

CABLINE®-CA IIF

Mechanical Lock 장치로 완전 차폐, 고속 데이터 전송(32Gbps/Lane)에 적합,
0.4mm Pitch, 수평 결합형 FPC Plug Connector

Product Specifications:

Mating type	Horizontal	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.48	
Mated size (mm)	Height	1.10 max. with cover
	Width	Formula: $6.95 + (0.4 * ?p)$
	Depth	6.74
Pin Counts	Range	Up to 60
	Available	30, 40, 50

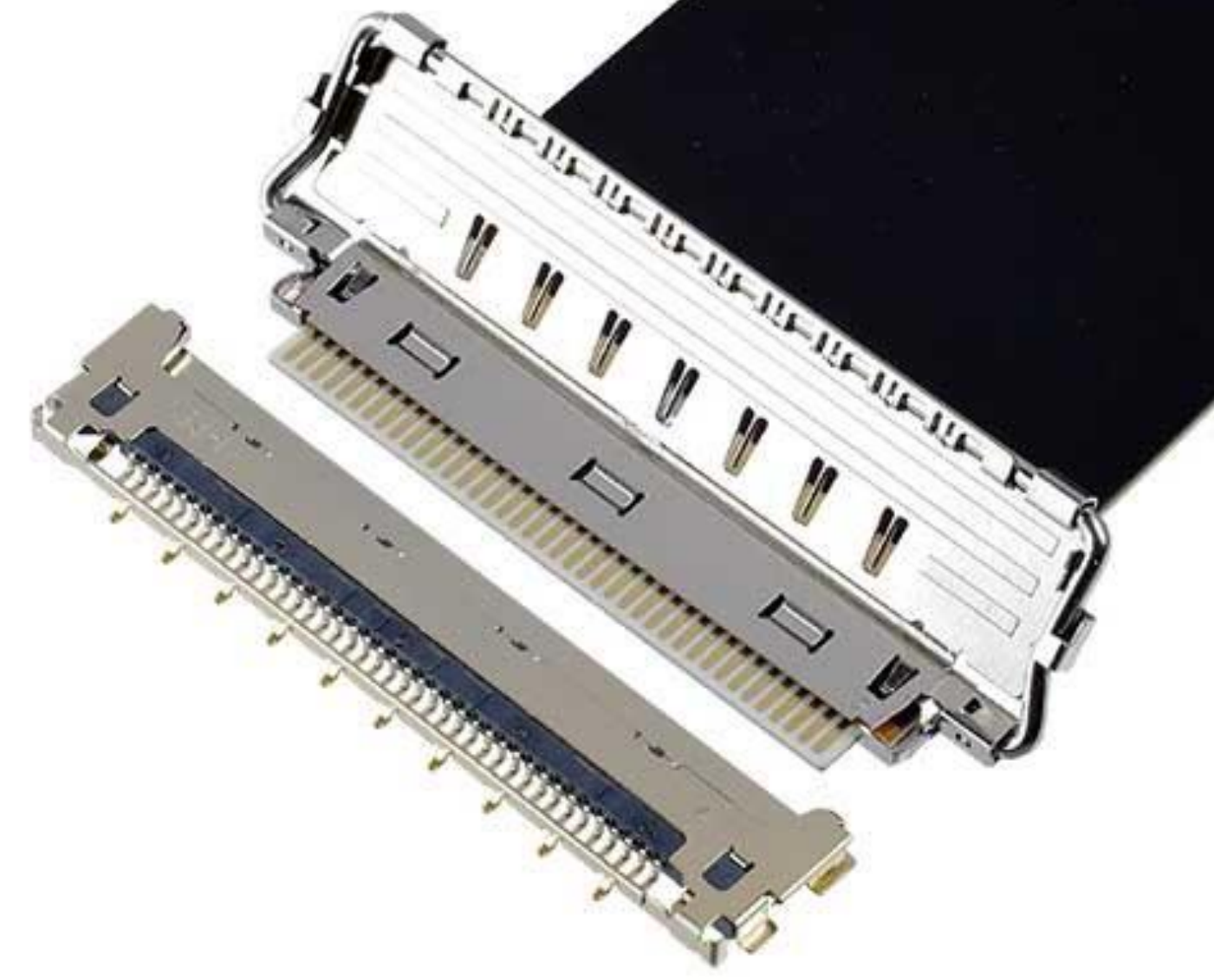
Applicable FPC

FPC Type	Shielded FPC
FPC Pitch (mm)	0.4
FPC Contact Point	Top
FPC Thickness (mm)	Contact Area: $0.25 + 0.02/-0.03$
	Ground Area: $0.37 + 0.04/-0.06$

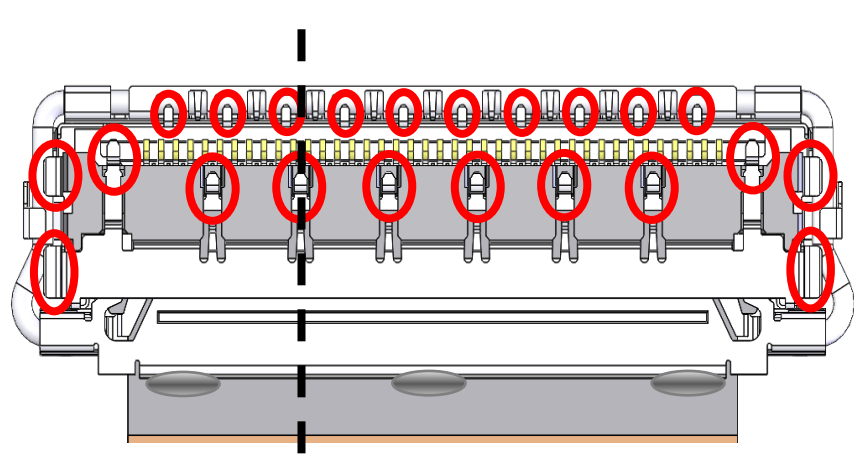
Applicable Standards (Reference Only):

32 Gbps/ Lane, USB4 Gen4 (40 Gbps/ Lane PAM3)
Display Port UHBR20 (20 Gbps/Lane),

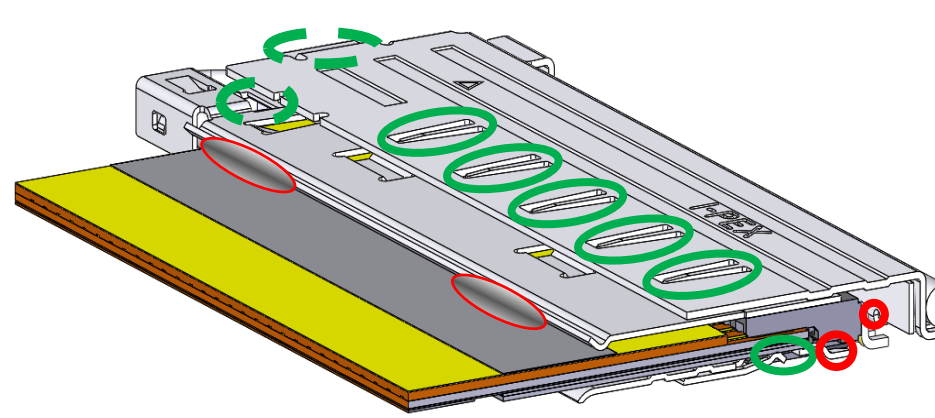
*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁드립니다.



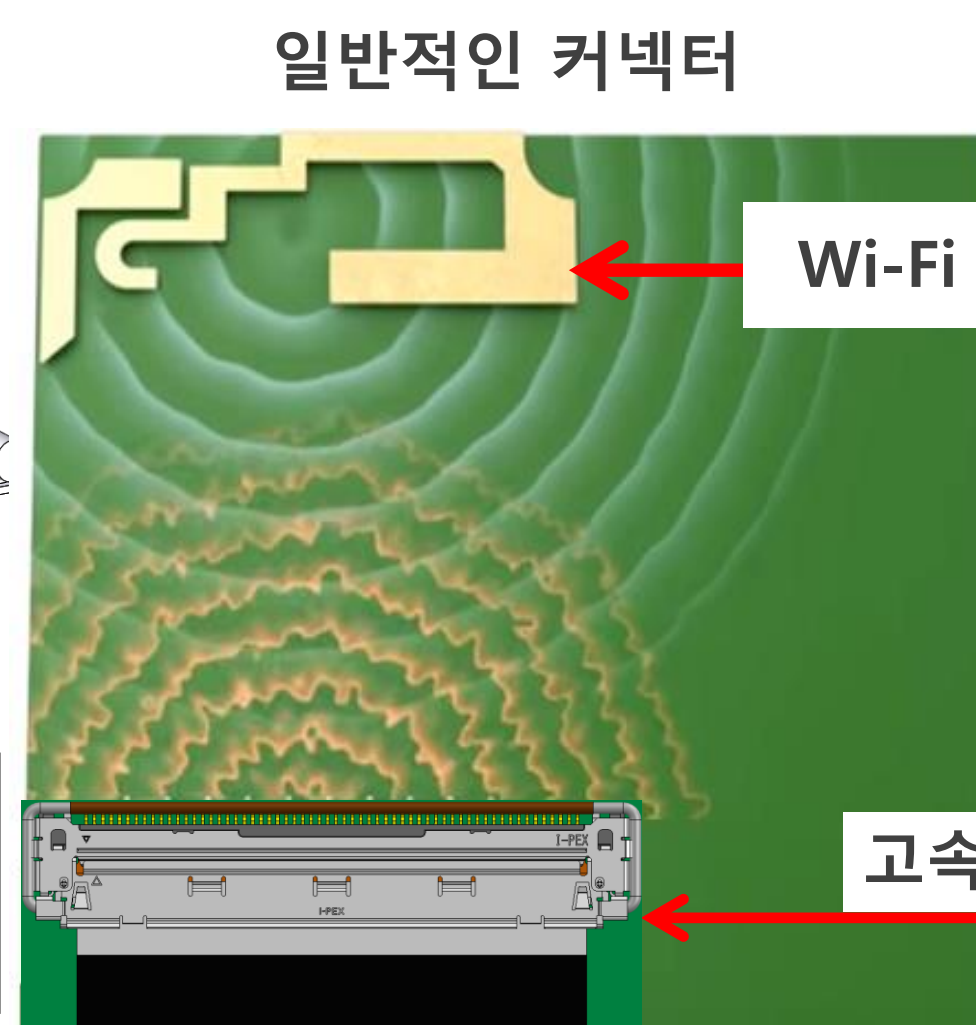
▶ ZenShield® Multi-point Ground를 통한 완전 차폐 Type 구조로 EMC Solution에 이상적입니다.



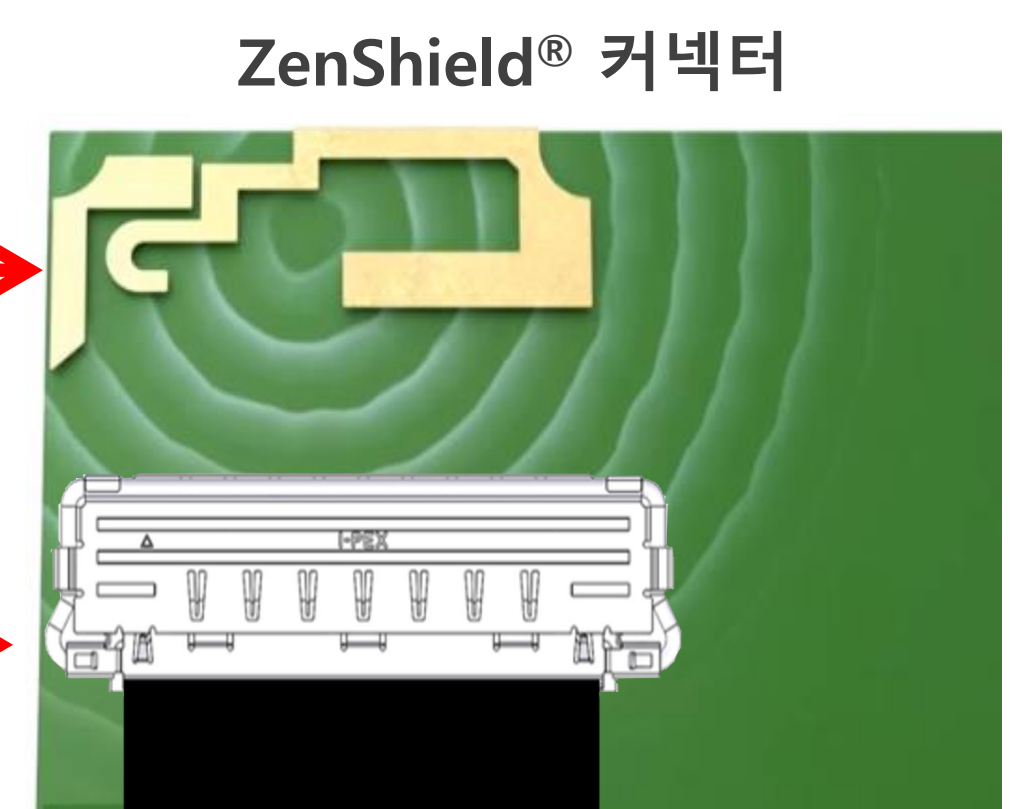
아래에서 본 커넥터



○ 납땜 접점부
○ 메카니컬 접점부



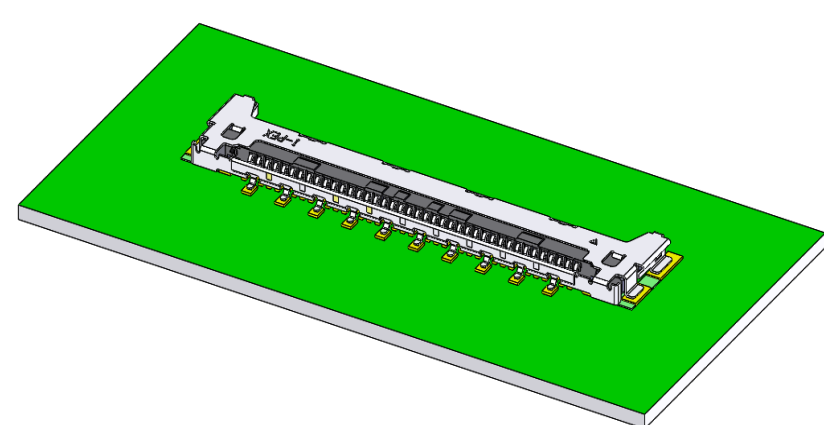
일반적인 커넥터



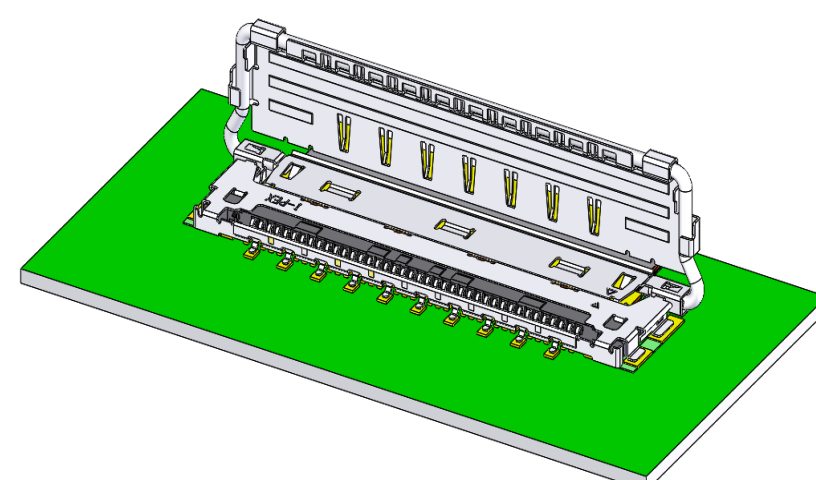
ZenShield® 커넥터

안테나 부근까지 커넥터 실장이 가능

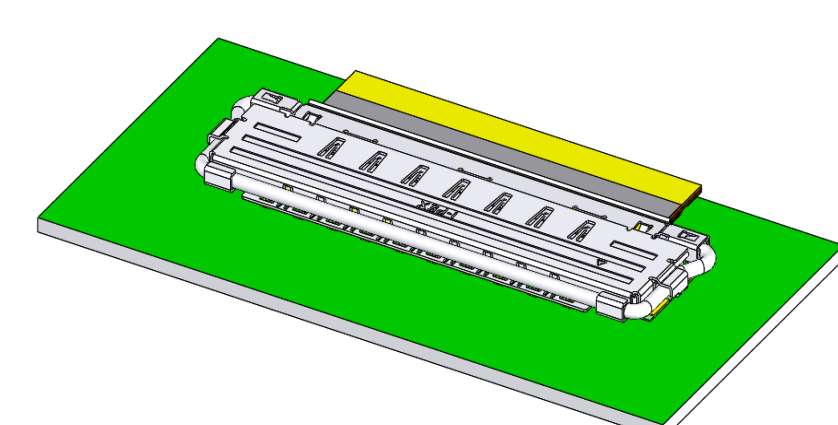
▶ Mechanical Lock Bar를 통한 불완전 결합 방지와 Plu 빠짐 방지



체결

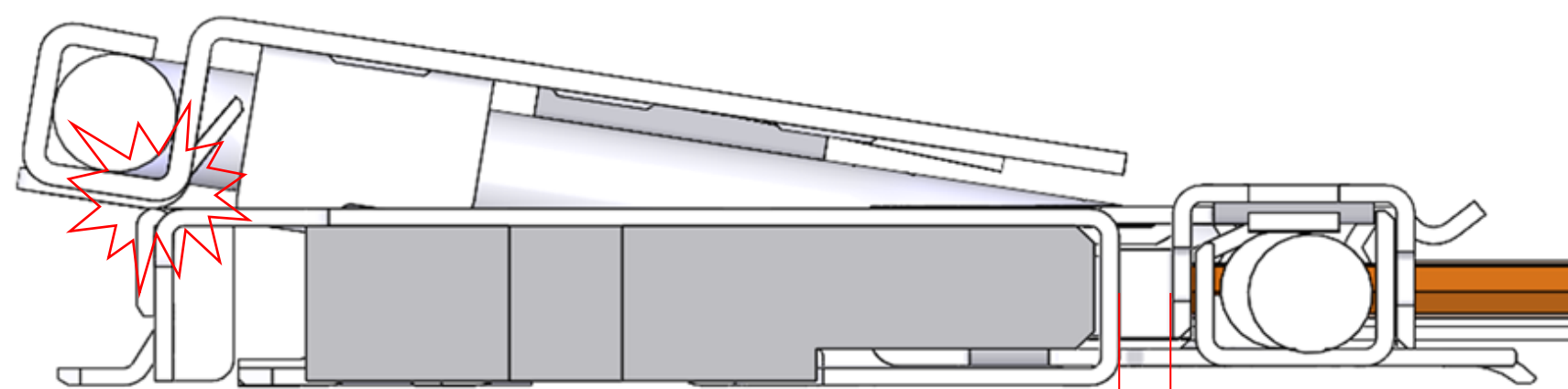


잠김



간섭

플러그가 리셉터클에 정상적으로 결합되어 있을 경우에만 잠금 가능



불완전 결합



정상 결합

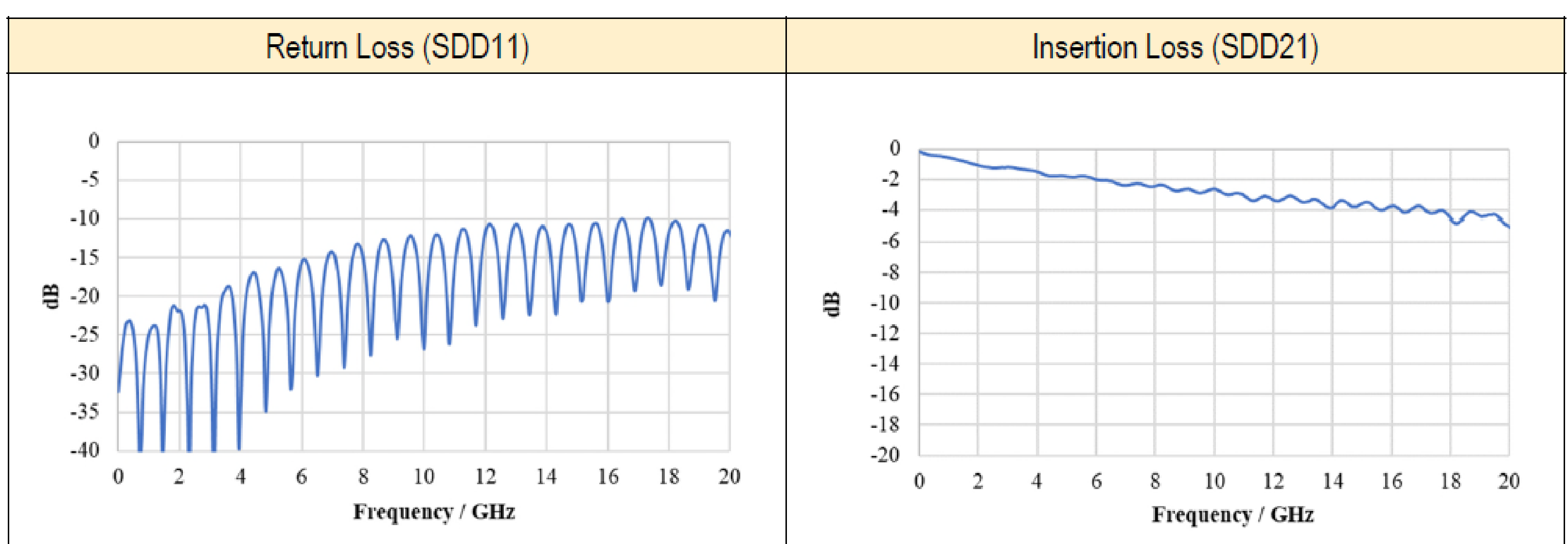
▶ 32Gbps/Lane Application에 이상적인 고속 데이터 전송

Measurement results

Connector: CABLINE-CA IIF 40P

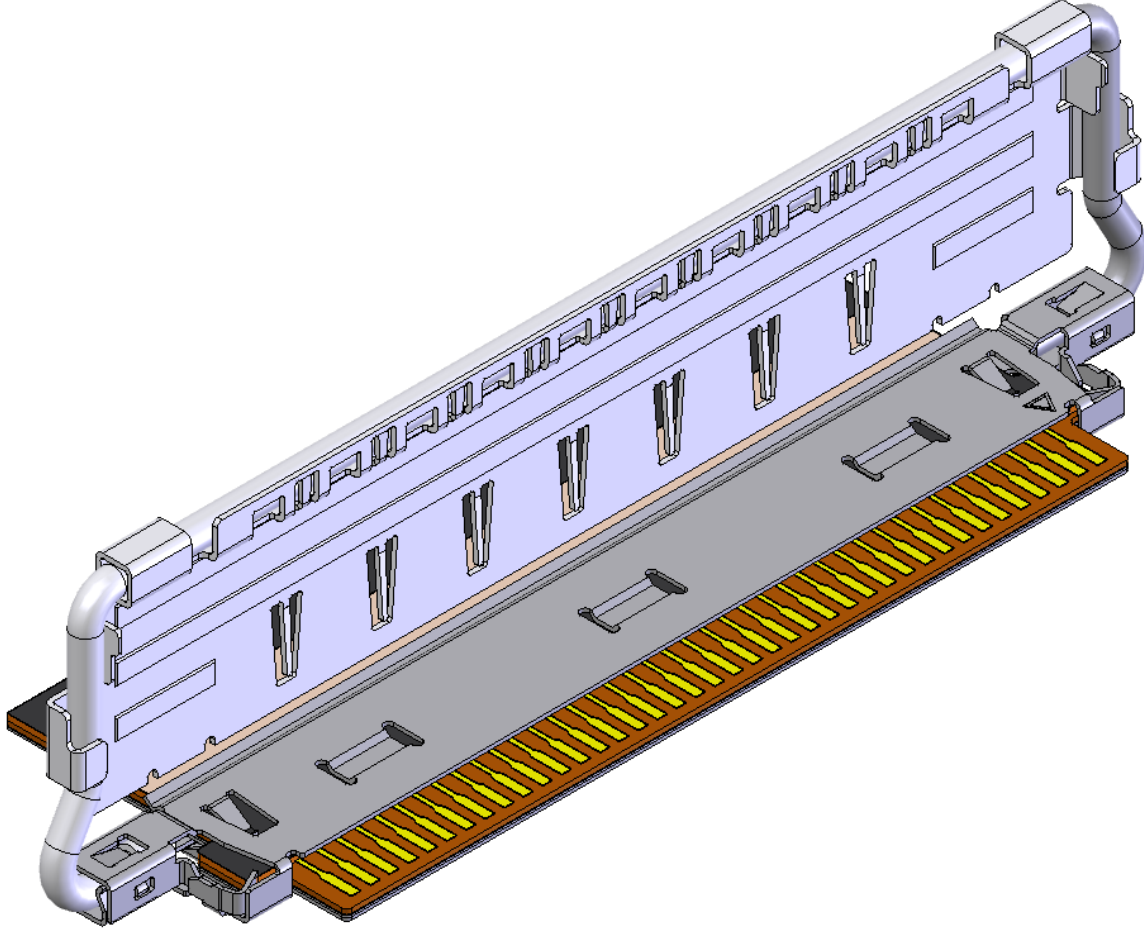
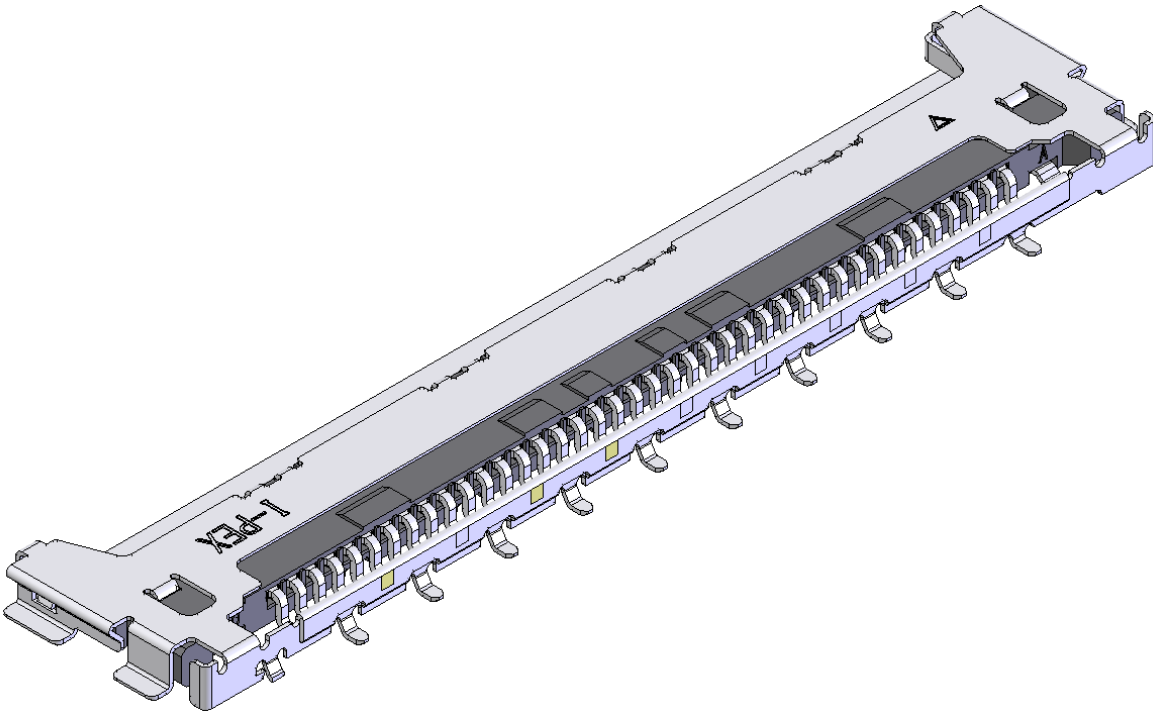
FPC: Shielded FPC,
Differential 90 ohm, Length : 100 mm

Pin Assignment: GSSGSSG



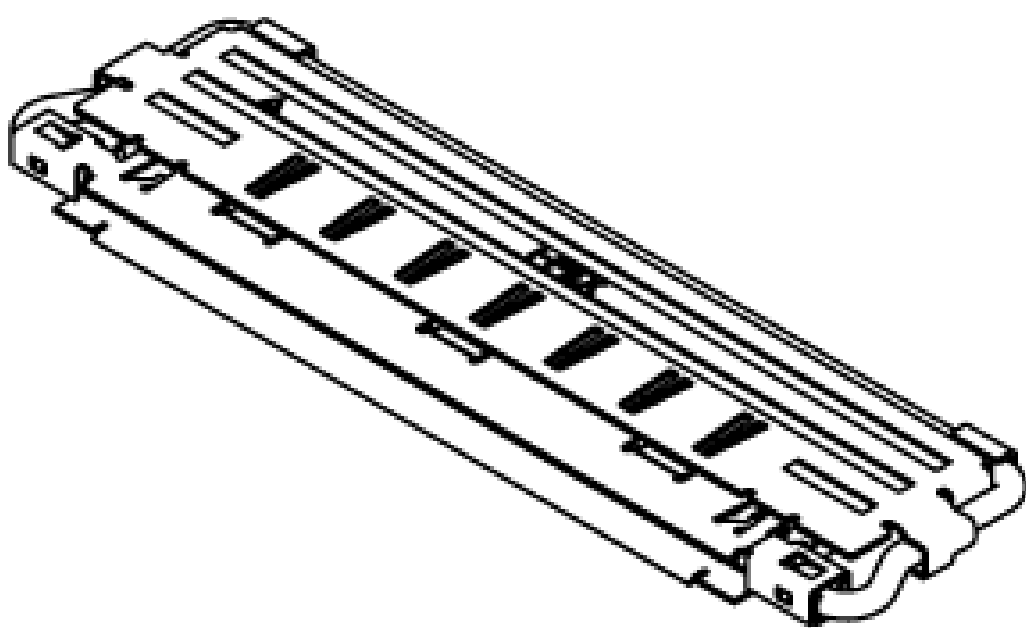
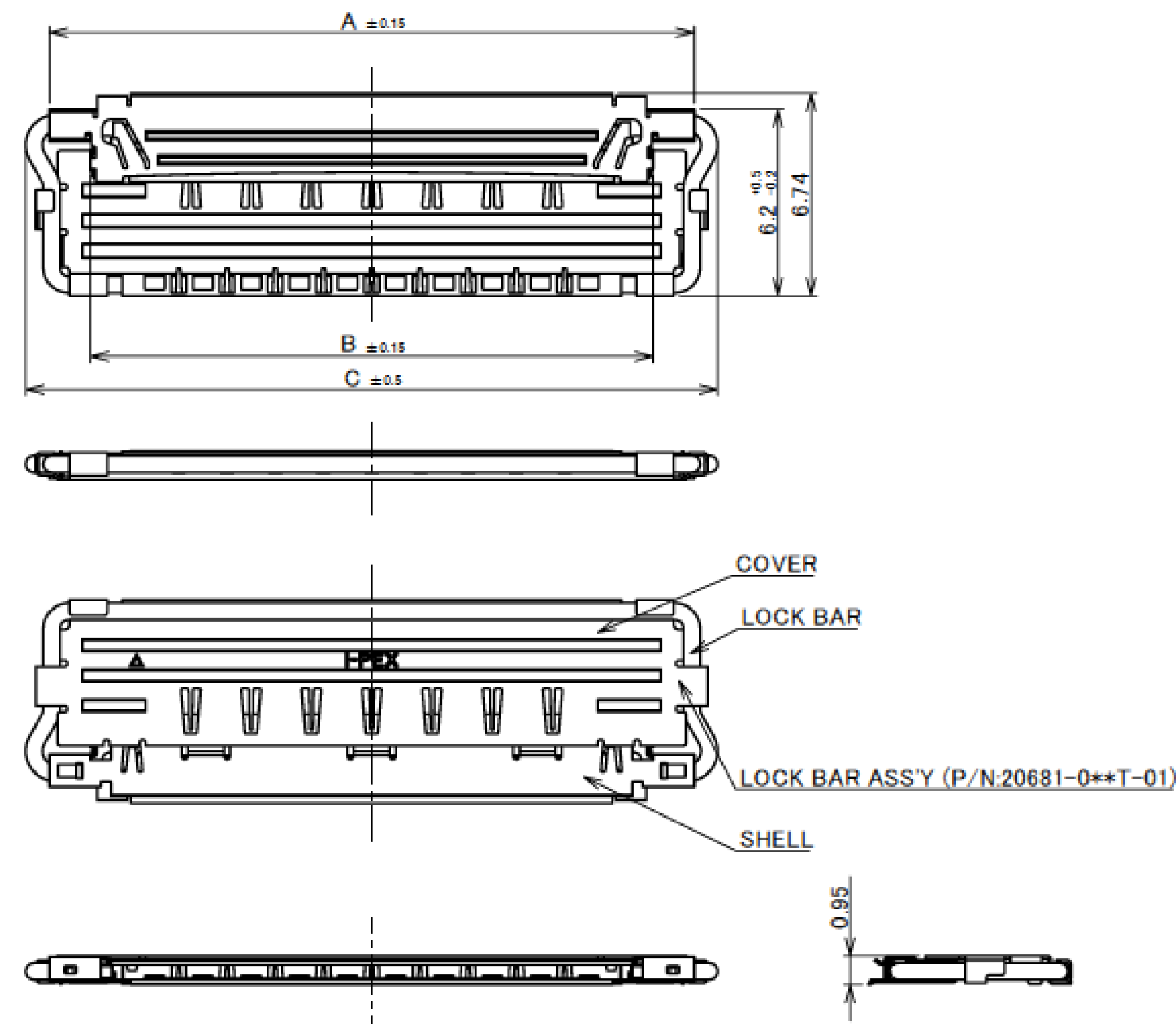
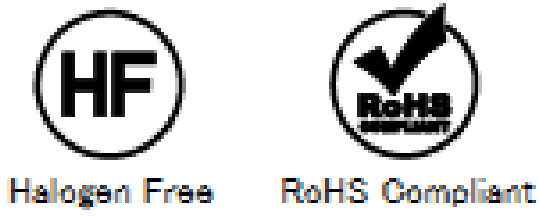
Component Parts Details

Component Parts

Connector parts

CABLINE-CA IIF PLUG with FPC

CABLINE-CA II RECEPTACLE

Shell Assembly

Recommended P/N		20856-0**T-01		
PART No.	A	B	C	
20856-030T-01	17.40	14.66	18.95	
20856-040T-01	21.40	18.66	22.95	
20856-050T-01	25.40	22.66	26.95	

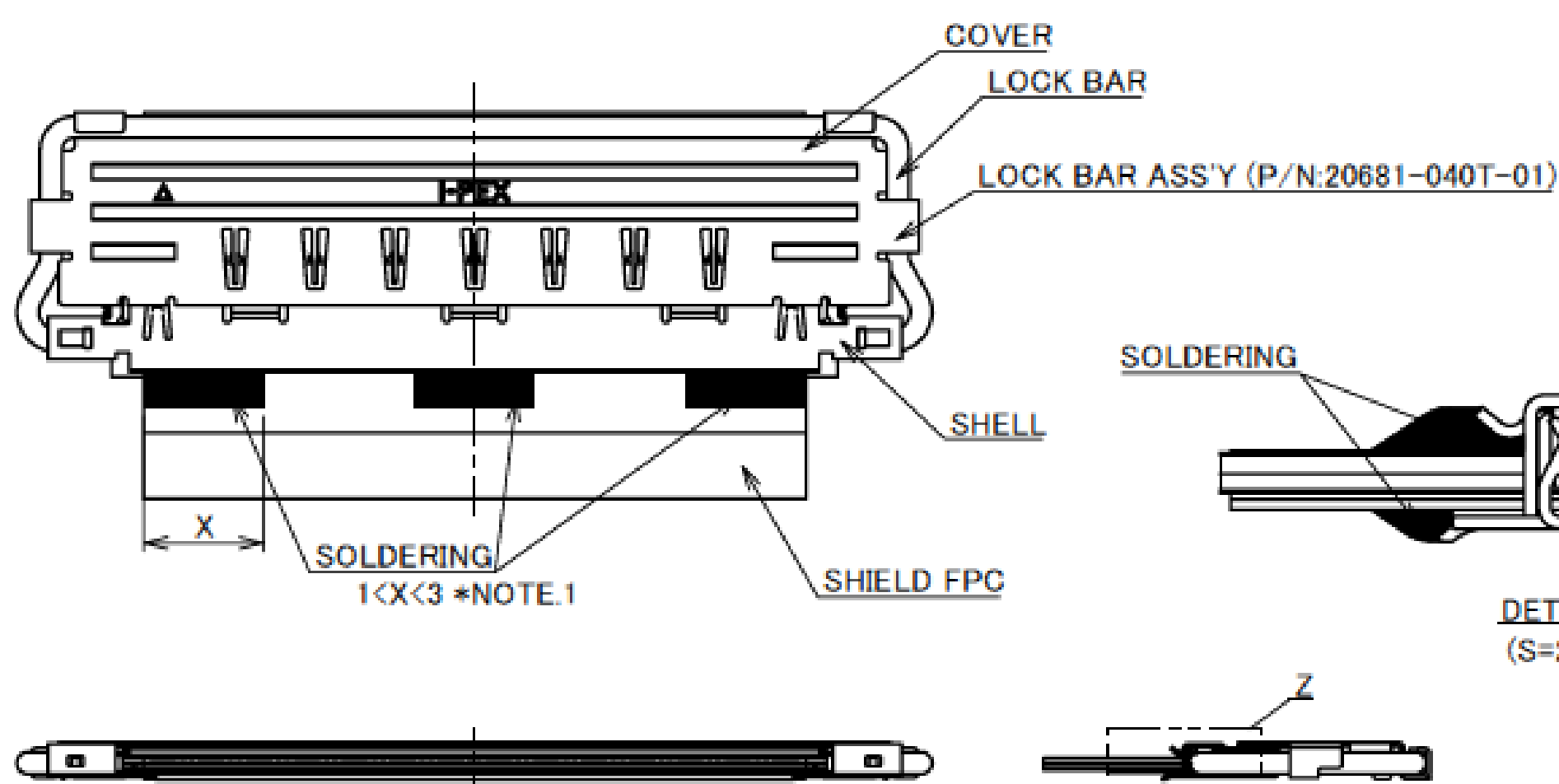
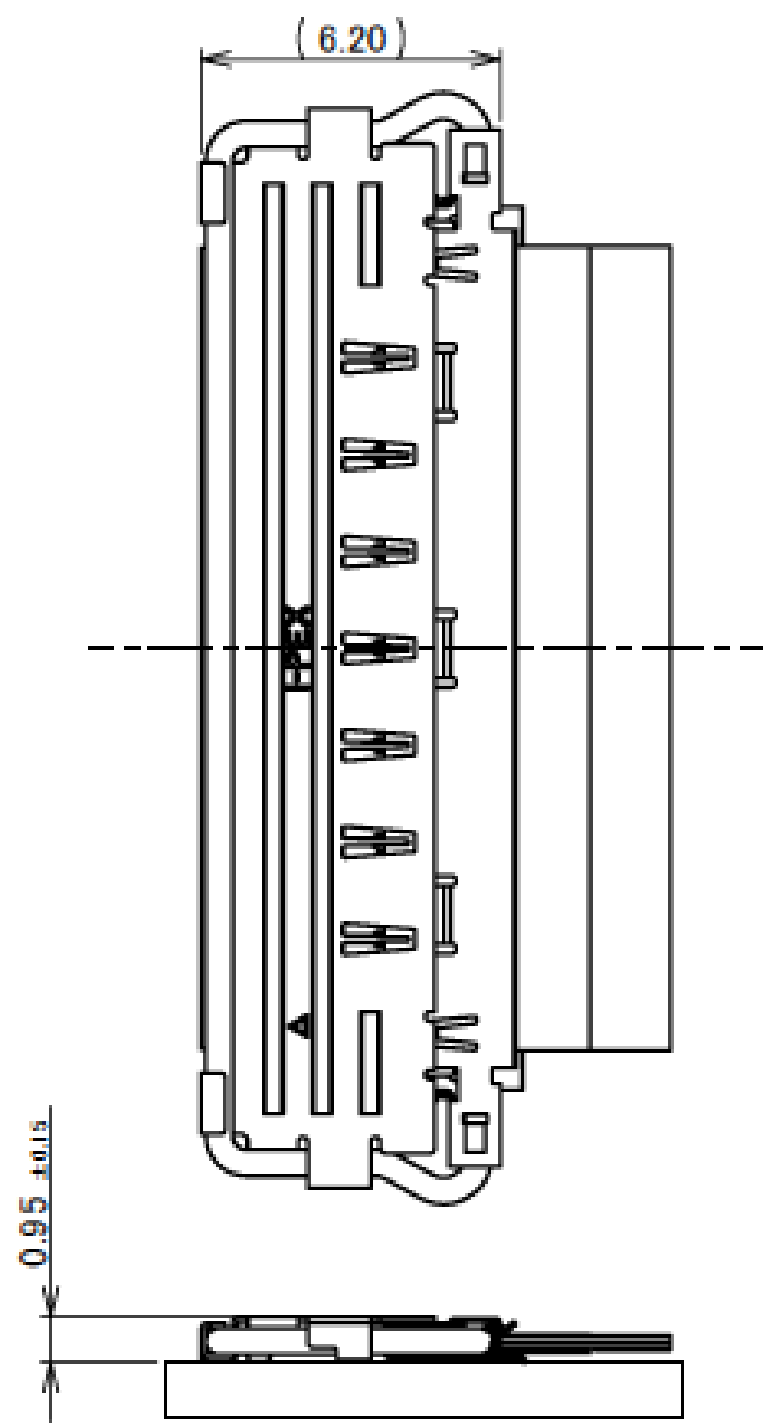
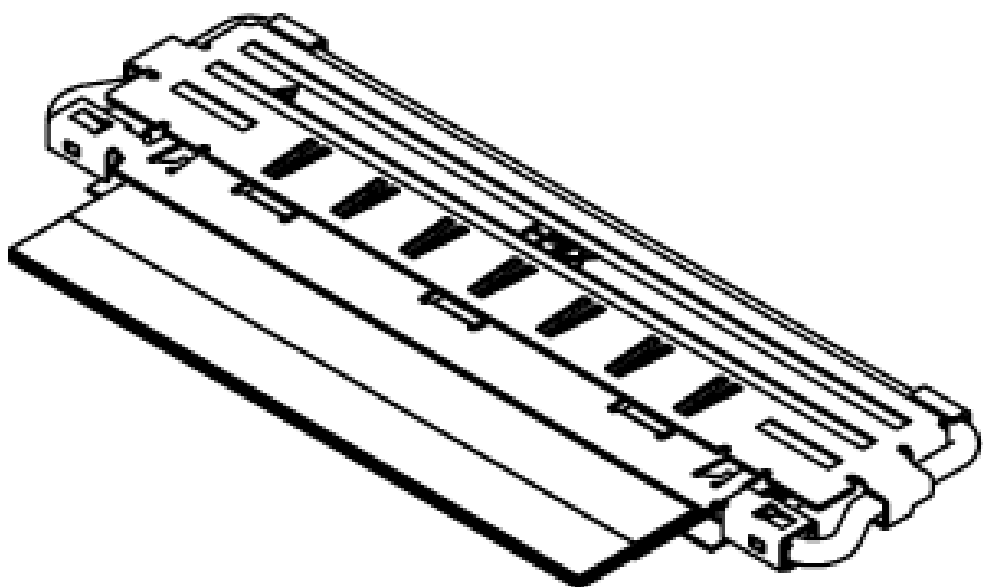
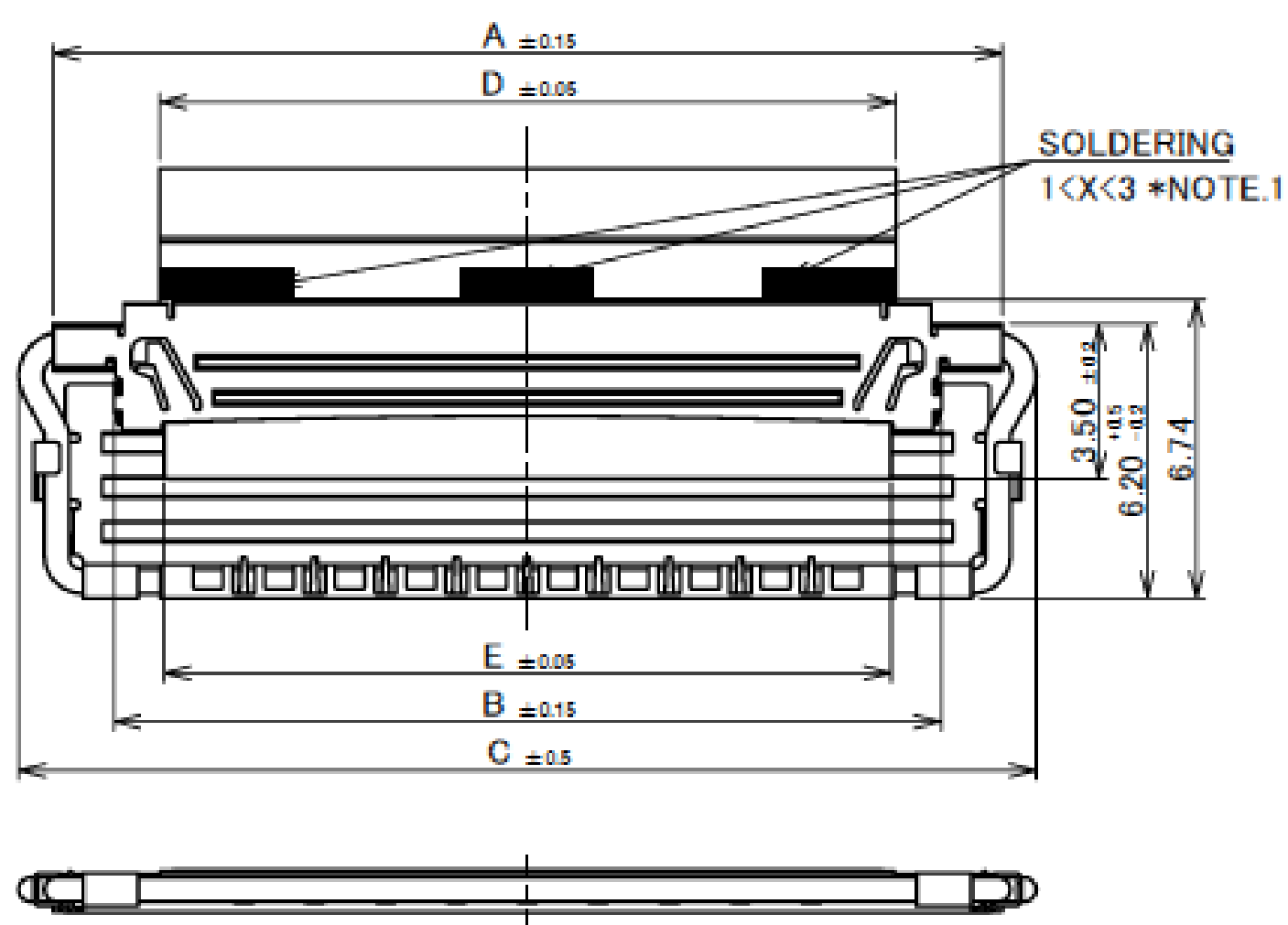
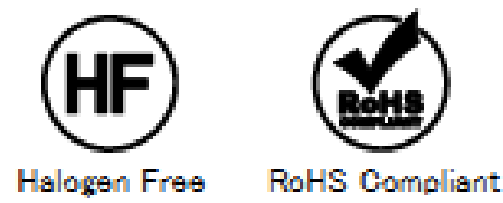


3	COVER	PHOSPHOR BRONZE	Ni PLATING
2	LOCK BAR	STAINLESS STEEL	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

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Recommended P/N		20856-0**T-01				
PART No.	A	B	C	D	E	
20856-030T-01	17.40	14.66	18.95	12.60	12.40	
20856-040T-01	21.40	18.66	22.95	16.60	16.40	
20856-050T-01	25.40	22.66	26.95	20.60	20.40	

FPC ASS'Y STATE COVER CLOSE



MATING CONDITION

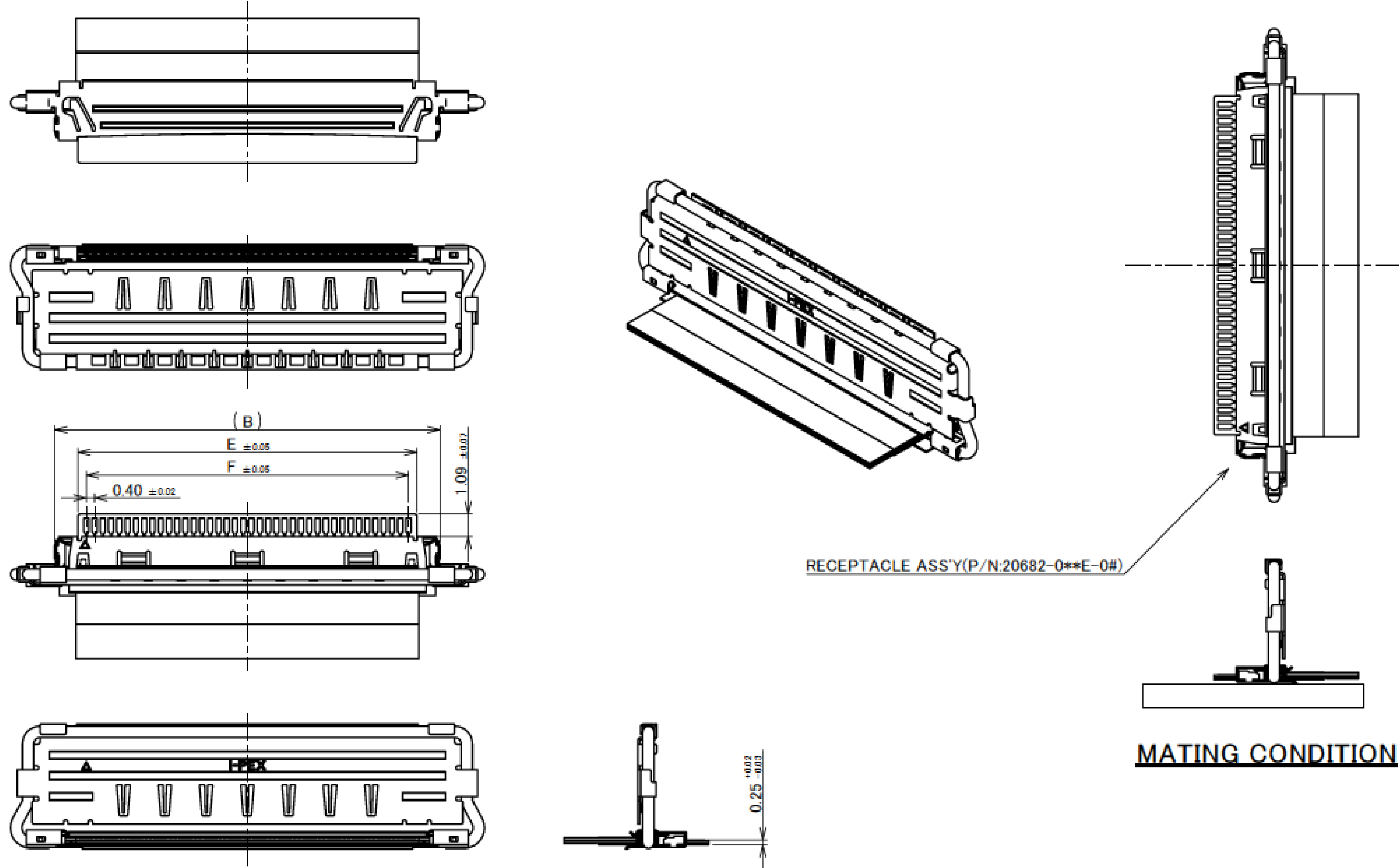
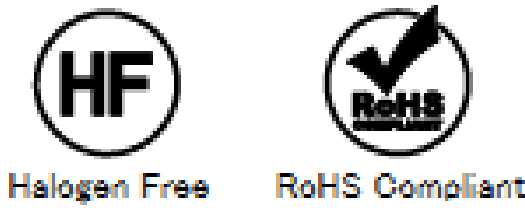
NOTES.
1.Soldering Area X is recommended dimension.
It does not mater if it might be exceed the recommended dimension.

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Shell Assembly

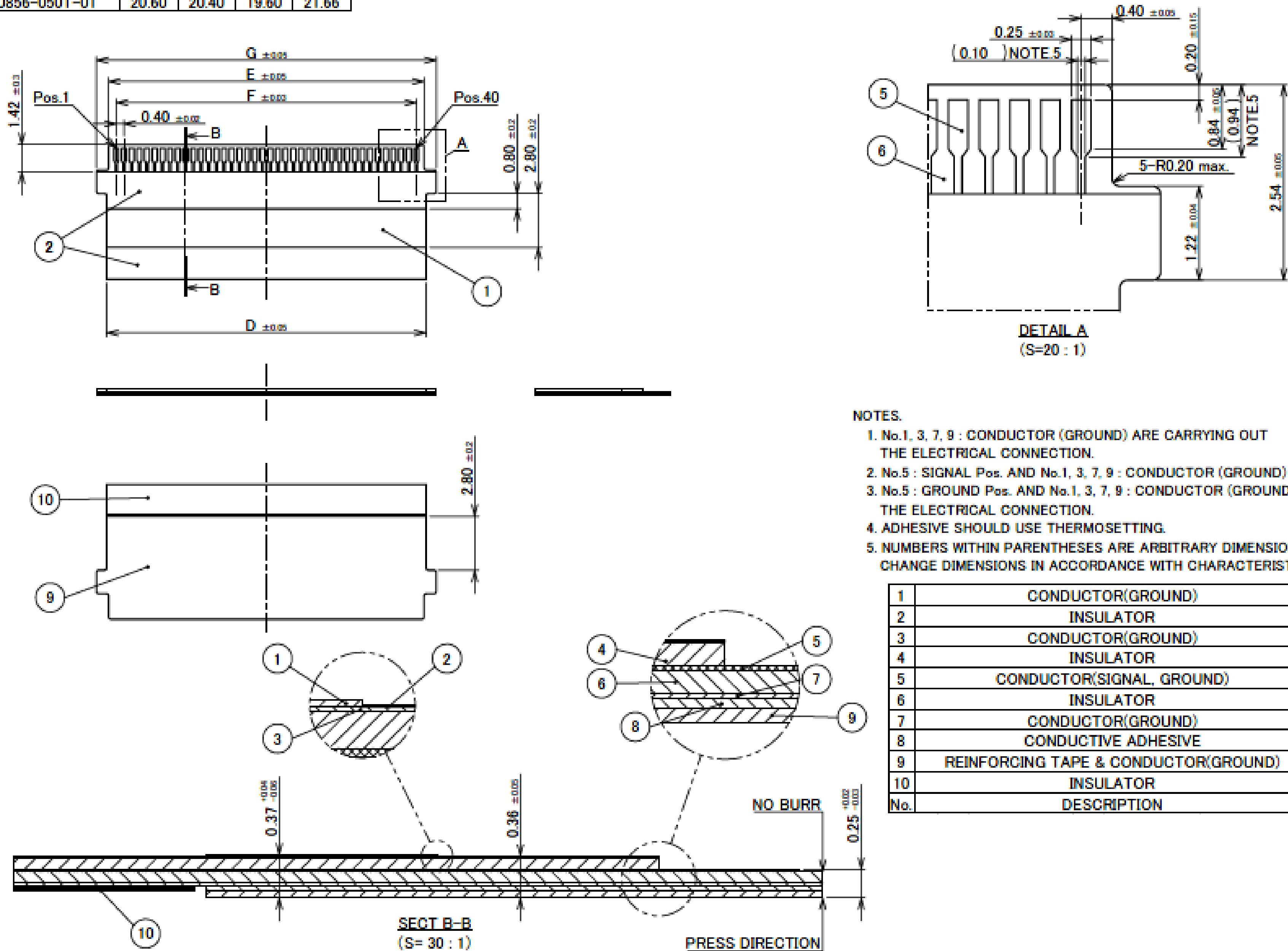
Recommended P/N		20856-0**T-01		
PART No.	B	E	F	
20856-030T-01	14.66	12.40	11.60	
20856-040T-01	18.66	16.40	15.60	
20856-050T-01	22.66	20.40	19.60	

FPC ASS'Y STATE COVER OPEN



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PART No.	D	E	F	G
20856-030T-01	12.60	12.40	11.60	13.66
20856-040T-01	16.60	16.40	15.60	17.66
20856-050T-01	20.60	20.40	19.60	21.66



- NOTES.
- No.1, 3, 7, 9 : CONDUCTOR (GROUND) ARE CARRYING OUT THE ELECTRICAL CONNECTION.
 - No.5 : SIGNAL Pos. AND No.1, 3, 7, 9 : CONDUCTOR (GROUND) ARE NOT CONTACTING.
 - No.5 : GROUND Pos. AND No.1, 3, 7, 9 : CONDUCTOR (GROUND) ARE CARRYING OUT THE ELECTRICAL CONNECTION.
 - ADHESIVE SHOULD USE THERMOSETTING.
 - NUMBERS WITHIN PARENTHESES ARE ARBITRARY DIMENSIONS.
CHANGE DIMENSIONS IN ACCORDANCE WITH CHARACTERISTIC IMPEDANCE VALUE.

1	CONDUCTOR(GROUND)	Cu	Ni , Au
2	INSULATOR	-	-
3	CONDUCTOR(GROUND)	Cu	-
4	INSULATOR	-	-
5	CONDUCTOR(SIGNAL, GROUND)	Cu	Ni , Au
6	INSULATOR	-	-
7	CONDUCTOR(GROUND)	Cu	-
8	CONDUCTIVE ADHESIVE	-	-
9	REINFORCING TAPE & CONDUCTOR(GROUND)	SUS	Ni
10	INSULATOR	-	-
No.	DESCRIPTION	MATERIAL PLATING	

Rev.13

Shell Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A AC/DC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K(-40℃~+85℃)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : \angle 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \angle 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 : 13.5N MAX. 40P : 18.0N MAX. 50P : 22.5N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 1.44N MIN. 40P : 1.92N MIN. 50P : 2.40N MIN.
PRODUCT SPECIFICATION	PRS-2418
TEST REPORT	TR-17079
PACKING STANDARD	PST-17104
INSTRUCTION MANUAL	HIM-17029
ASSEMBLY MANUAL	ASM-17006
APPEARANCE CRITERIA No.	QLS-A***

Rev.13

Receptacle Assembly

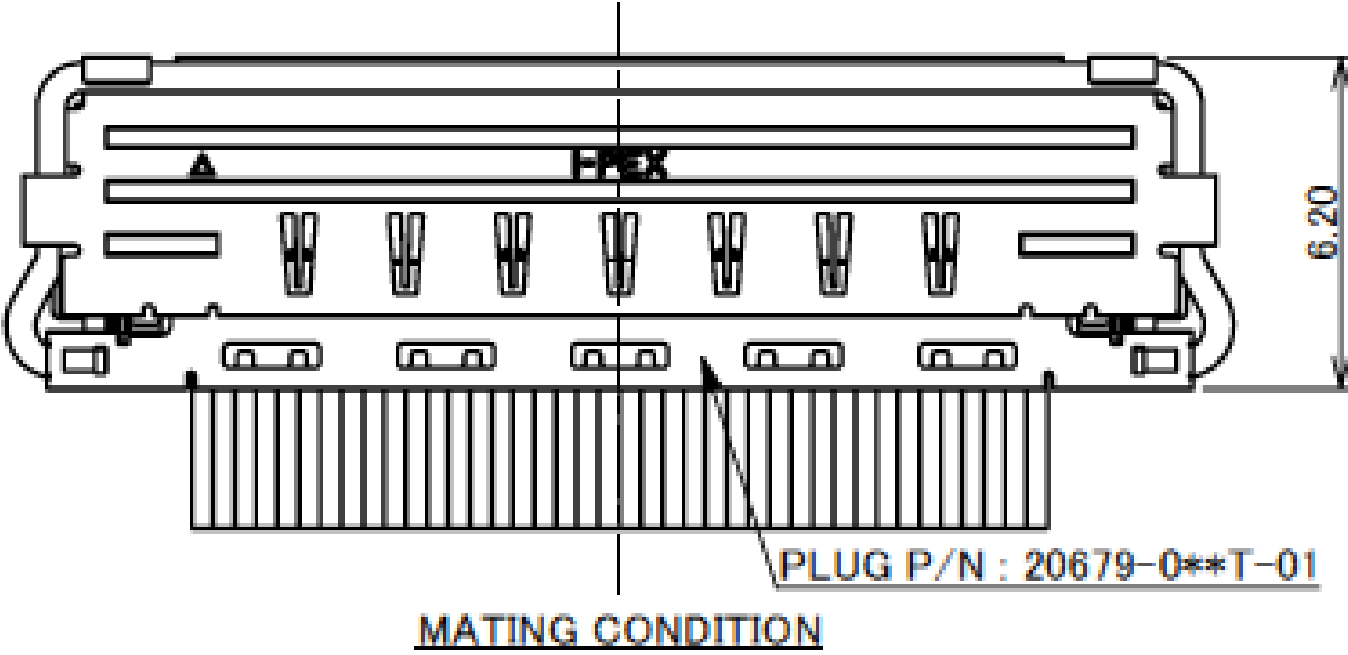
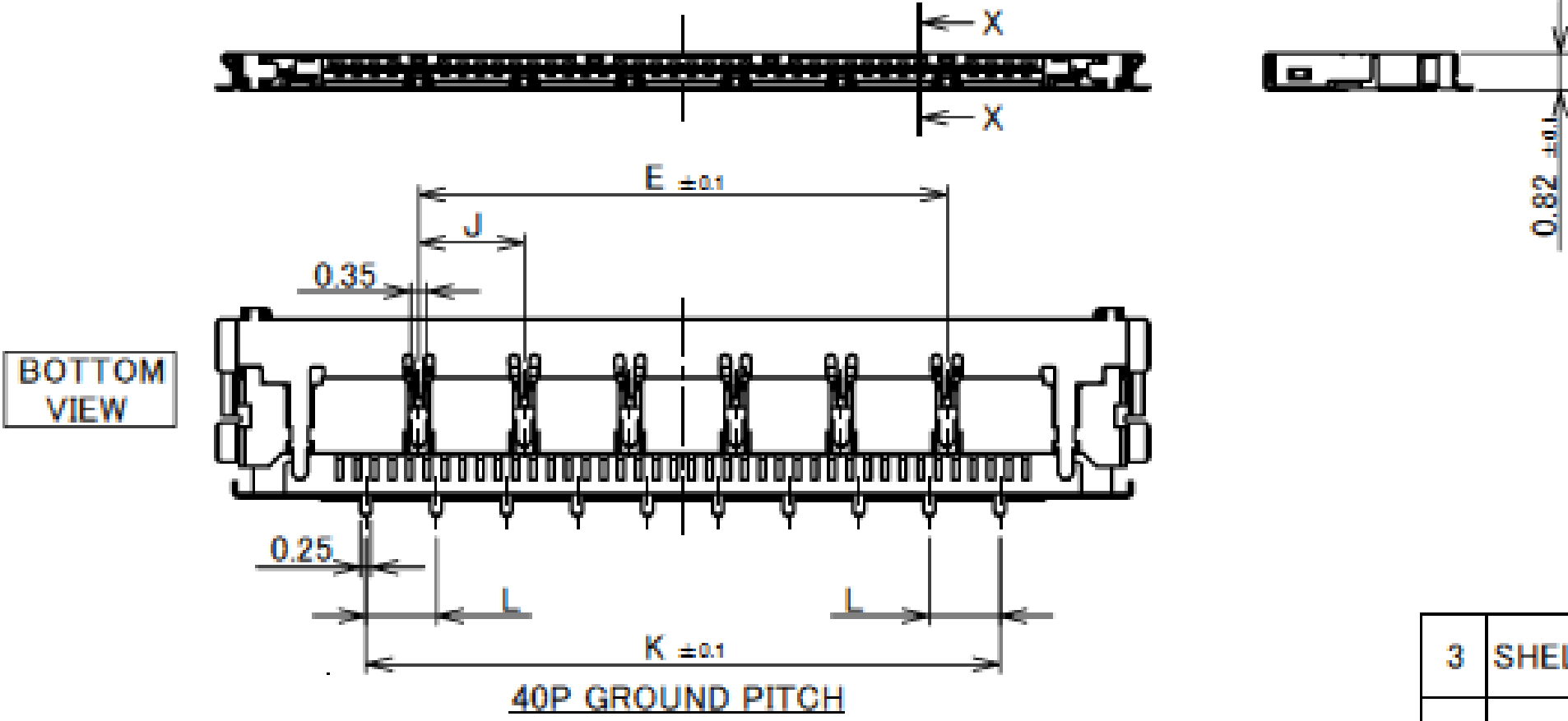
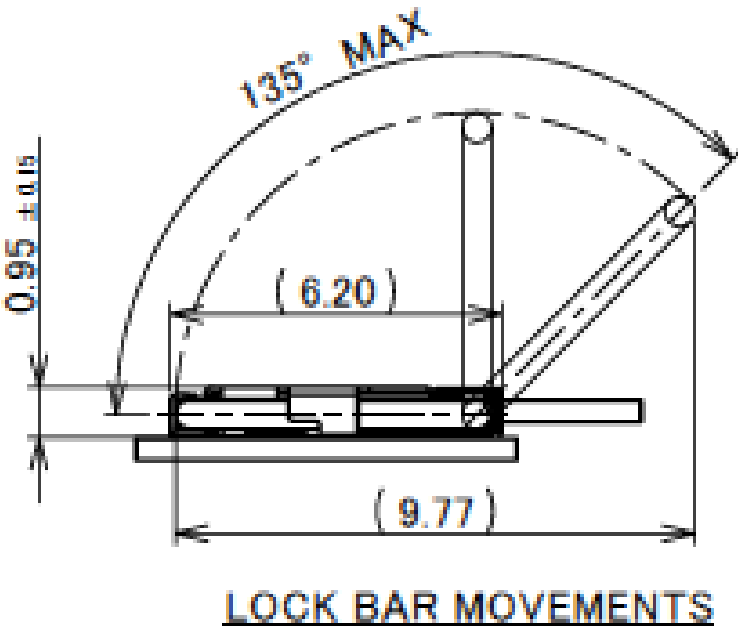
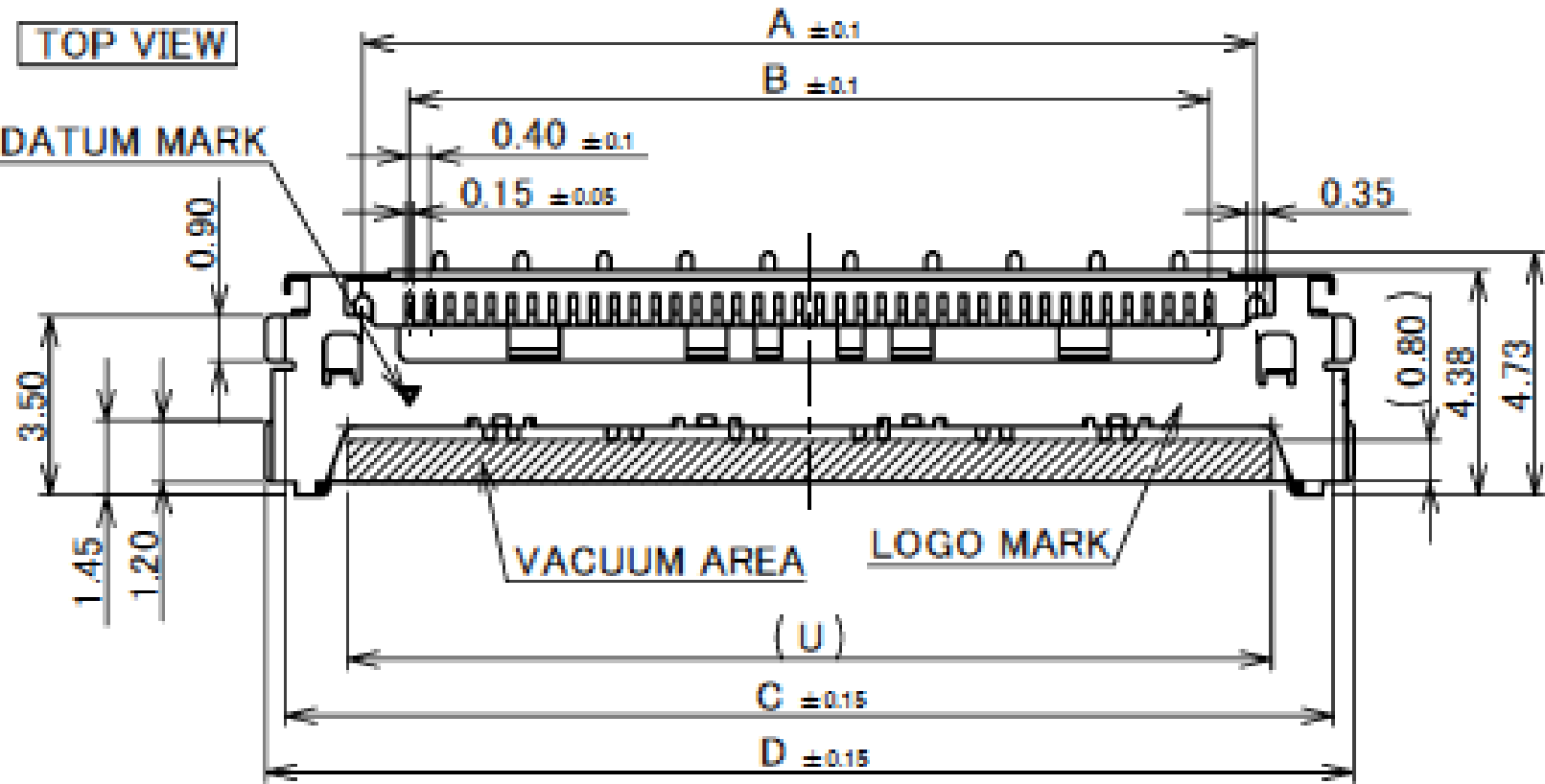
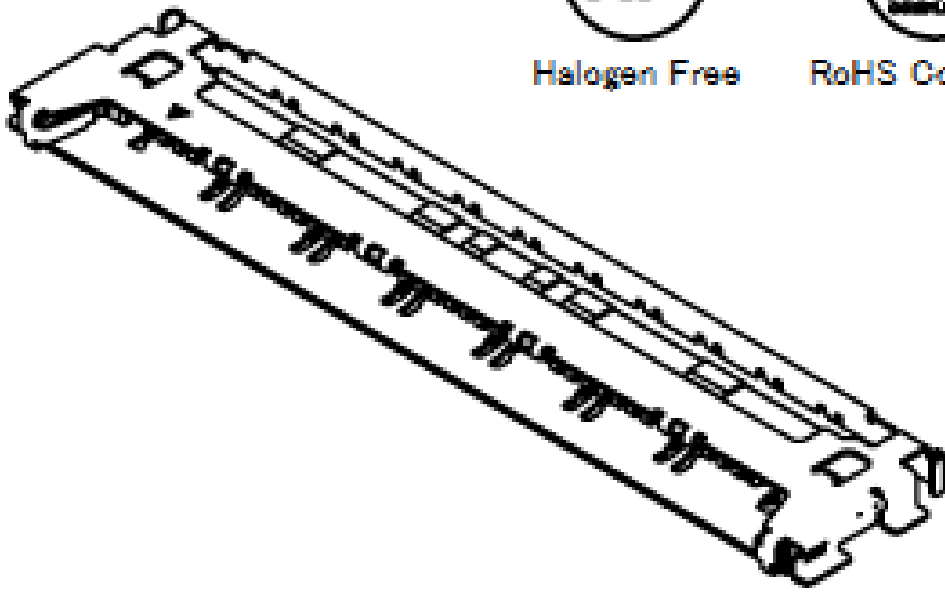
Recommended P/N 20682-0**E-02

PART NO.	Pos.	A	B	C	D	E	J	K	L	U
20682-020E-02	20	9.40	7.60	12.43	13.20	4.80	2.40	5.60	2.00	10.01
20682-030E-02	30	13.40	11.60	16.43	17.20	9.60	2.40	12.00	1.60	14.01
20682-040E-02	40	17.40	15.60	20.43	21.20	12.00	2.40	14.40	1.60	18.01
20682-050E-02	50	21.40	19.60	24.43	25.20	16.80	2.80	18.40	1.60	22.01

P/N : 20682-0 ** E- 02
Pos.



Halogen Free RoHS Compliant

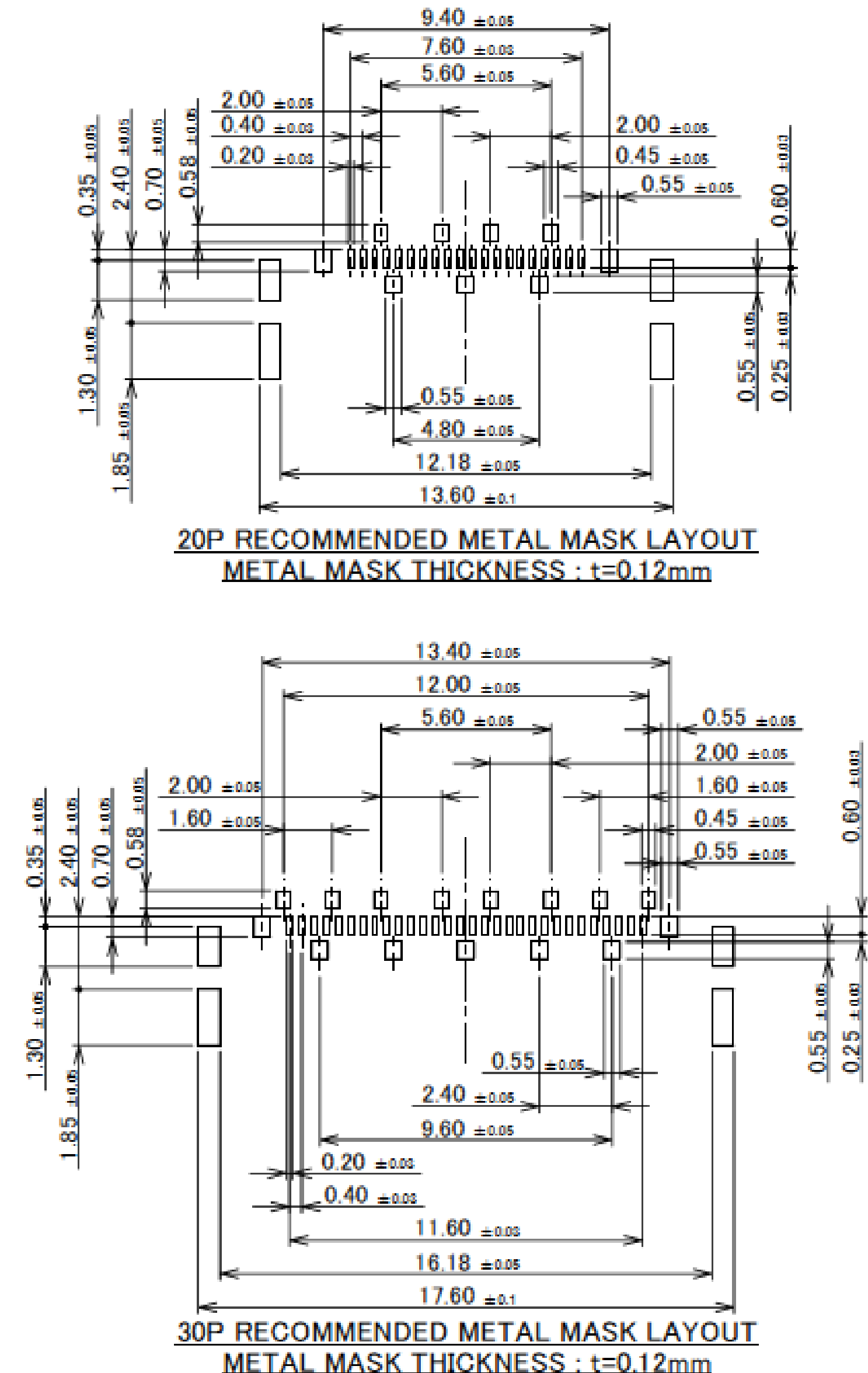
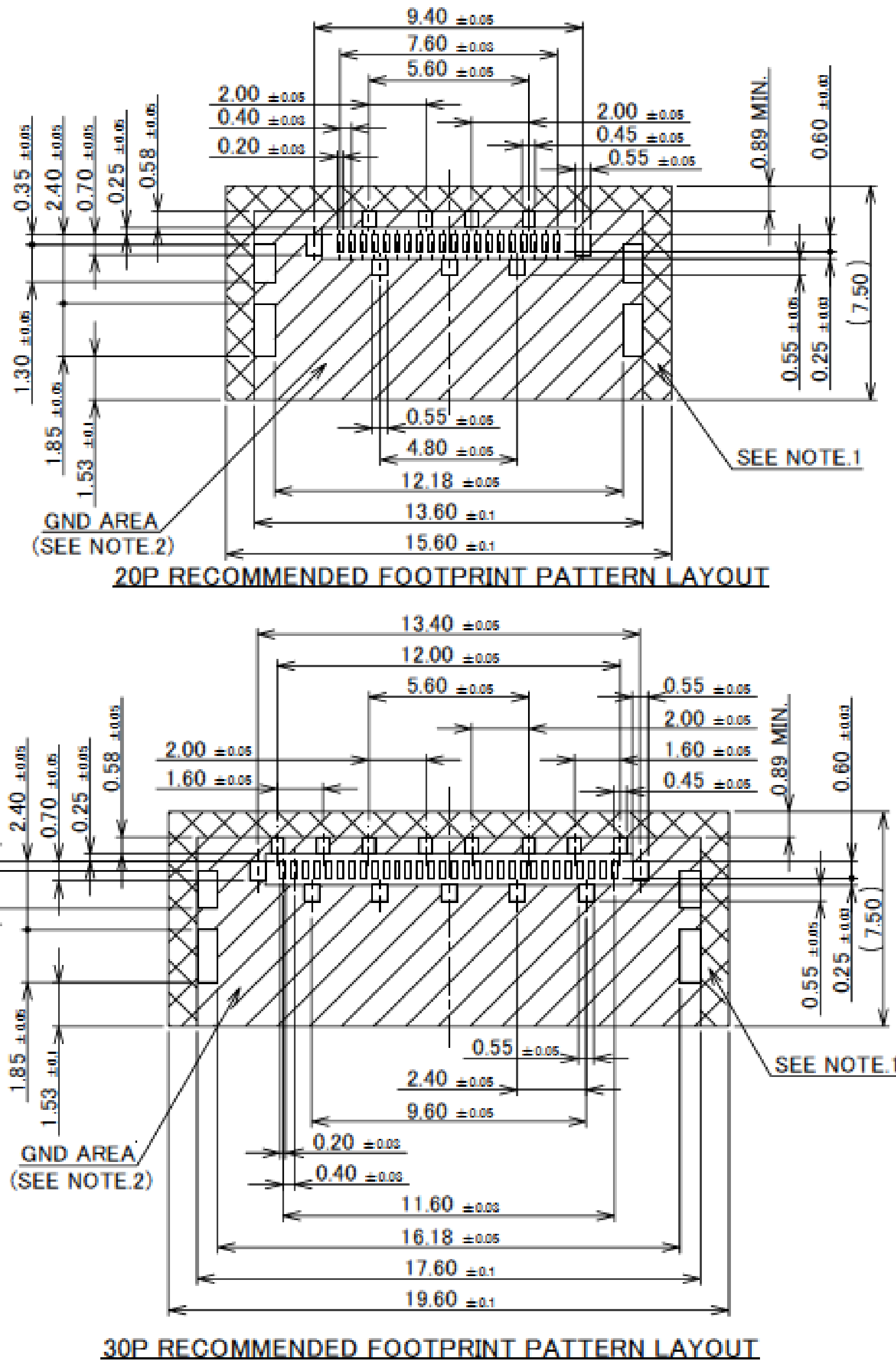
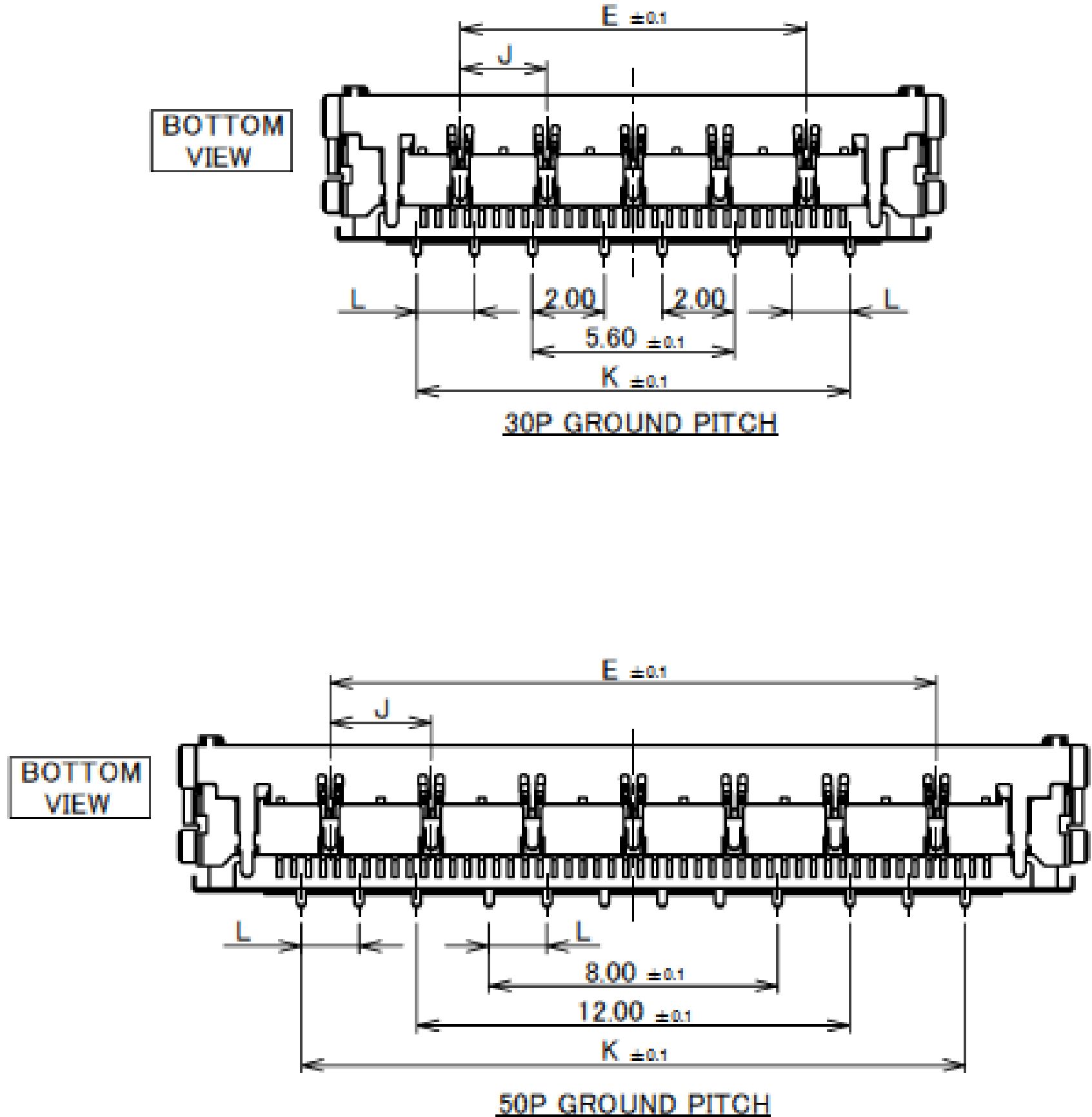
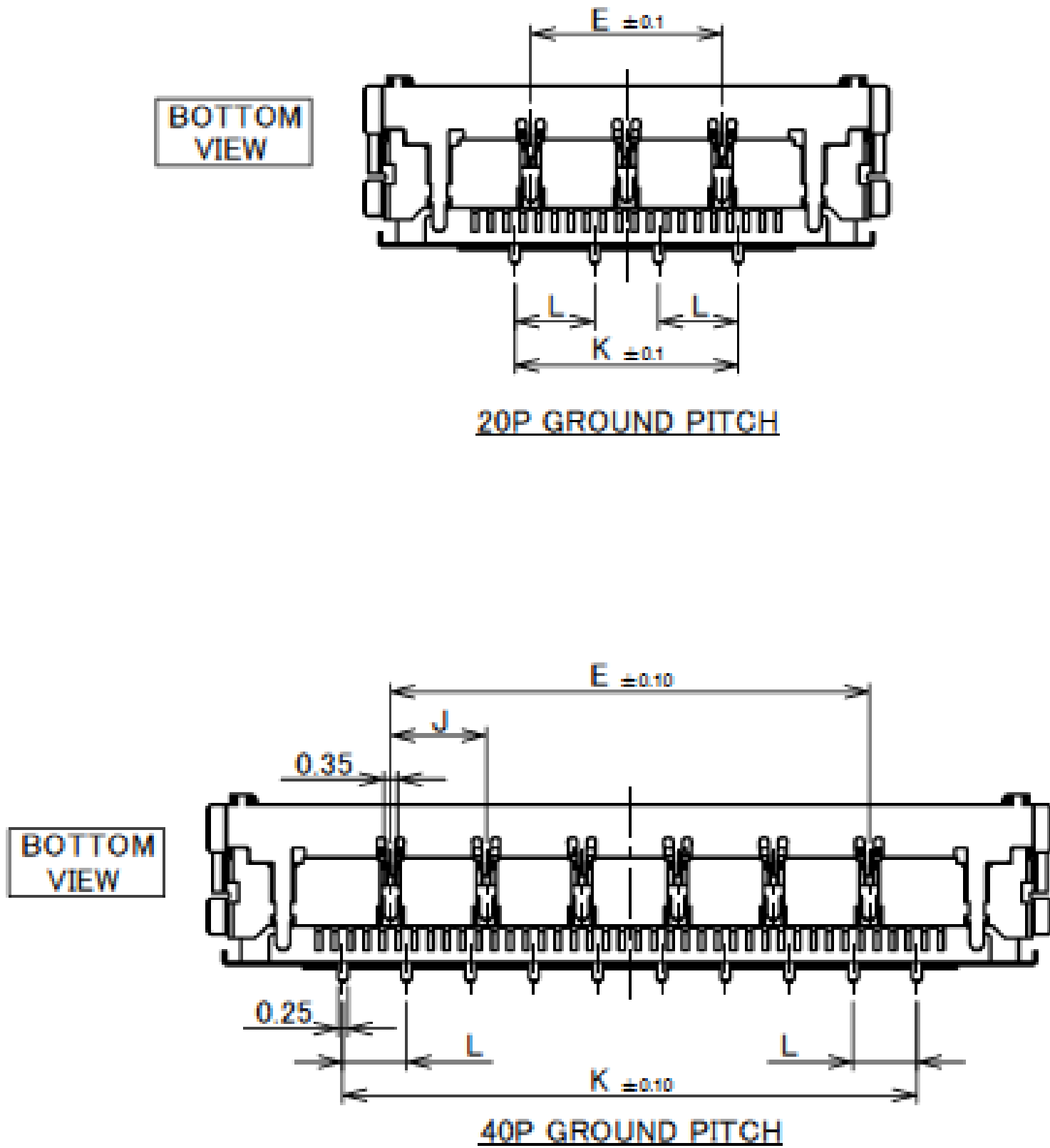


3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

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Receptacle Assembly

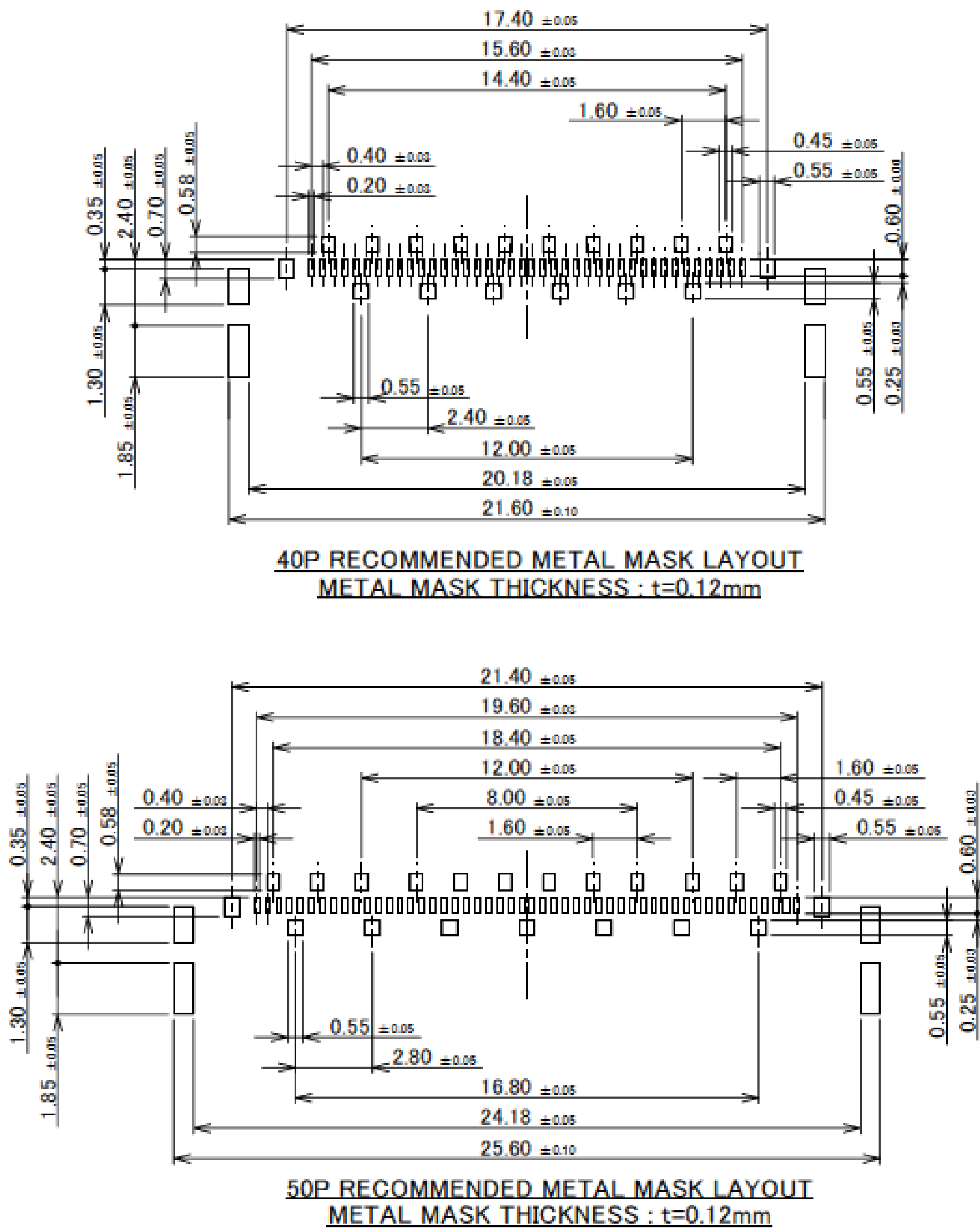
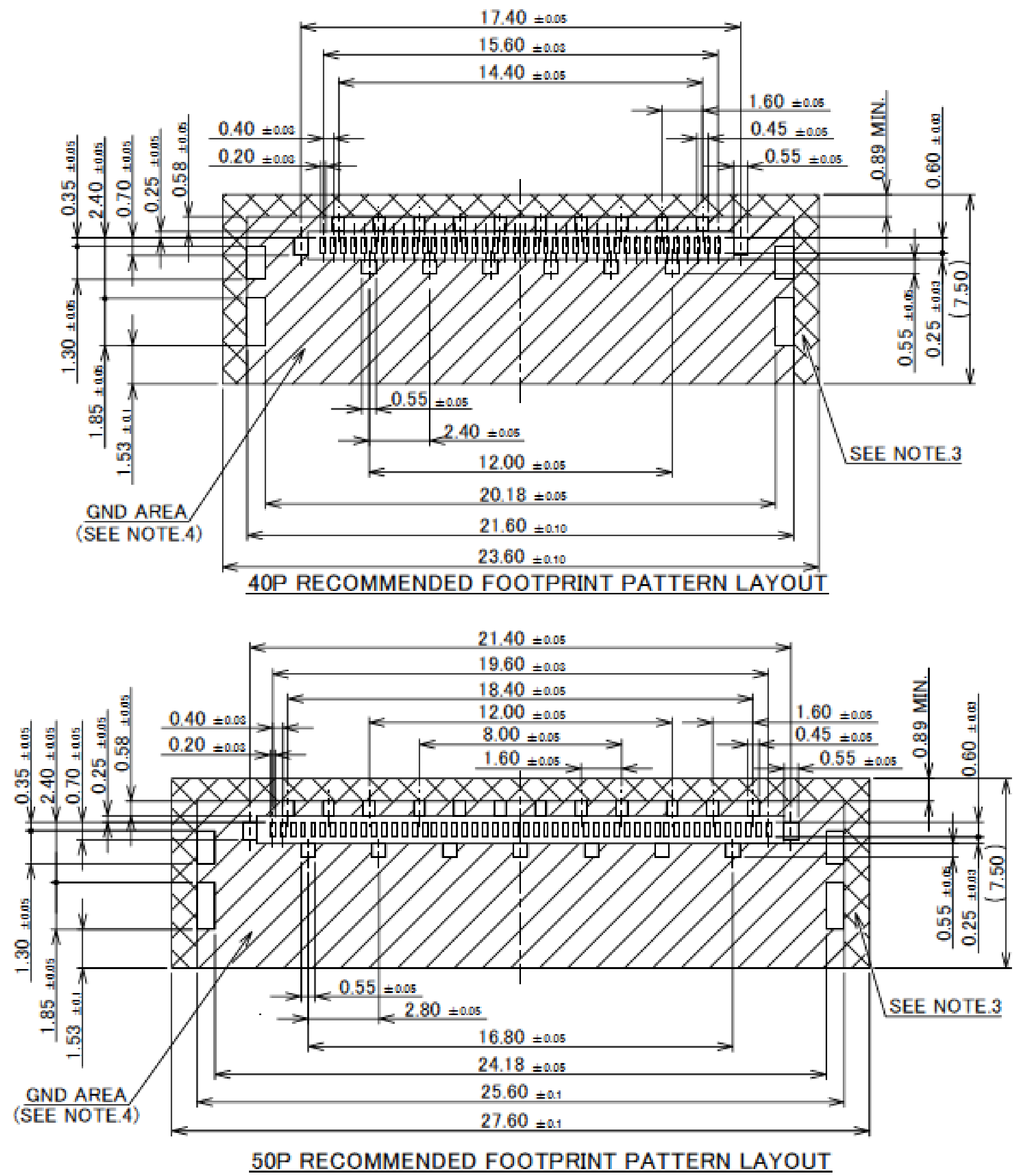
PART NO.	Pos.	E	J	K	L
20682-020E-02	20	4.80	2.40	5.60	2.00
20682-030E-02	30	9.60	2.40	12.00	1.60
20682-040E-02	40	12.00	2.40	14.40	1.60
20682-050E-02	50	16.80	2.80	18.40	1.60



NOTES.

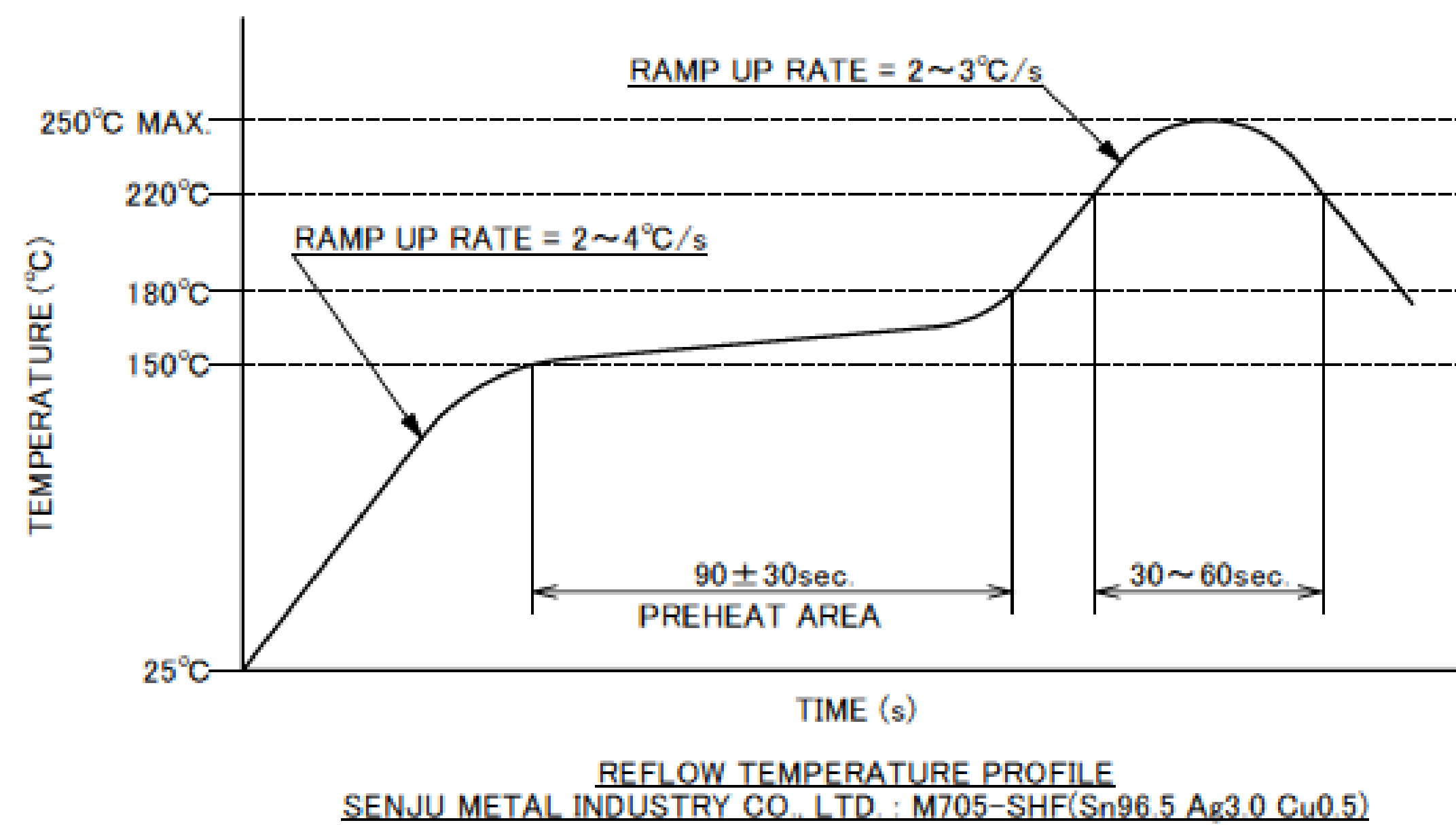
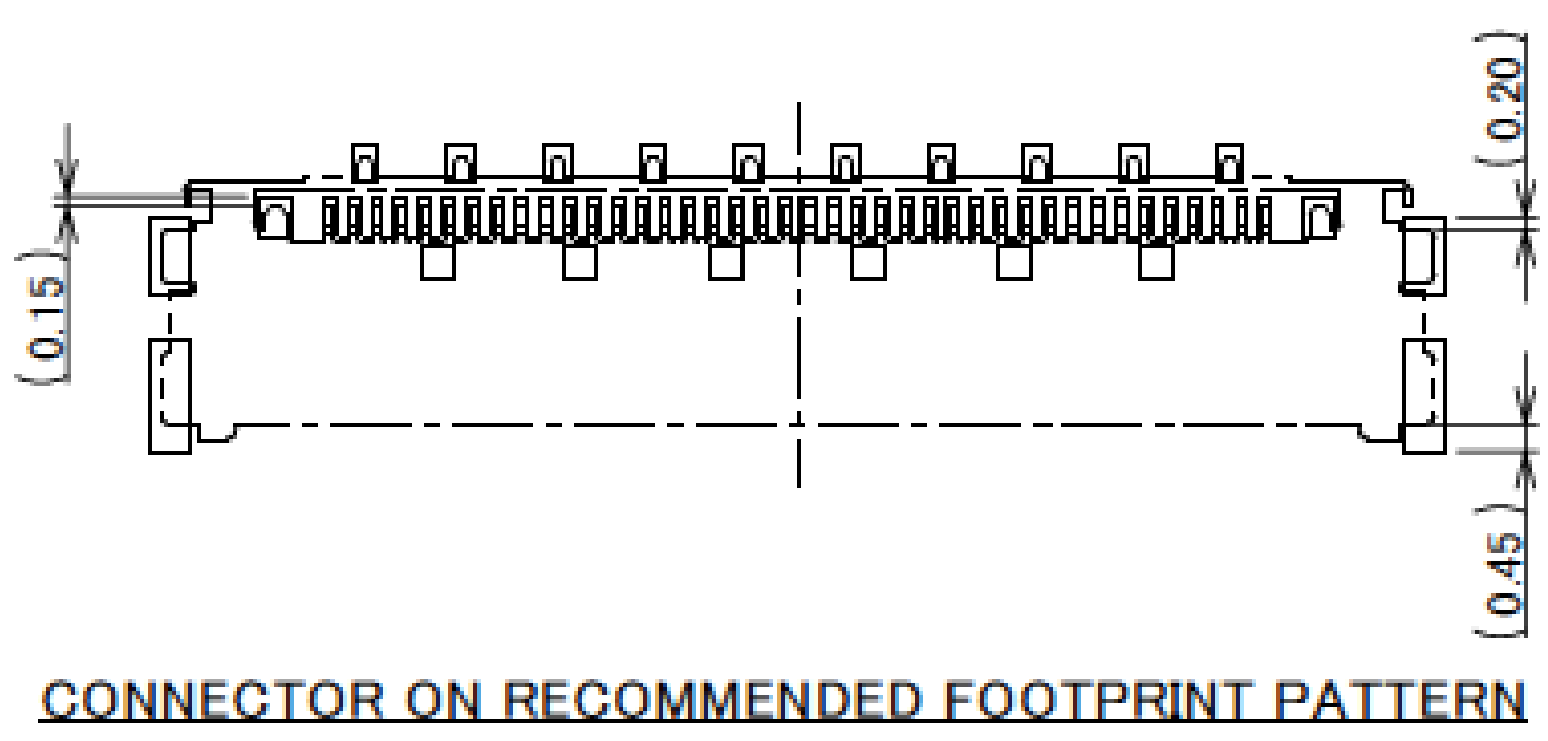
1. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
2. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Receptacle Assembly



NOTES.
3. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
4. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

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Rev.16

Receptacle Assembly

FOR CABLINE-CA IIF PLUG SHELL ASSEMBLY (DWG. NO. 20856)

ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A AC/DC (PER CONTACT PIN) ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~358K(-40℃~+85℃)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : \triangle 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 60mohm 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 : 13.5N MAX. 40P : 18.0N MAX. 50P : 22.5N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 1.44N MIN. 40P : 1.92N MIN. 50P : 2.40N MIN.
PRODUCT SPECIFICATION	PRS-2418
TEST REPORT	TR-17079
PACKING STANDARD	PST-17104
INSTRUCTION MANUAL	HIM-17029
ASSEMBLY MANUAL	ASM-17006
APPEARANCE CRITERIA No.	QLS-A***

Rev.16

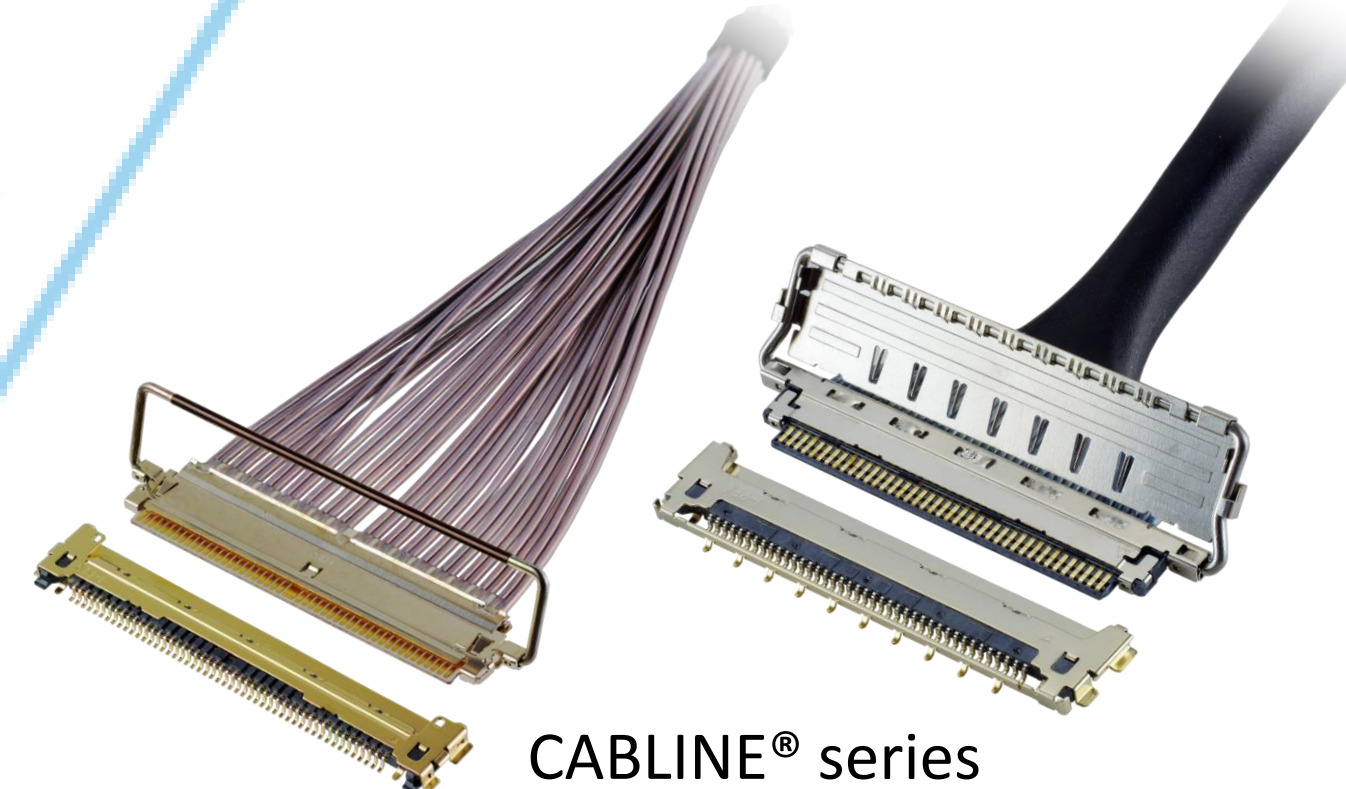
Custom Connectors Available

 RF
Connectors

MHF® series



Micro-Coaxial/Twinax
Connectors

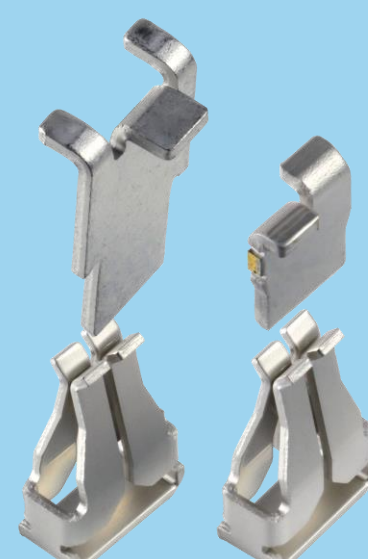


CABLIME® series

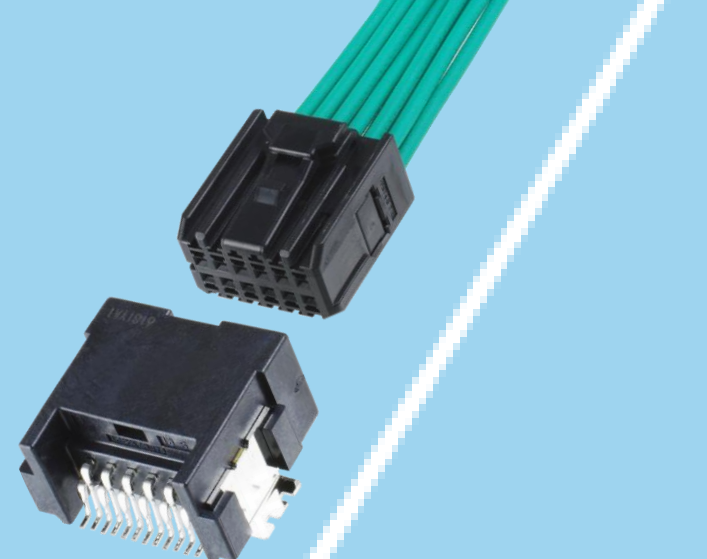


Wire-to-Board
Connectors/
Terminals

AP series



ISH® series



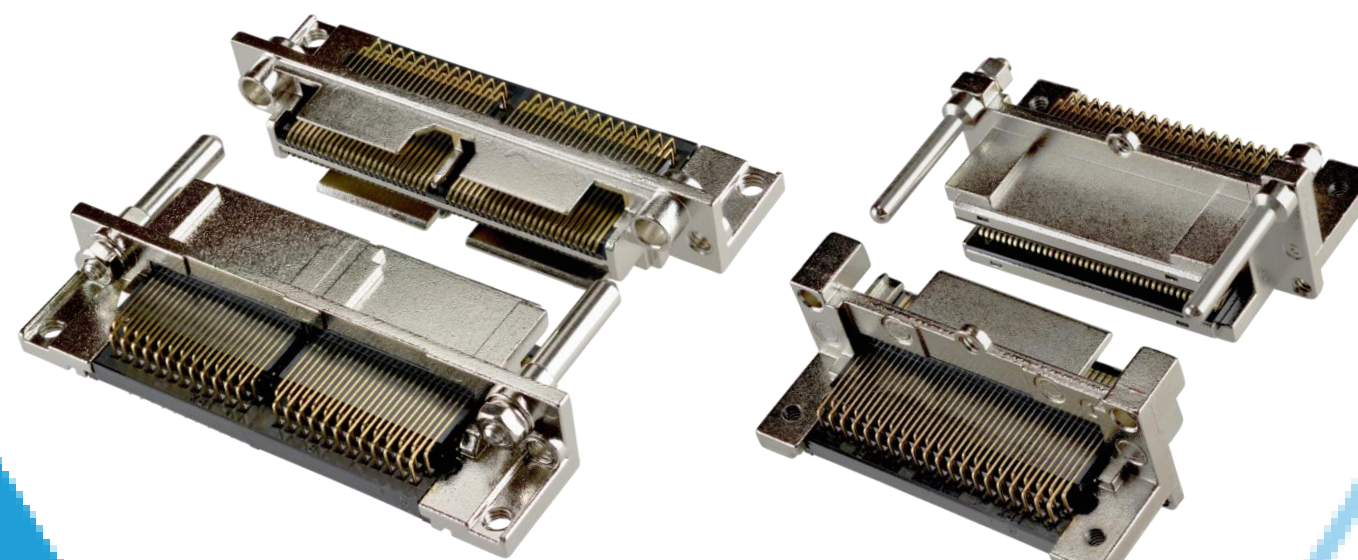
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



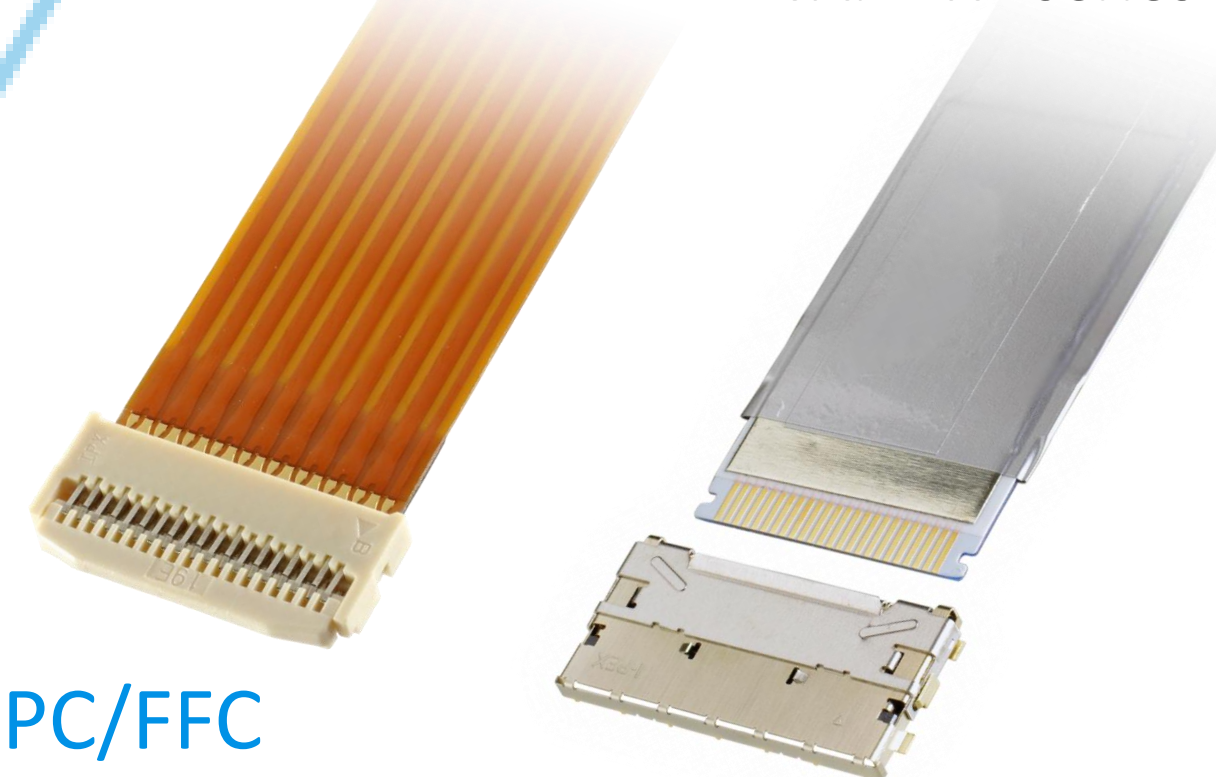
MINIDOCK™ series



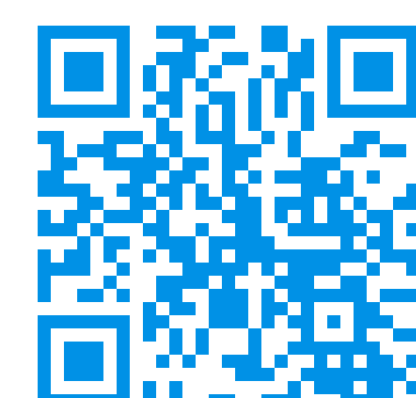
FPC/FFC
Connectors

MINIFLEX® series

EVAFLEX® series



Inquiry



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