

CABLINE®-CA IIF

全屏蔽設計，多點接地和機械鎖扣，0.4 mm 間距，
水平對插款的FPC 型公頭連接器

Product Specifications:

Mating type	Horizontal	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.48	
Mated size (mm)	Height	1.1 max. with cover
	Width	Formula: 6.95 + (0.4*?p)
	Depth	6.74
Pin Counts	Range	Up to 60
	Available	30, 40, 50

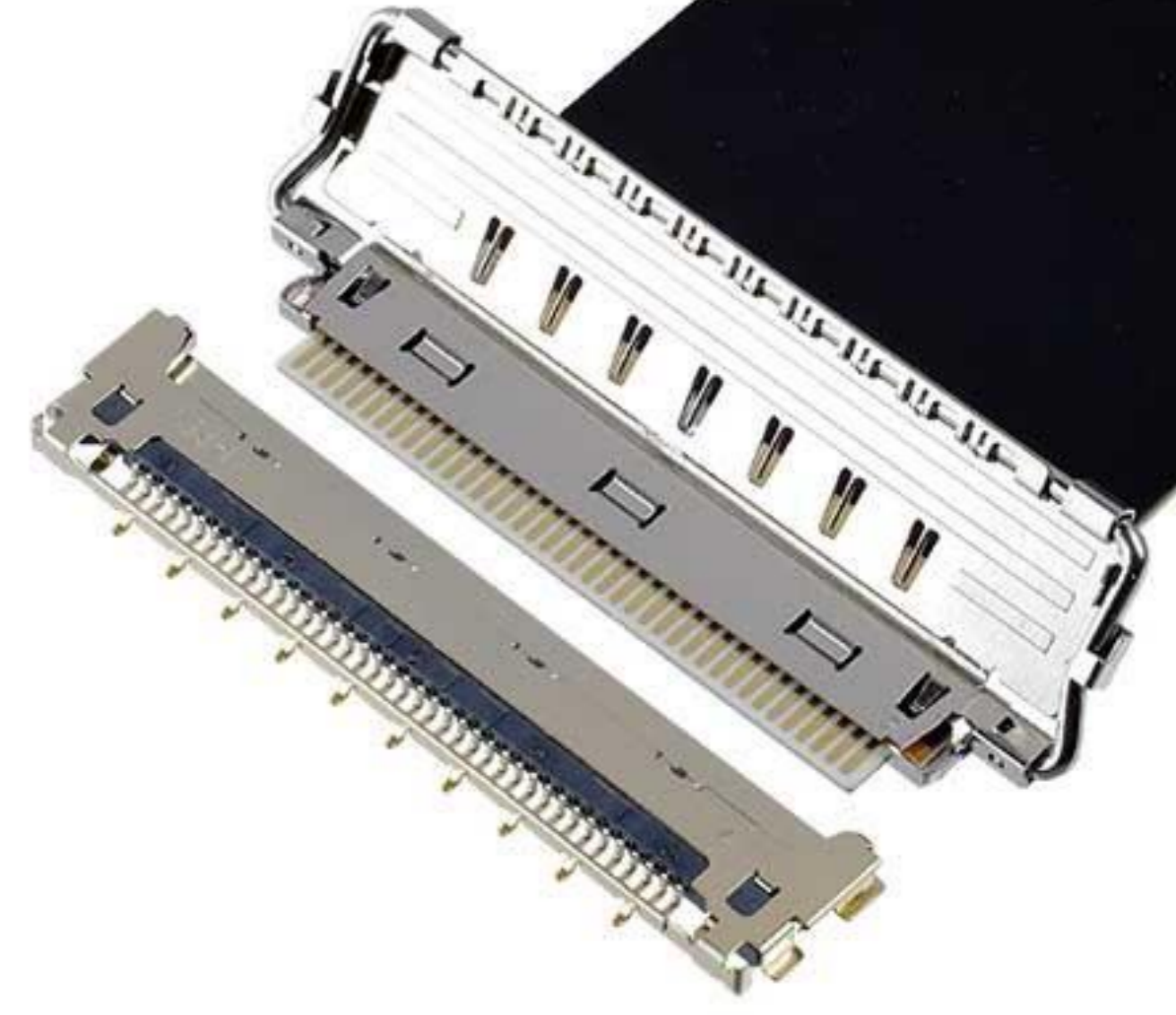
Applicable FPC

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

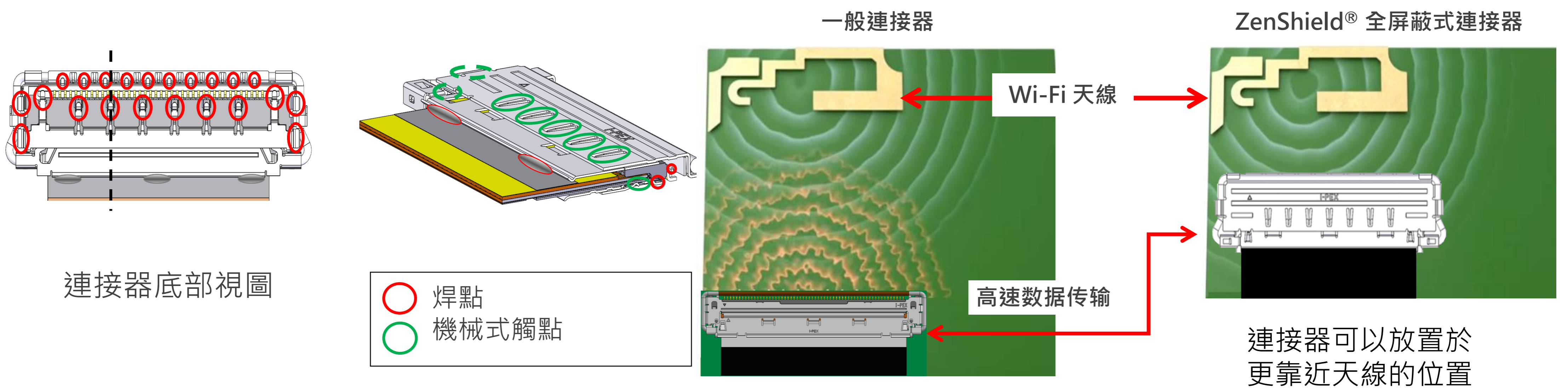
Applicable Standards (Reference Only):

USB4 Gen3 (20 Gbps/Lane), Display Port UHBR20 (20 Gbps/Lane),
PCIe® Gen 4 (16 GT/s/Lane), eDP HBR 3 (8.1 Gbps/Lane)

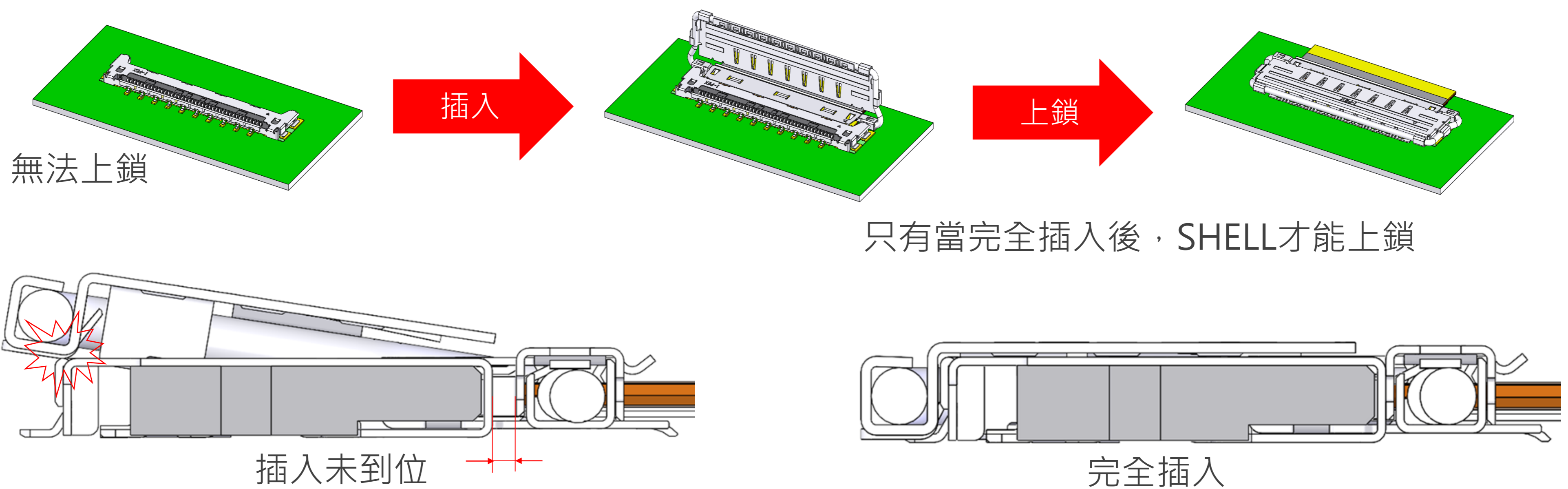
*若有規格外 Pin數需求,請與當地負責業務窗口聯繫。



▶ ZenShield® 的全屏蔽和多點接地設計，有效防止EMI外洩

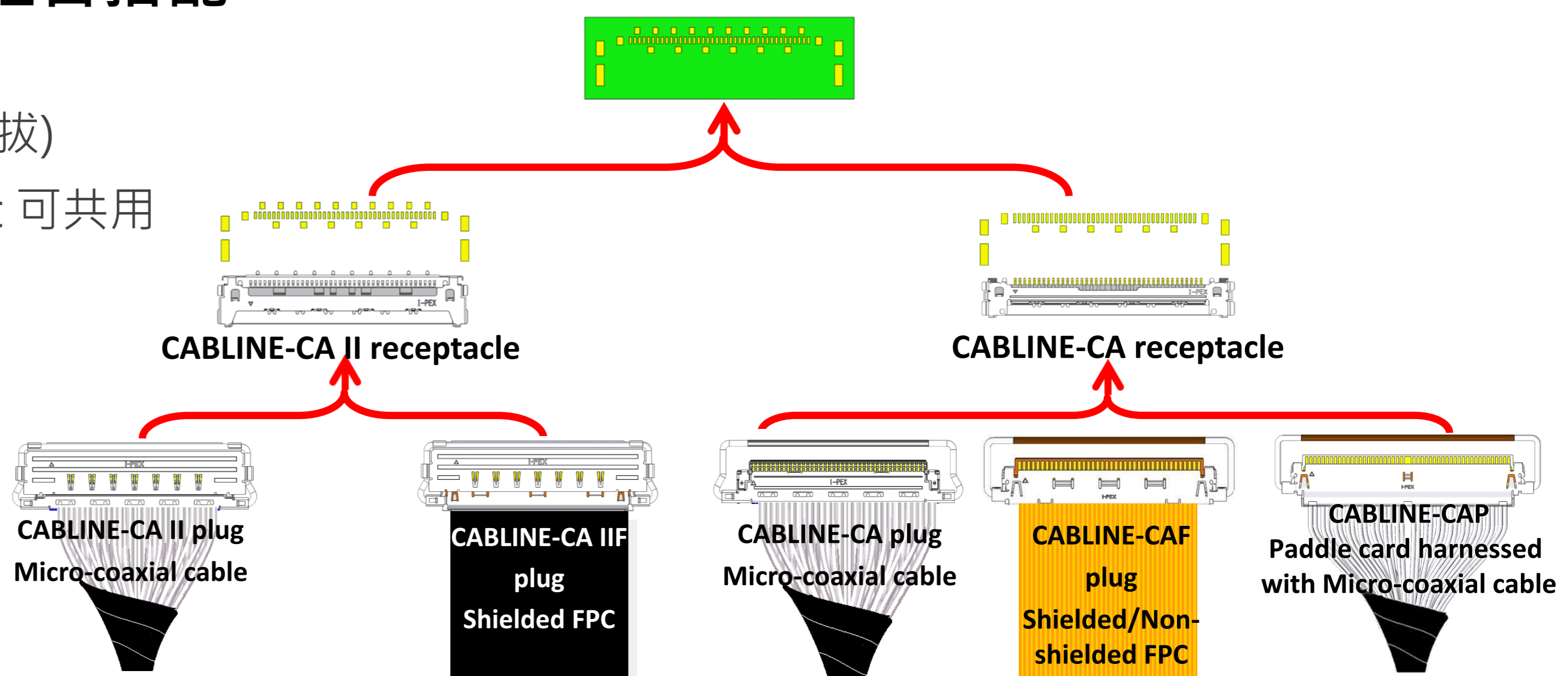


▶ 機械式鎖扣罩防止連接器不完全嵌合及脫落



▶ 與CABLINE®-CA 系列有多種組合搭配

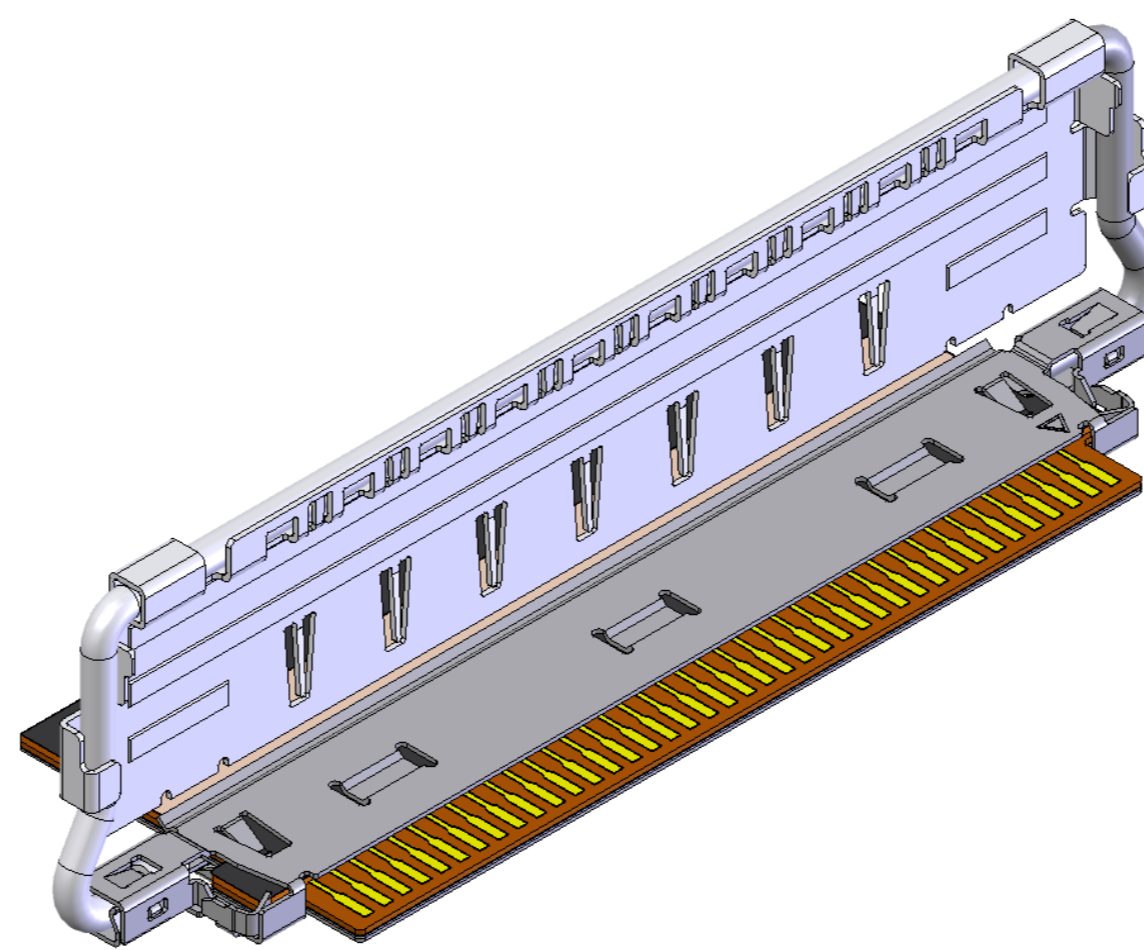
CABLINE-CA 系列 (間距0.4 mm,水平插拔)
CABLINE-CA and CA II 板端PCB layout 可共用



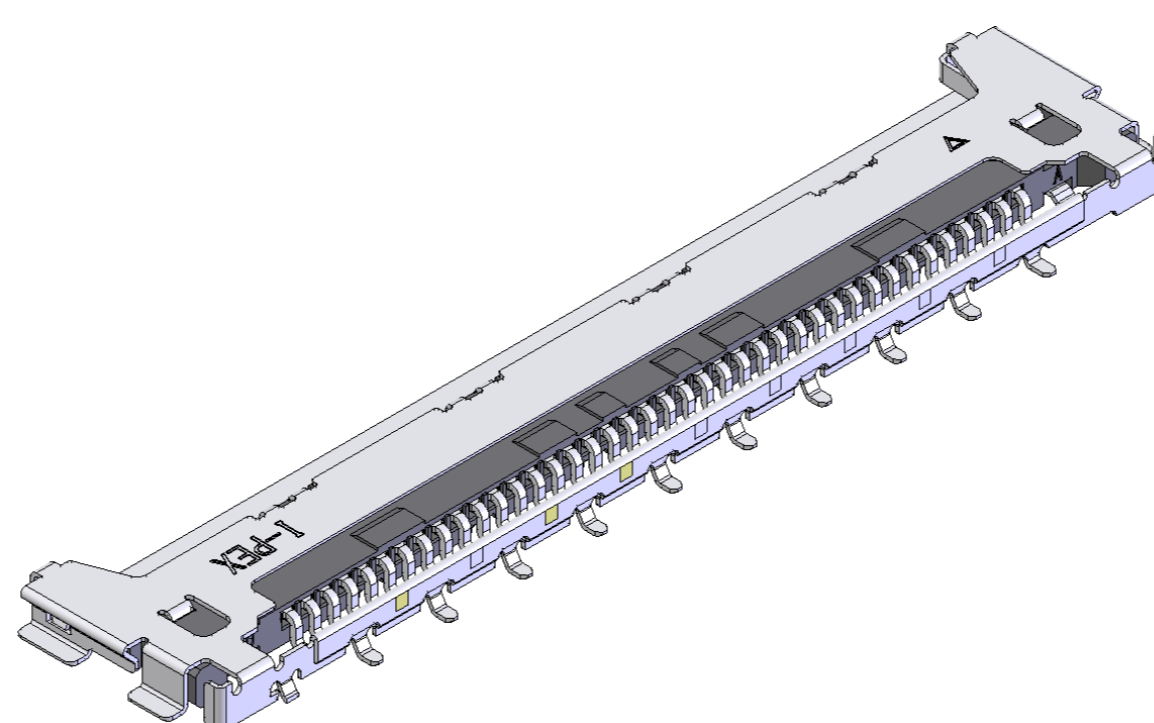
Component Parts Details

Component Parts

Connector parts



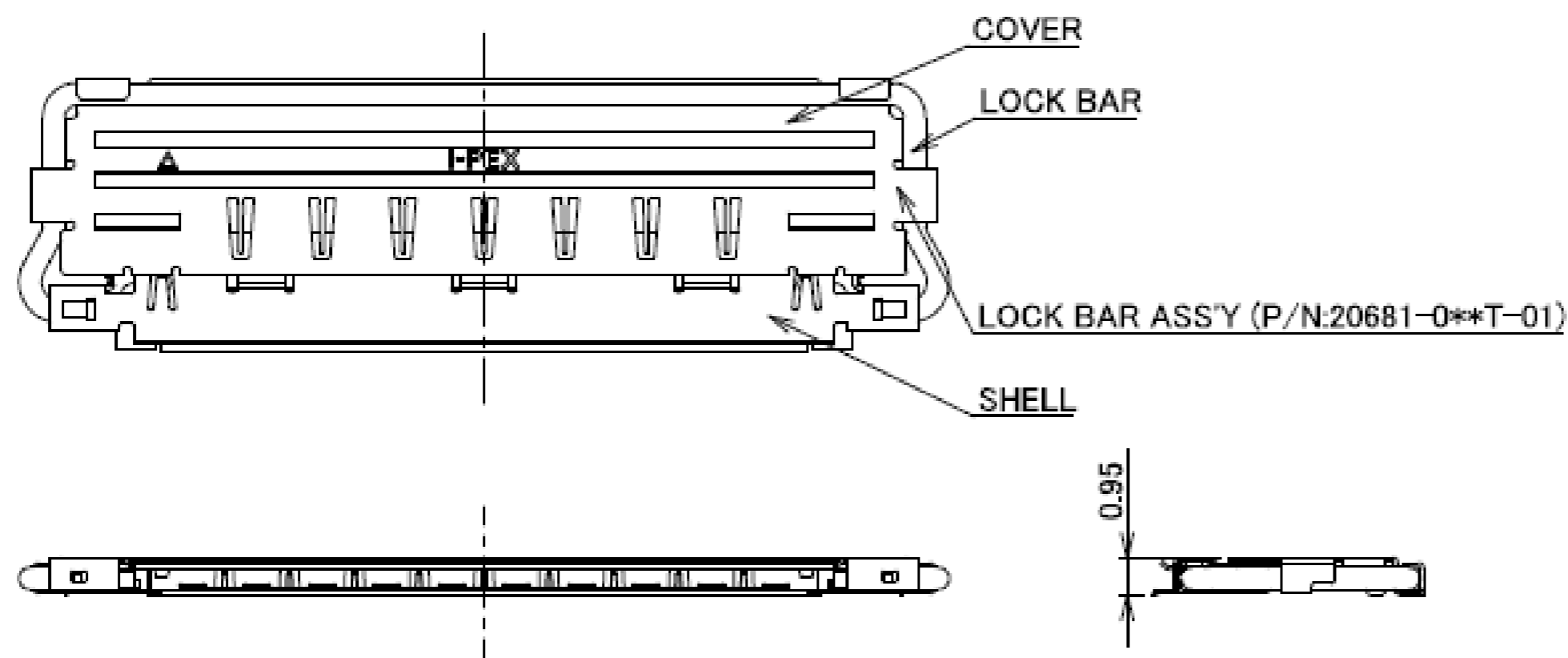
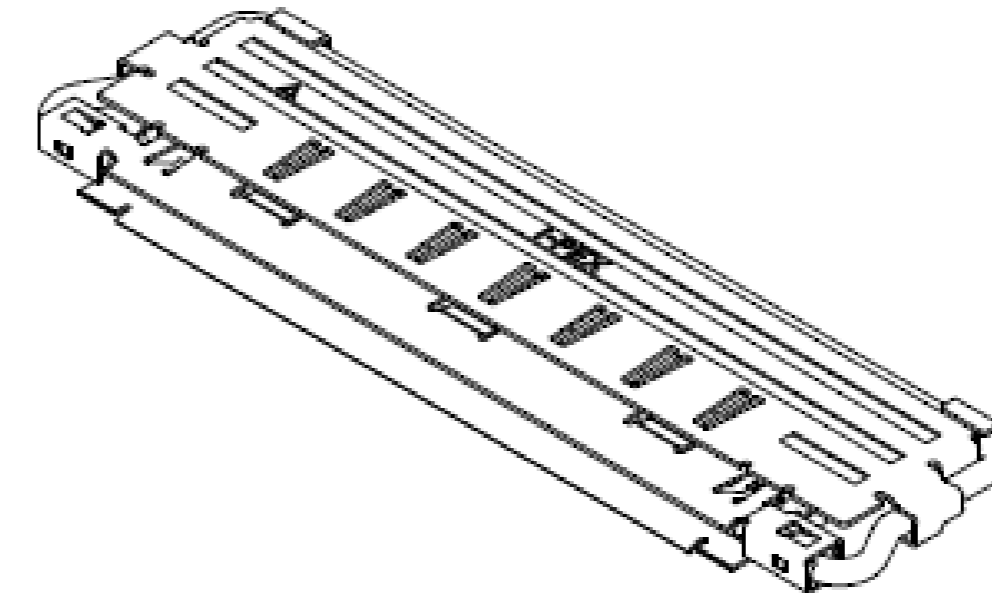
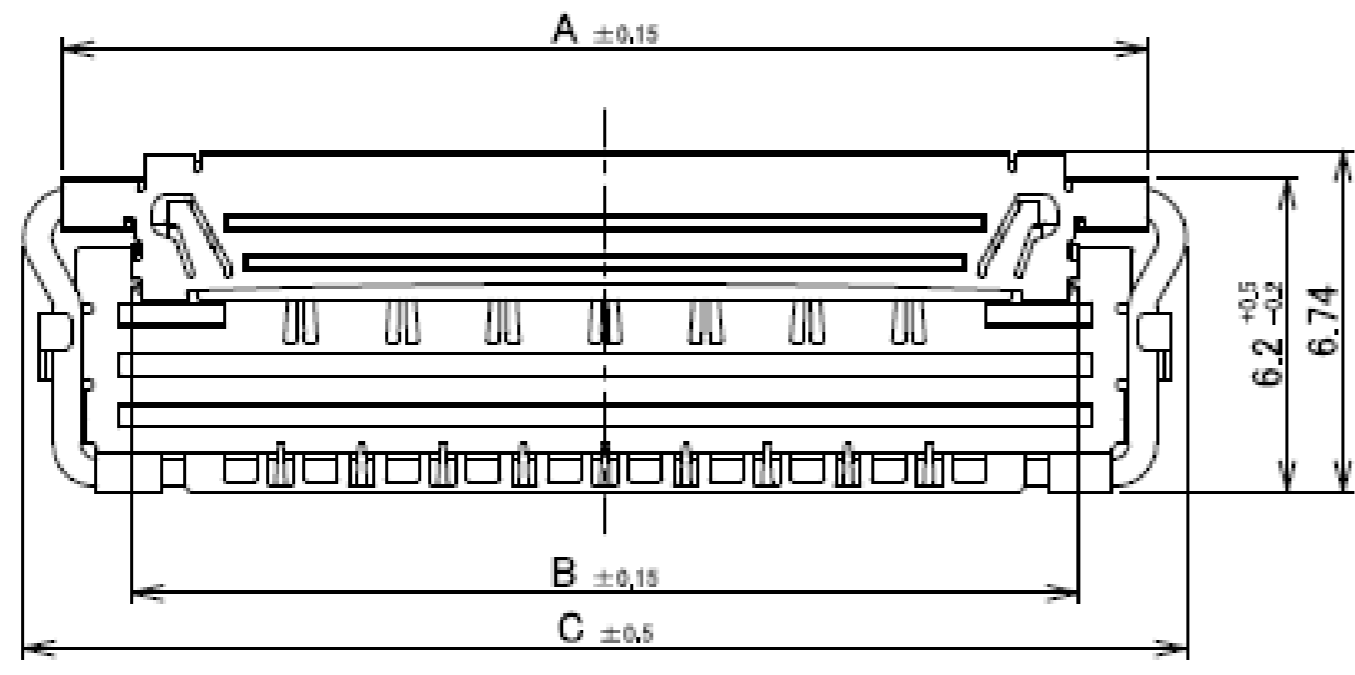
CABLINE-CA IIF PLUG with FPC



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	

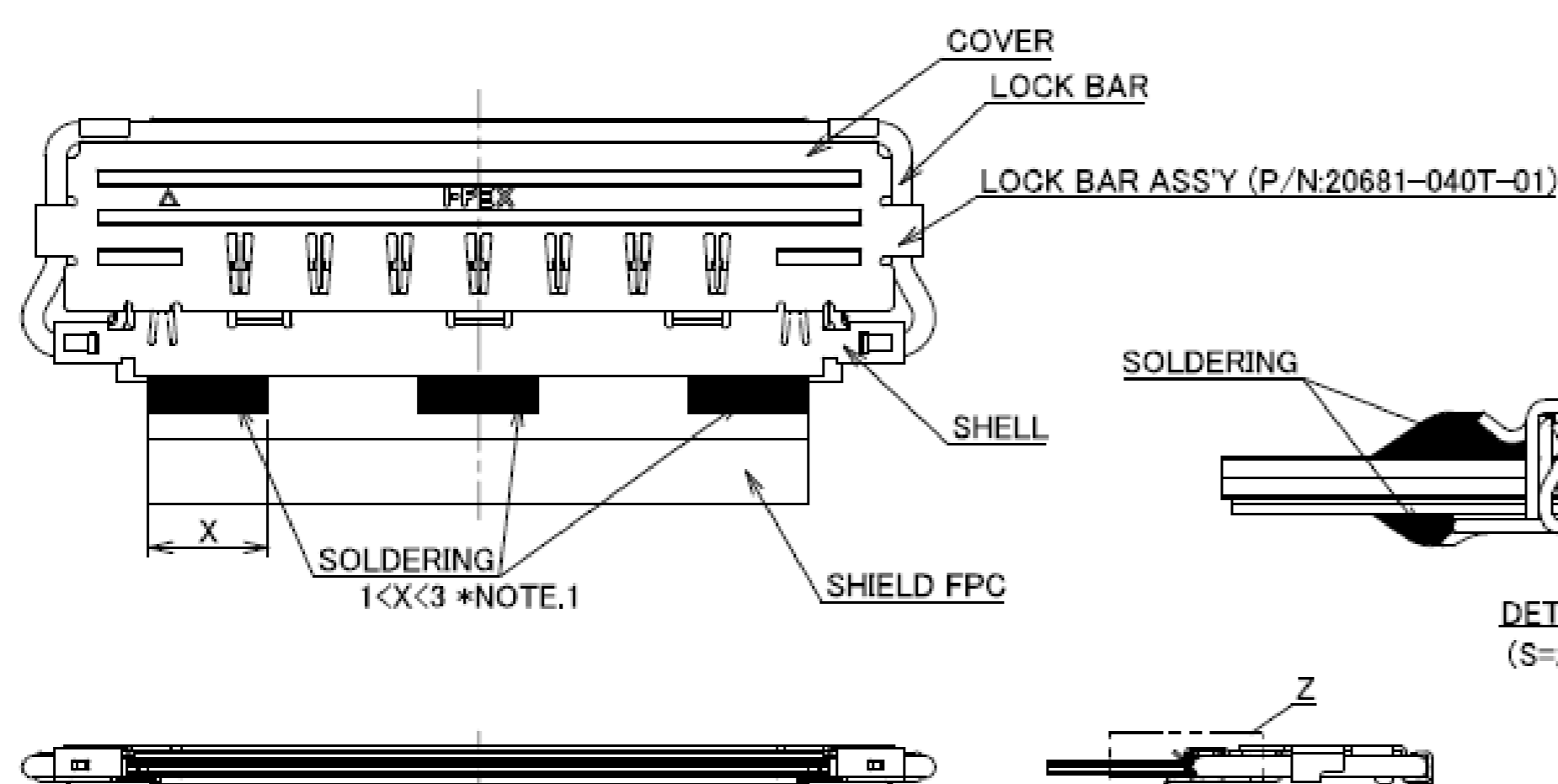
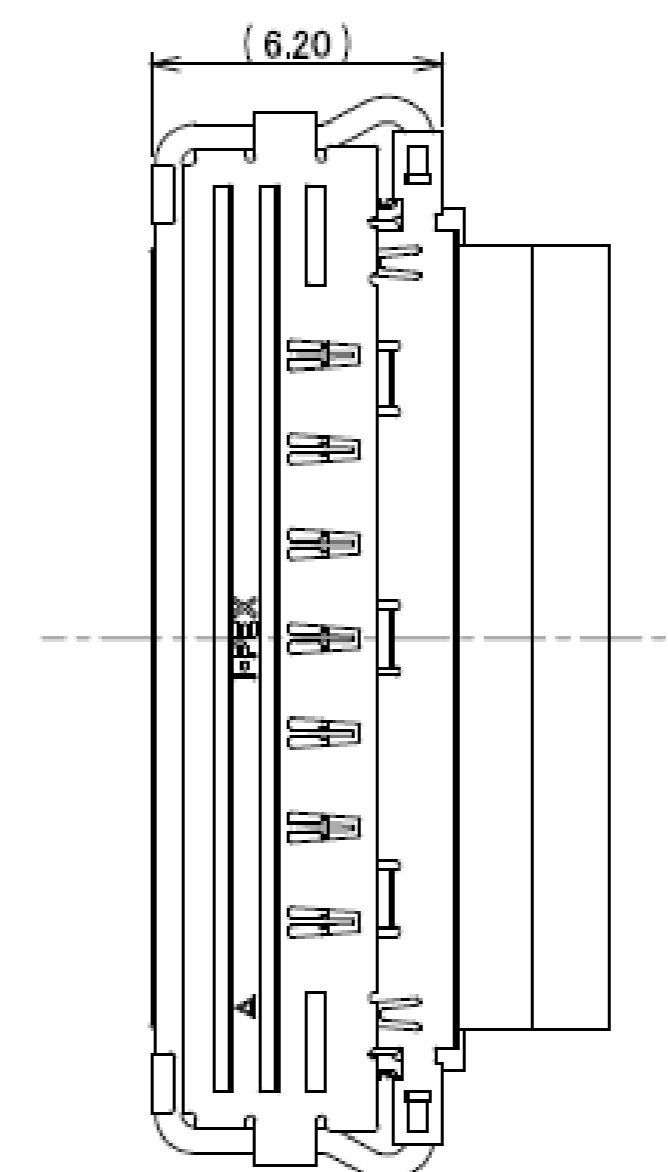
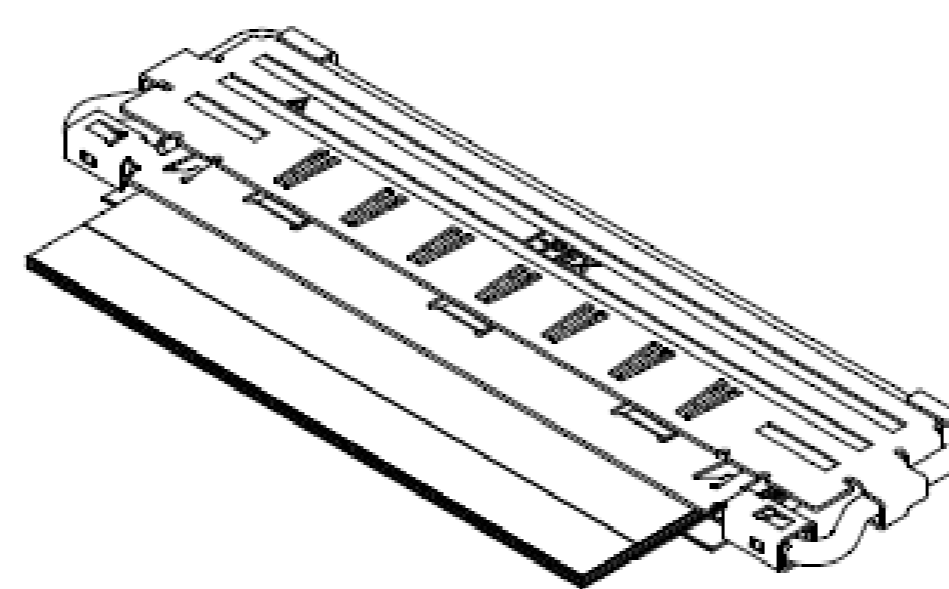
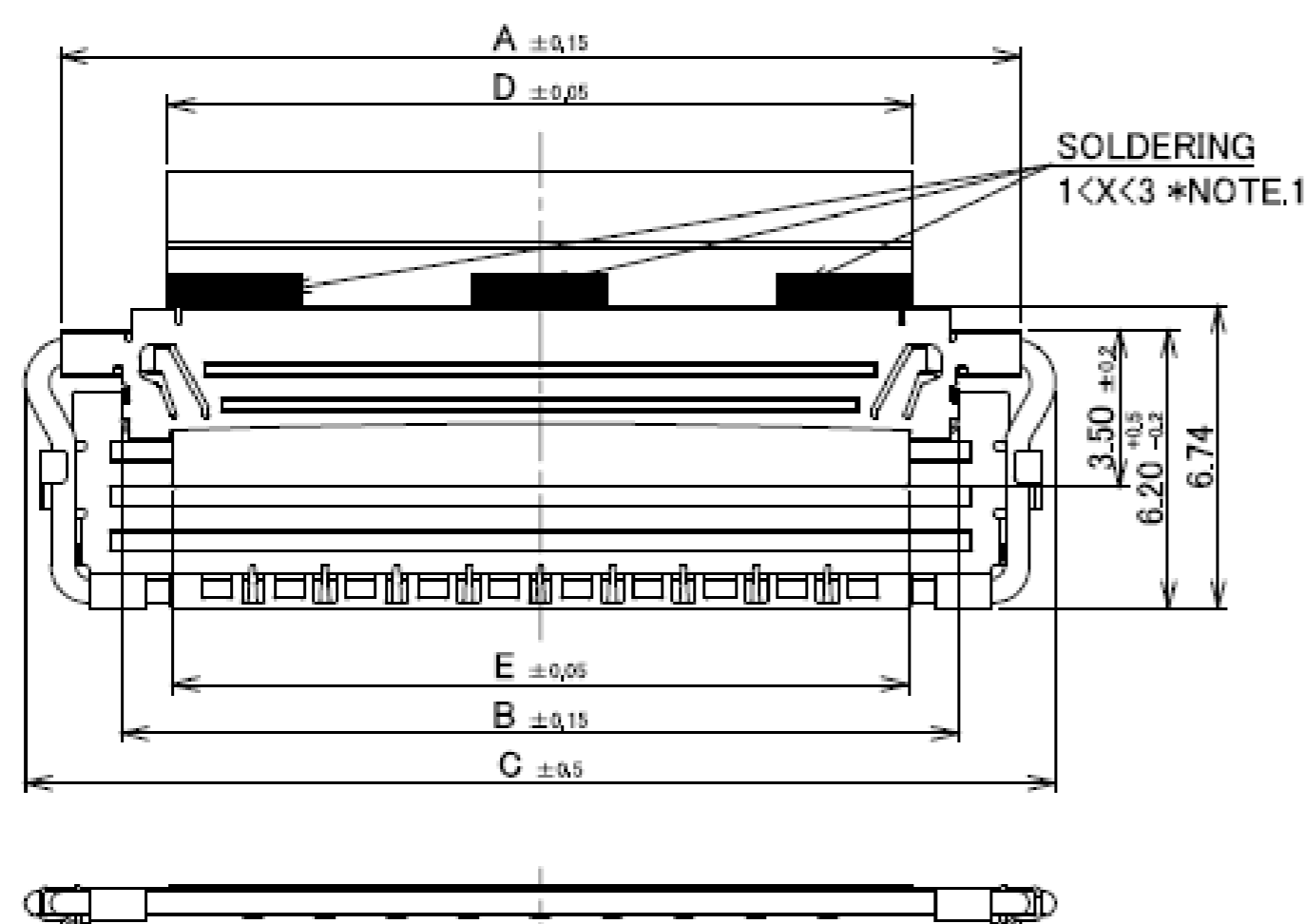
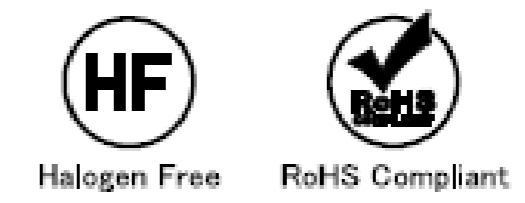


3	COVER	PHOSPHOR BRONZE	Ni PLATING
2	LOCK BAR	STAINLESS STEEL	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0,003 μm MIN. OVER Ni 1,00 μm MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.12

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

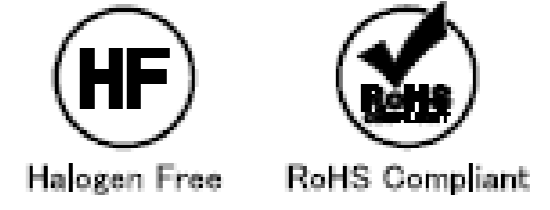


NOTES.
1.Soldering Area X is recommended dimension.
It does not mater if it might be exceed the recommended dimension.

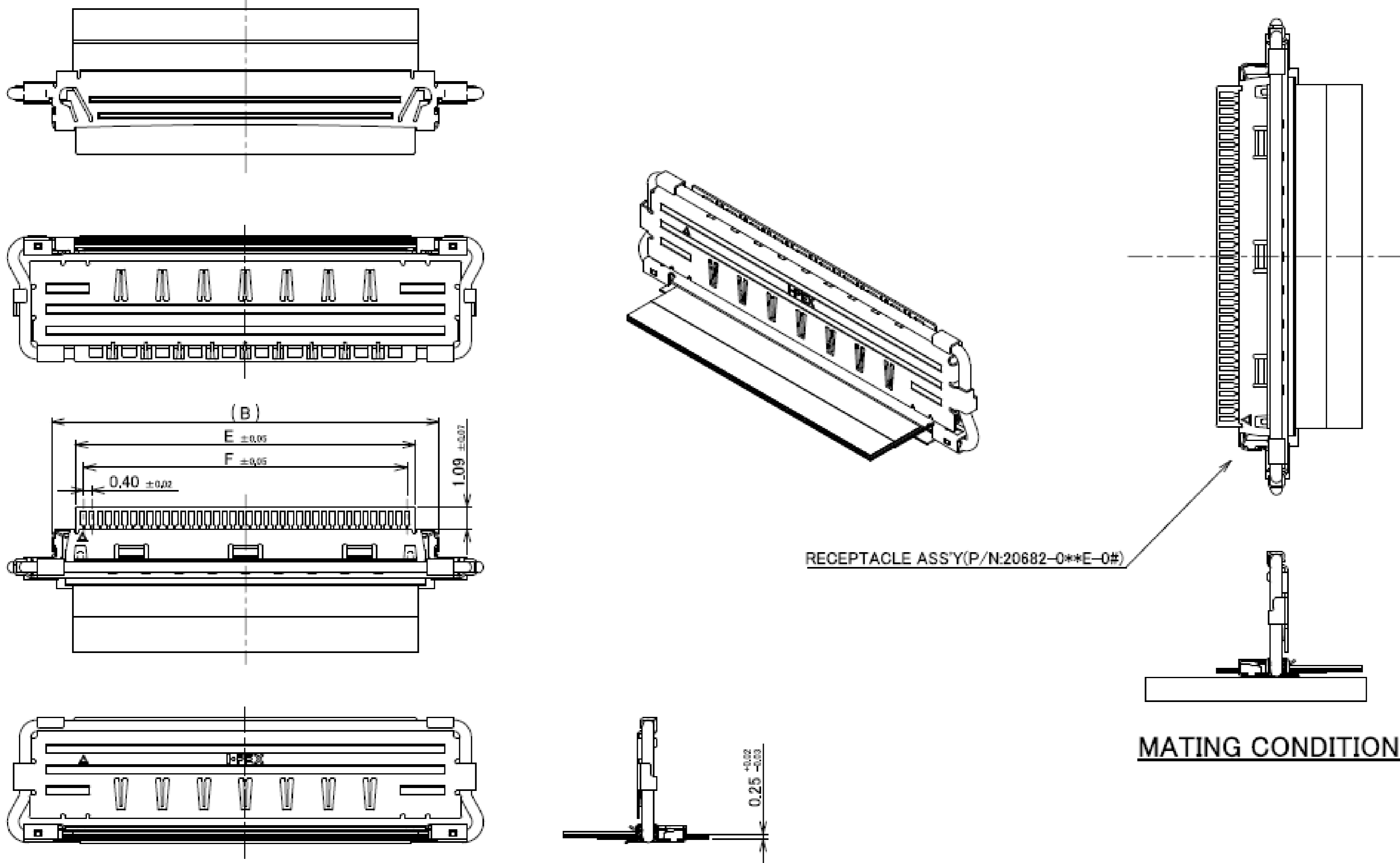
Rev.12

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

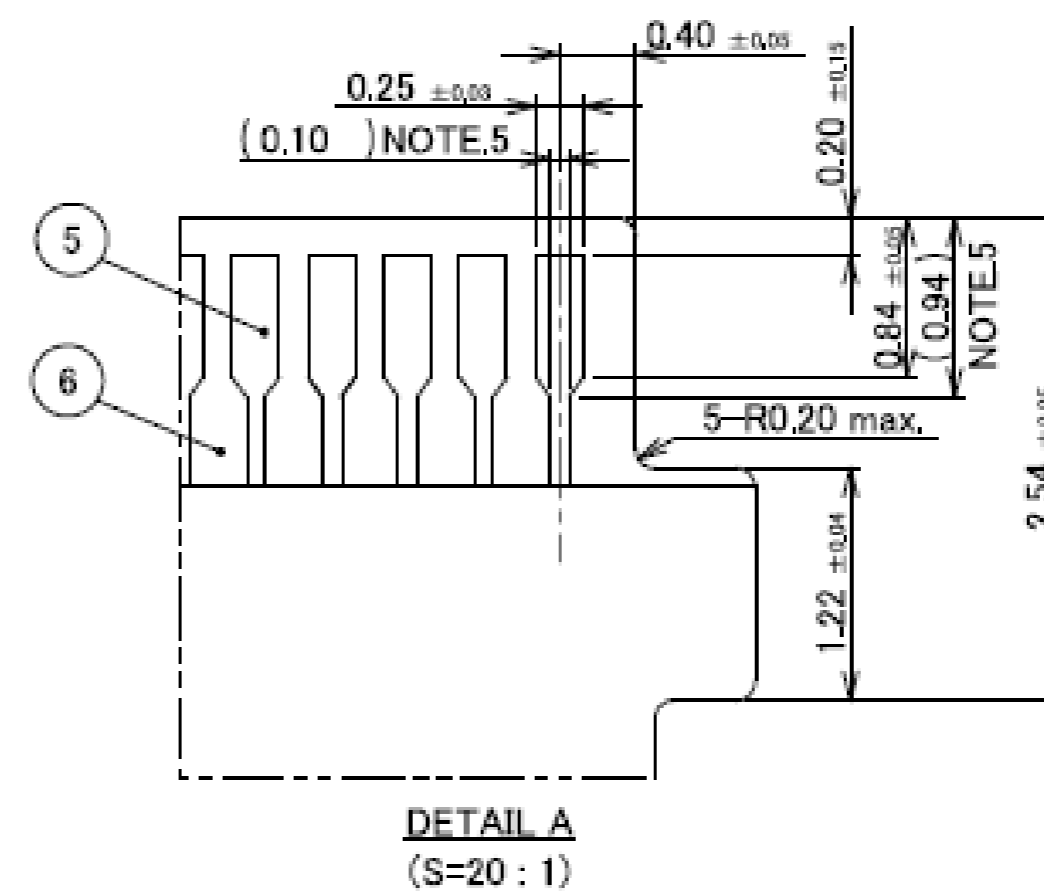
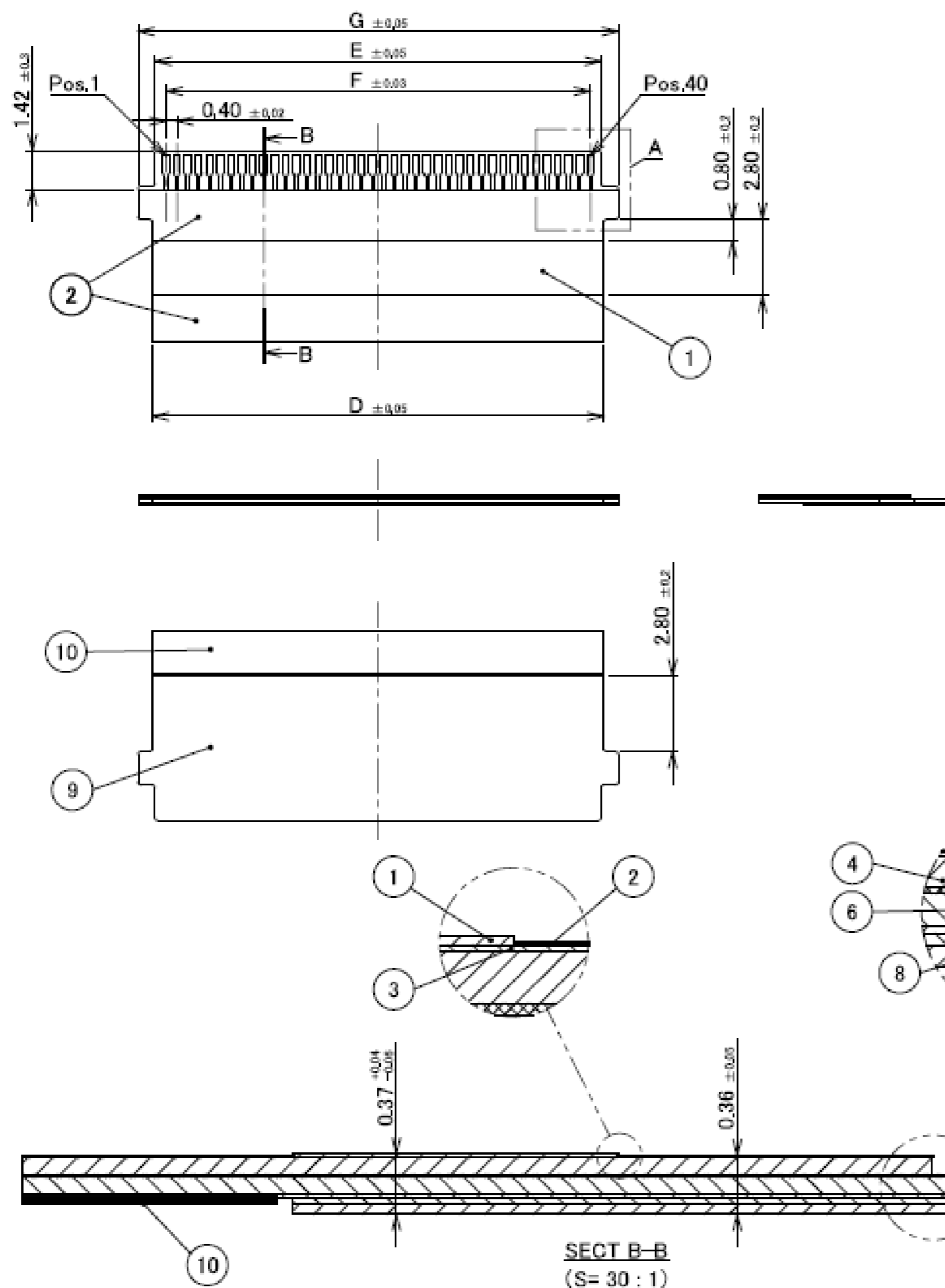


FPC ASS'Y STATE COVER OPEN



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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.12

Shell Assembly

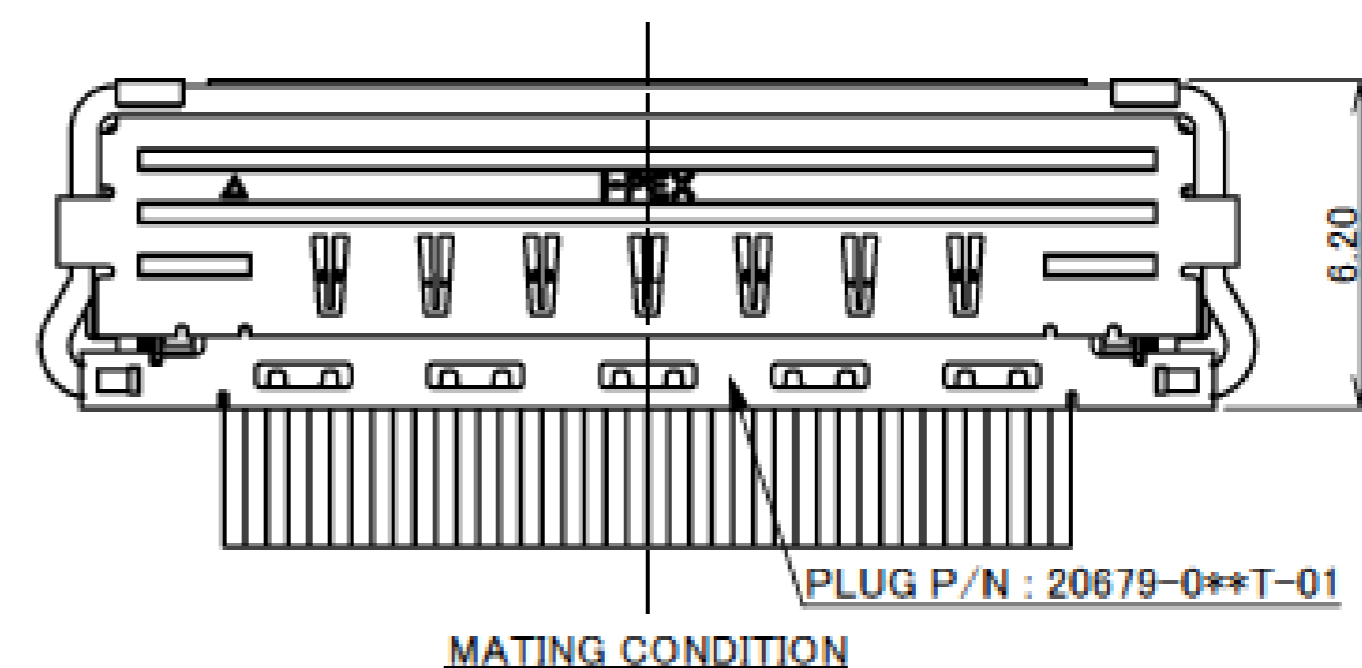
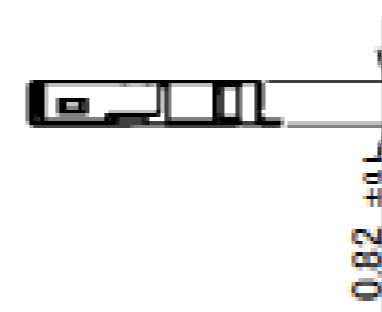
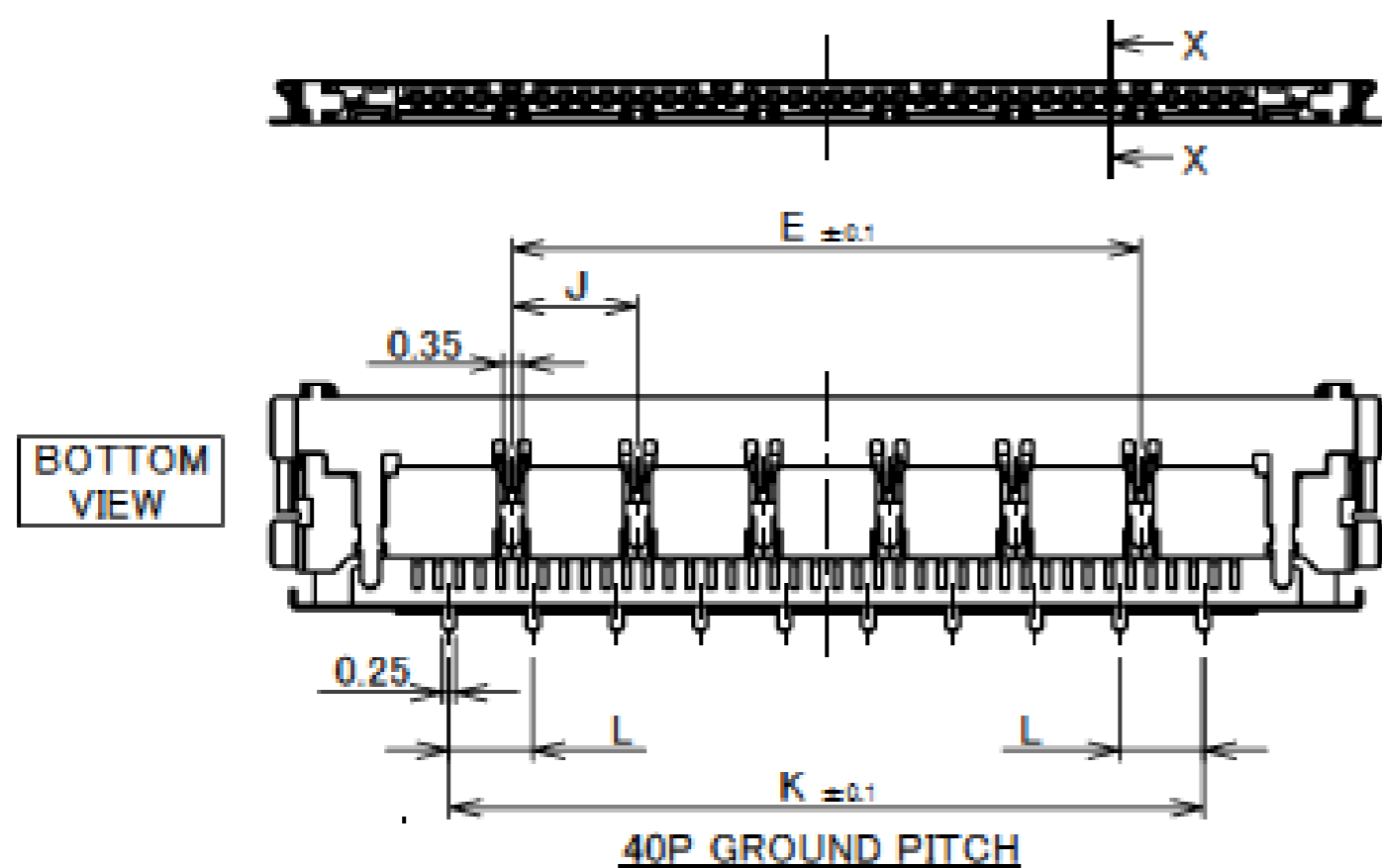
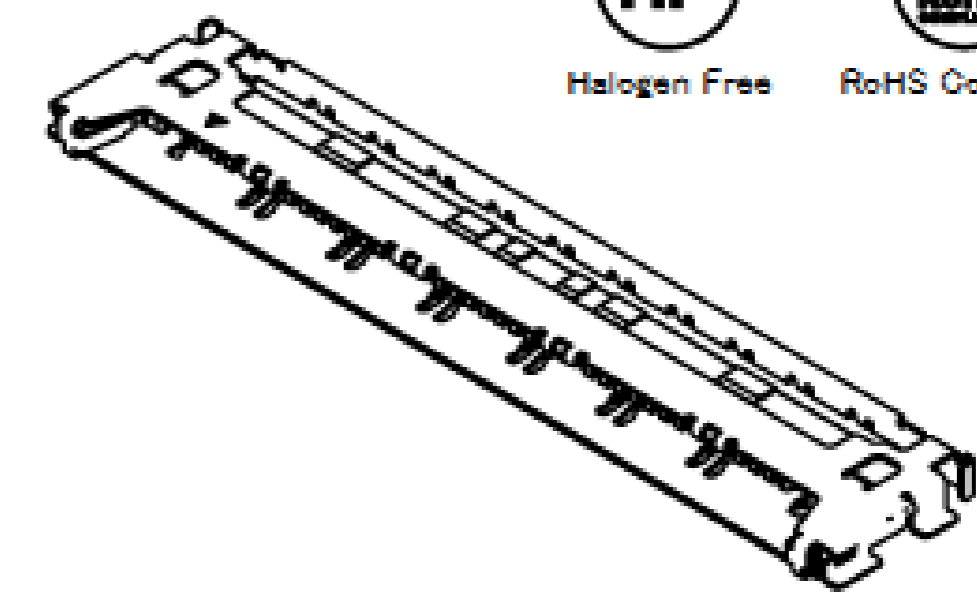
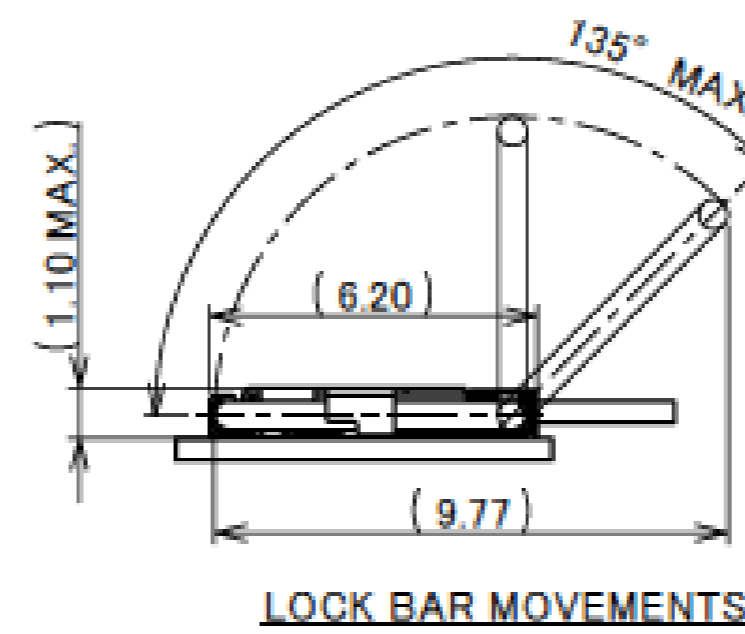
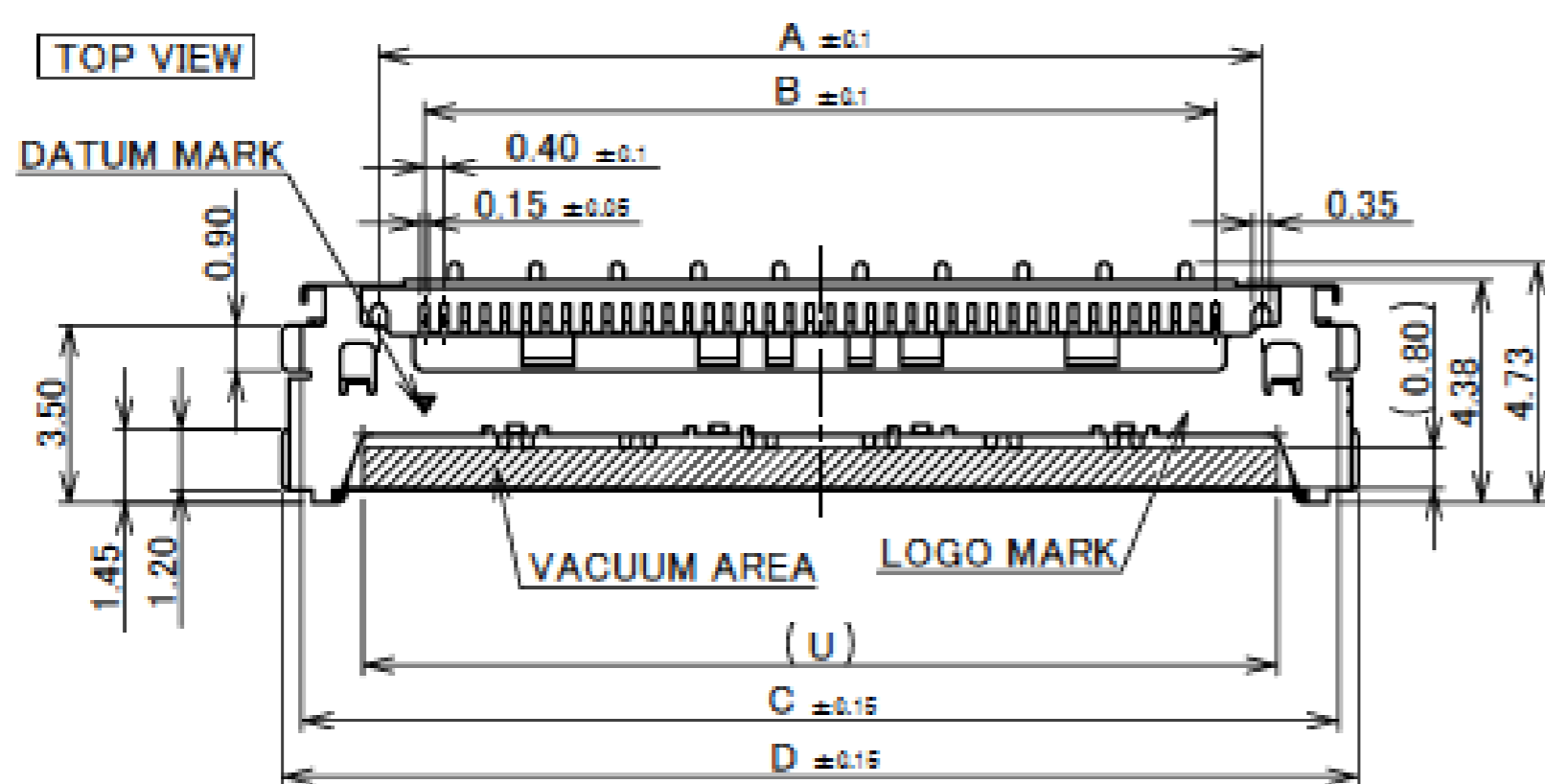
ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A AC/DC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : \triangle 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.12

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.

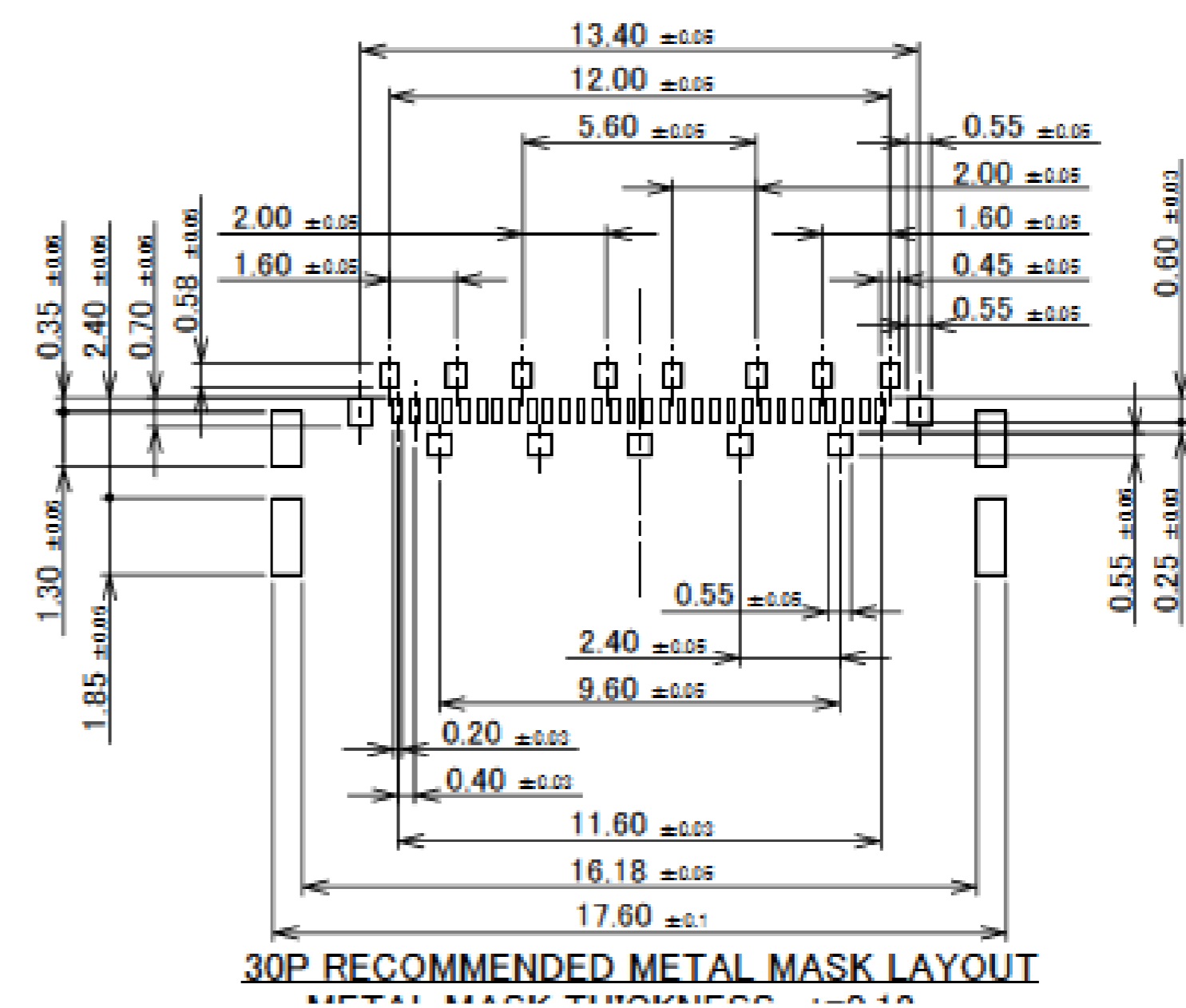
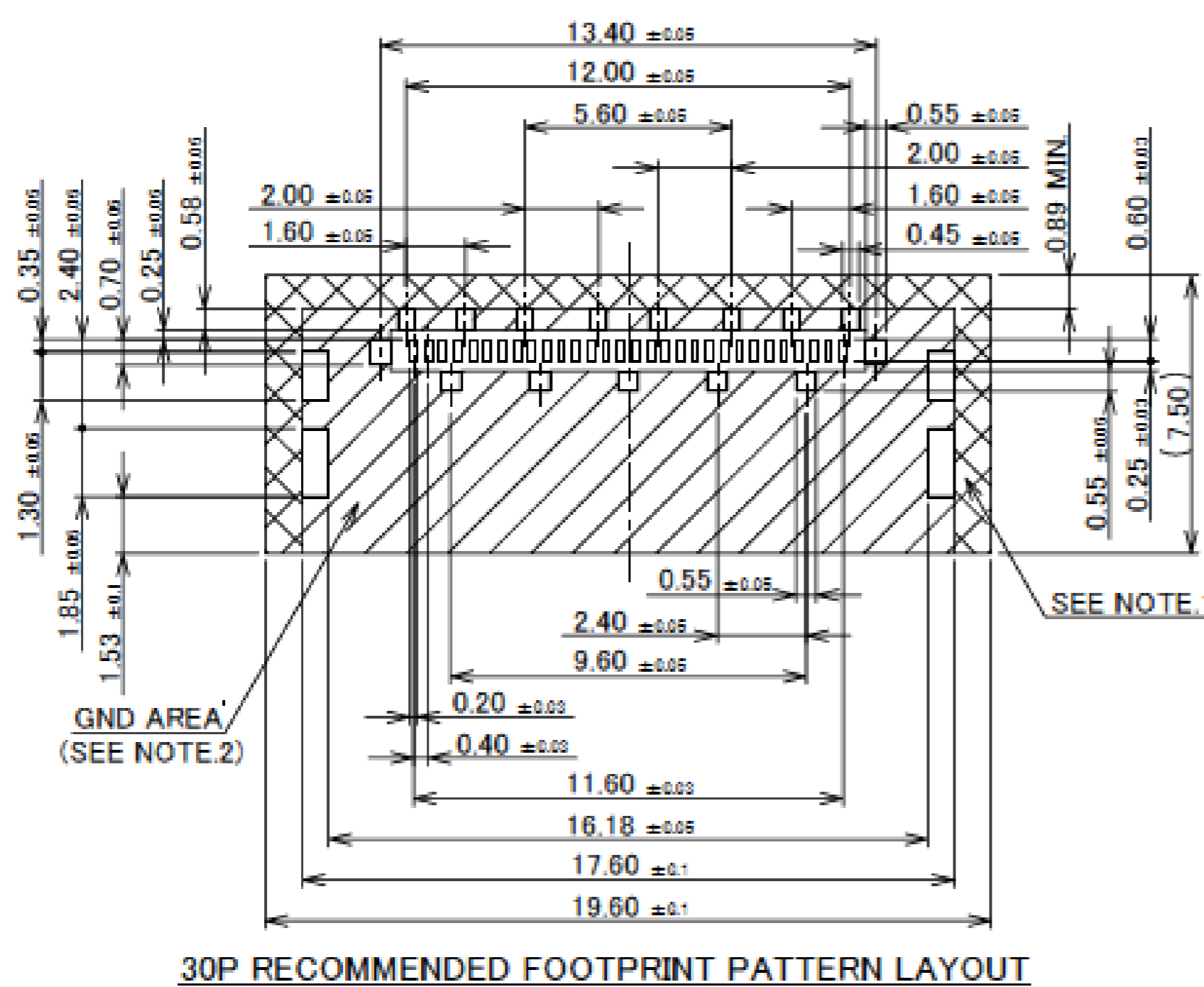
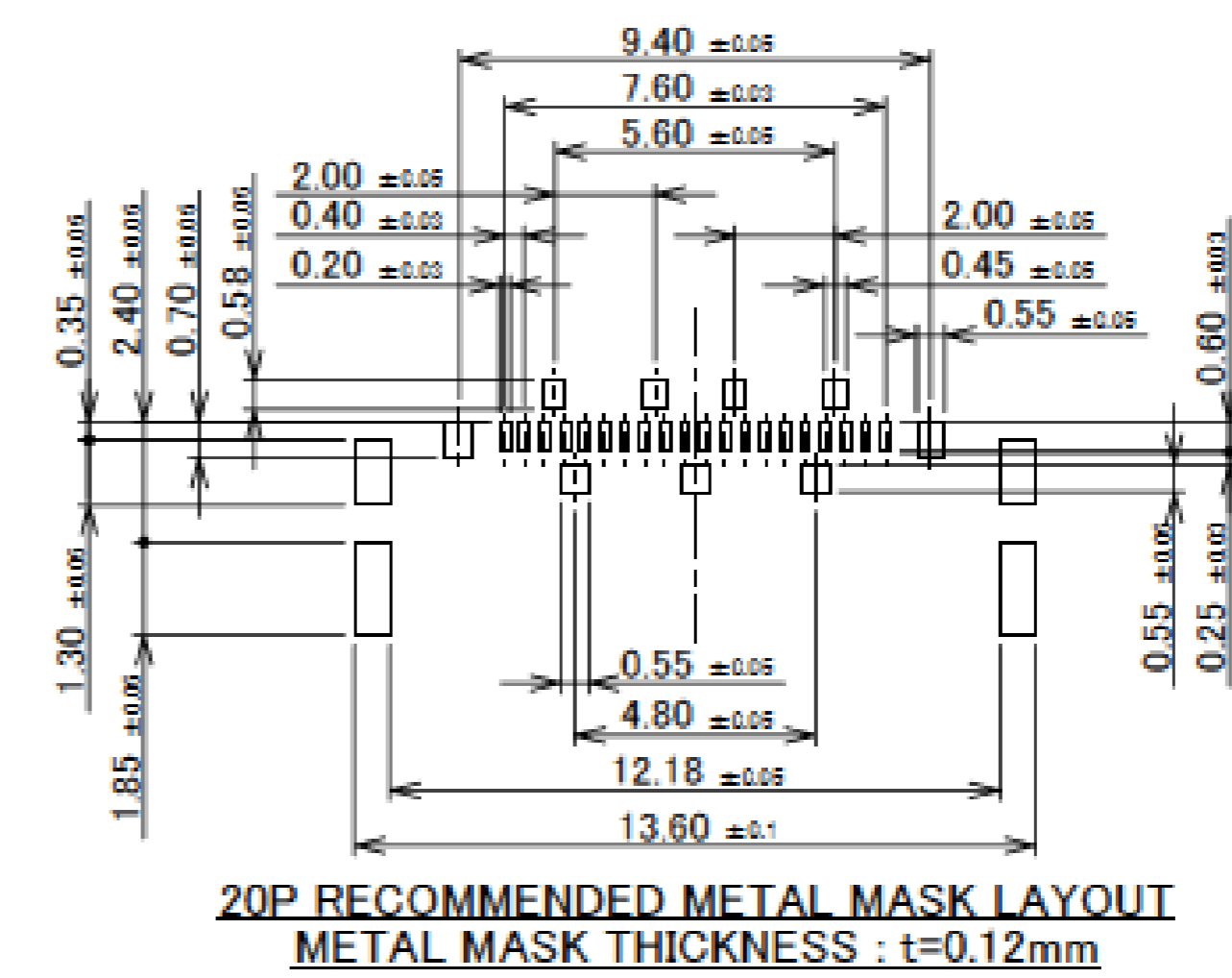
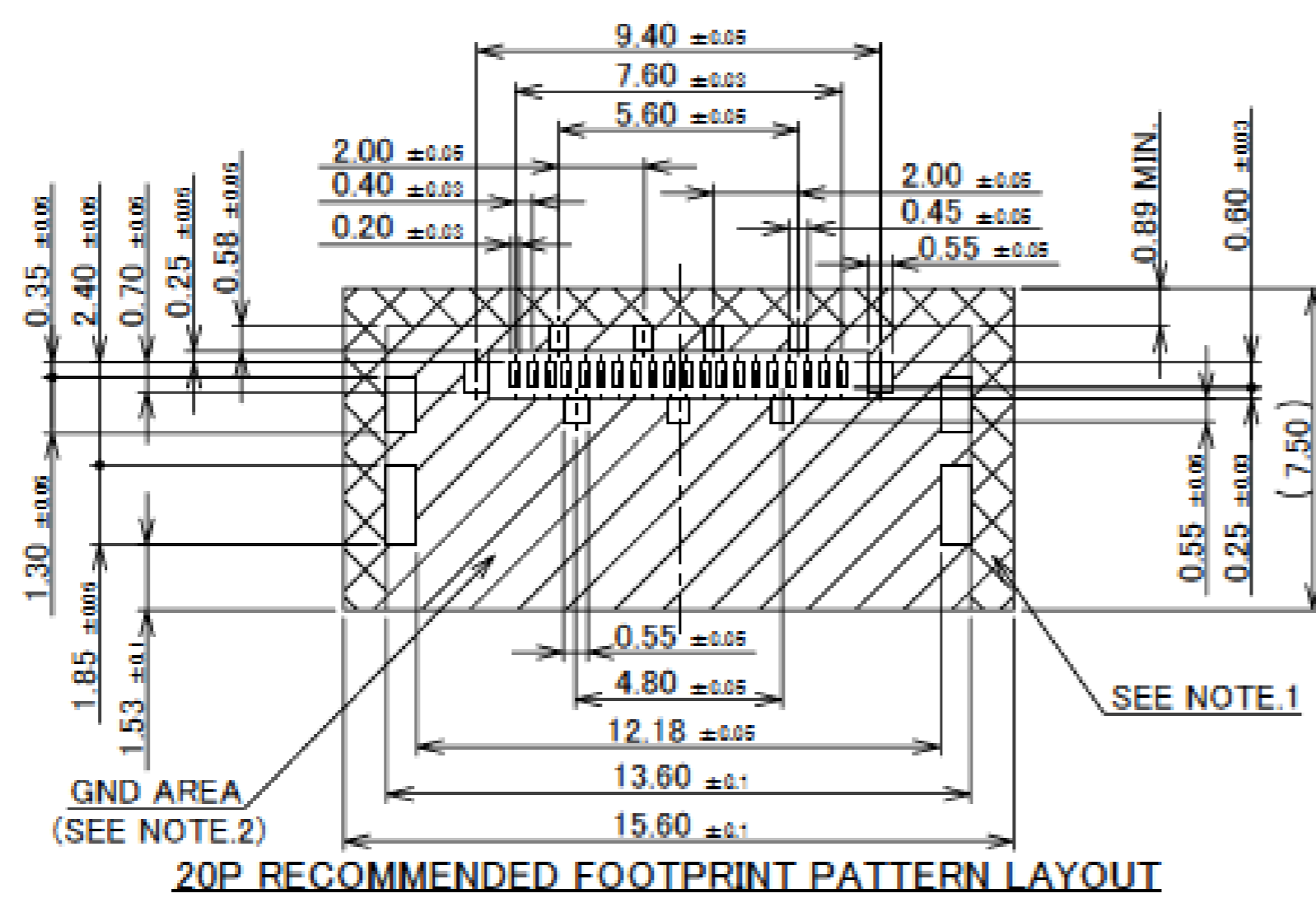
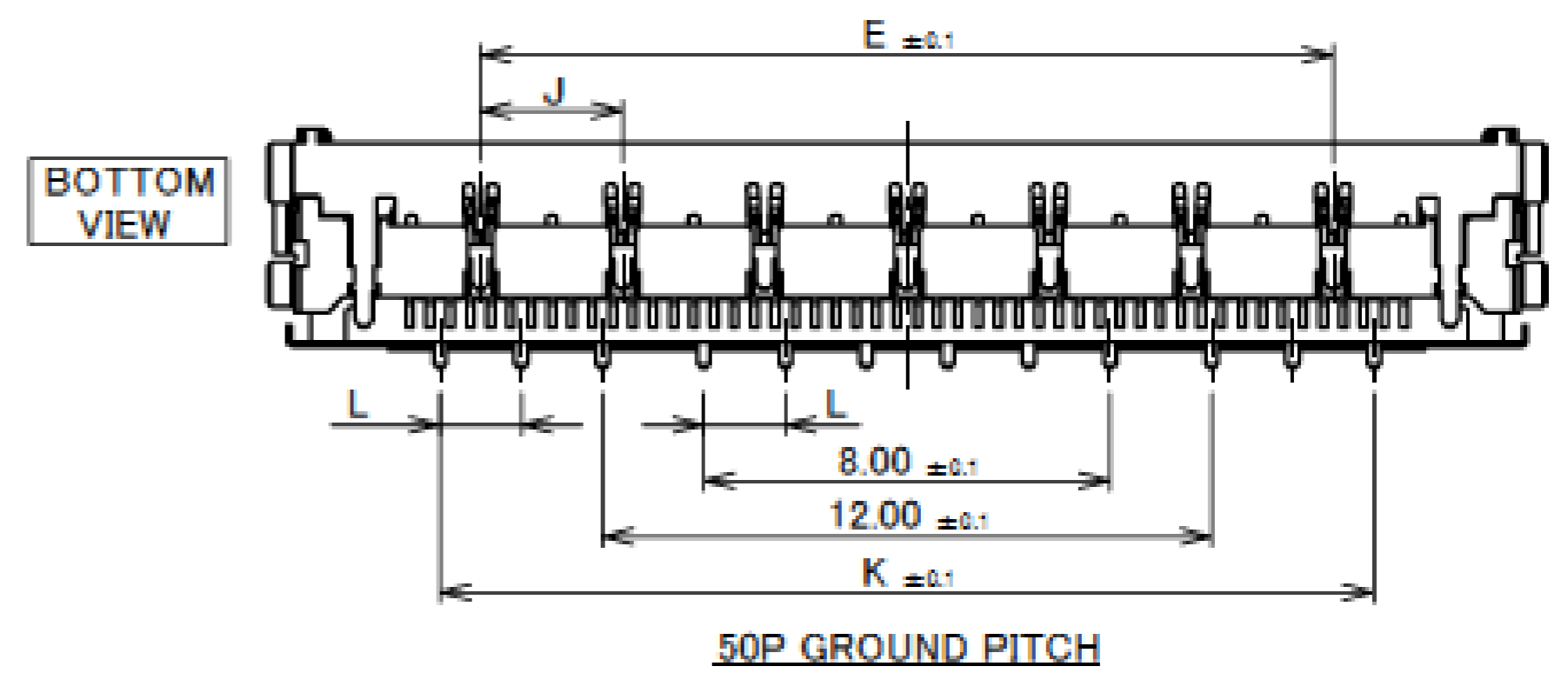
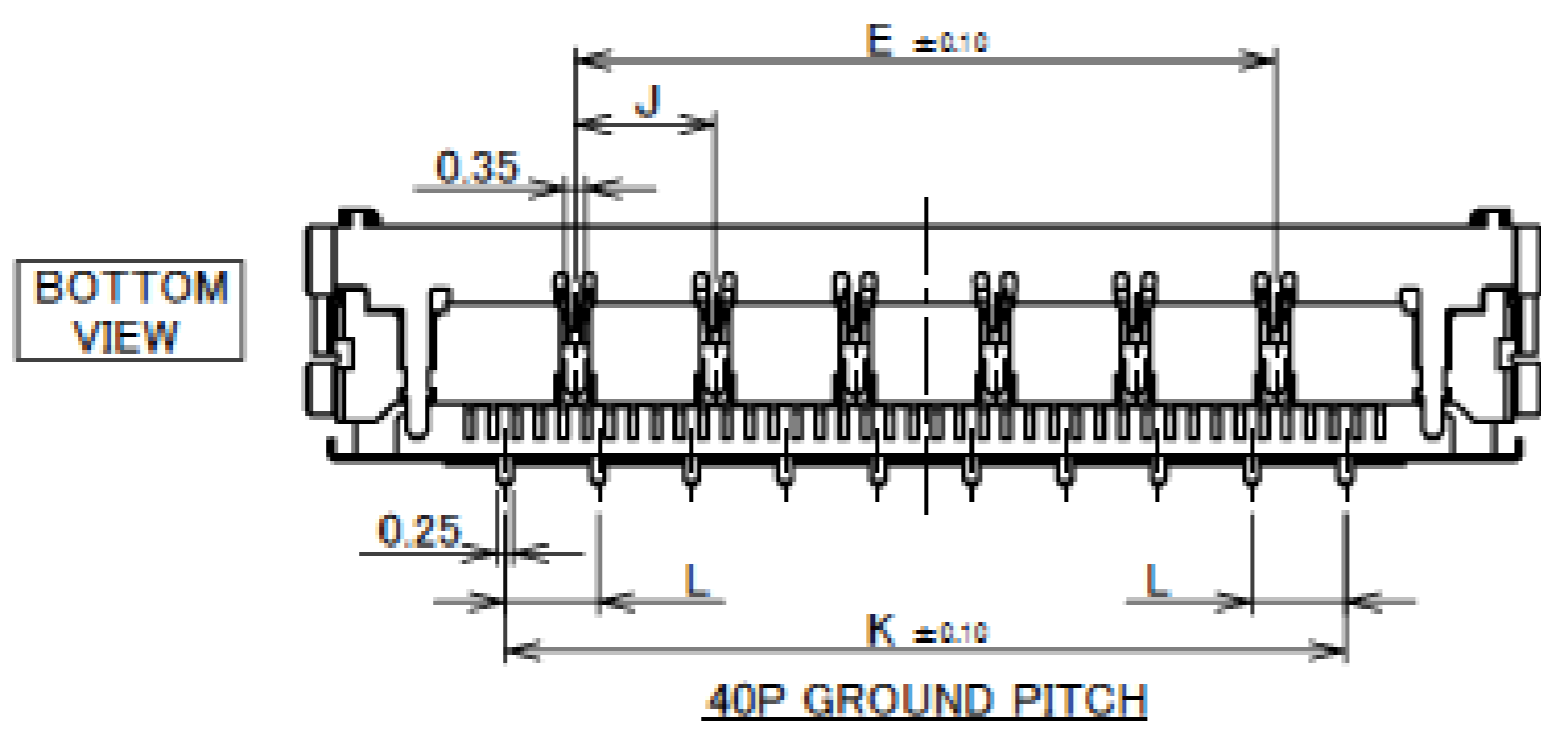
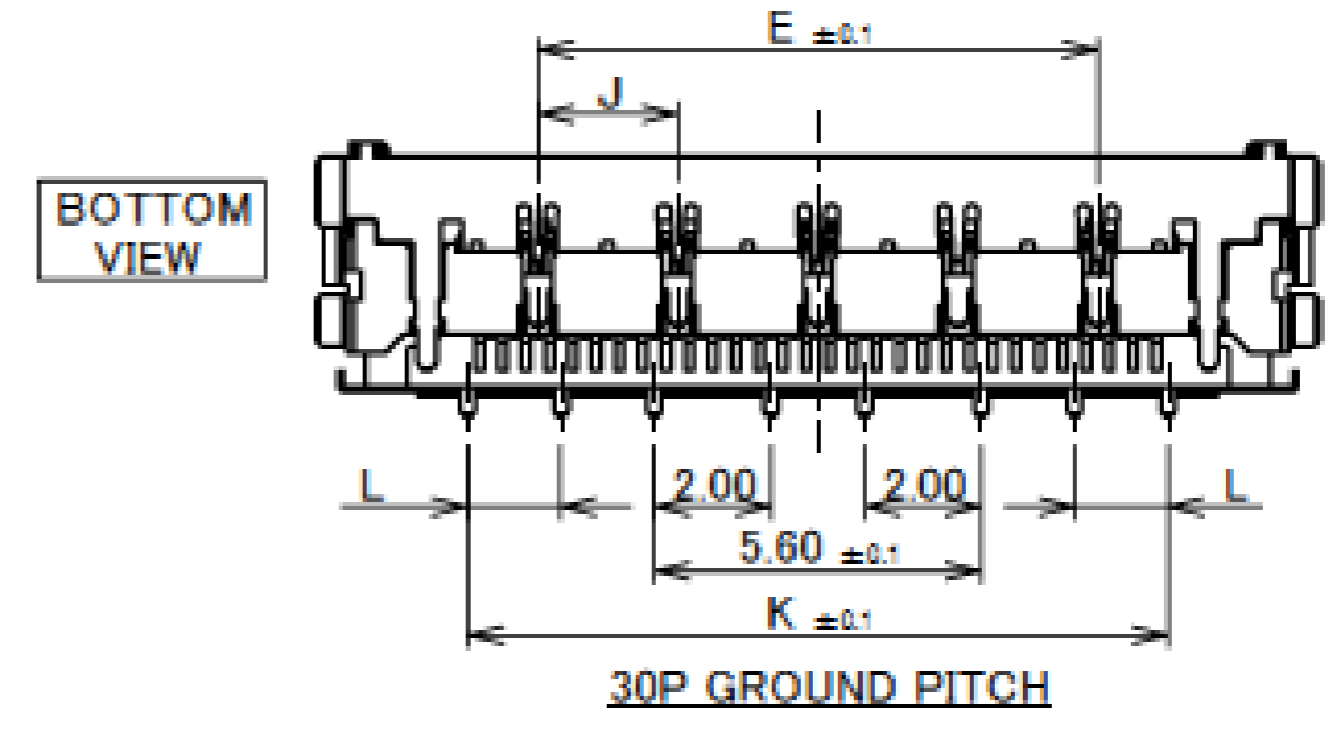
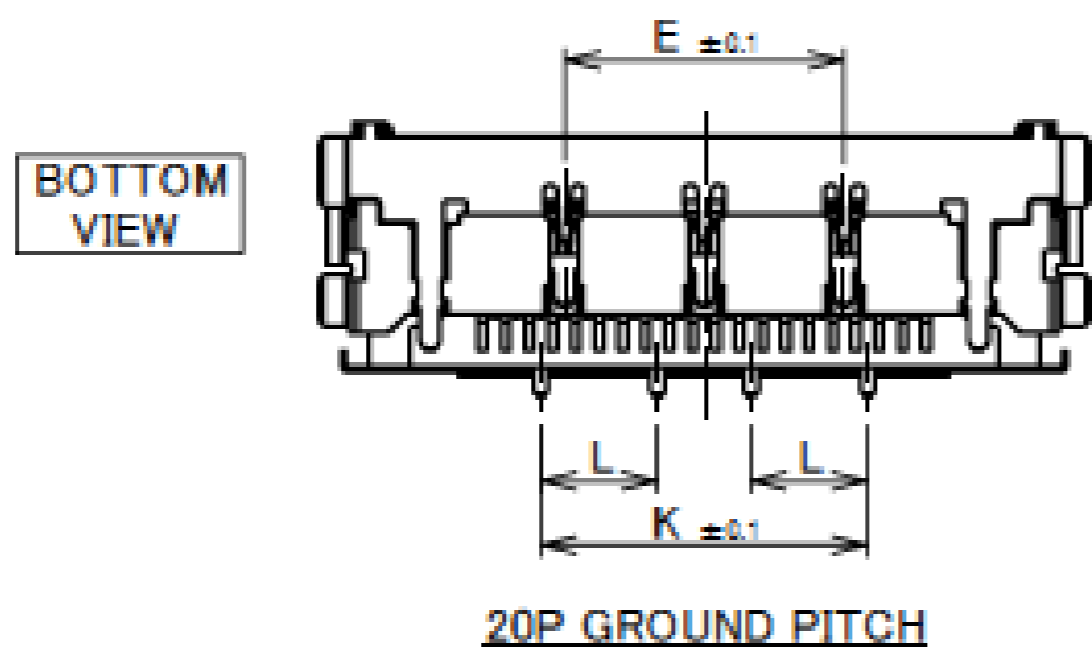


NO.	DISCRPTION	MATERIAL	FINISH , REMARKS
3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 .BLACK

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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

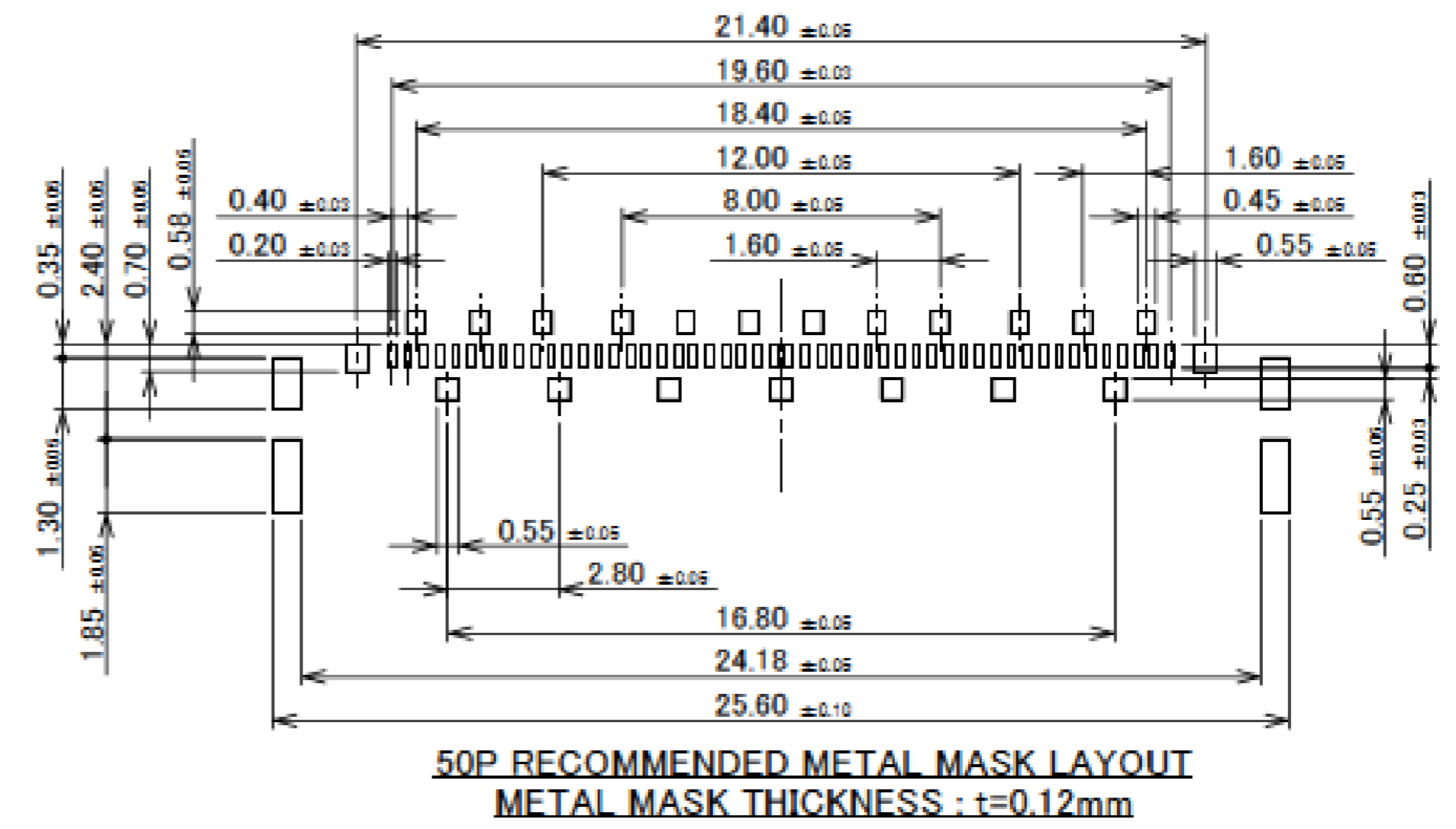
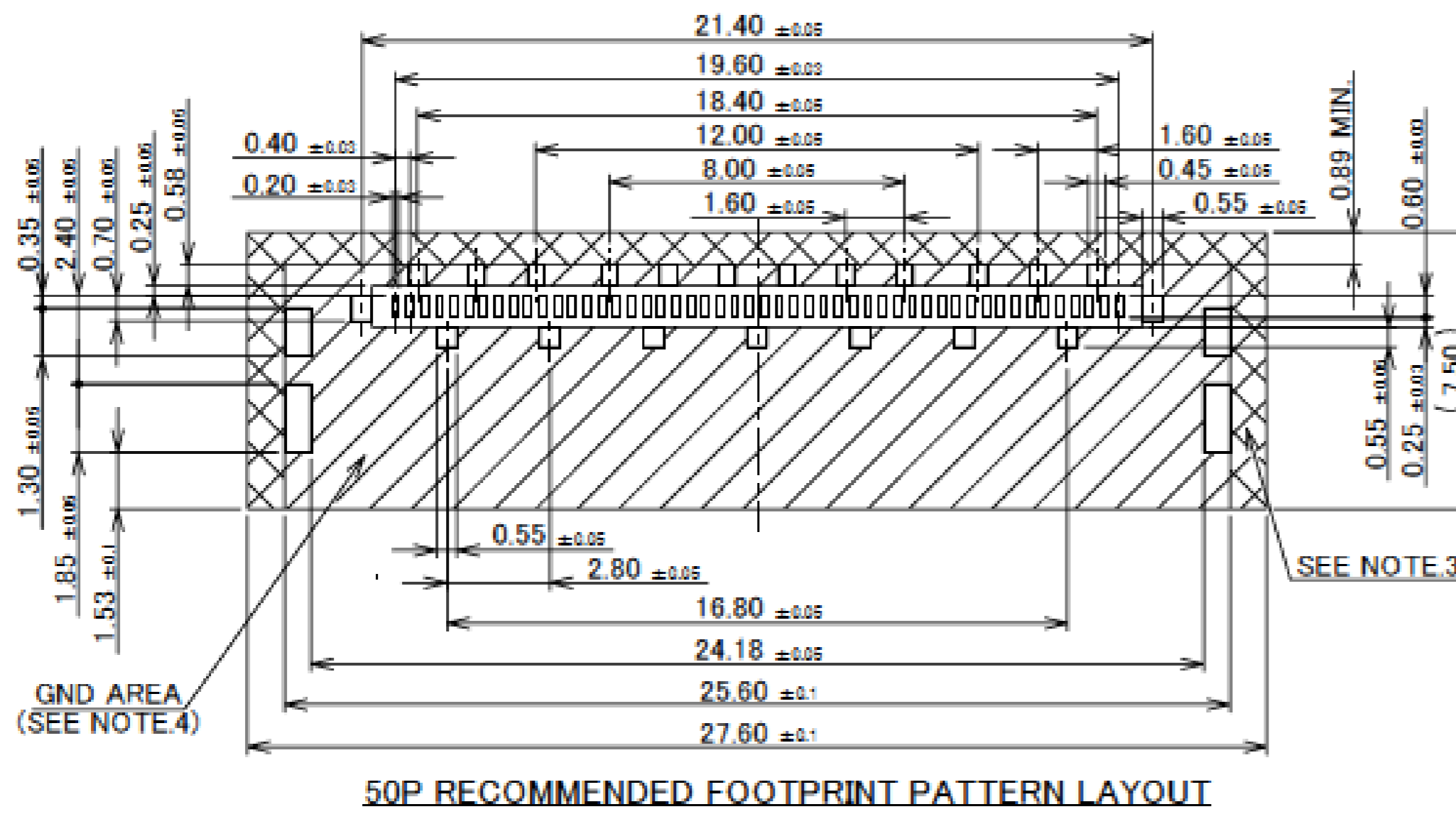
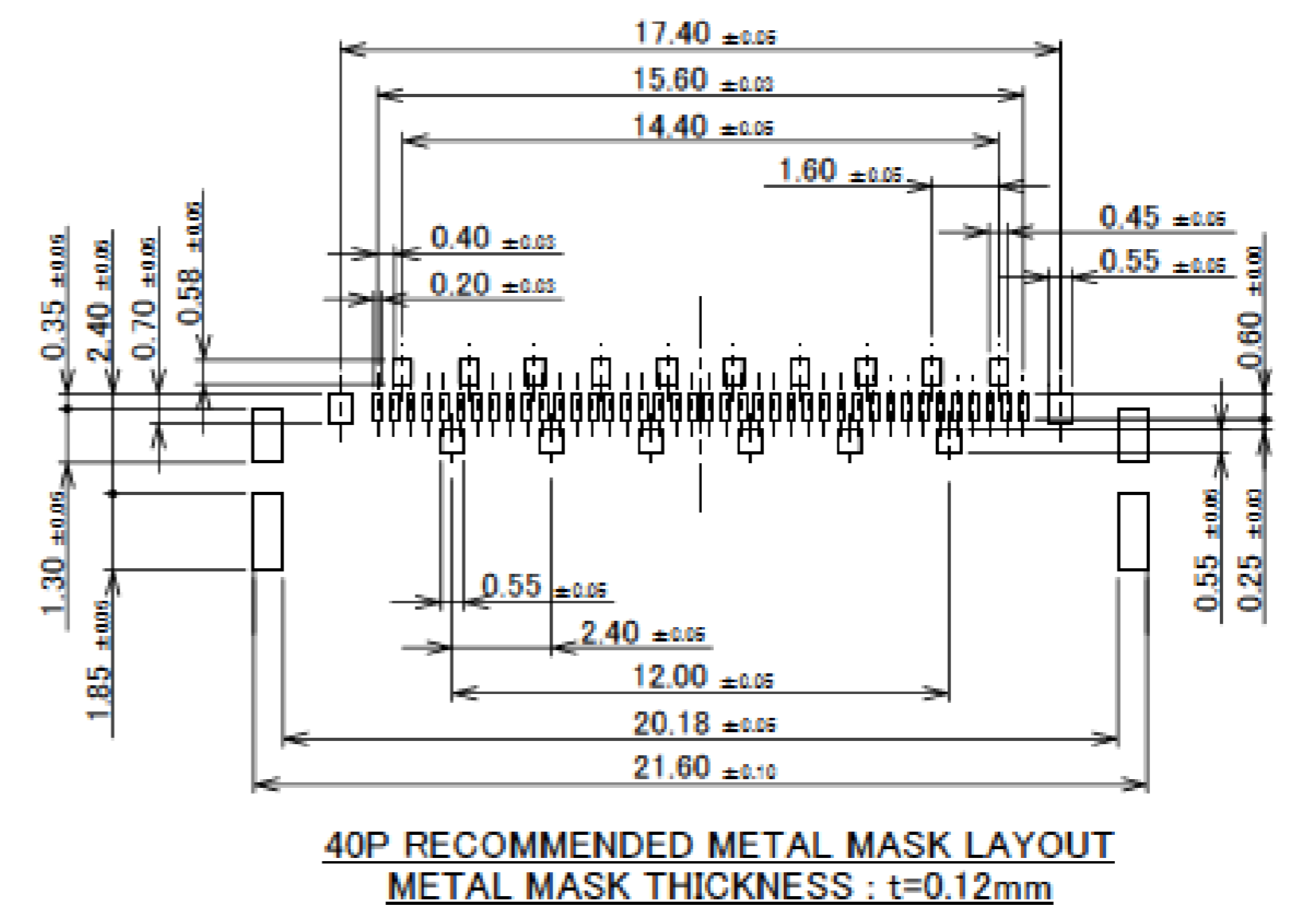
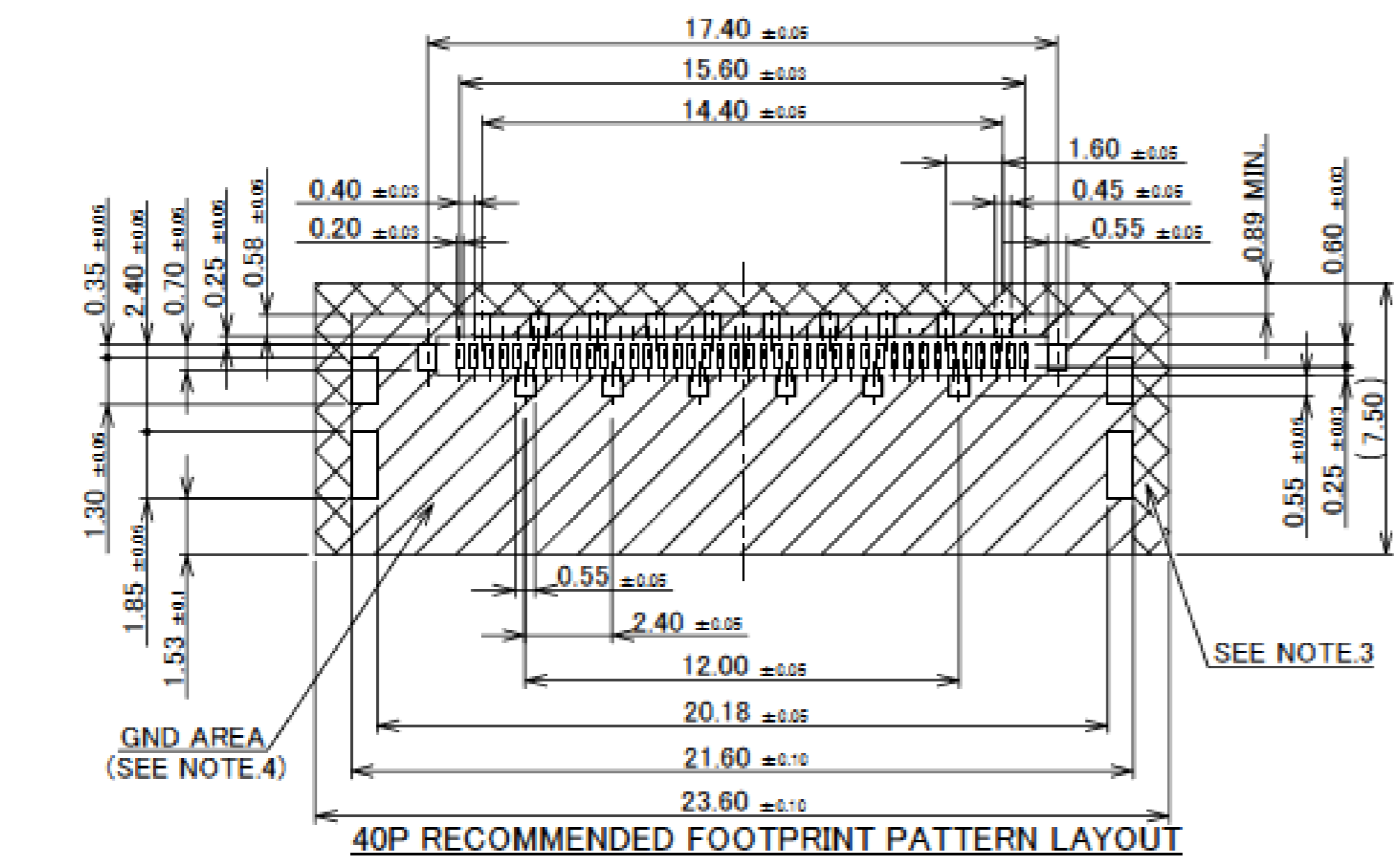


- NOTES:
 1. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
 2. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Rev.13

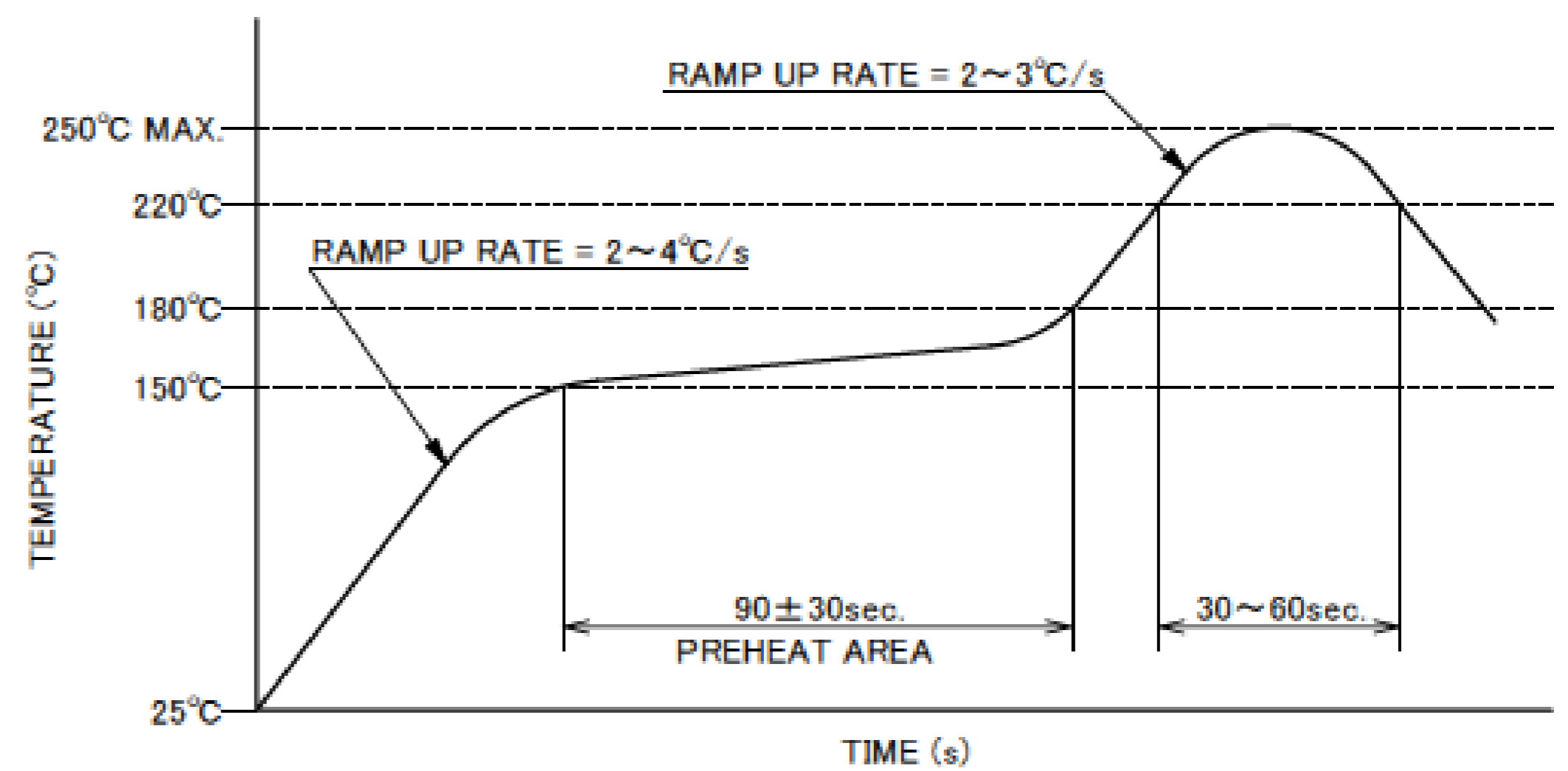
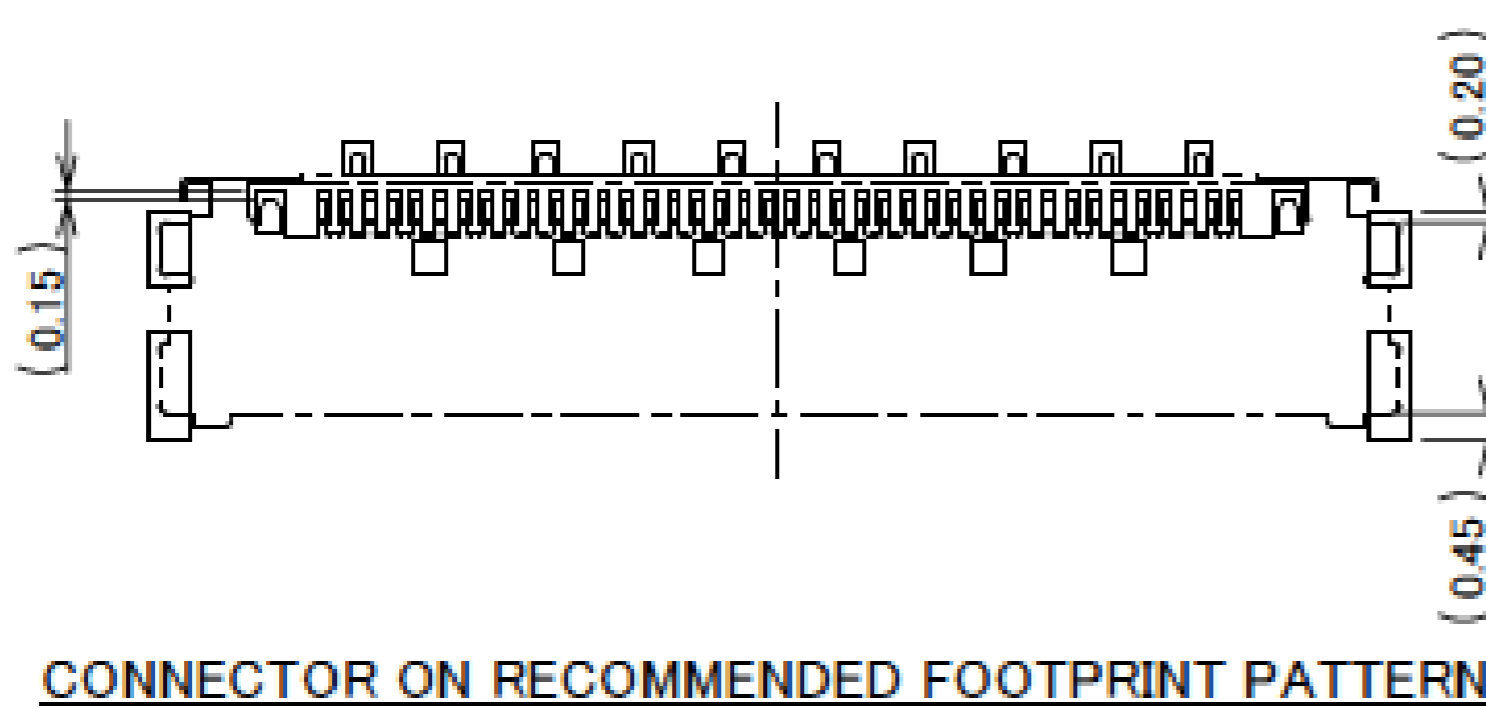
Rev.13

Receptacle Assembly



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

Rev.13



Receptacle Assembly

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL : 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)	0.1A AC/DC [AWG#44] PER CONTACT PIN/UP TO 50 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN/UP TO 50 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 50 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 18 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN/UP TO 6 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT PIN/UP TO 6 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPURTURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~378K(-40°C~105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENDING)
CONTACT RESISTANCE	INITIAL : 180mohm MAX.(AWG#34) / AFTER TEST : \sphericalangle40mohm MAX. 275mohm MAX.(AWG#36) 360mohm MAX.(AWG#38) 600mohm MAX.(AWG#40) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \sphericalangle40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER 30 CYCLES)	20P : 9.70N MAX. 30P : 14.55N MAX. 40P : 19.40N MAX. 50P : 24.25N MAX.
UN-MATING FORCE (INITIAL / AFTER 30 CYCLES)	20P : 2.0N MIN. 30P : 3.0N MIN. 40P : 4.0N MIN. 50P : 5.0N MIN.
CABLE RETENTION FORCE	20P : 9.70N MIN. 30P : 14.55N MIN. 40P : 19.40N MIN. 50P : 24.25N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2163
TEST REPORT	TR-15103
INSTRUCTION MANUAL	HIM-15033
PACKING STANDARD	PST-15027
APPEARANCE CRITERIA No.	QLS-A***

Rev.13

Custom Connectors Available

 RF Connector

MHF® series



 CABLINE® 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

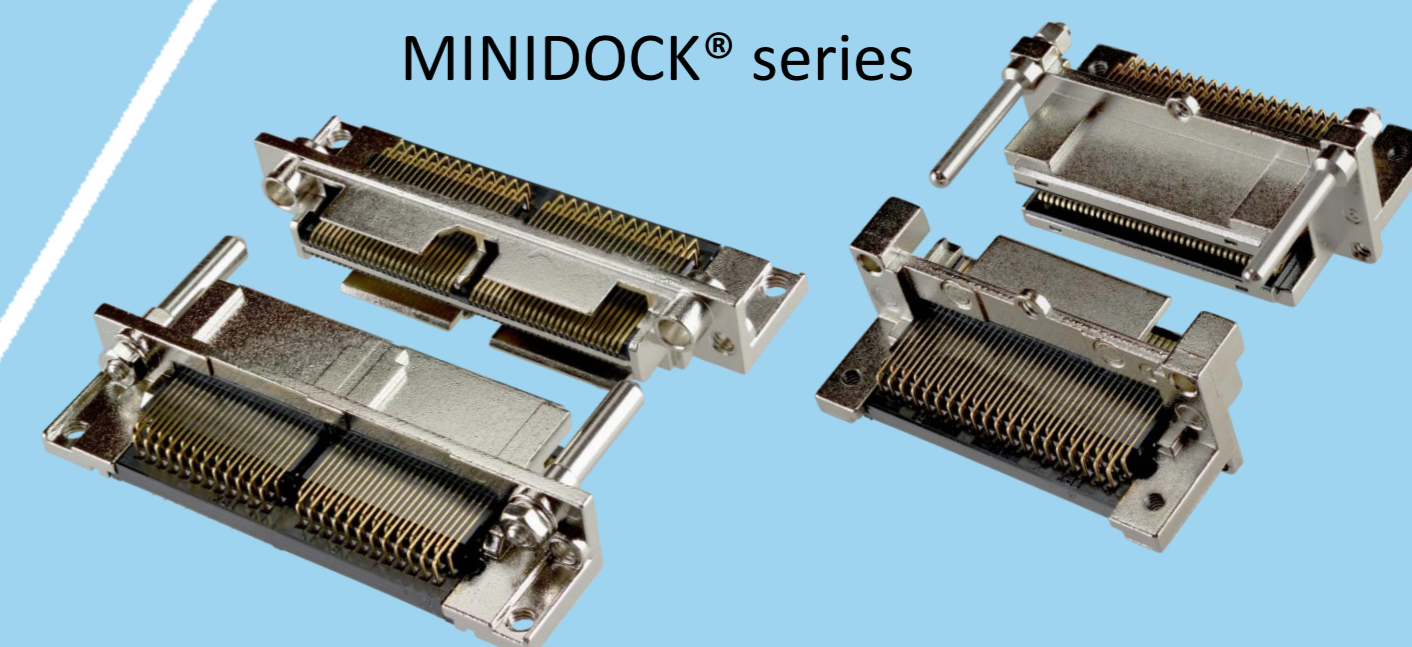


Inquiry



MINIDOCK® series

 I/O Connector



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