

CABLINE®-CA IIF

フルシールド & メカニカルロック付き、高速伝送対応(32 Gbps/lane)、0.4mmピッチ、水平嵌合タイプFPCプラグコネクタ

Product Specifications:

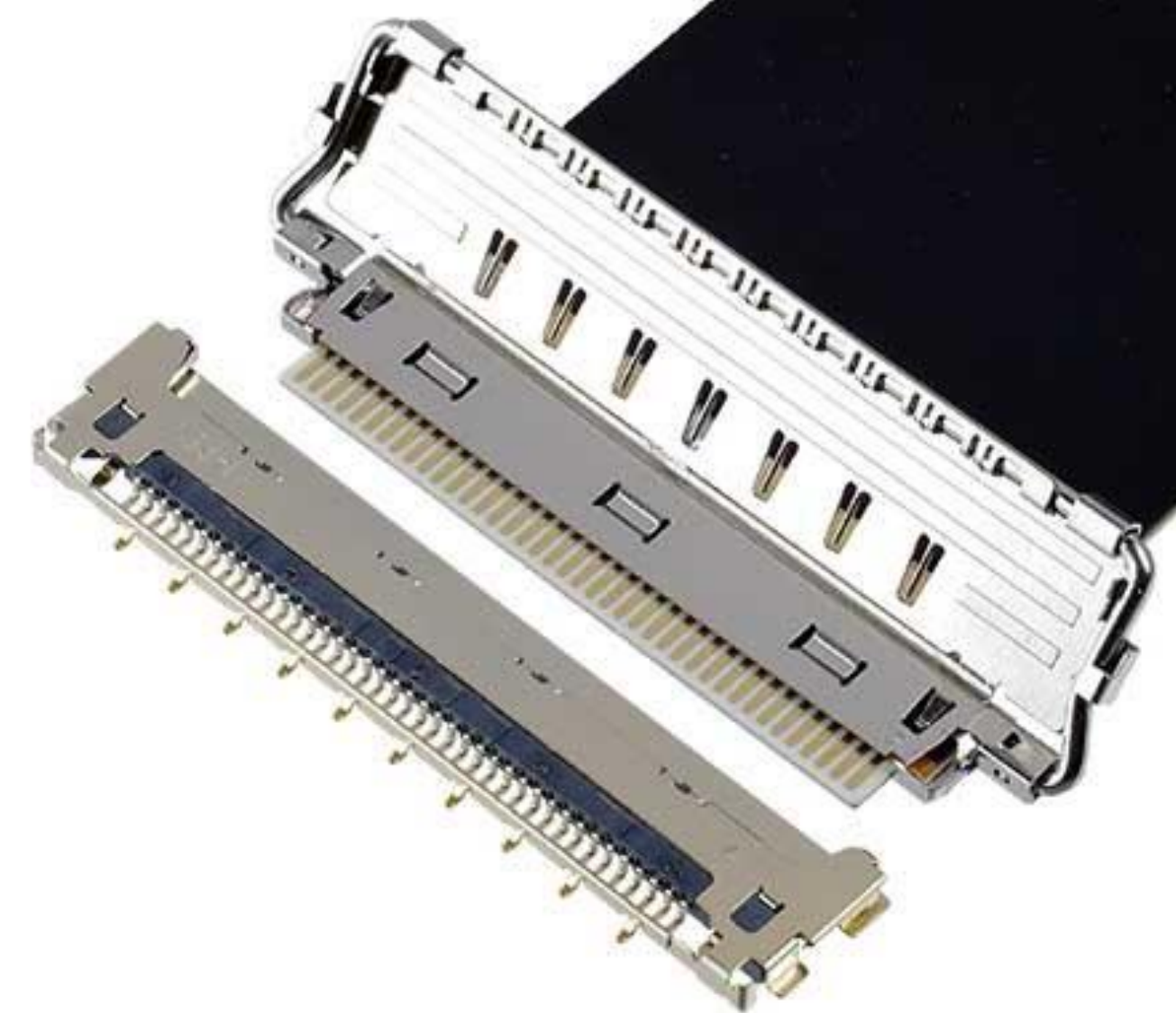
Mating type	Horizontal	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.48	
Mated size (mm)	Height	1.10 max. with cover
	Width	Formula: $6.95 + (0.4 * ?p)$
	Depth	6.74
Pin Counts	Range	Up to 60
	Available	30, 40, 50

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: $0.37 + 0.04/-0.06$

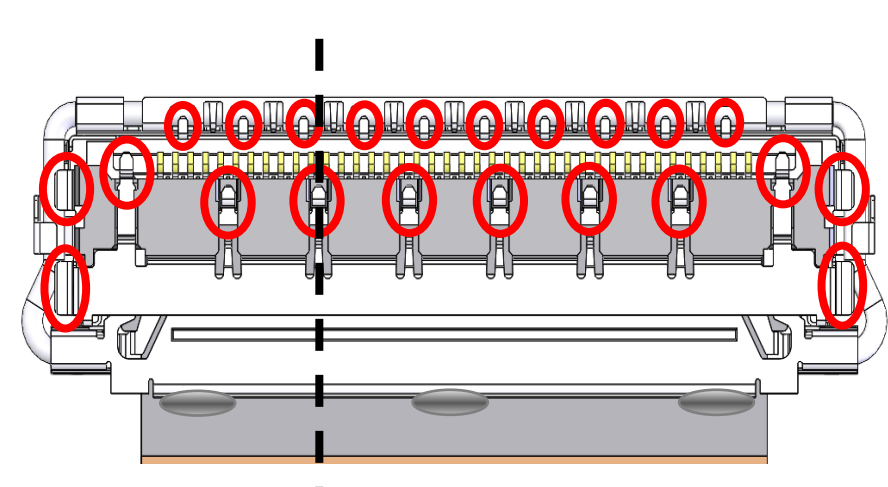
Applicable Standards (Reference Only):

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

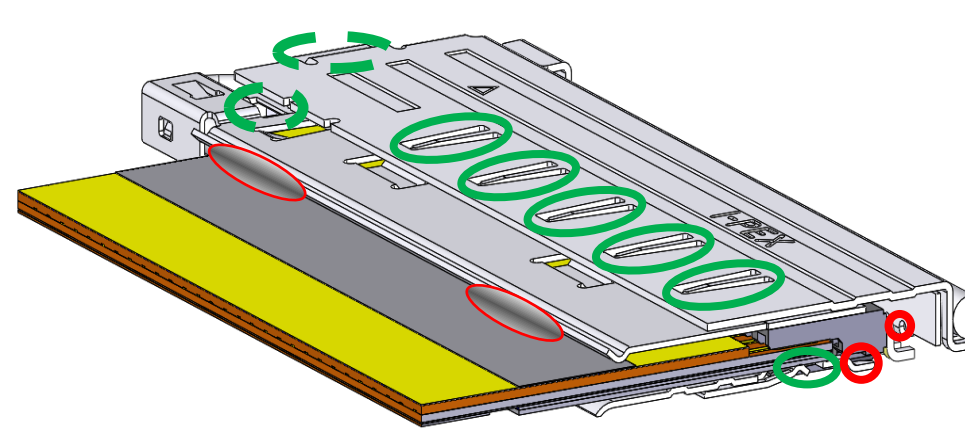


*記載のない極数の対応状況についてはお問い合わせください。

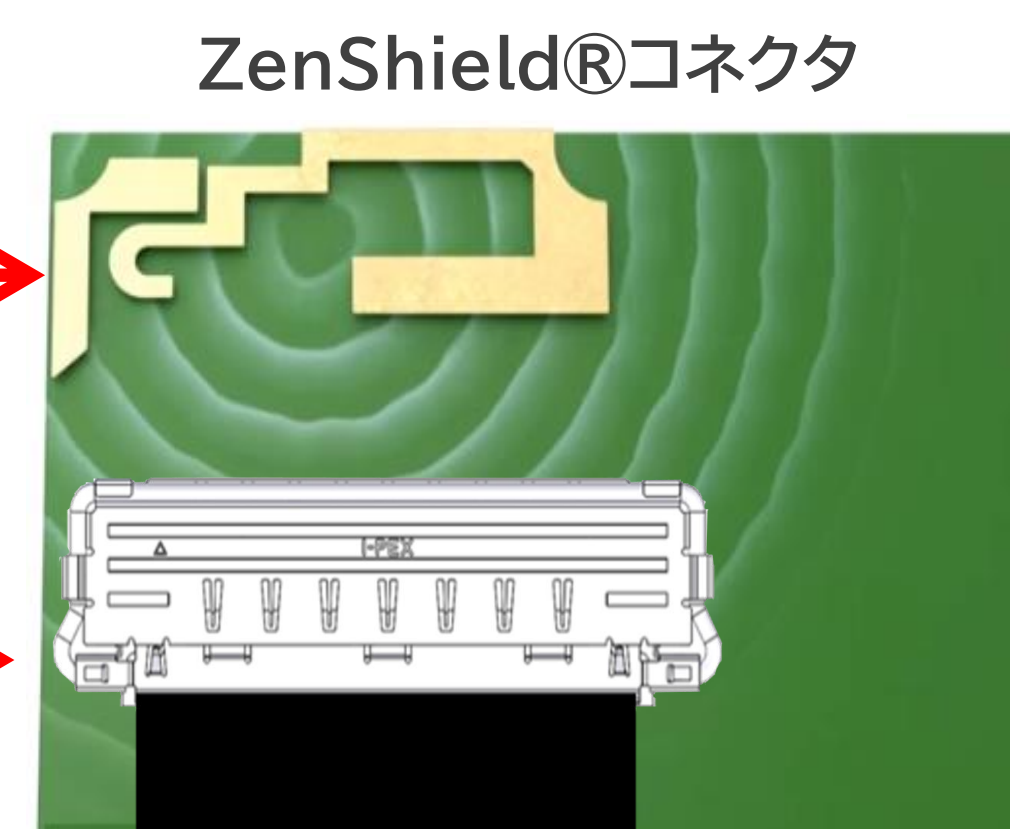
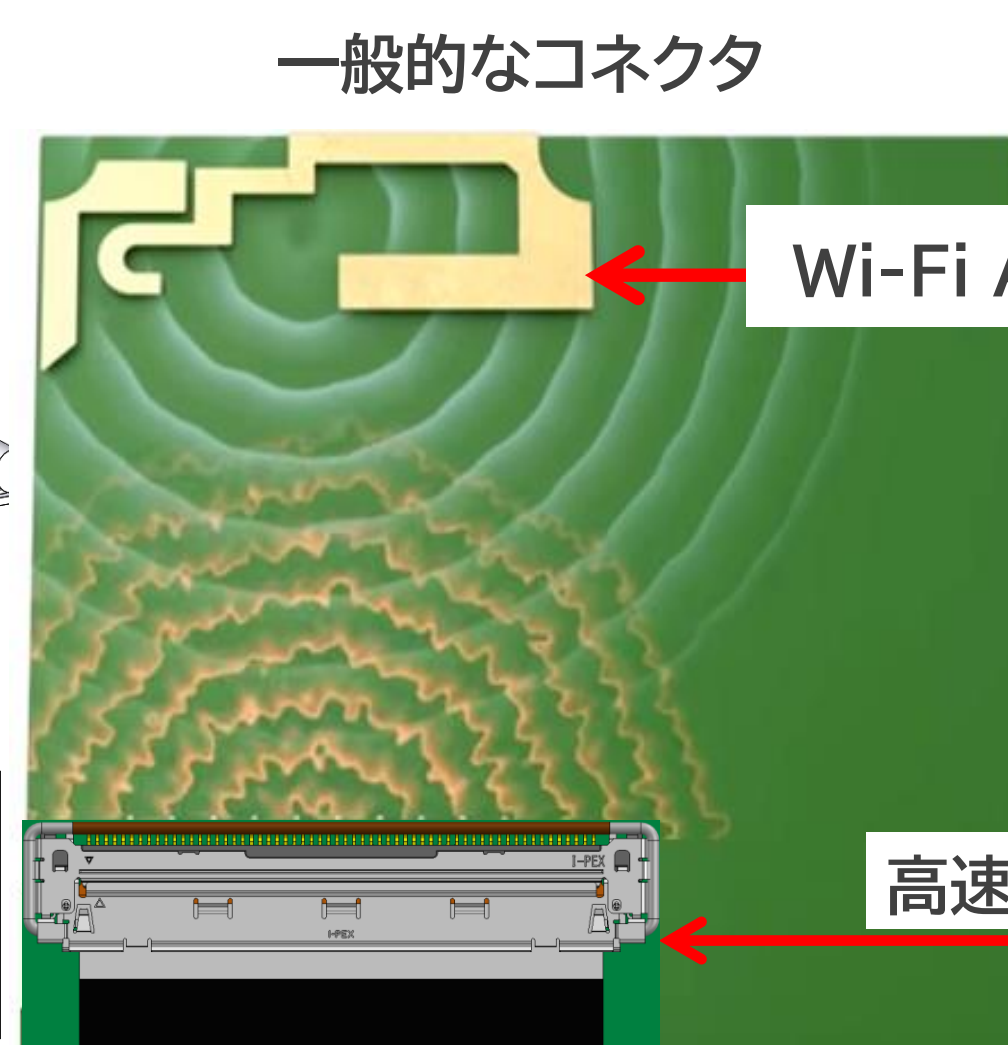
▶ ZenShield®フルシールドと多点グランド構造で、EMCソリューションに最適



下から見たコネクタ

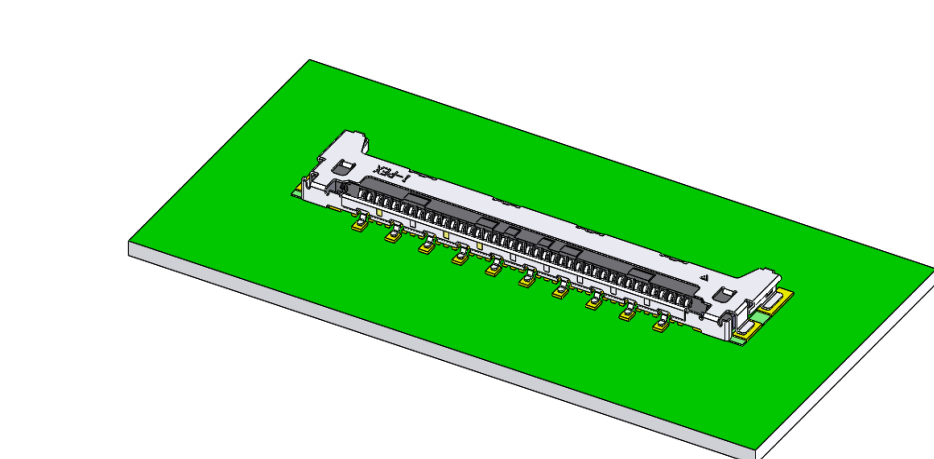


○ はんだ付け接点部
○ メカニカル接点部

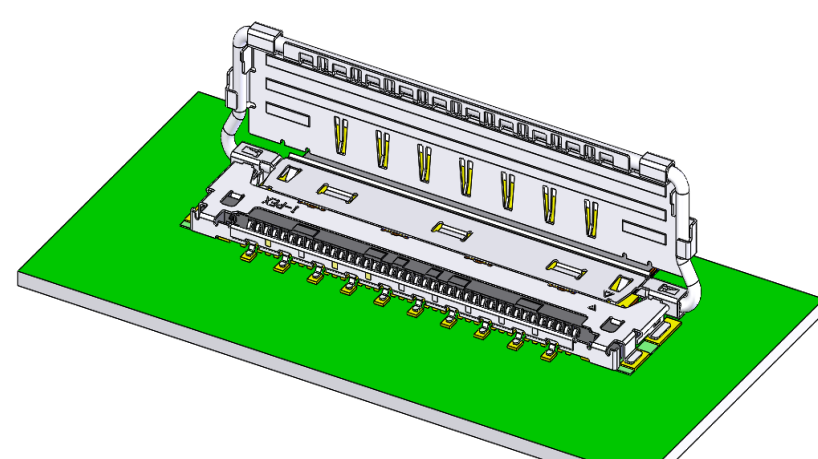


アンテナ付近まで
コネクタ実装が可能に

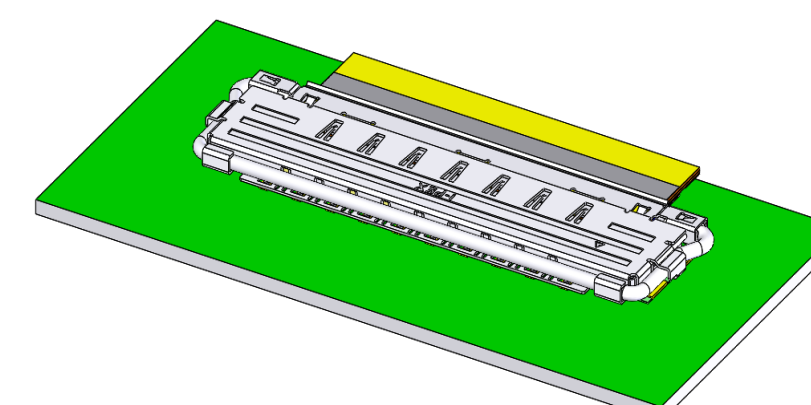
▶ メカニカルロックバーによる半嵌合防止とプラグ抜け防止



Mate

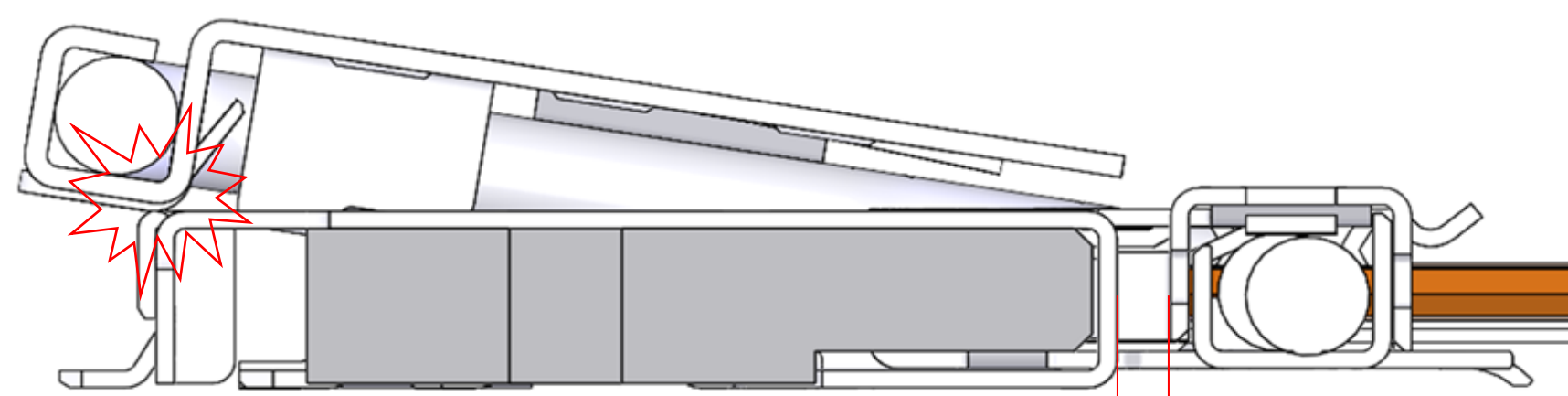


Locked



干渉

プラグがレセプタクルに正常に嵌合されている場合にのみロックが可能



不完全嵌合



正常嵌合

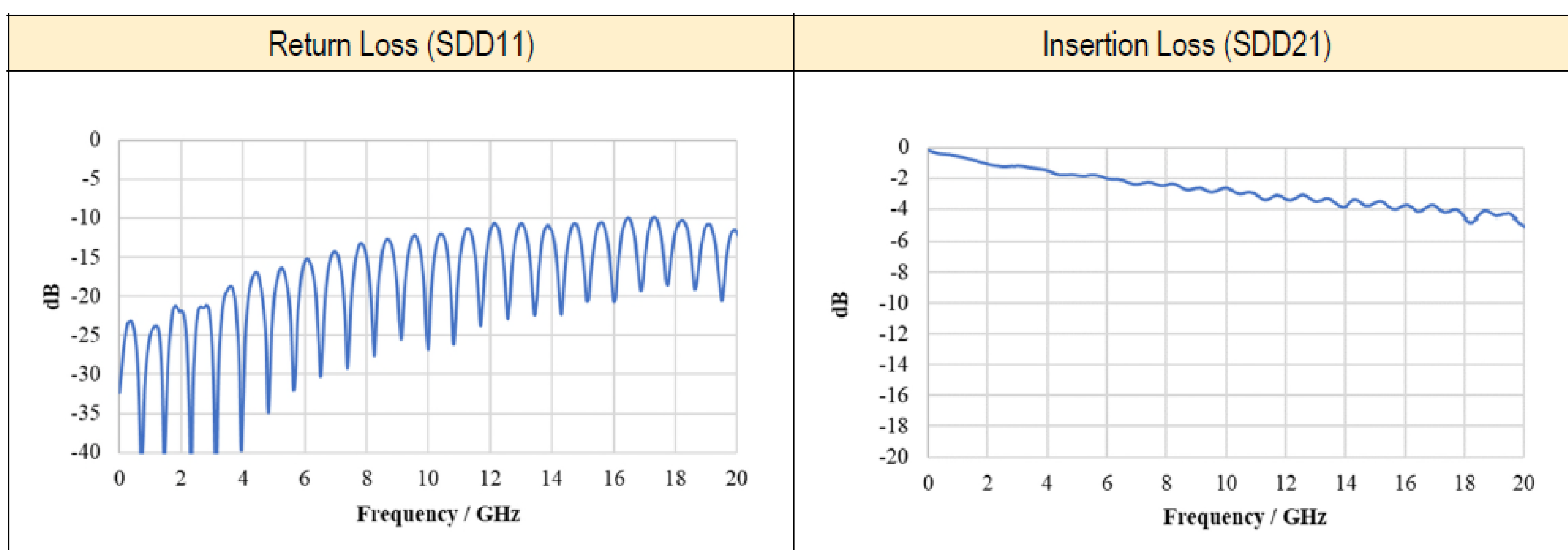
▶ 32Gbps/lane の高速伝送内部接続に最適

Measurement results

Connector: CABLINE-CA IIF 40P

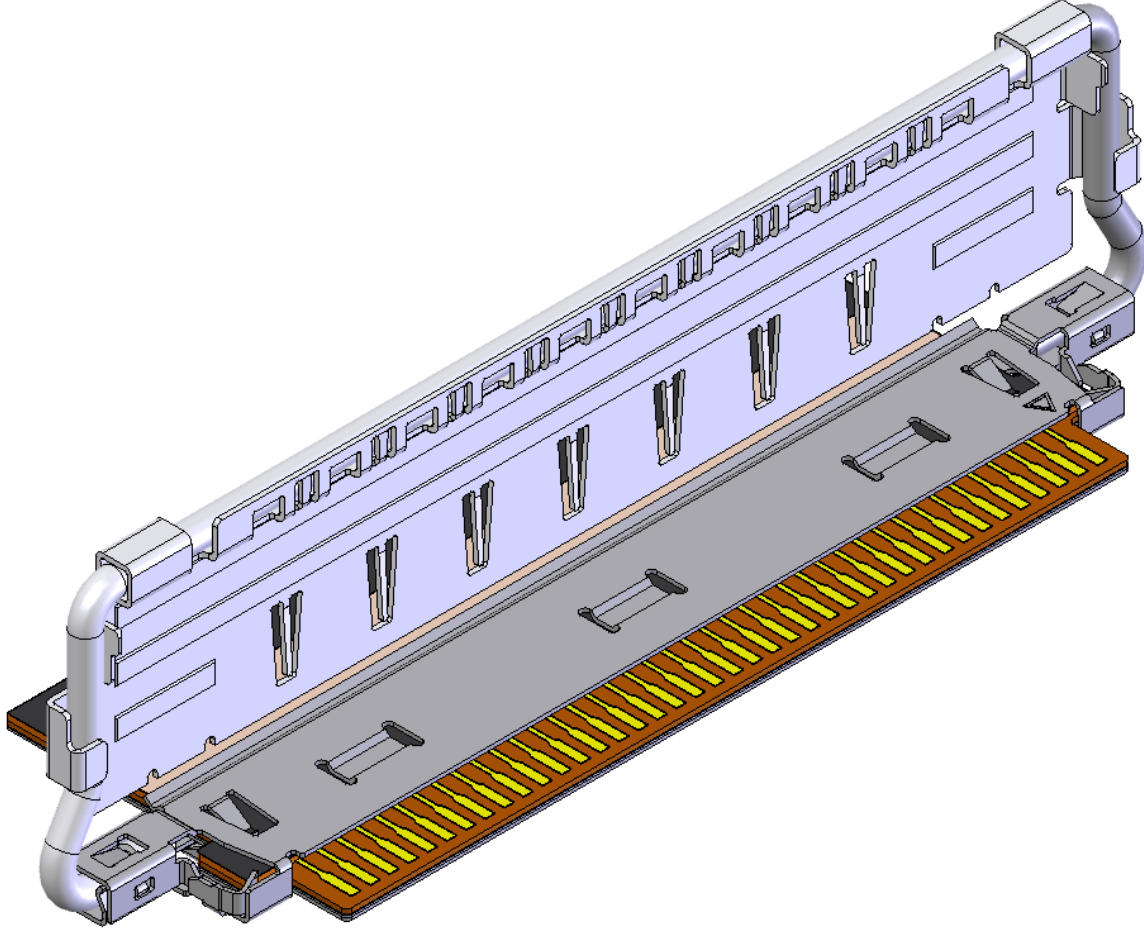
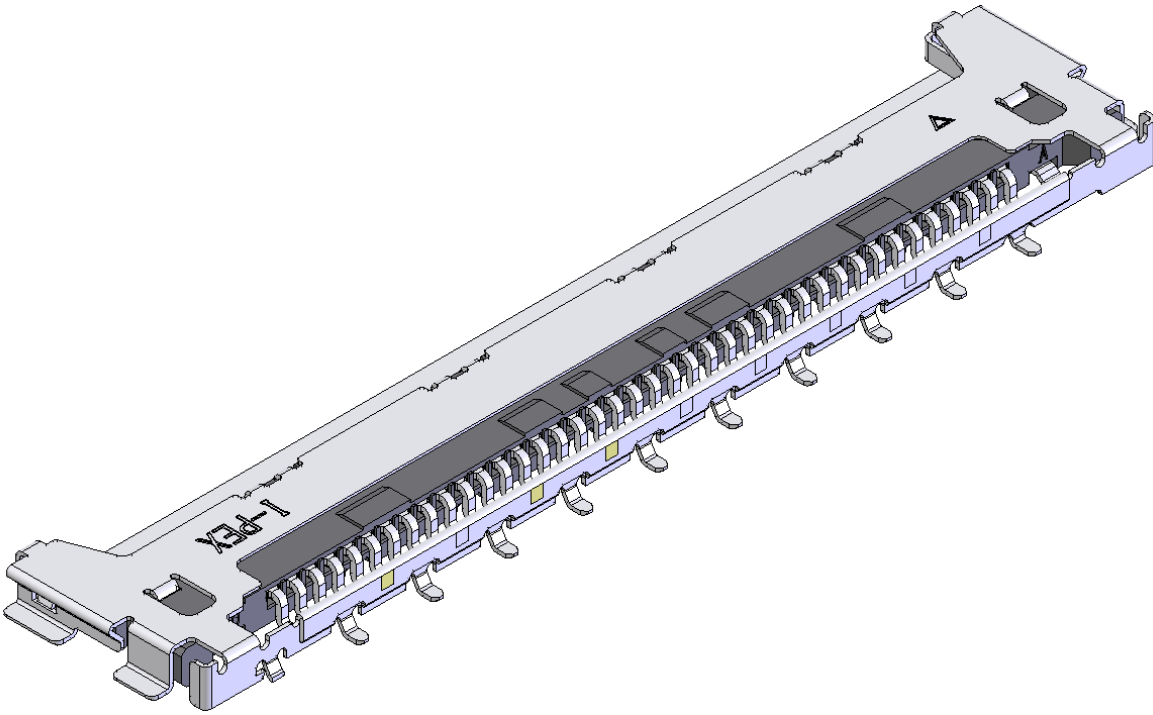
FPC: Shielded FPC,
Differential 90 ohm, Length : 100 mm

Pin Assignment: GSSGSSG



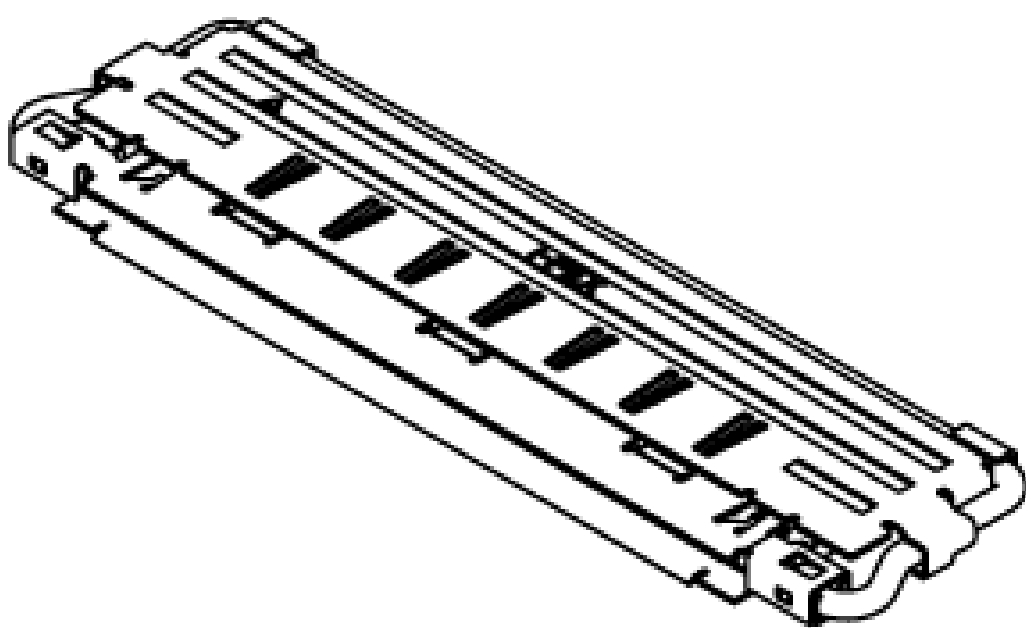
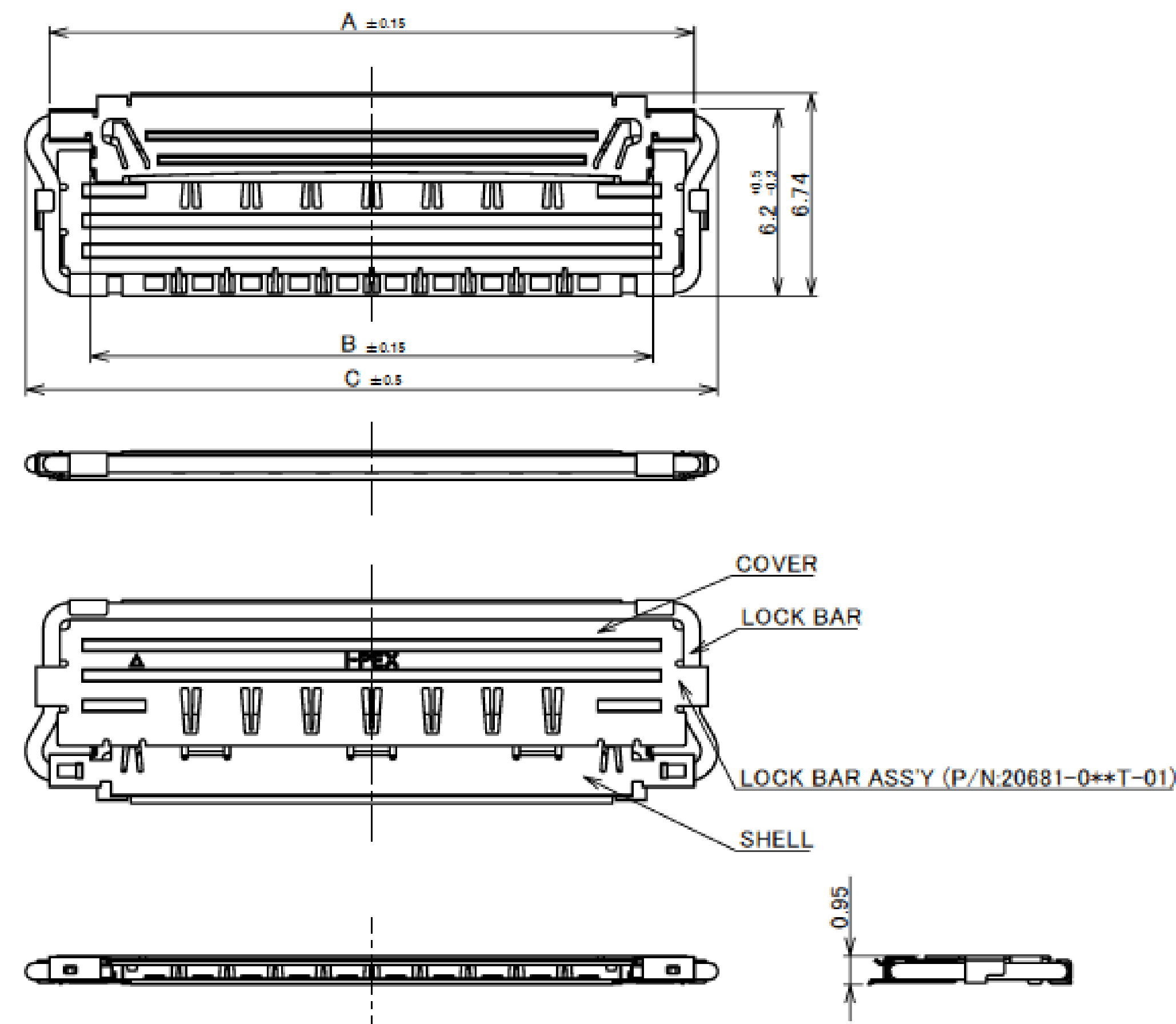
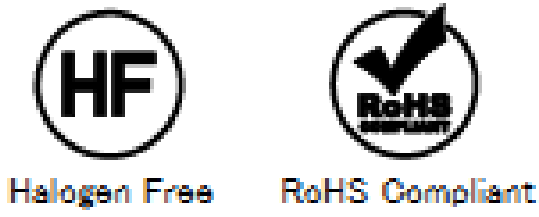
Component Parts Details

Component Parts

Connector parts
 A 3D perspective view of a CABLINE-CA IIF PLUG with FPC. The component is a long, narrow, light blue plastic housing with a series of gold-plated pins along one edge. A flexible printed circuit (FPC) is attached to the bottom of the housing.
CABLINE-CA IIF PLUG with FPC
 A 3D perspective view of a CABLINE-CA II RECEPTACLE. The component is a long, narrow, light blue plastic housing with a series of gold-plated pins along one edge. It is designed to receive a plug connector.
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	

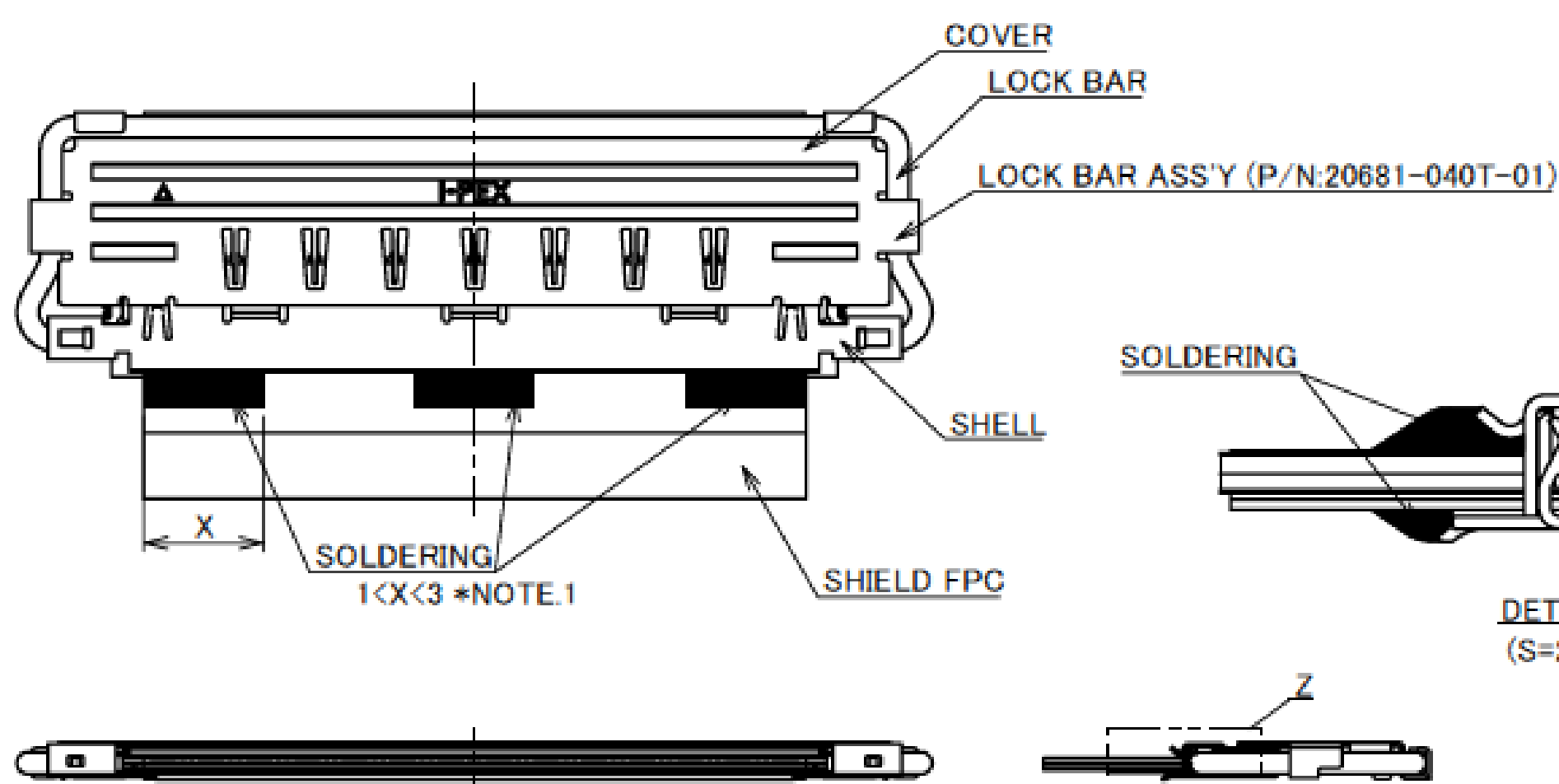
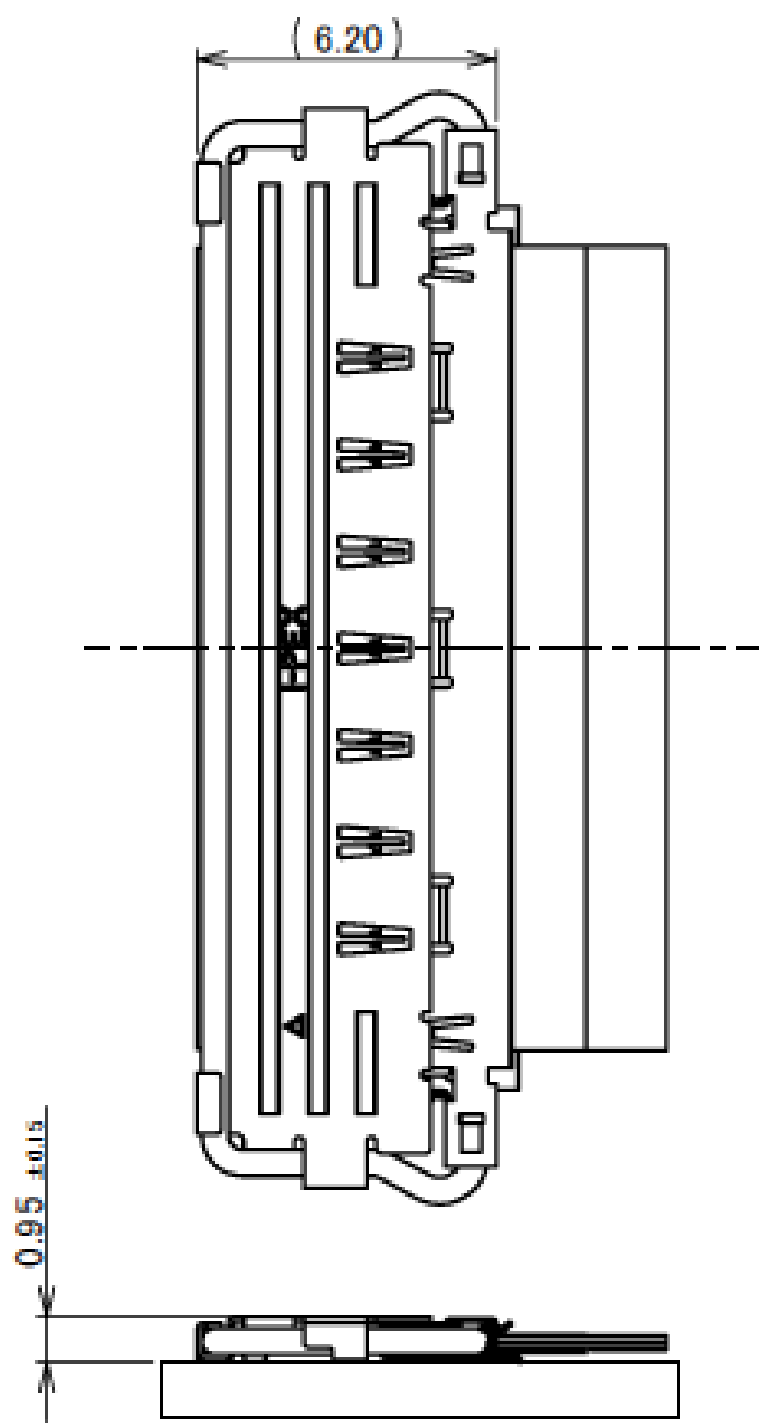
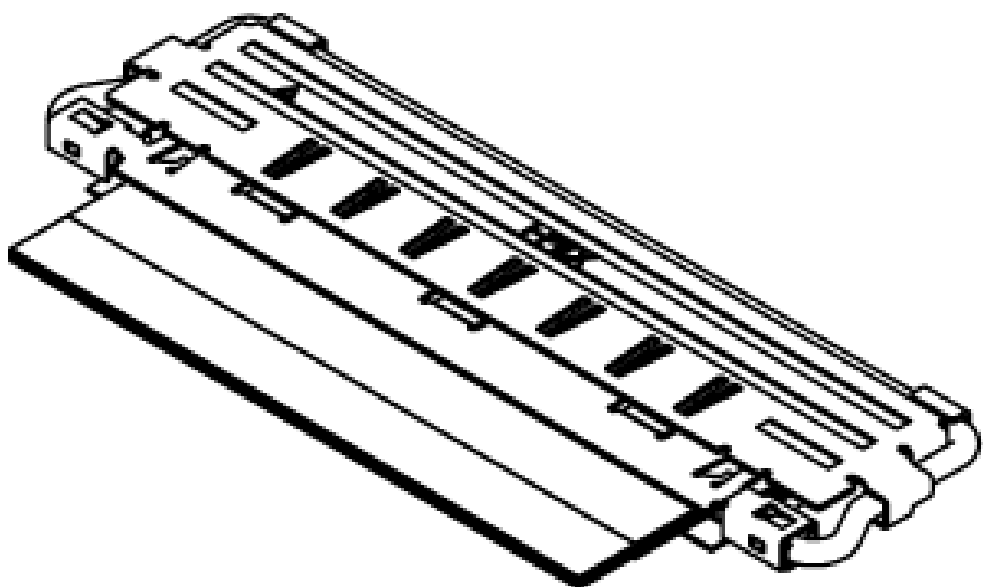
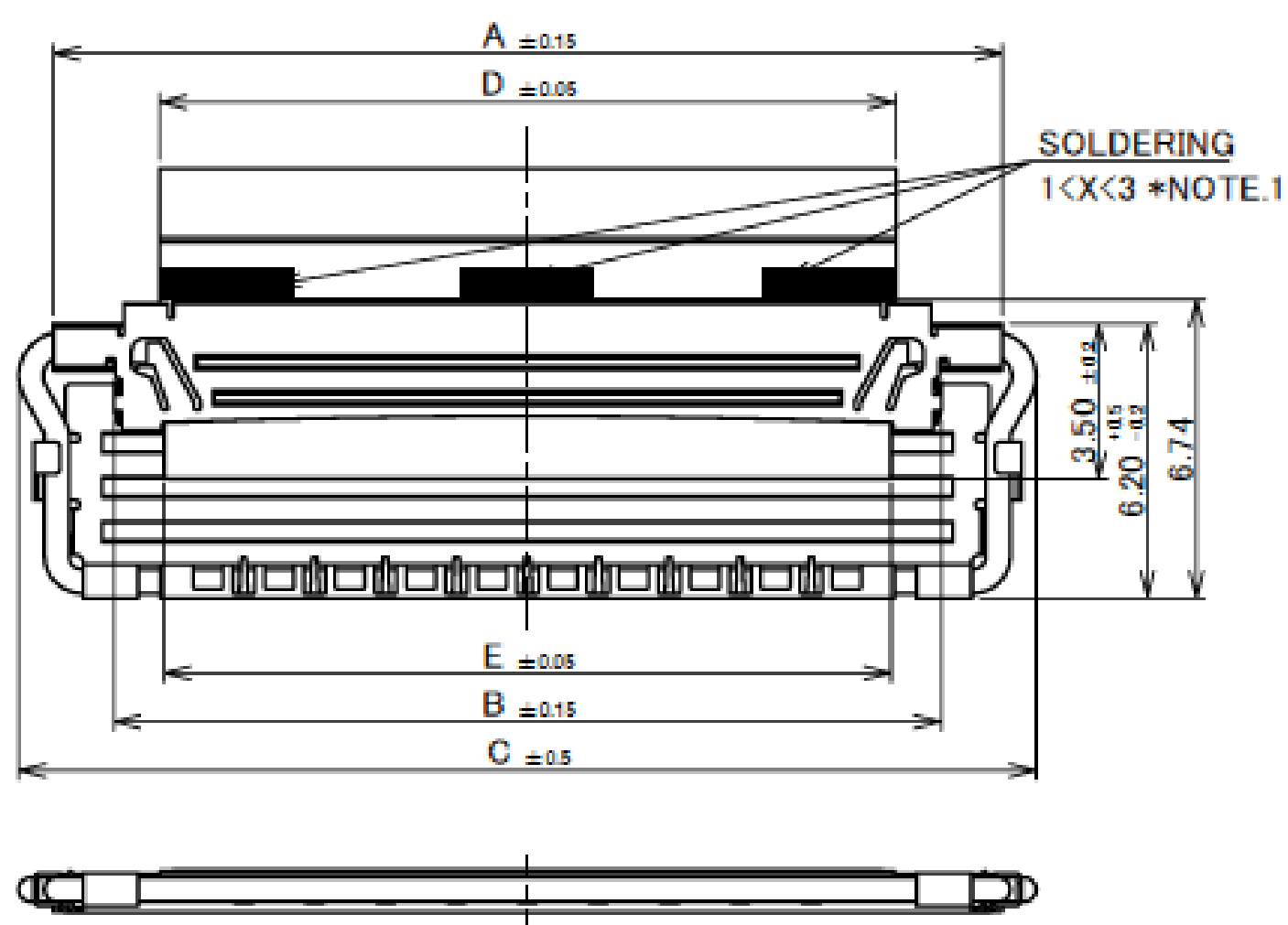
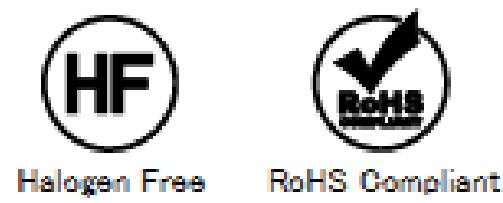


3	COVER	PHOSPHOR BRONZE	Ni PLATING
2	LOCK BAR	STAINLESS STEEL	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.13

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

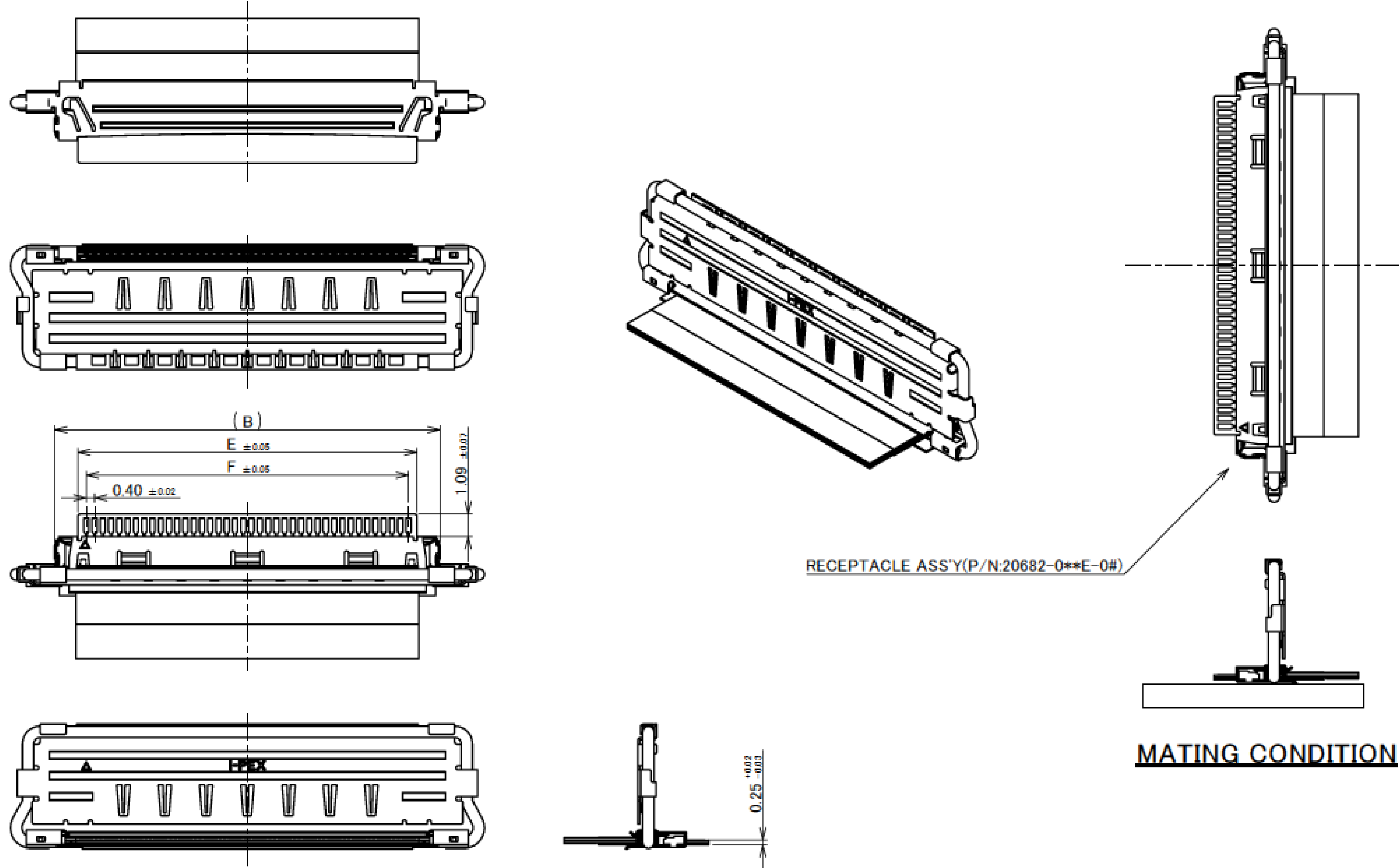
NOTES.
1.Soldering Area X is recommended dimension.
It does not mater if it might be exceed the recommended dimension.

Rev.13

Shell Assembly

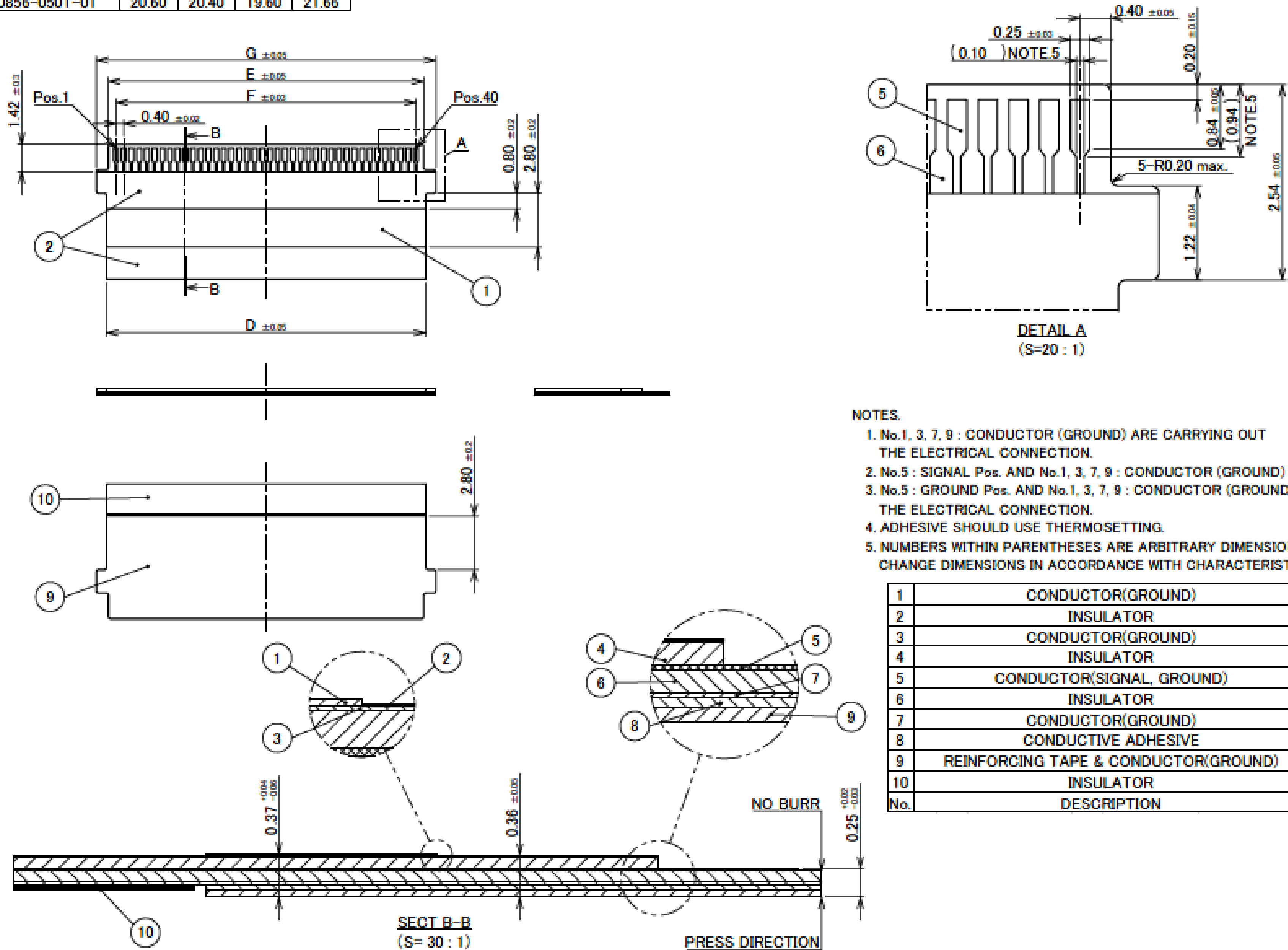
Recommended P/N		20856-0**T-01		
PART No.	B	E	F	
20856-030T-01	14.66	12.40	11.60	
20856-040T-01	18.66	16.40	15.60	
20856-050T-01	22.66	20.40	19.60	

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.

No.	DESCRIPTION	MATERIAL	PLATING
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	-	-

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

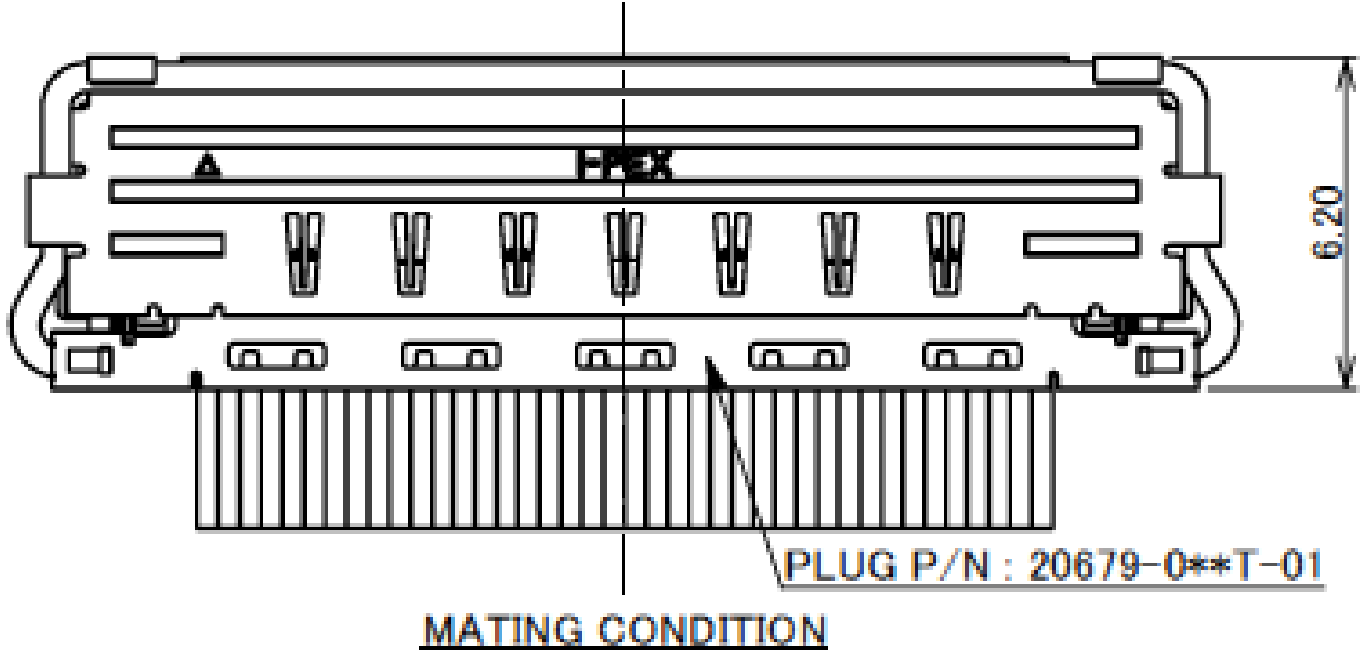
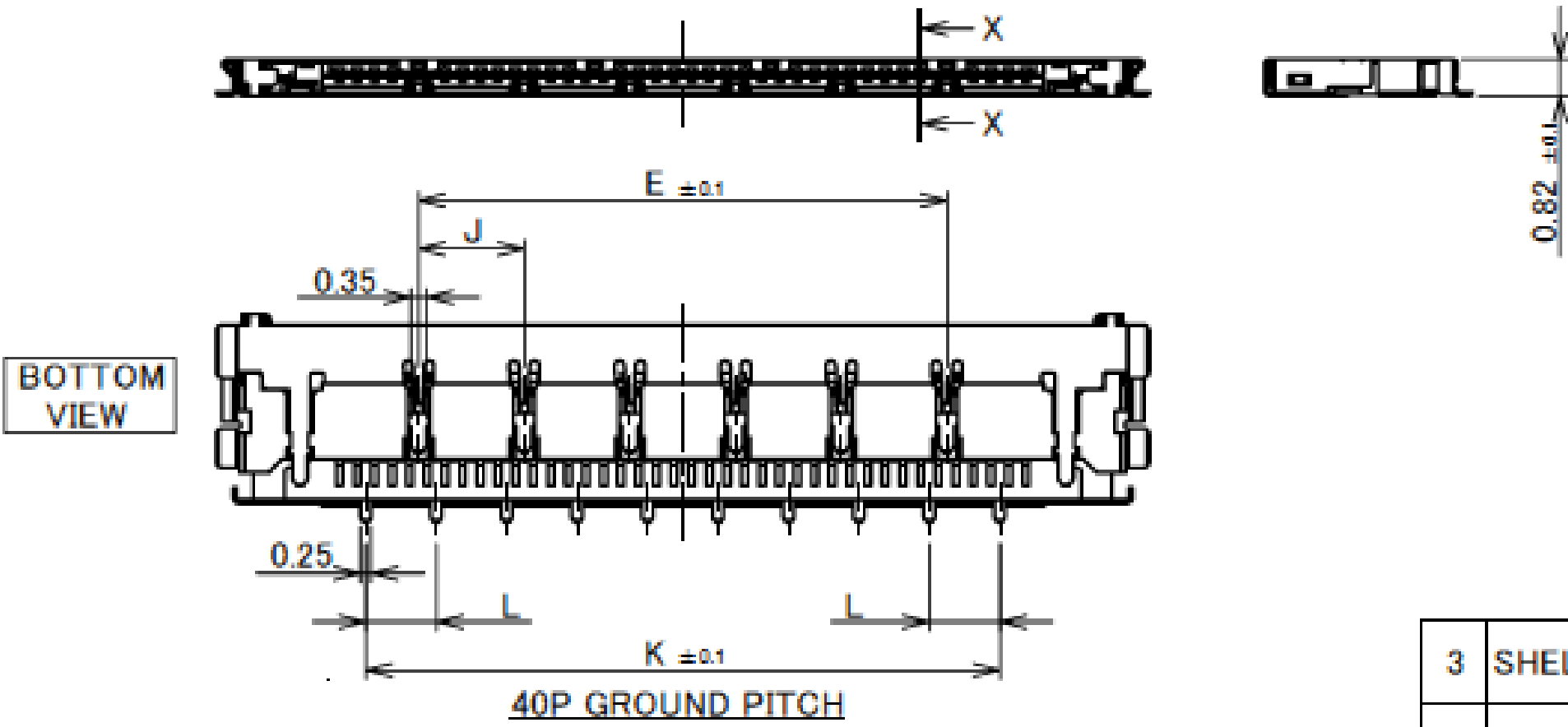
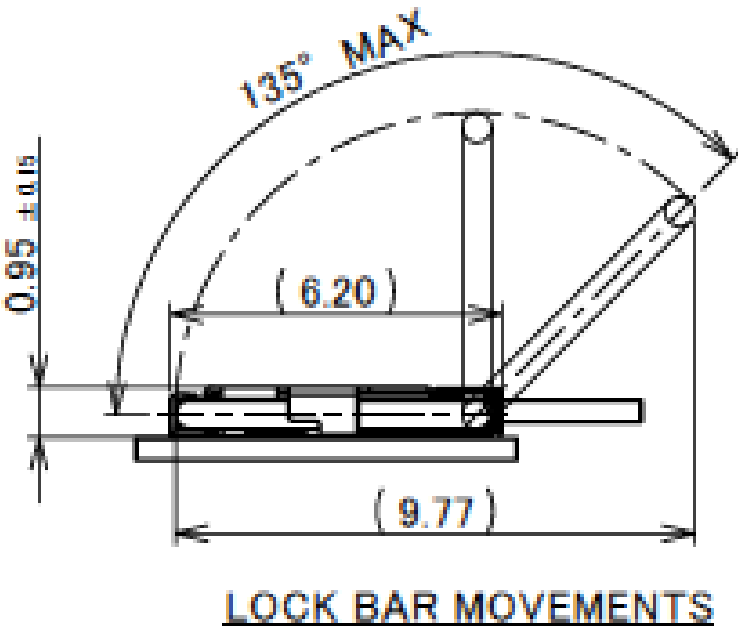
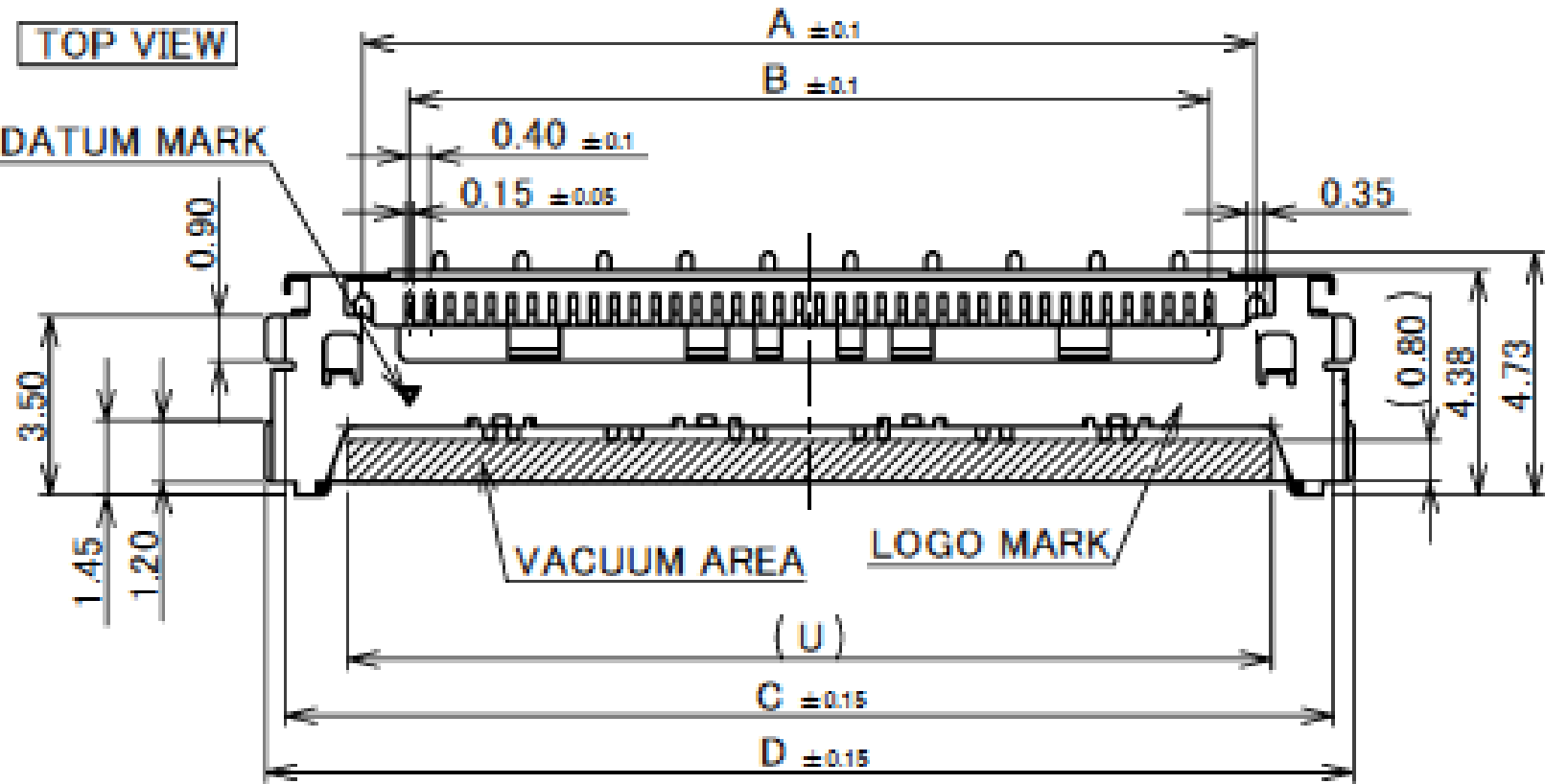
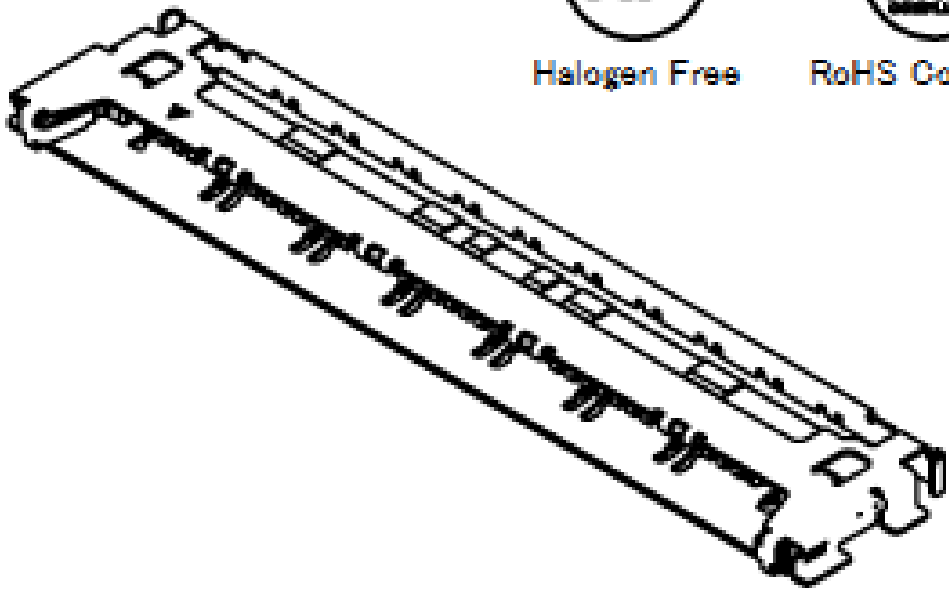
Recommended P/N 20682-0**E-02

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

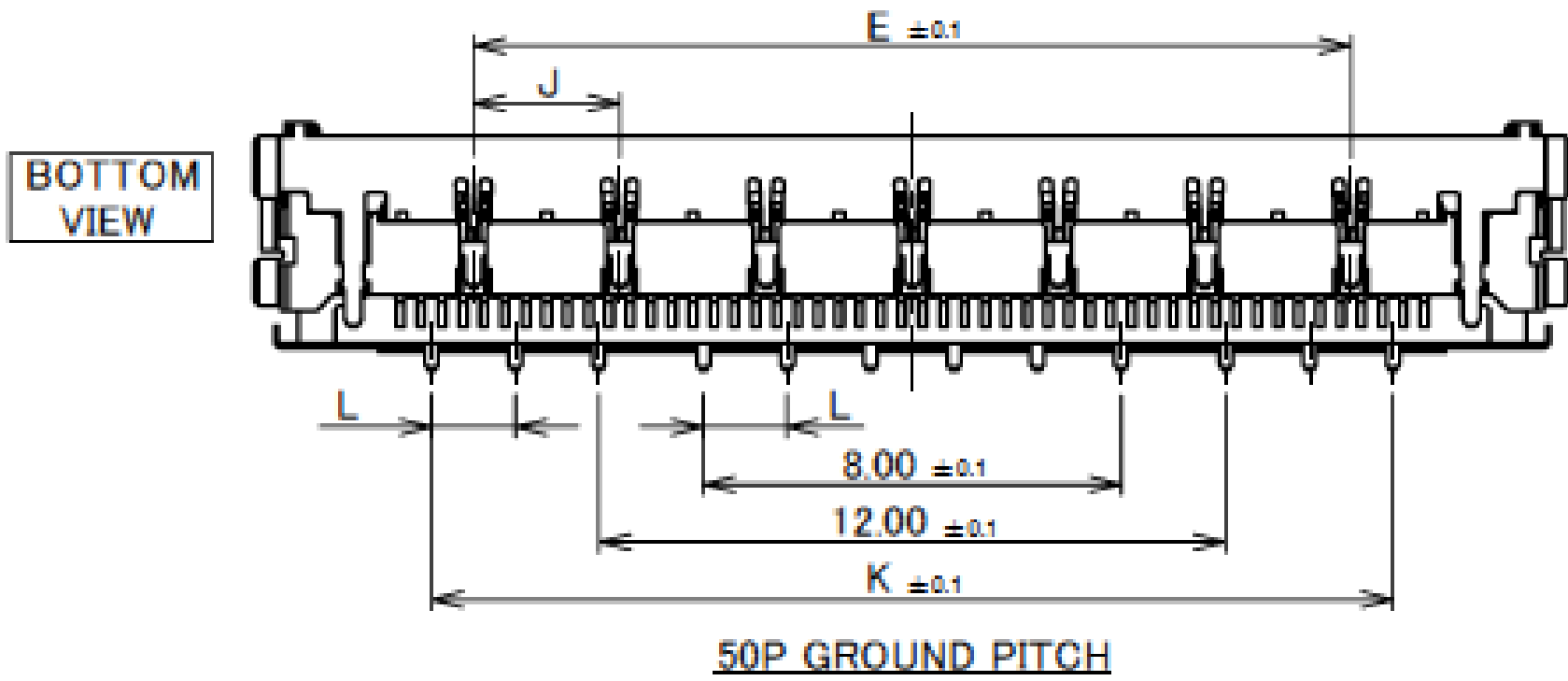
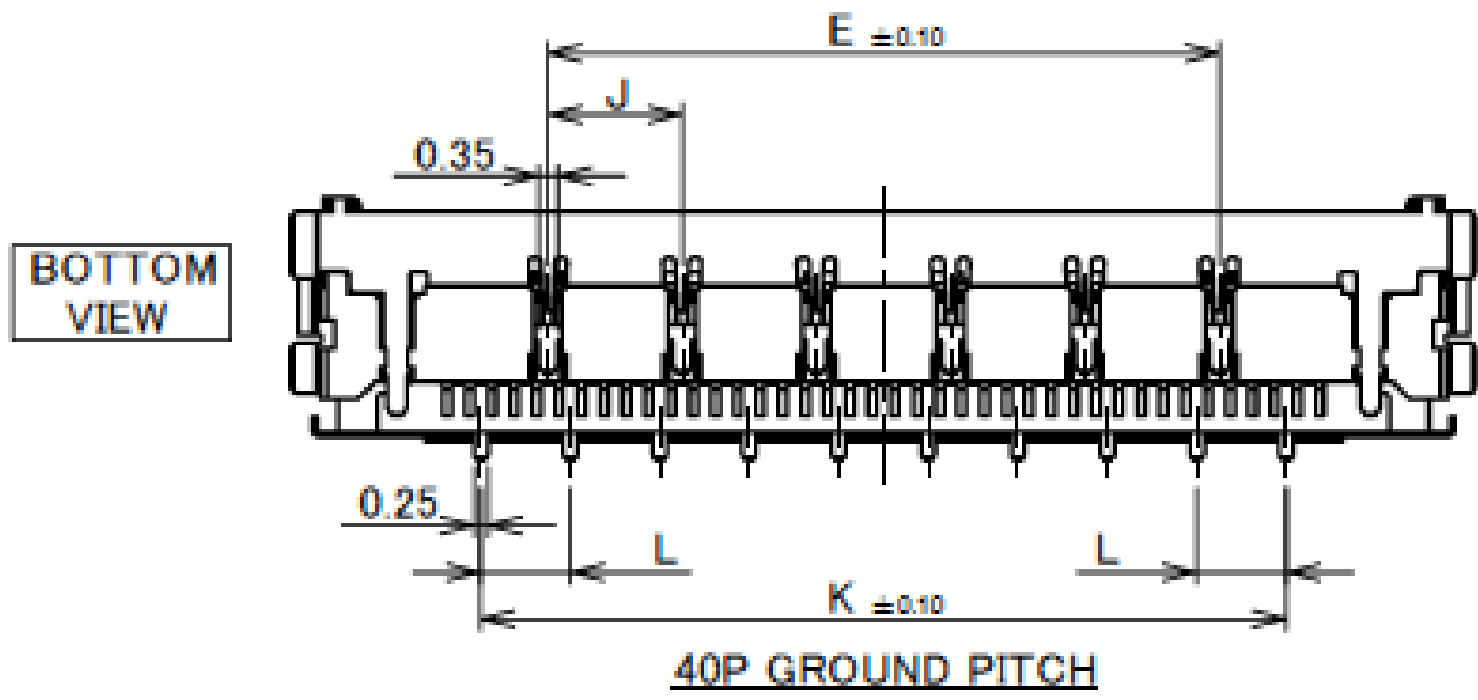
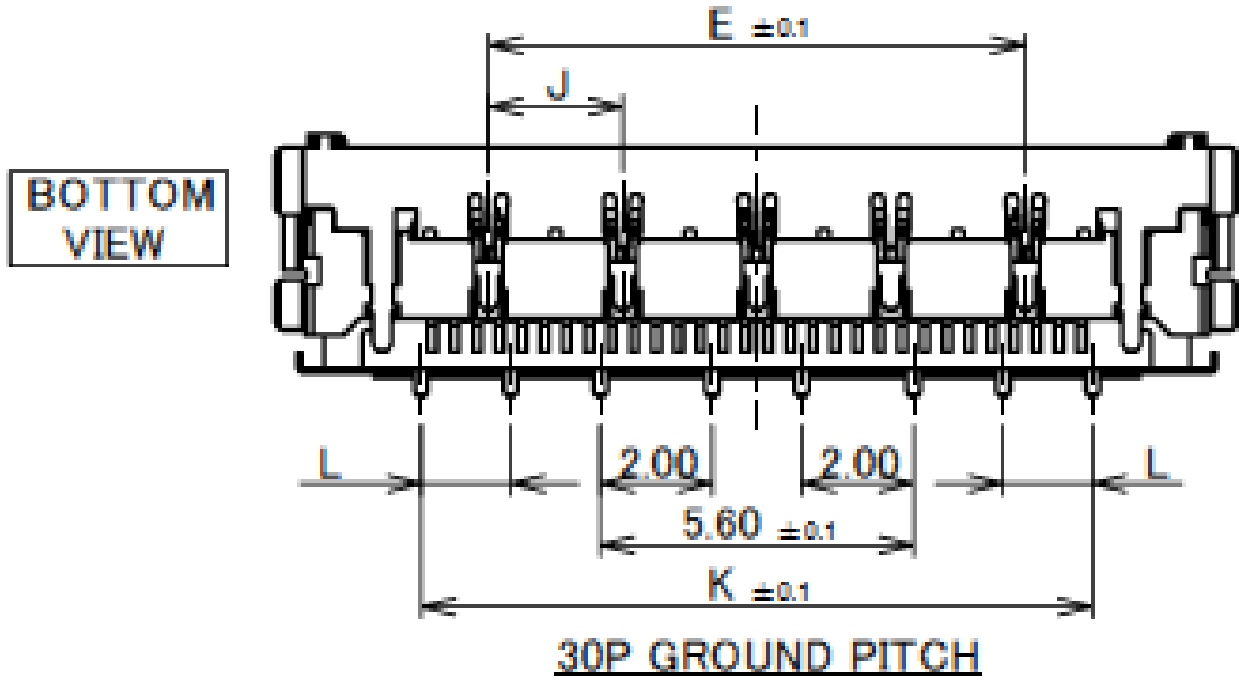
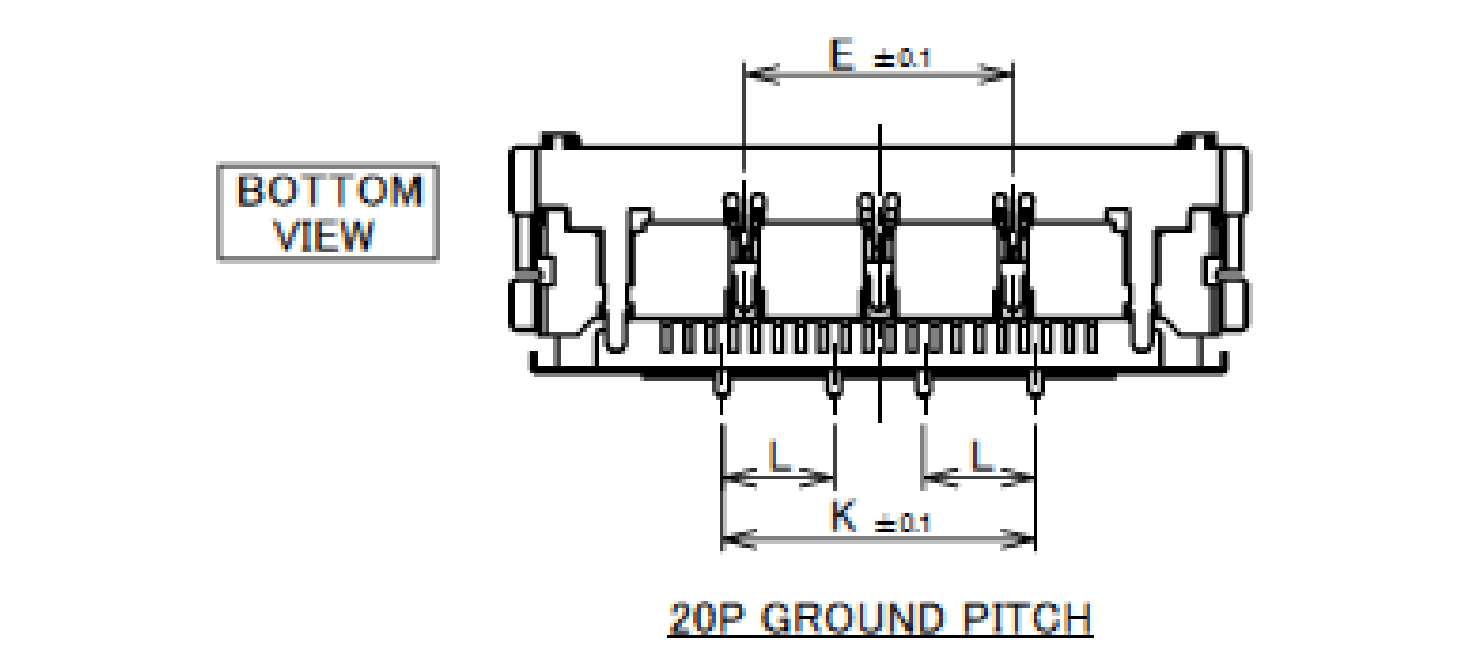


3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

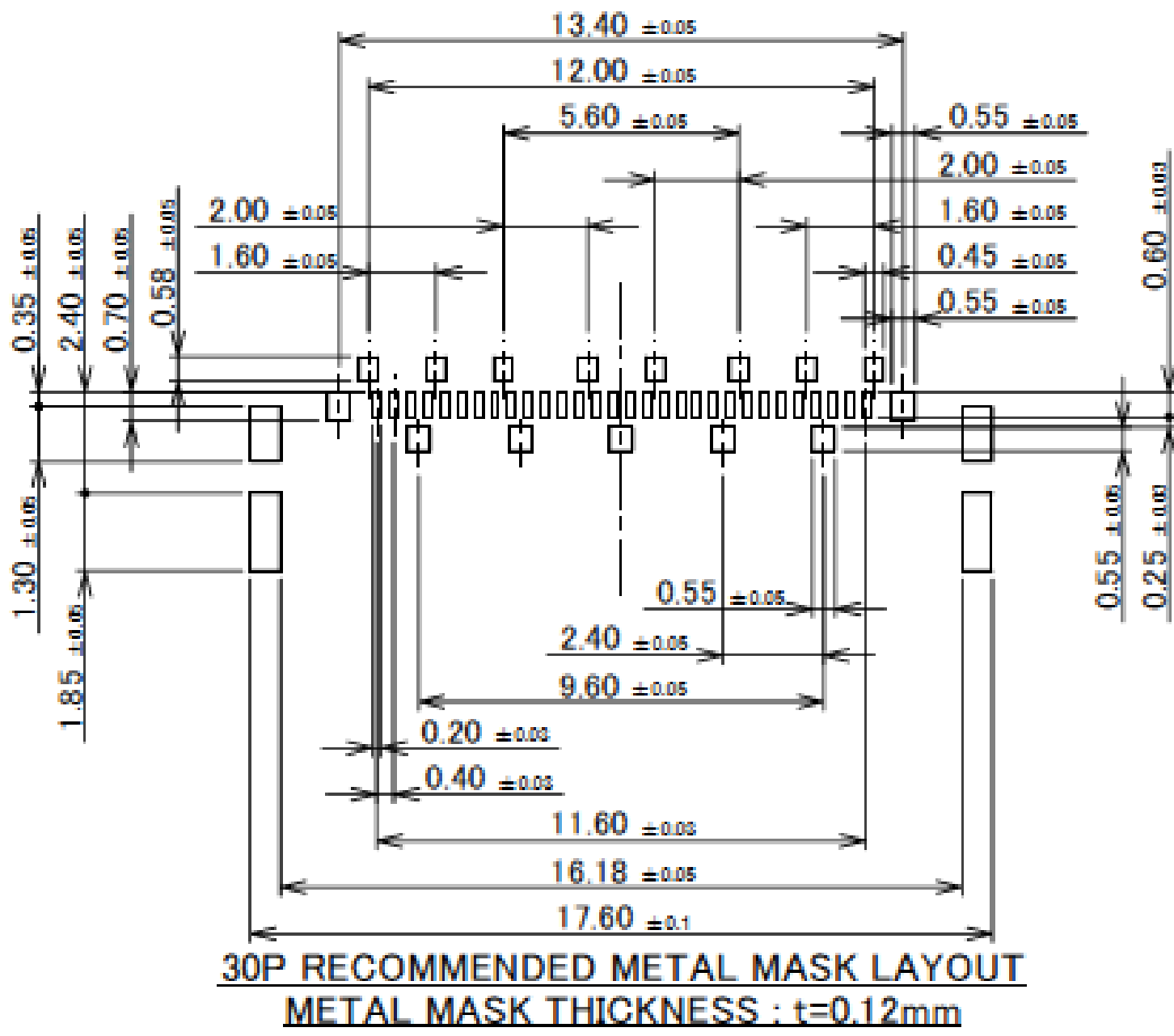
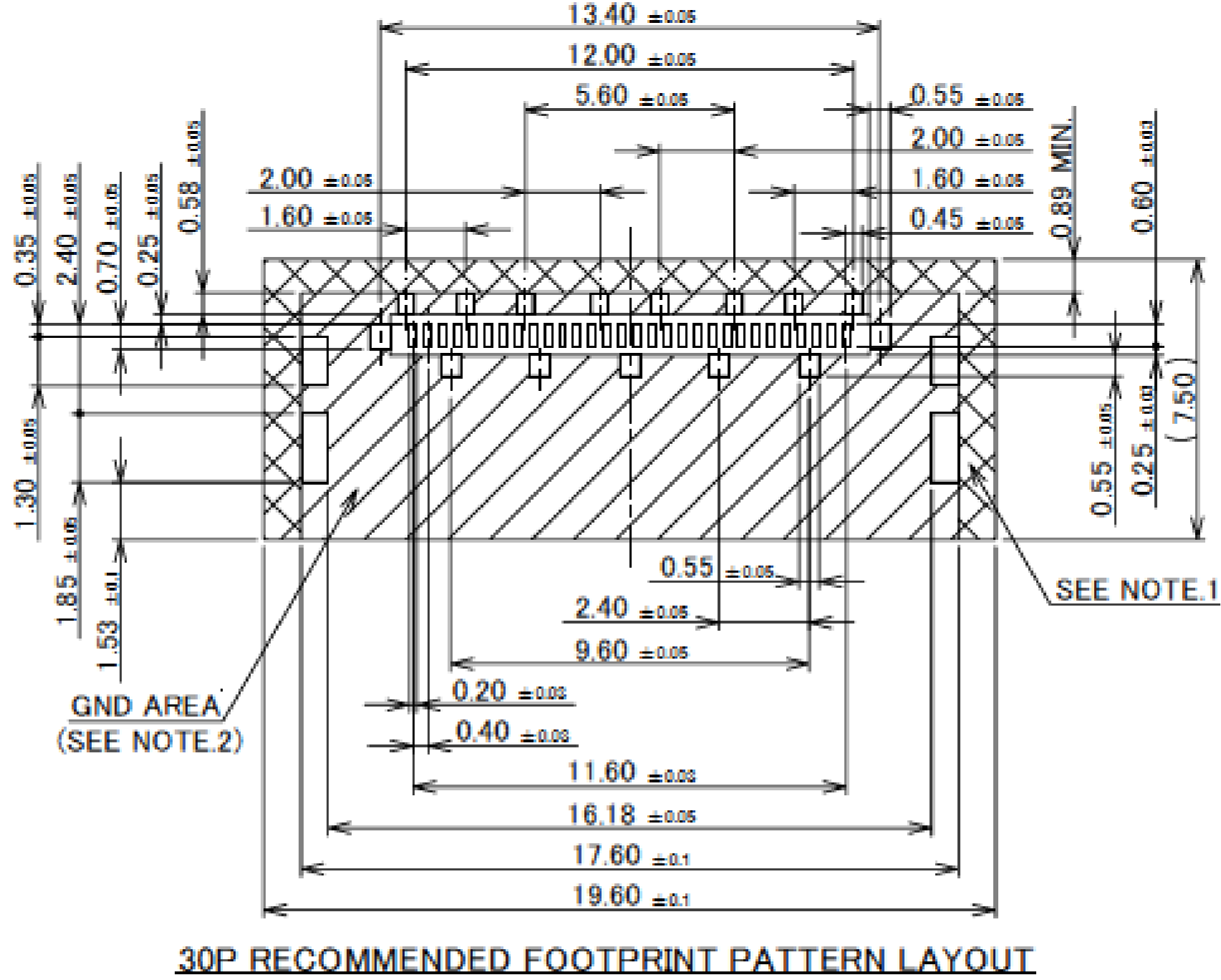
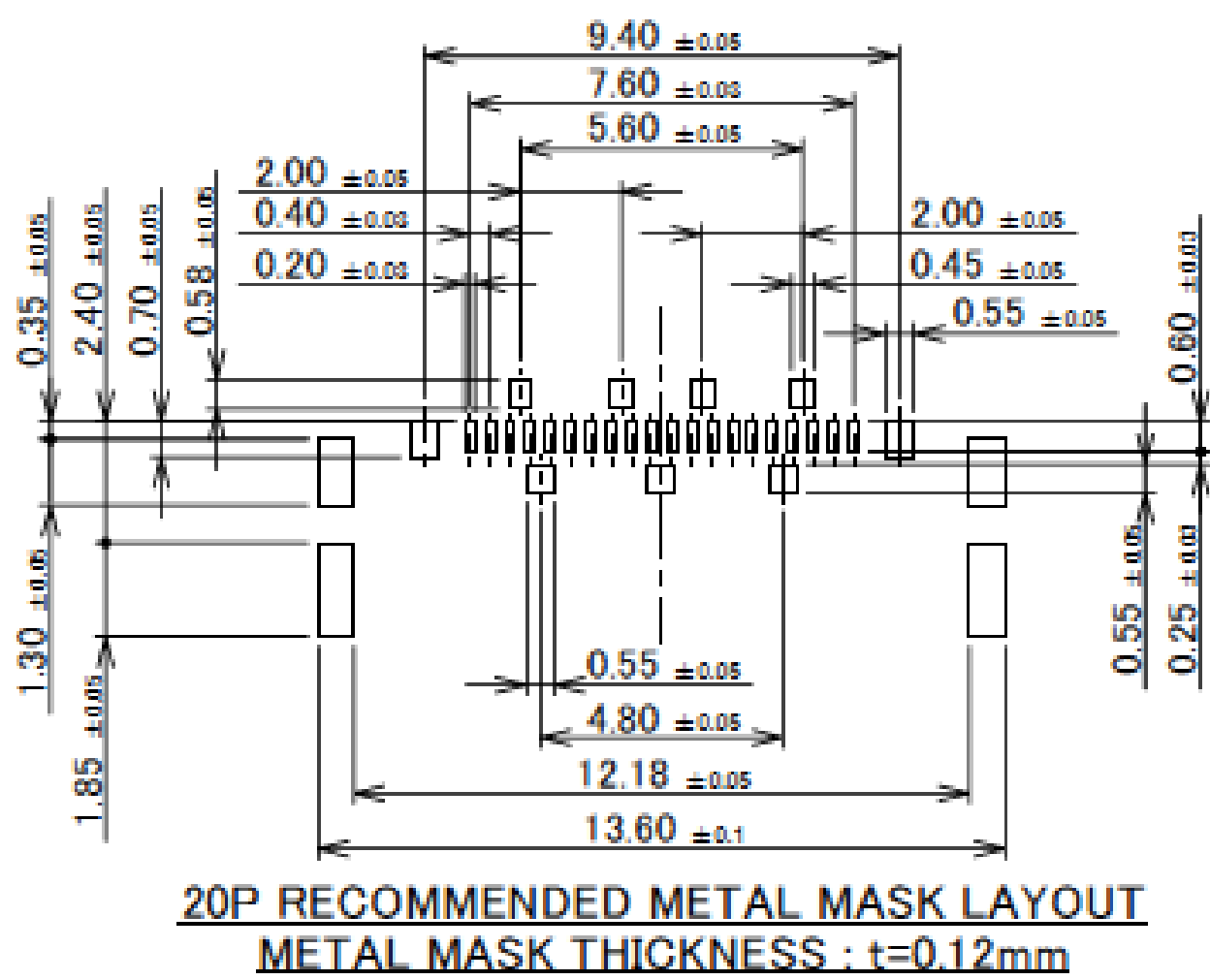
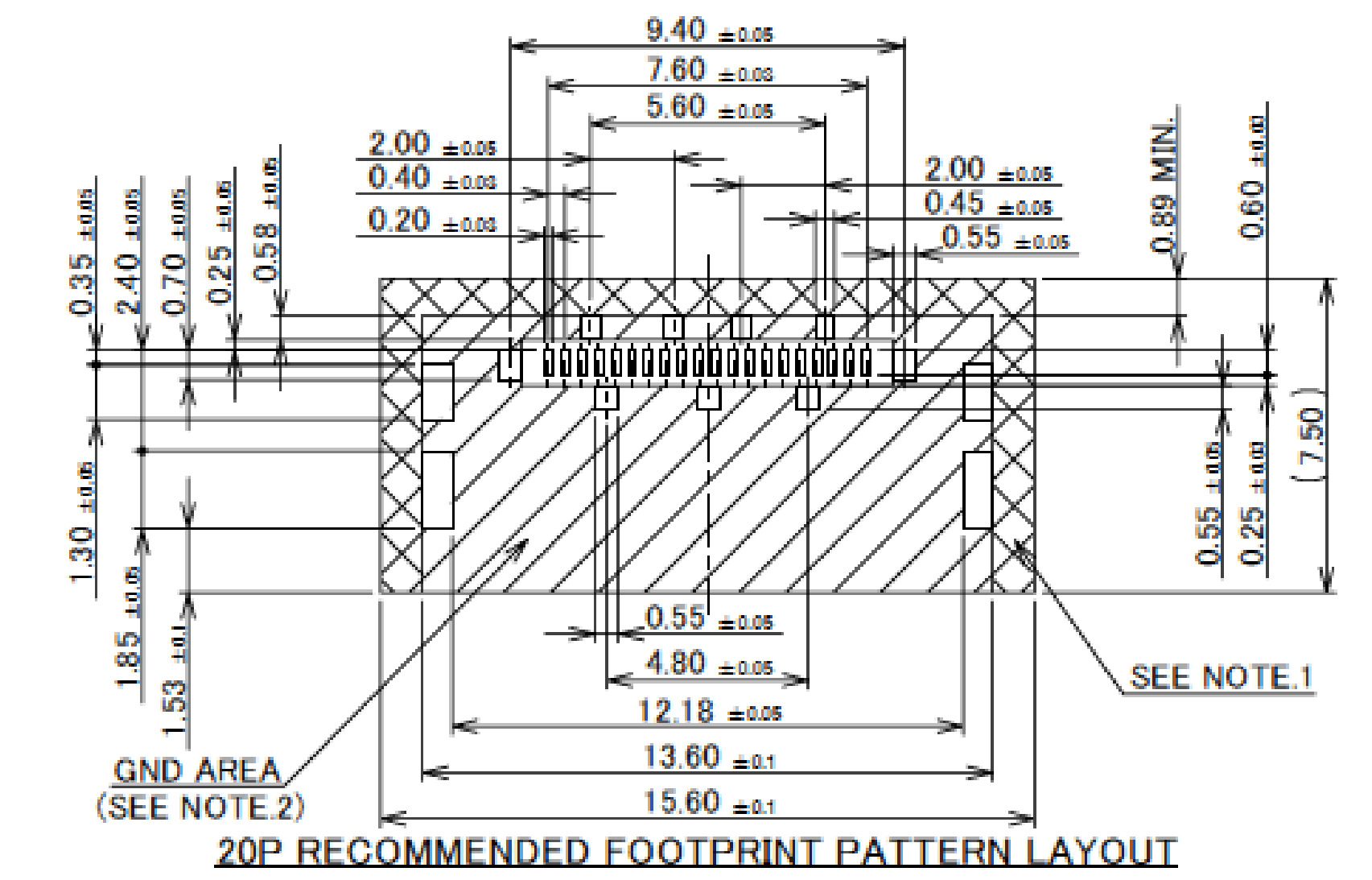
Rev.16

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



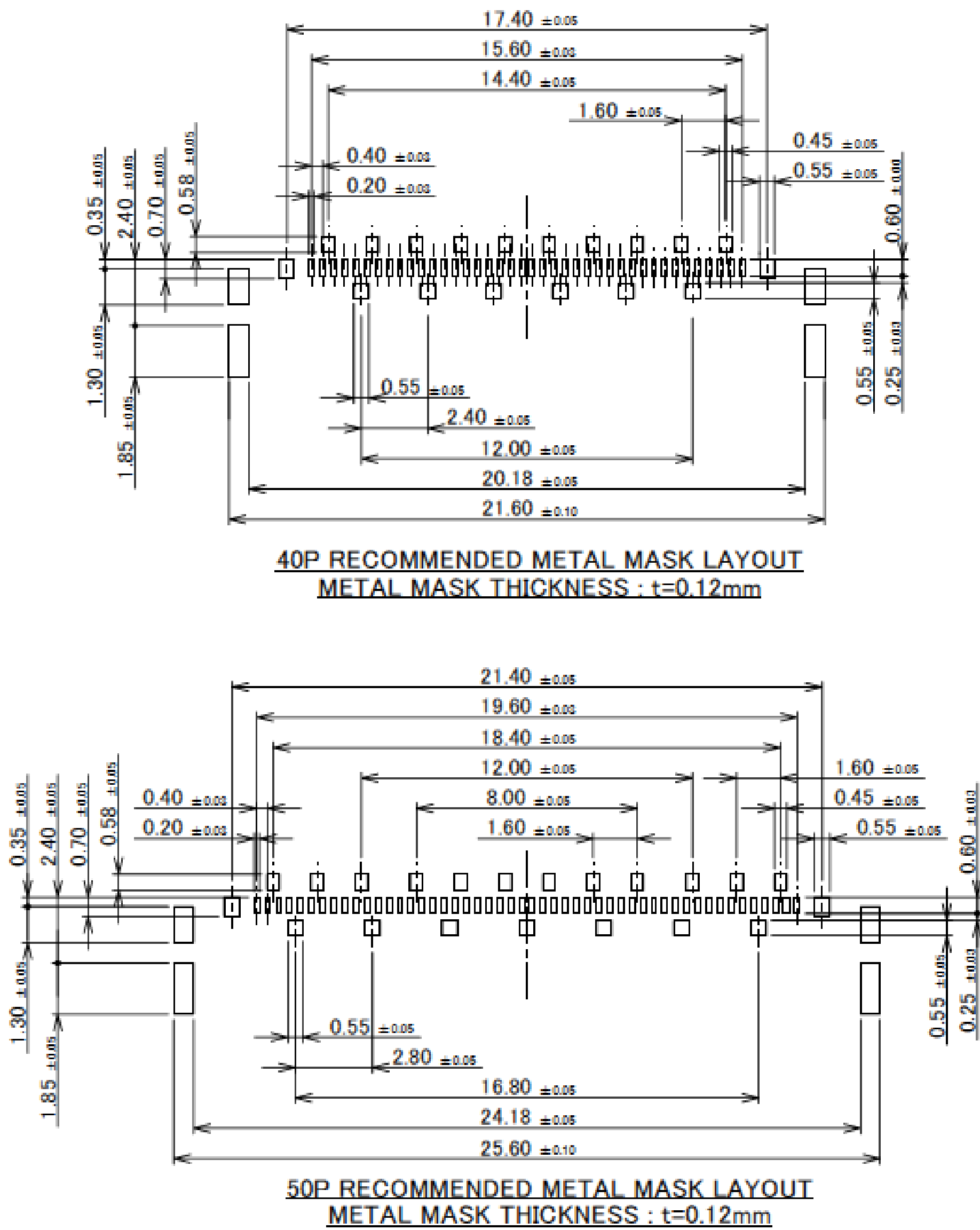
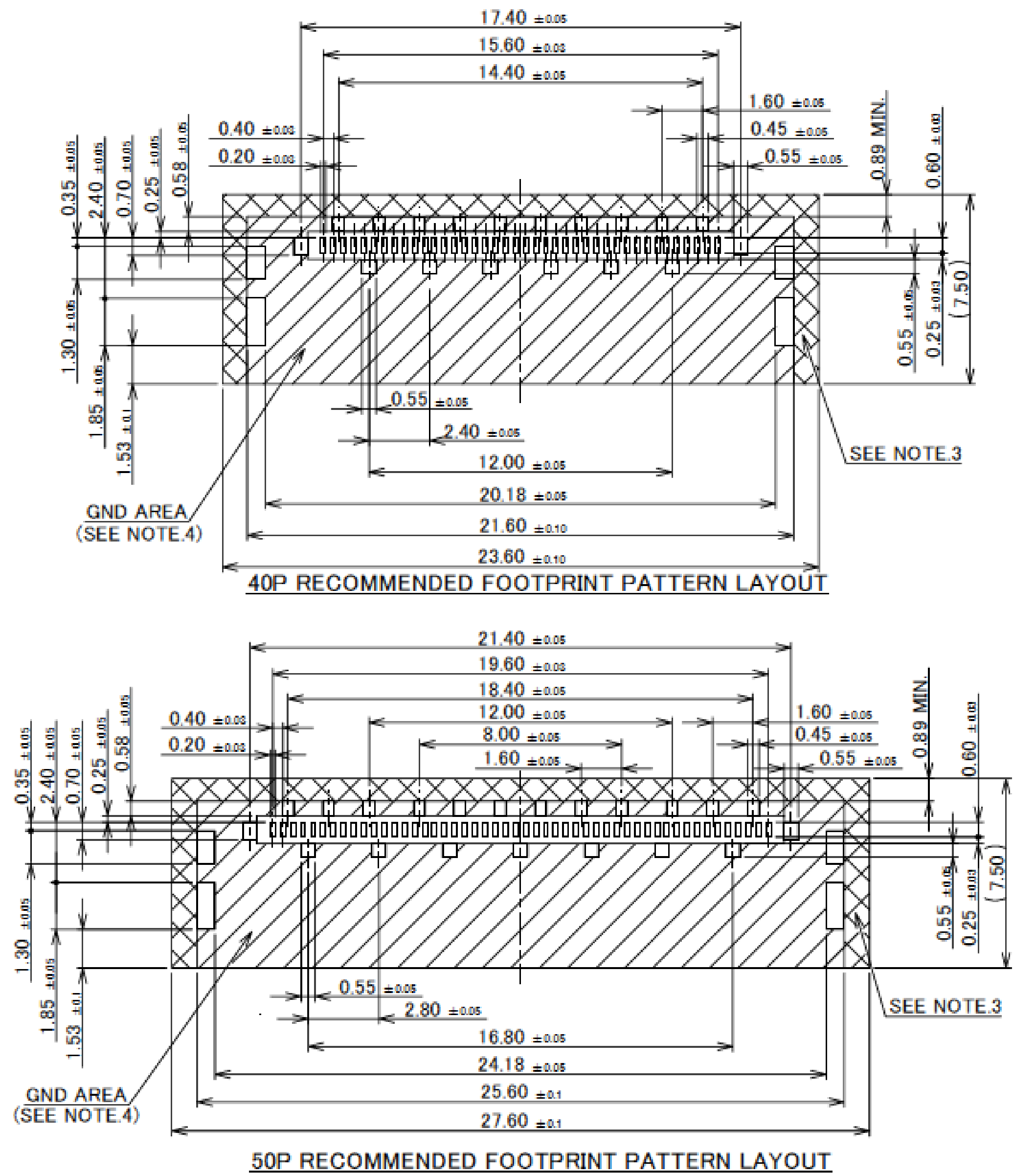
Rev.16



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

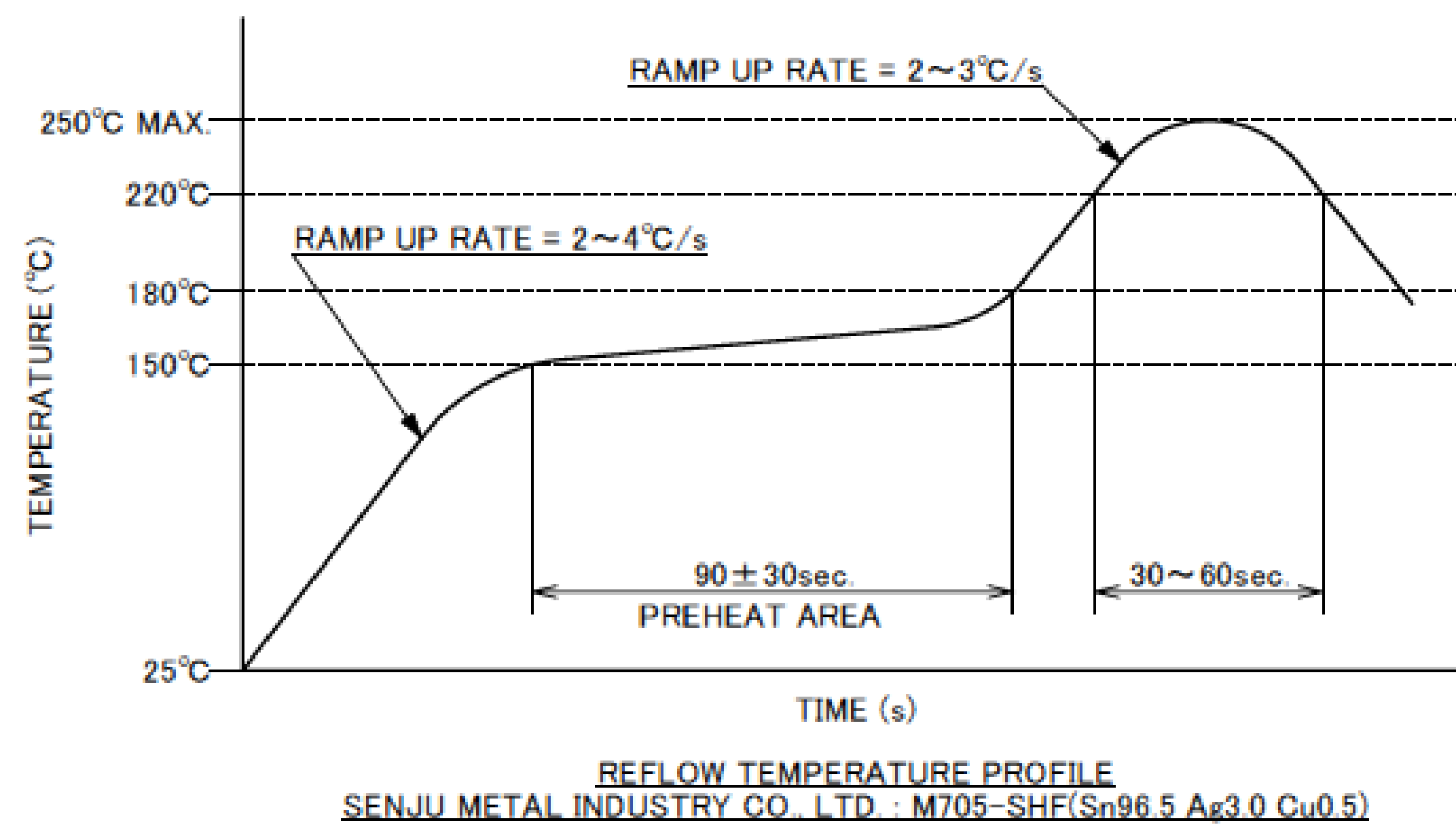
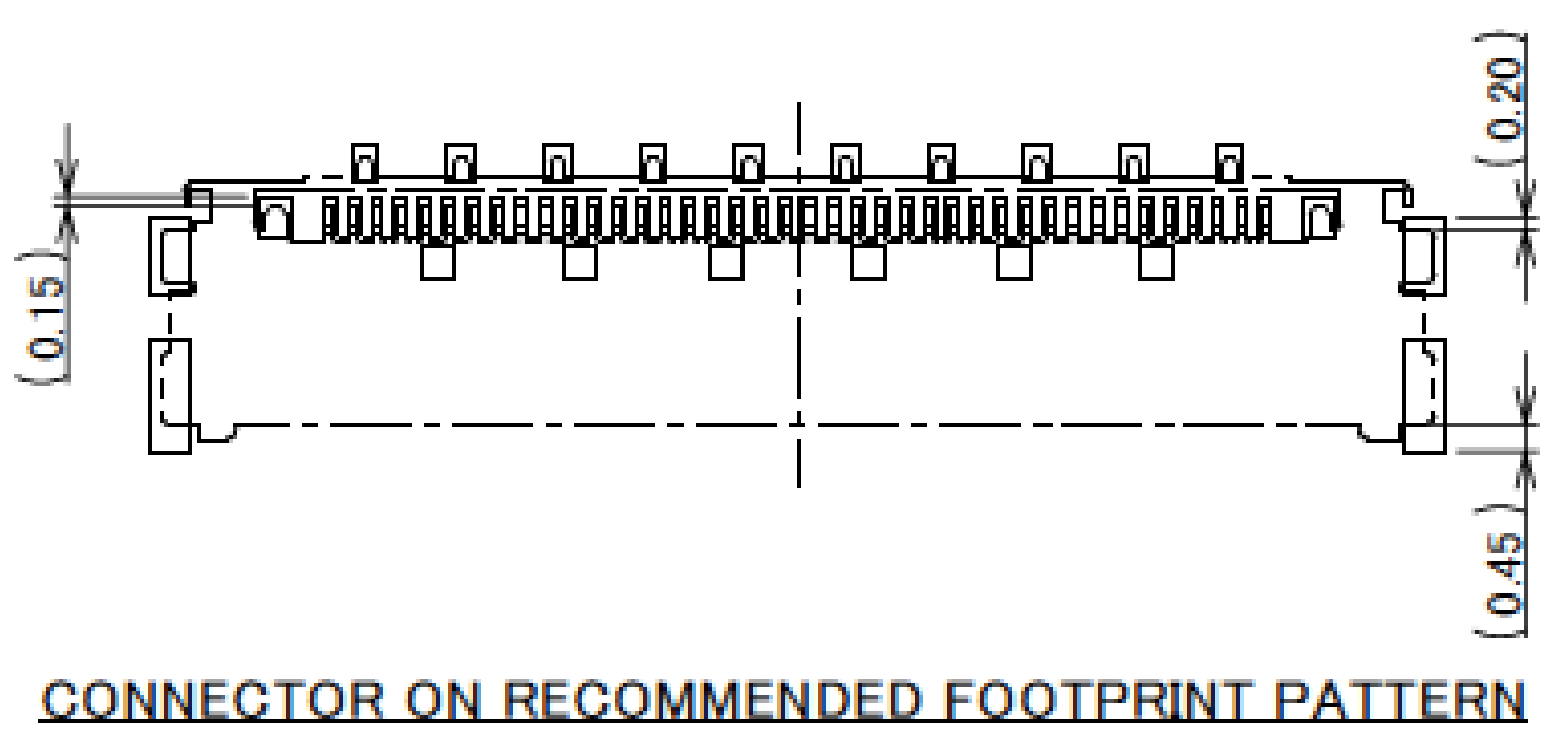
Rev.16

Receptacle Assembly



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

Rev.16



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°C~+85°C)
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

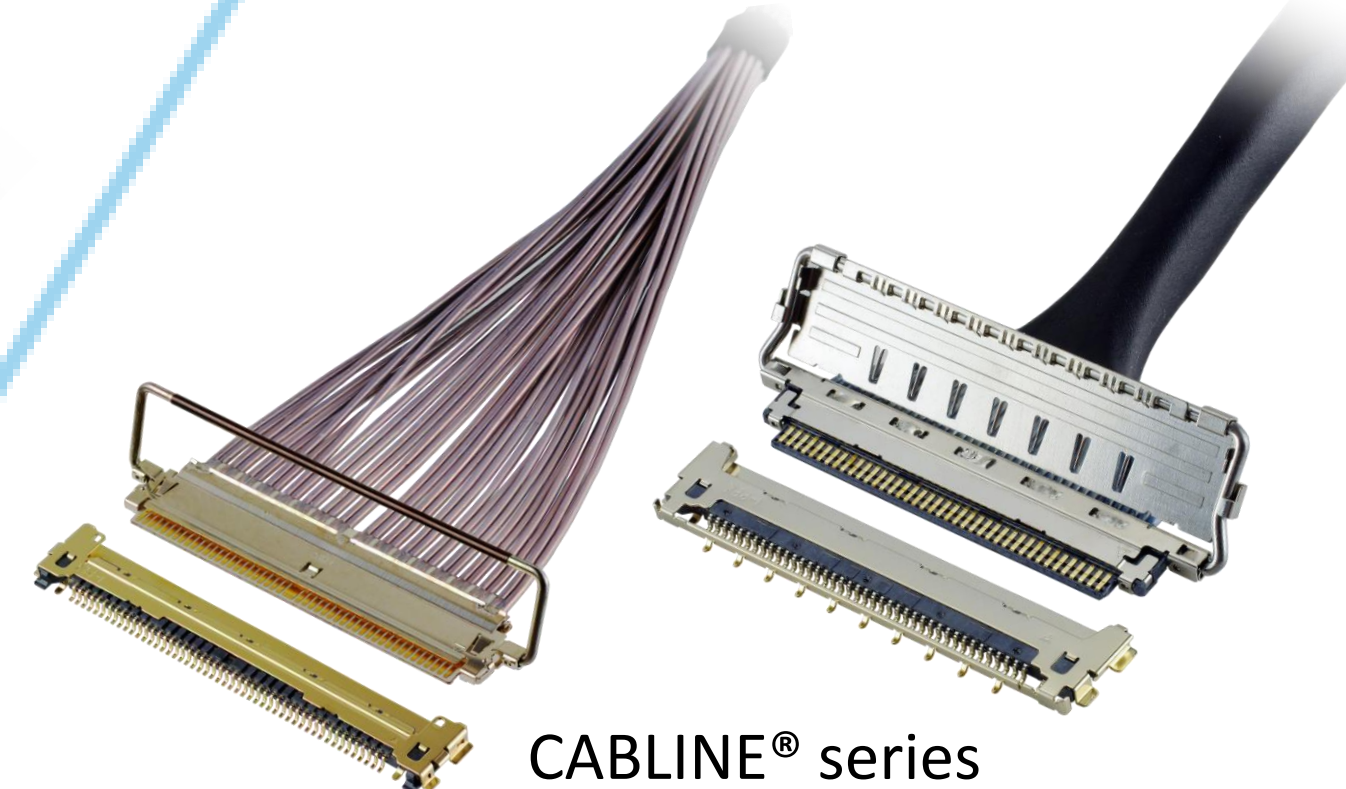
Custom Connectors Available

 RF
Connectors

MHF® series



Micro-Coaxial/Twinax
Connectors

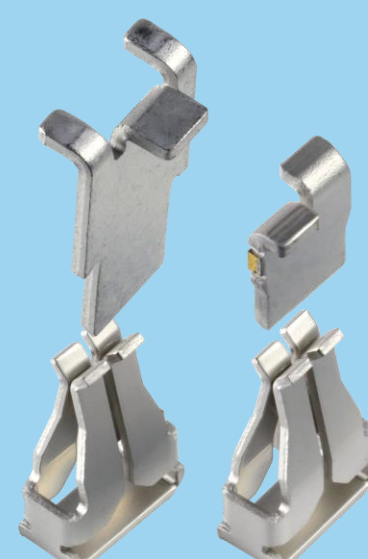


CABLIME® series

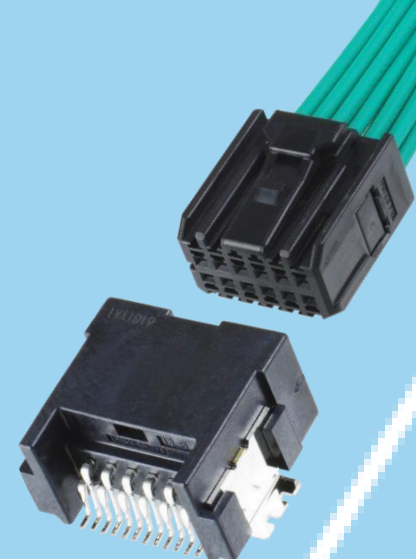


Wire-to-Board
Connectors/
Terminals

AP series



ISH® series



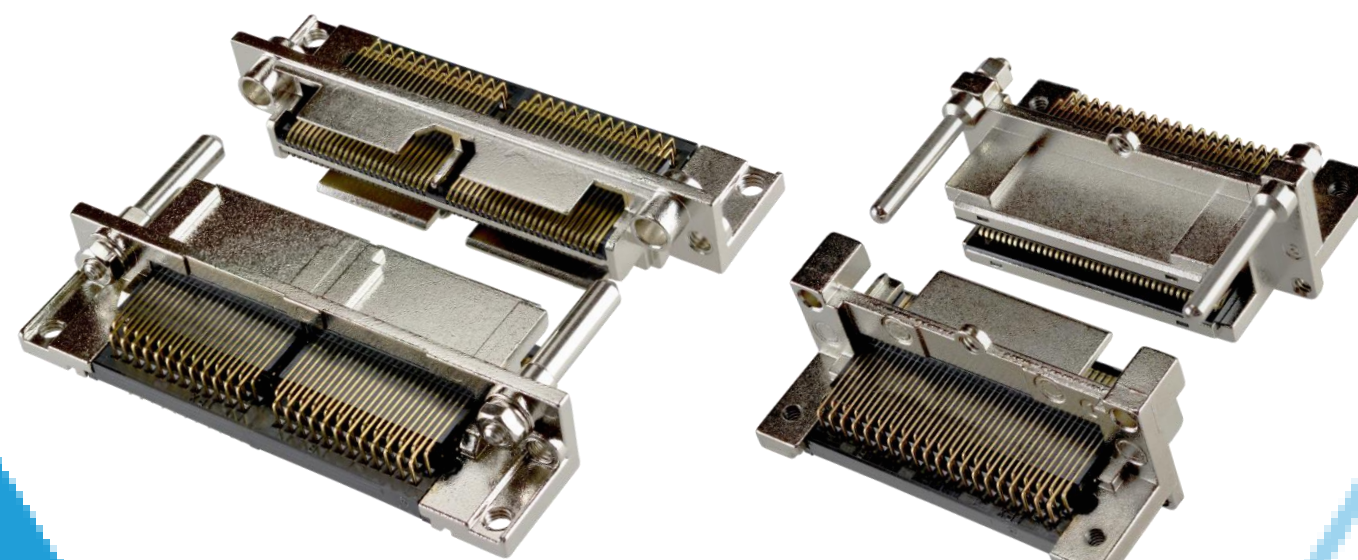
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



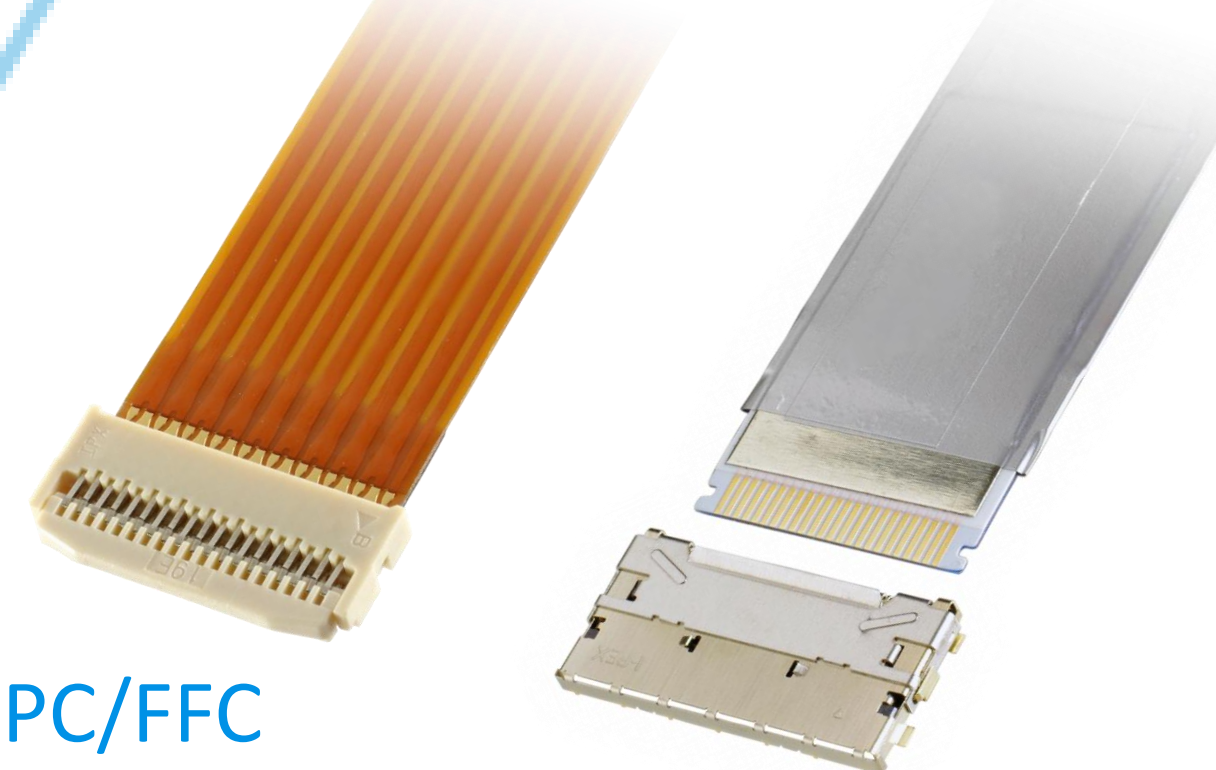
MINIDOCK™ series



FPC/FFC
Connectors

MINIFLEX® series

EVAFLEX® series



Inquiry



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