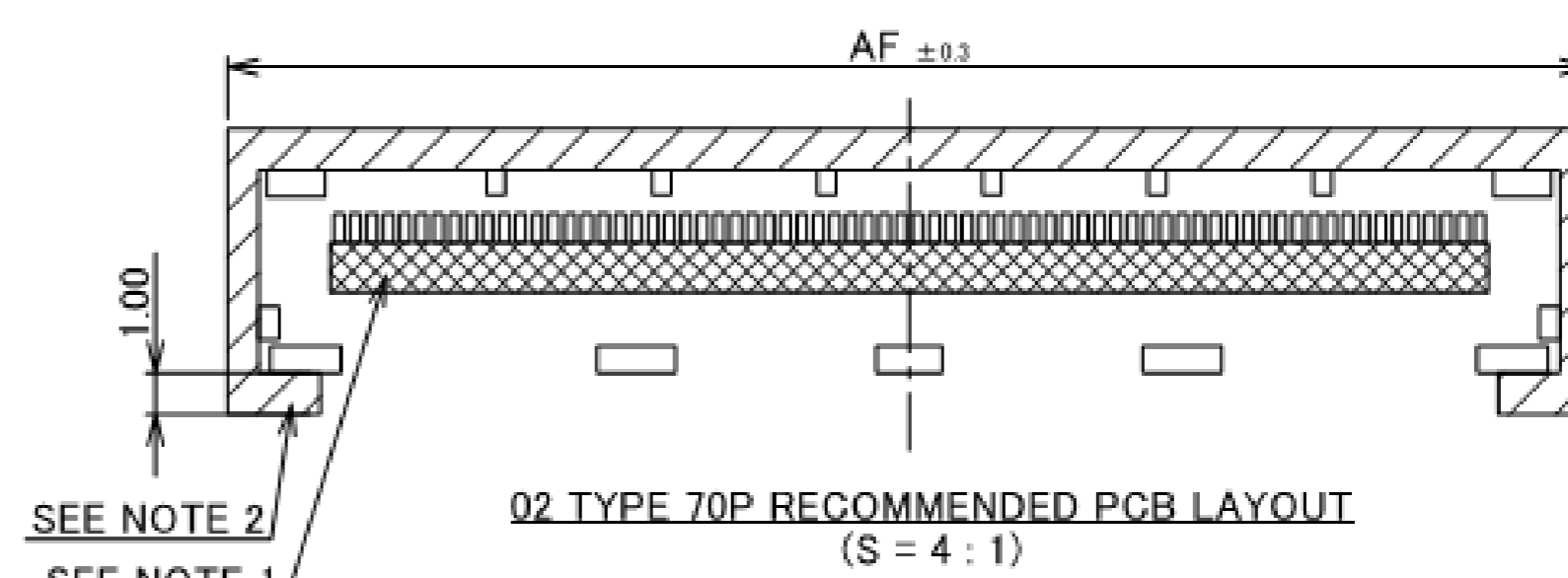
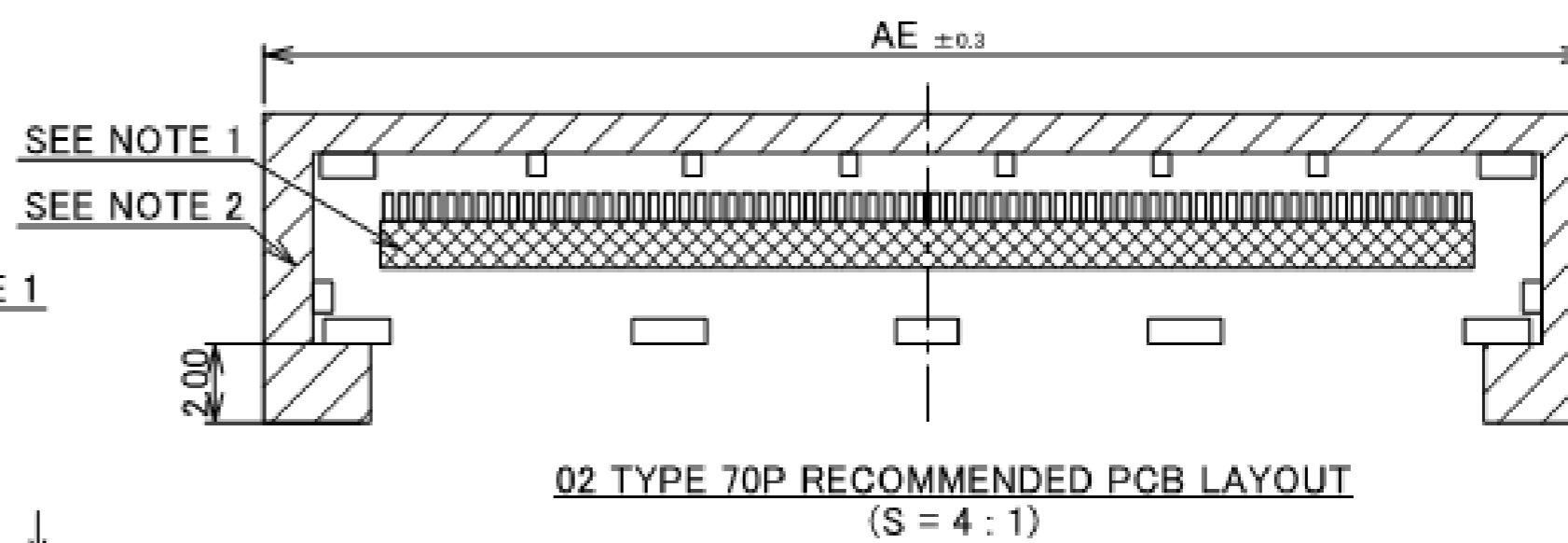
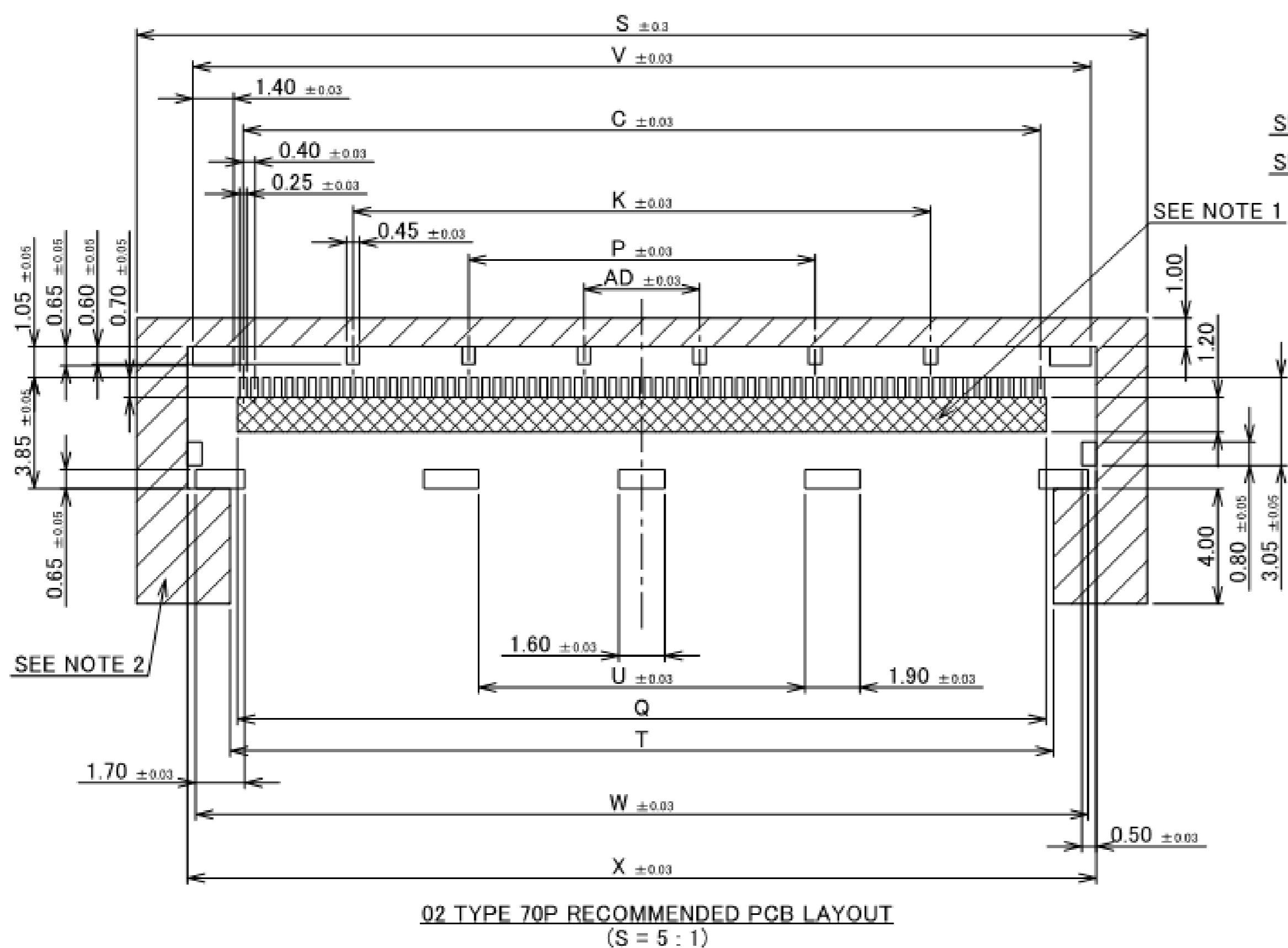
Rev.20

# Receptacle Assembly

PART No.	Pos.	C	K	L	P	Q	S	T	U	V	W	X	AD	AE	AF
20879-070E-02	70	27.60	20.00	-	12.00	28.00	35.00	28.50	11.30	31.07	30.89	31.47	4.00	34.00	33.00

PLUG PART No.	DUAL-HOOK PULL JIG	PCB LAYOUT
20877-0##T-01	USE	TYPE A
	UNUSED	TYPE B
20877-0##T-02	USE	TYPE A
	UNUSED	TYPE C
20877-0##T-03	-	TYPE C
	-	

## 02 TYPE



### NOTES.

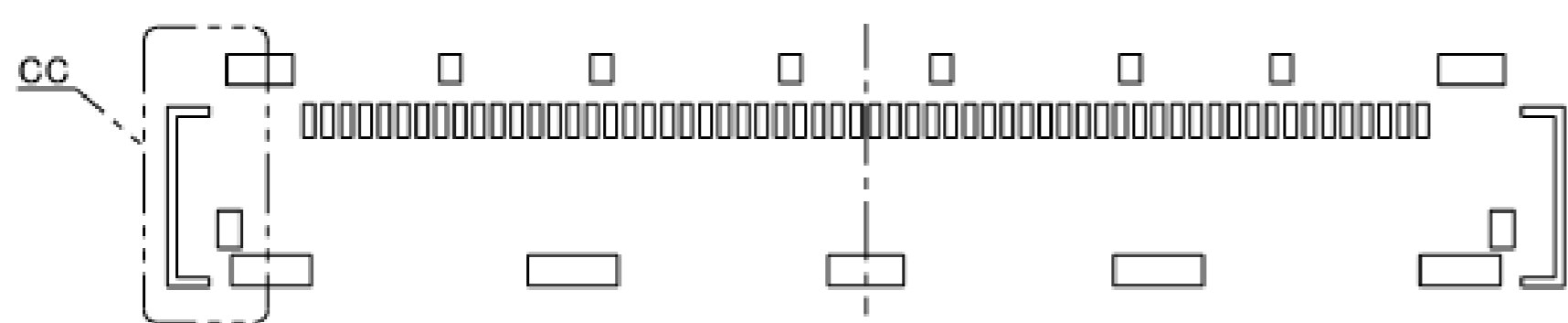
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA. THIS AREA VARIES DEPENDING ON WHETHER THE PULL JIG IS USED, AND THE PART NUMBER OF THE PLUG CABLE ASSEMBLY BEING USED. FOR DETAILS ON THE PULL JIG, PLEASE REFER TO HIM-18033.

Rev.20

PART No.	Pos.
20879-030E-02	30
20879-040E-02	40
20879-050E-02	50
20879-060E-02	60
20879-070E-02	70

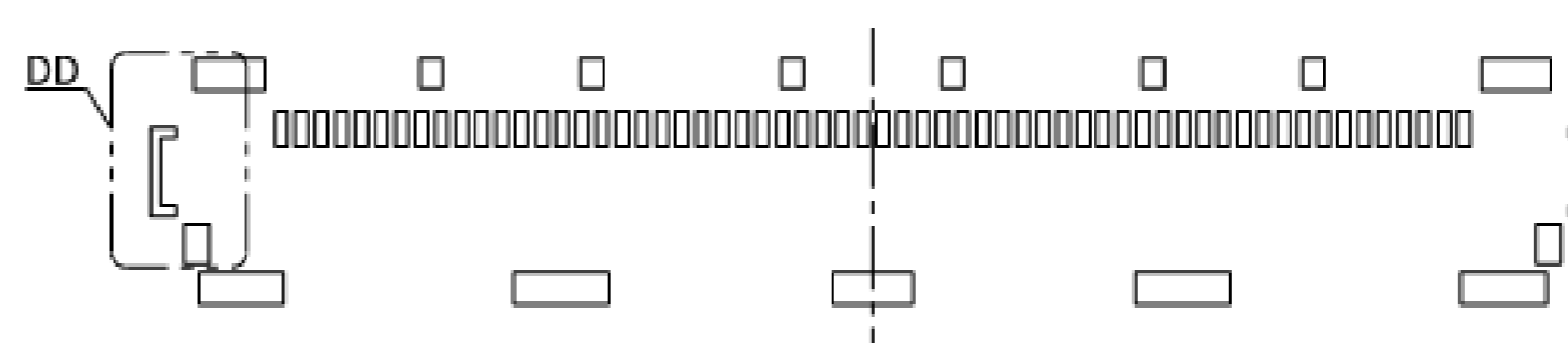
## 02 TYPE

### With LOCK COVER

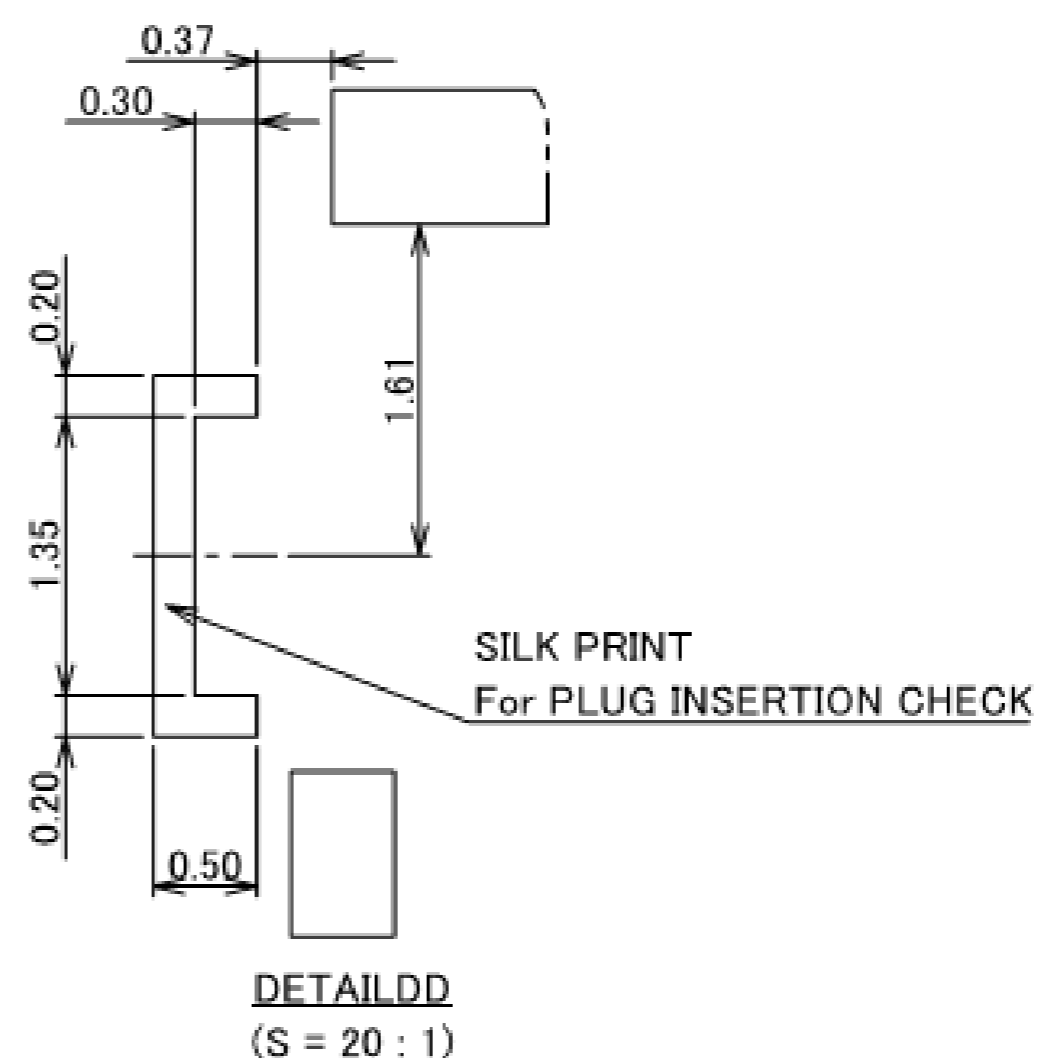
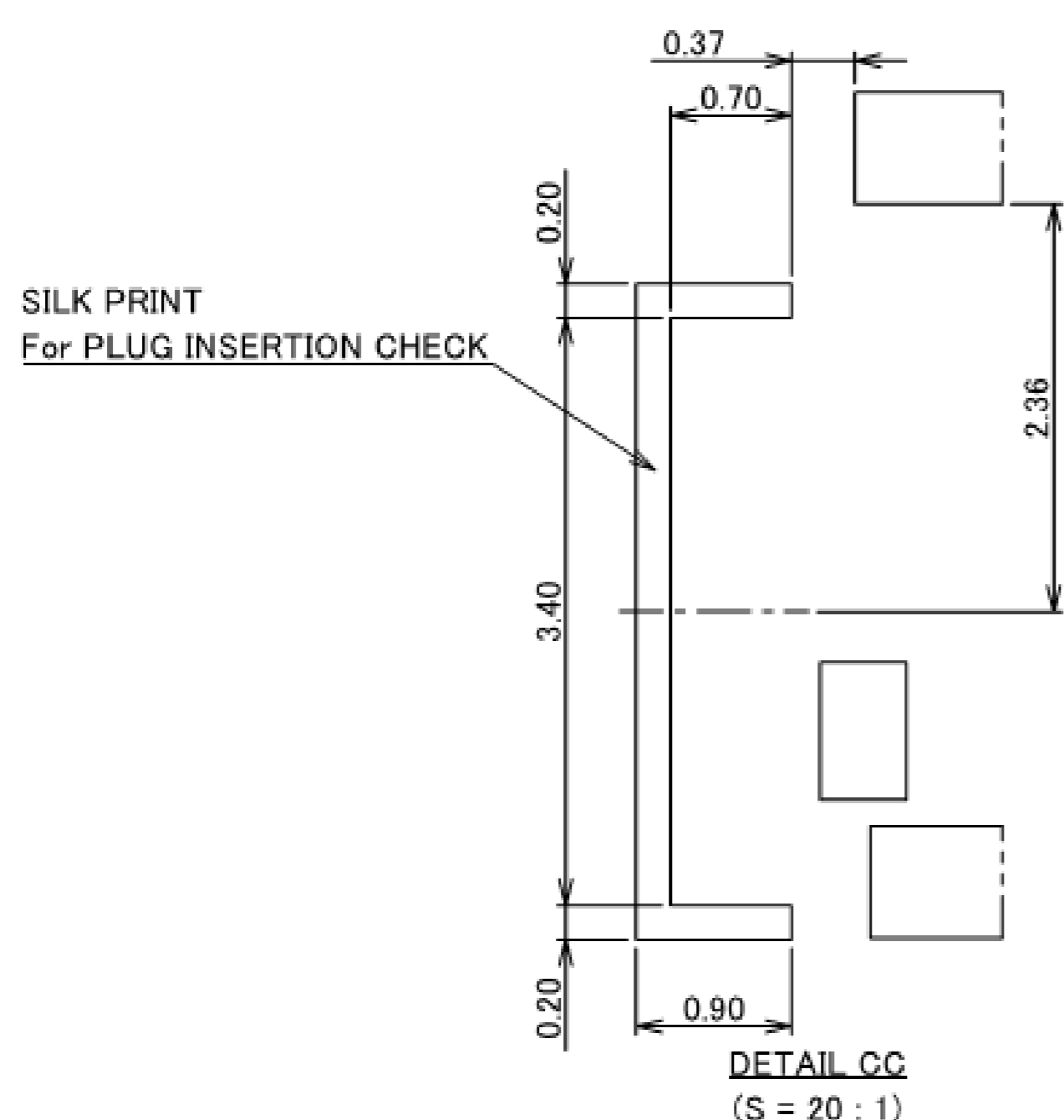


RECOMMENDED SILK PRINT For With LOCK COVER (S = 5 : 1)

### Without LOCK COVER & With PULL TAPE HOLDER



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

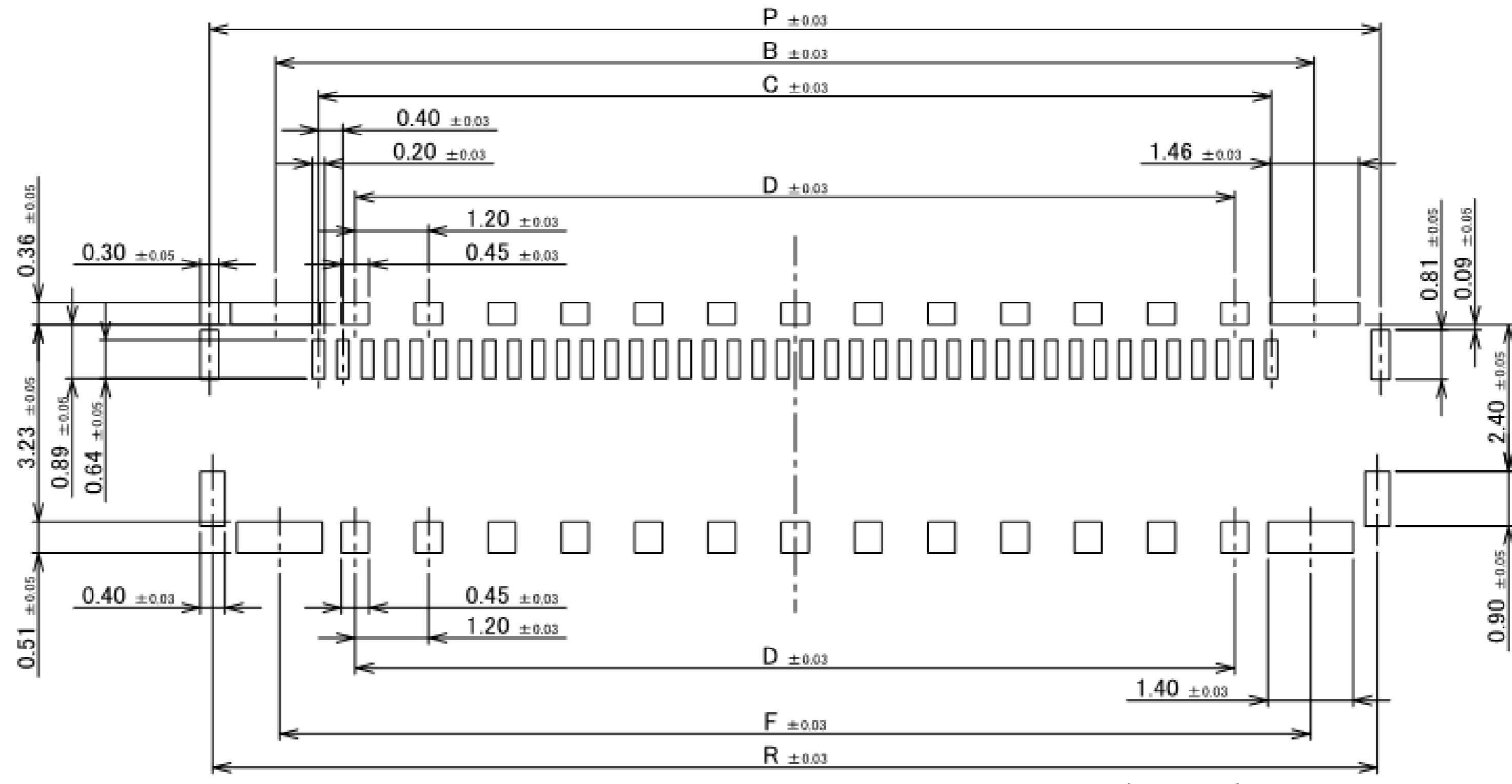


Rev.20

# Receptacle Assembly

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
20879-070E-#1	70	29.01	27.60	26.40	28.88	31.17	31.07

#1 TYPE

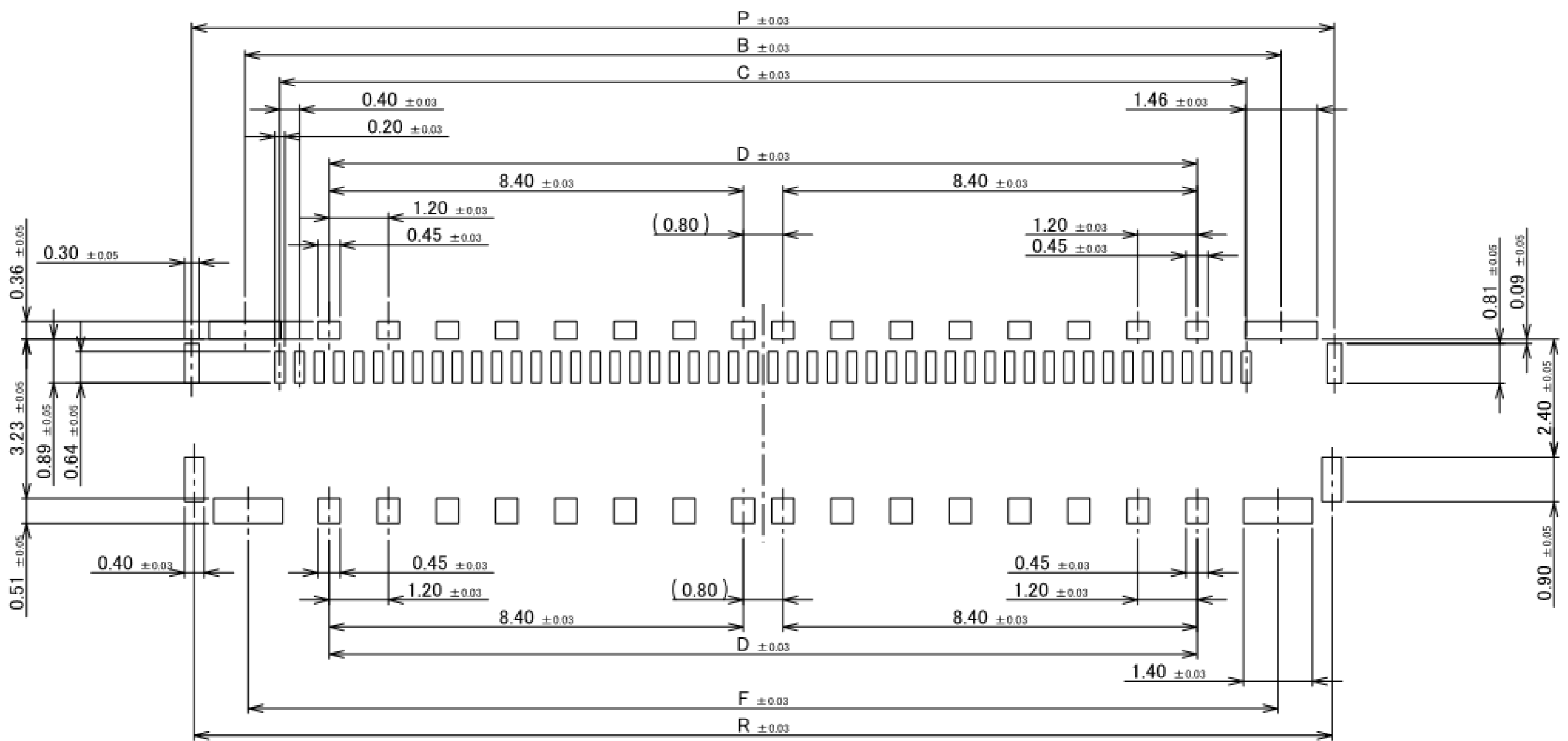


#1 TYPE 30P, 40P, 60P, 70P RECOMMENDED METAL MASK LAYOUT (S = 10 : 1)  
 ※ METAL MASK THICKNESS : t = 0.10

Rev.20

PART No.	Pos.	B	C	D	F	P	R
20879-050E-#1	50	21.01	19.60	17.60	20.88	23.17	23.07

#1 TYPE



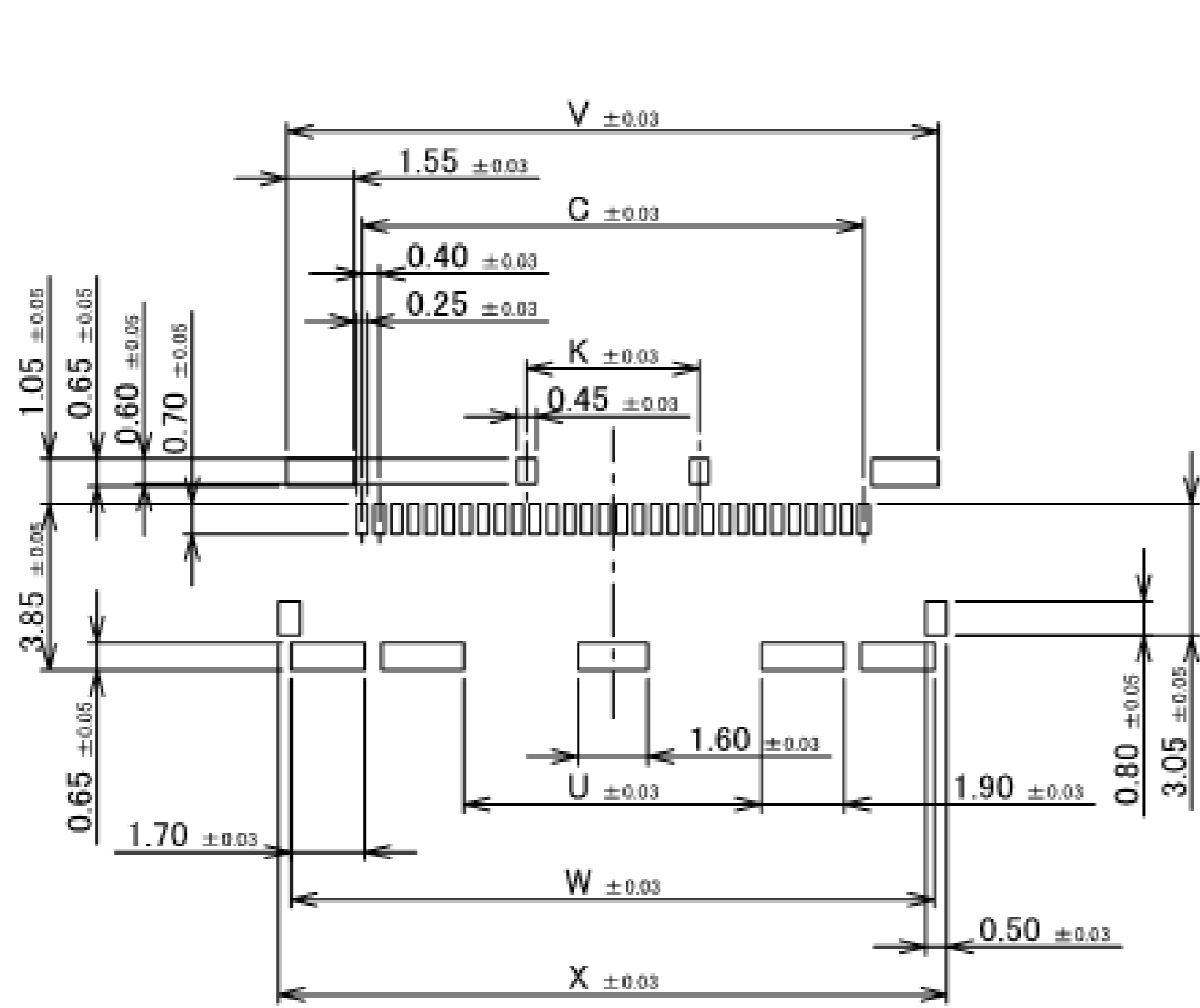
#1 TYPE 50P RECOMMENDED METAL MASK LAYOUT (S = 10 : 1)  
 ※ METAL MASK THICKNESS : t = 0.10

Rev.20

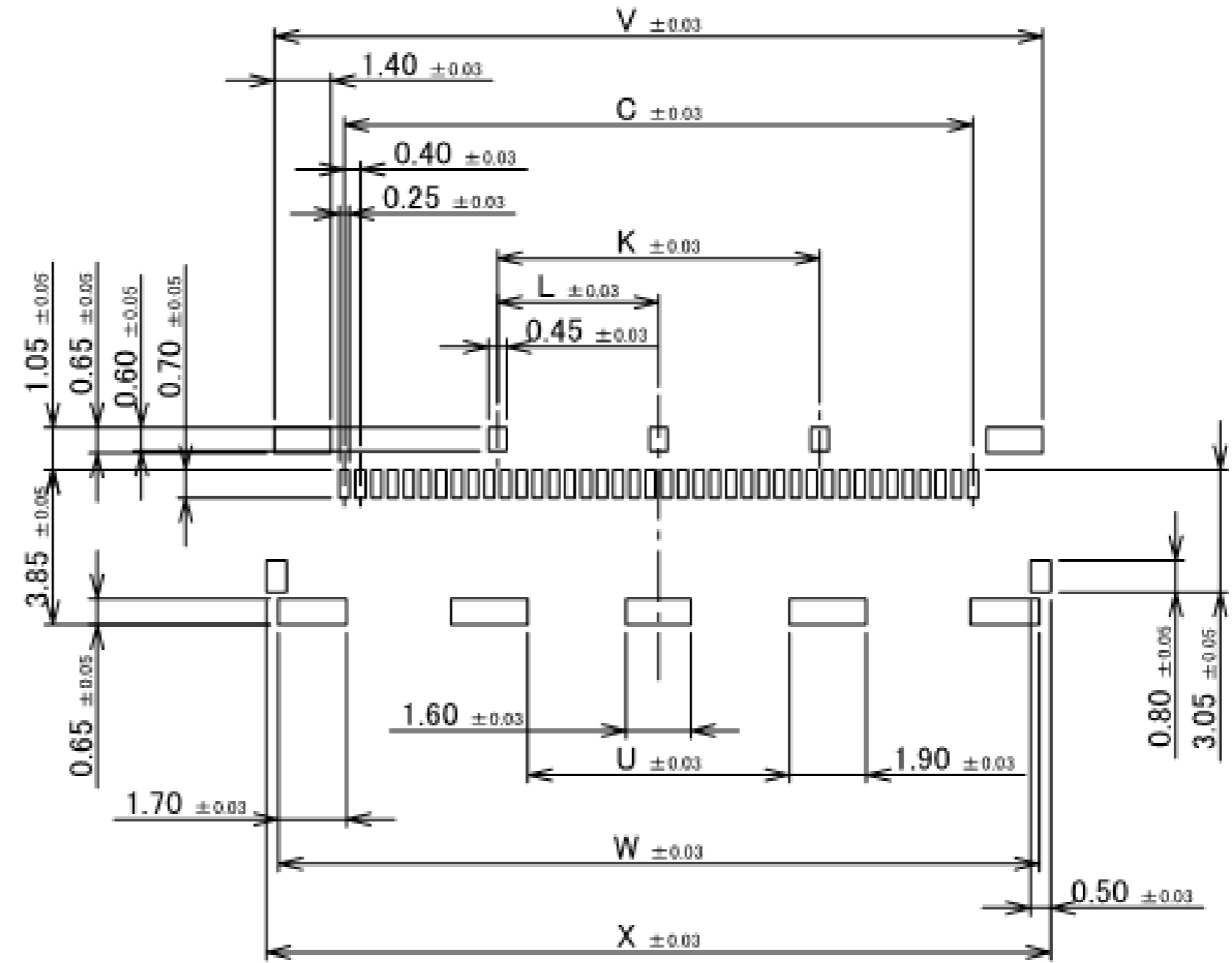
# Receptacle Assembly

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
20879-050E-02	50	19.60	14.40	3.60	8.50	23.07	22.89	23.47
20879-060E-02	60	23.60	17.60	-	10.50	27.07	26.89	27.47
20879-070E-02	70	27.60	20.00	-	11.30	31.07	30.89	31.47

02 TYPE



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

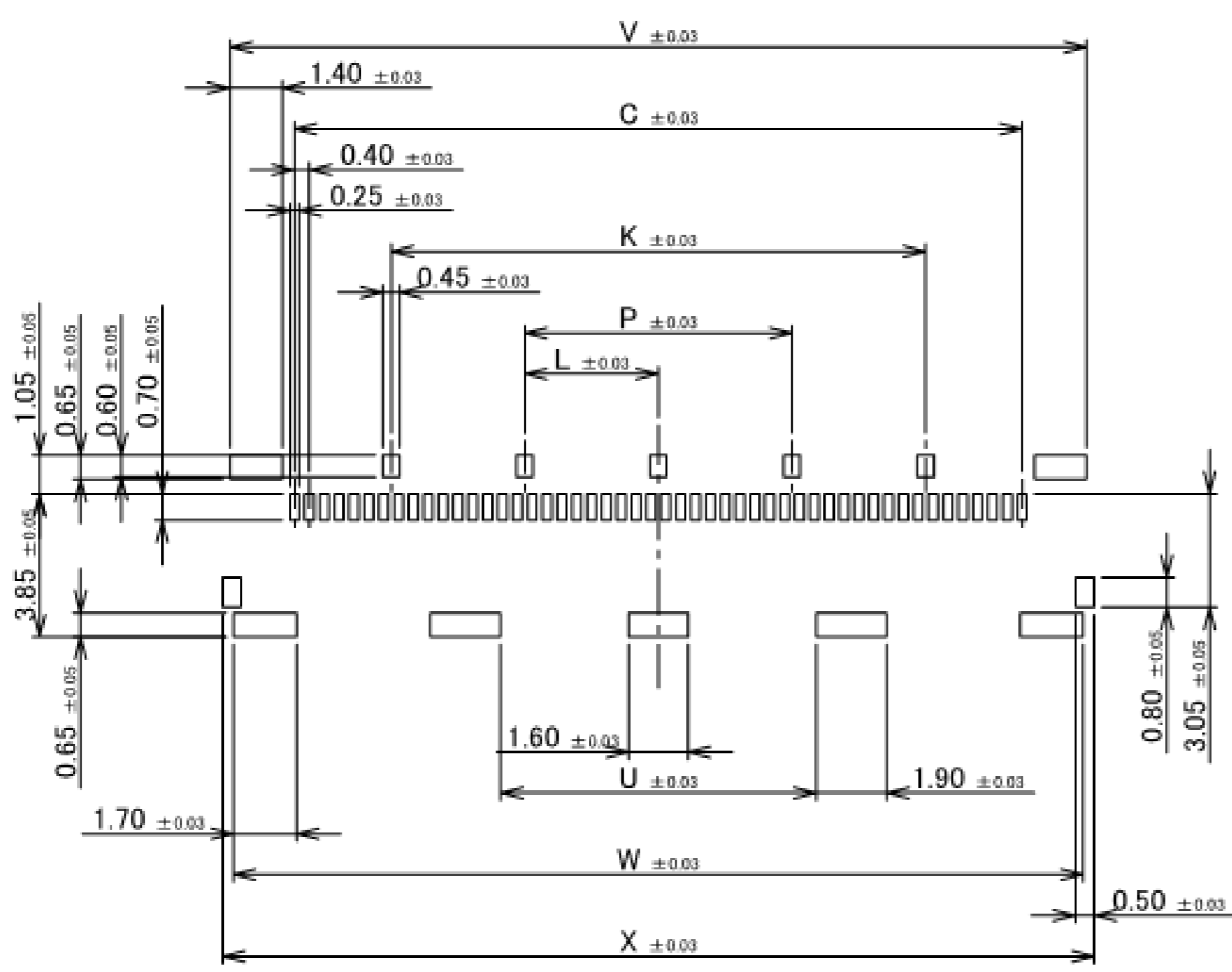


02 TYPE 40P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)  
※ METAL MASK THICKNESS : t = 0.12

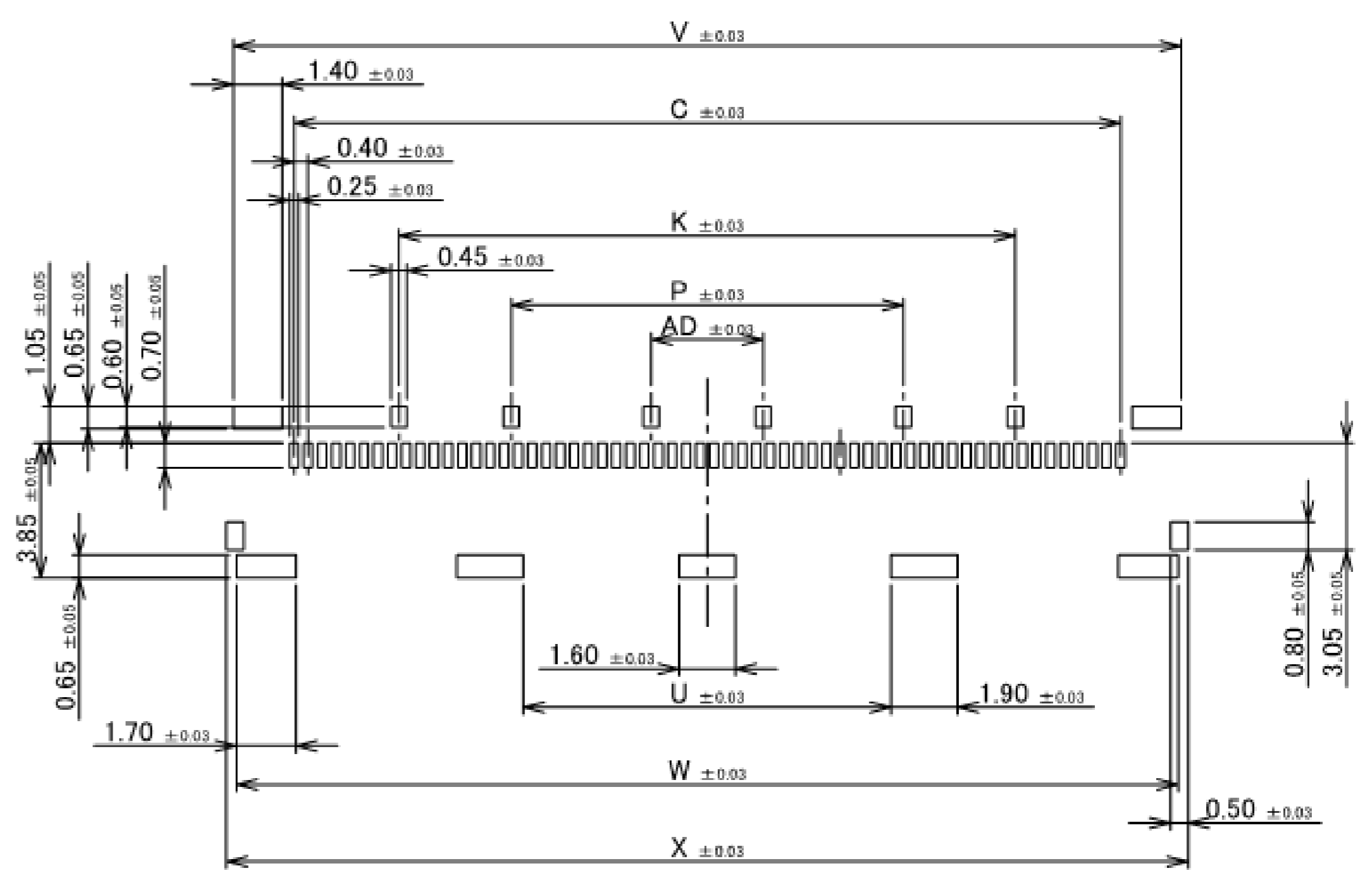
Rev.20

PART No.	Pos.	C	K	L	P	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	-
20879-050E-02	50	19.60	14.40	3.60	7.20	8.50	23.07	22.89	23.47	-
20879-060E-02	60	23.60	17.60	-	11.20	10.50	27.07	26.89	27.47	3.20
20879-070E-02	70	27.60	20.00	-	12.00	11.30	31.07	30.89	31.47	4.00

02 TYPE



02 TYPE 50P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)  
※ METAL MASK THICKNESS : t = 0.12



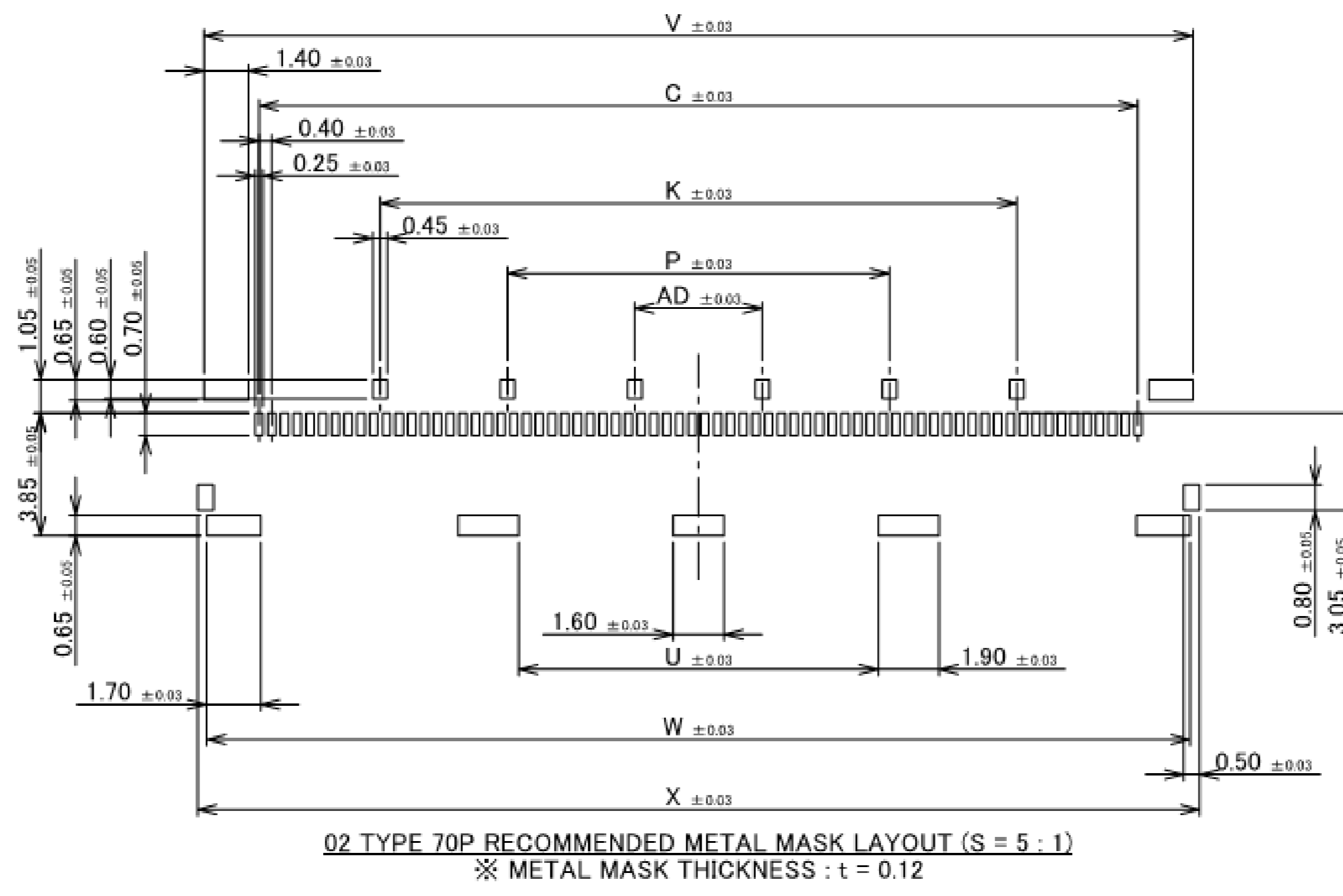
02 TYPE 60P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)  
※ METAL MASK THICKNESS : t = 0.12

Rev.20

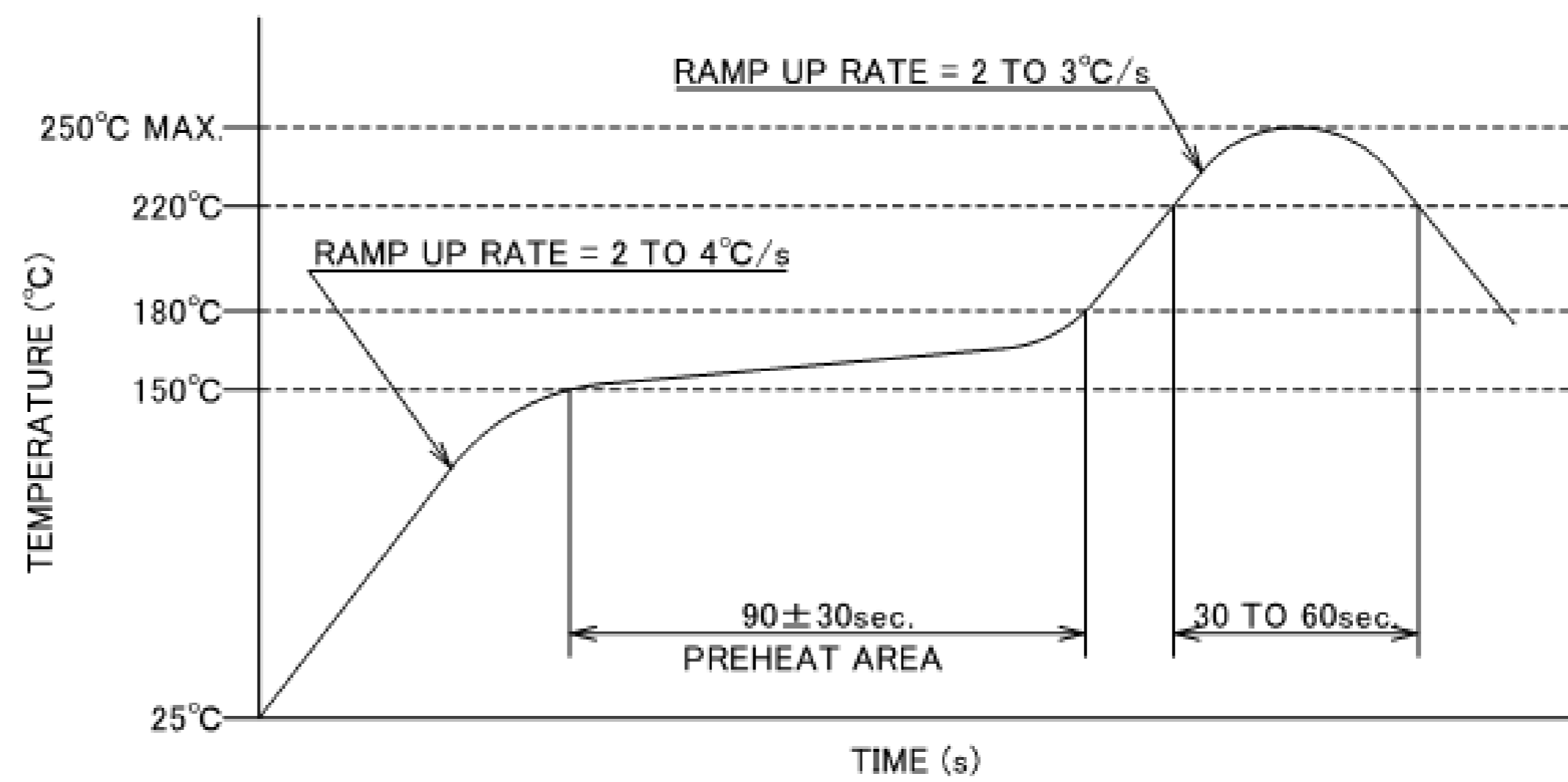
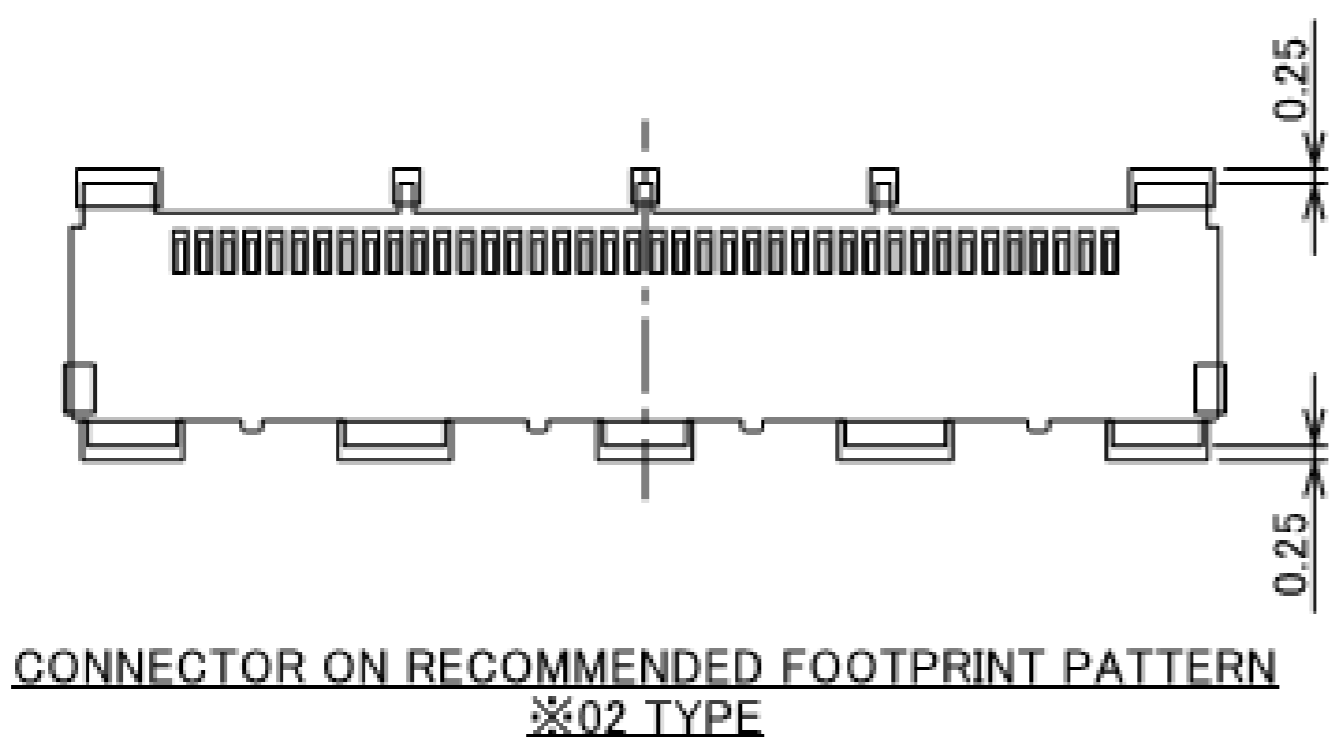
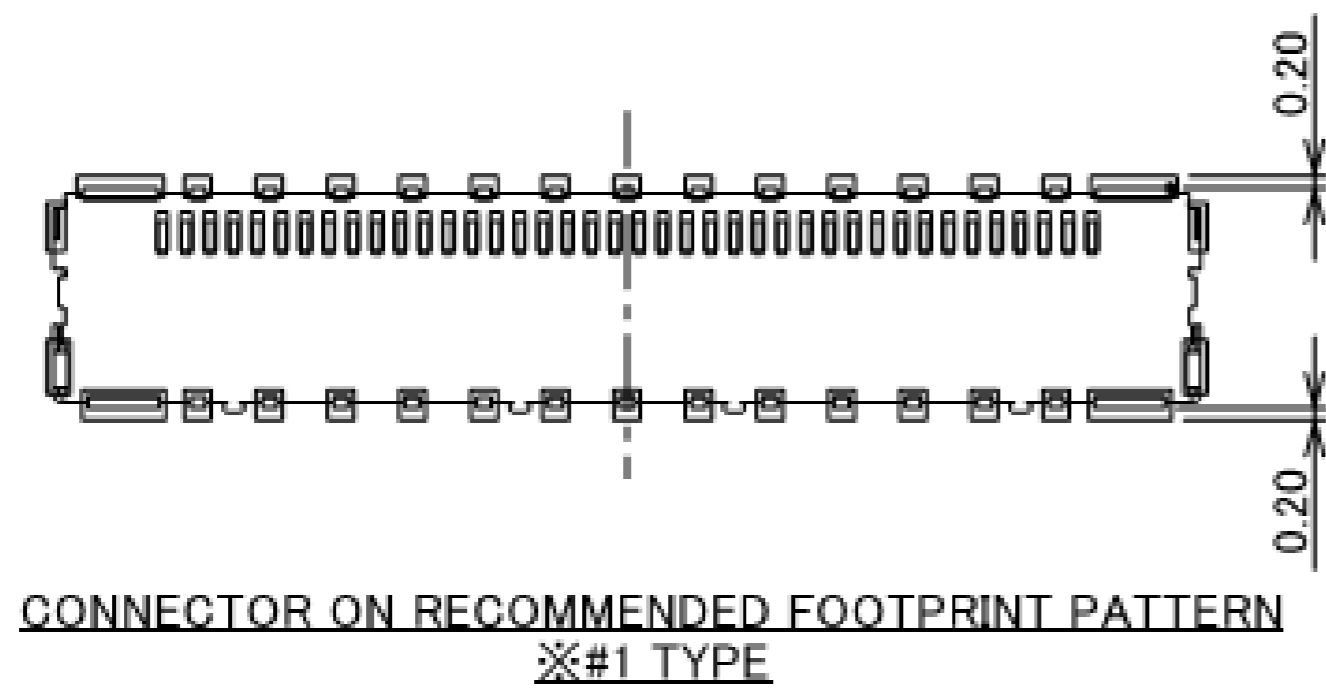
# Receptacle Assembly

PART No.	P <sub>os.</sub>	C	K	L	P	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	-
20879-050E-02	50	19.60	14.40	3.60	7.20	8.50	23.07	22.89	23.47	-
20879-060E-02	60	23.60	17.60	-	11.20	10.50	27.07	26.89	27.47	3.20
20879-070E-02	70	27.60	20.00	-	12.00	11.30	31.07	30.89	31.47	4.00

02 TYPE



Rev.20



Rev.20

# Receptacle Assembly

FOR CABLINE-UMF PLUG FPC ASSEMBLY (DWG NO. 21102)

ITEMS	SPECIFICATION
RATED VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR.
RATED AMPERAGE (FOR SIGNAL CONTACT)	0.5A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO 31PIN 0.3A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO ALL PIN ※TO BE DETERMINED BY PROTOTYPE EVALUATION ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233 TO 378K (-40°C TO +105°C)
OPERATING HUMIDITY	85% MAX.
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : <math>\triangleleft</math>40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : <math>\triangleleft</math>40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	40P : 40.0N MAX. / 70P : 58.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	40P : 4.0N MIN. / 70P : 7.0N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2997
TEST REPORT	TR-26009
PACKING STANDARD	PST-18043
INSTRUCTION MANUAL	HIM-25007
APPEARANCE CRITERIA No.	QLS-A***

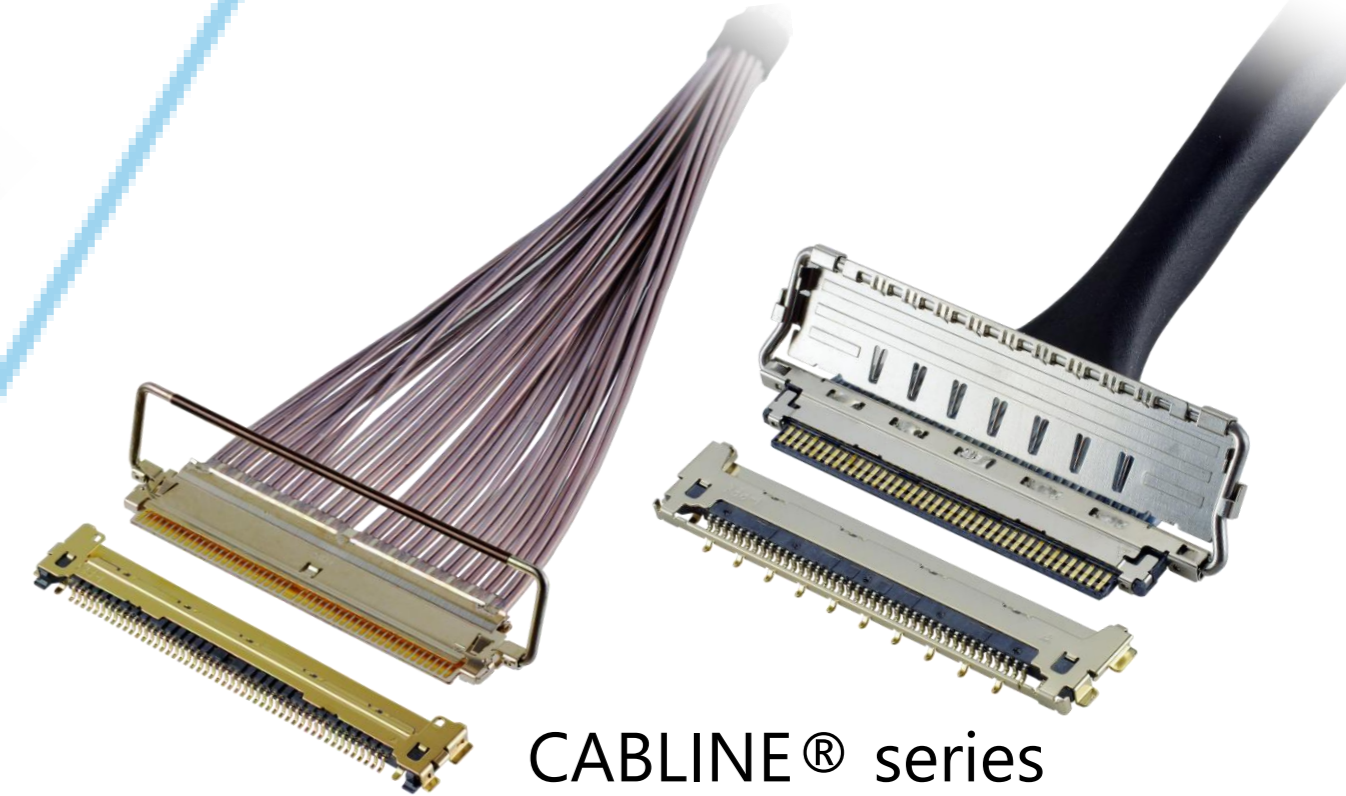
※Only the single-hook pull jig is permitted  
The dual-hook pull jig is not allowed

Rev.20

# Custom Connectors Available

## RF Connectors

MHF® series



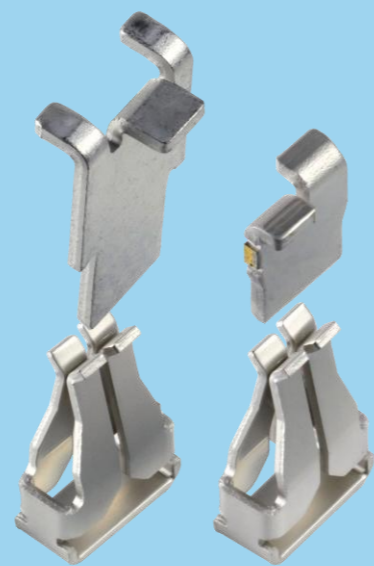
CABLINE® series

## Micro-Coaxial/Twinaxial Connectors

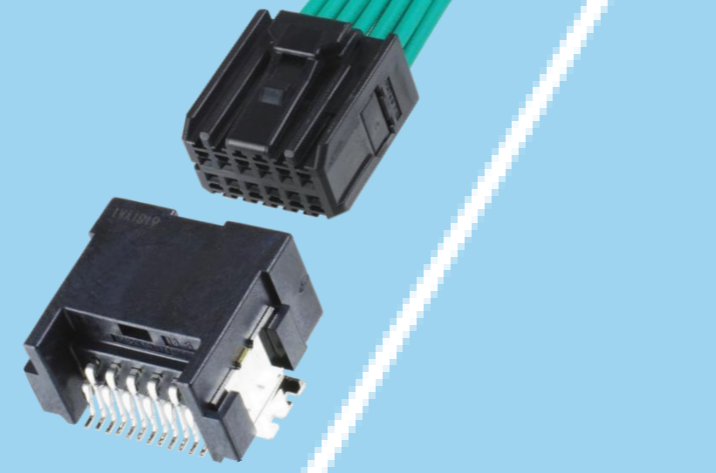


## Wire-to-Board Connectors/Terminals

AP series



ISH® series



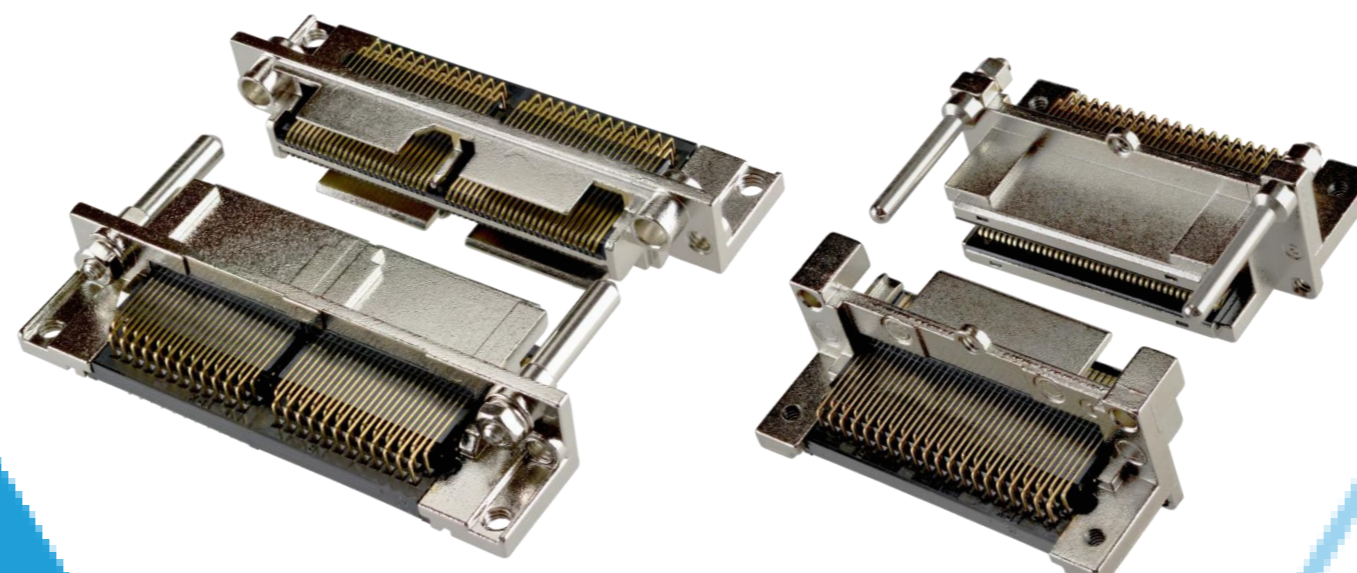
NOVASTACK® series



## Board-to-Board Connectors



## I/O Connectors



MINIDOCK™ series

MINIFLEX® series EVAFLEX® series



## FPC/FFC Connectors



Inquiry



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Contact your sales representative or more detailed information.

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