

CABLINE®-CAL IIF

超薄(嵌合高度 0.9 mm max.)，全屏蔽設計和機械鎖扣，適用於高速數據傳輸 (32 Gbps/lane) · 0.4mm 間距，水平對插款的FPC連接器

Product Specifications:

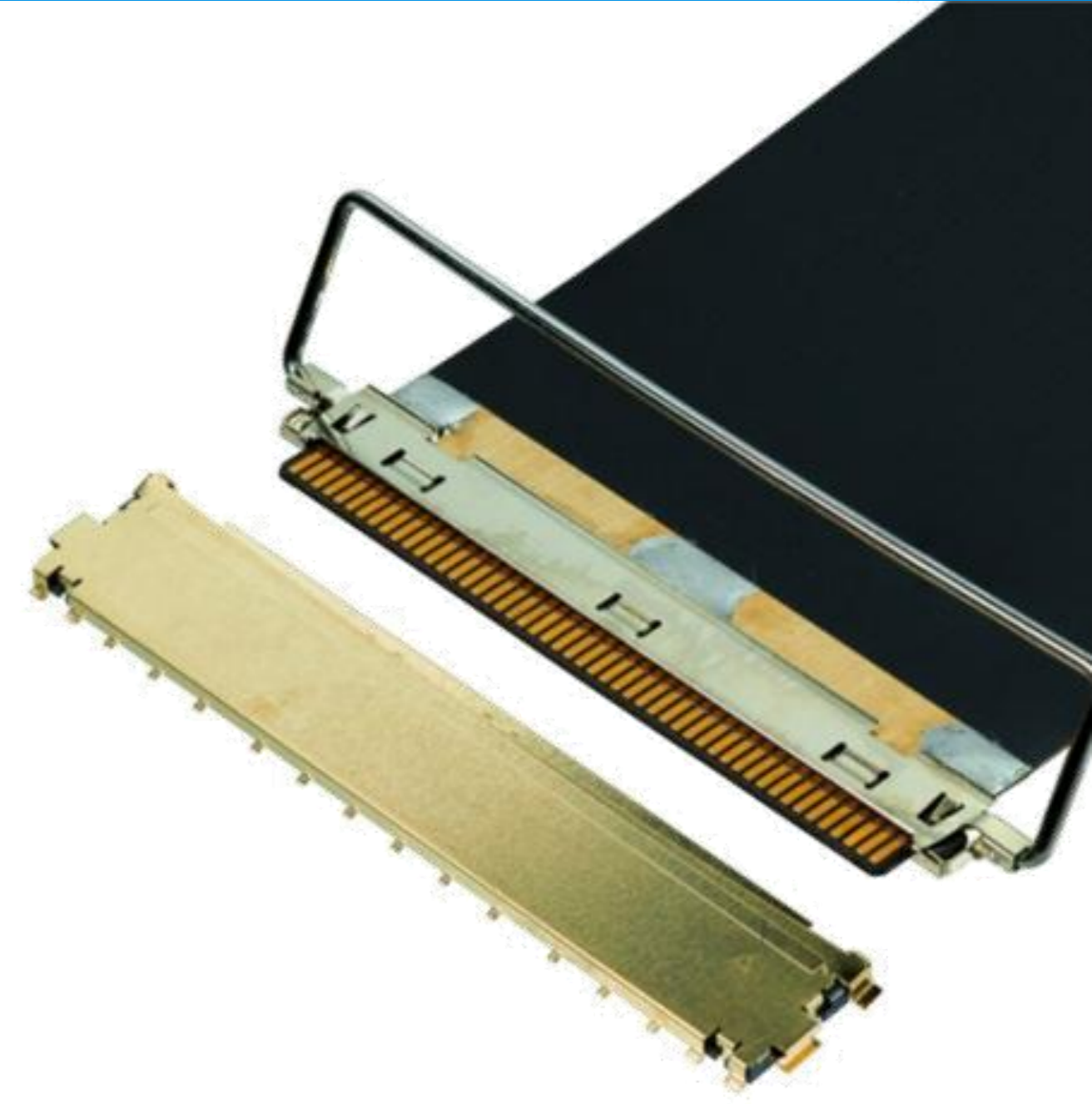
Mating type	Horizontal	
Board Pitch	0.4 mm	
Wiping Length	0.44 mm	
Mated size	Height	0.9 mm max.
	Width	5.74 + (0.4 x pin count) mm
	Depth	6.41 mm
Pin Counts	Range	Up to 60
	Available	50

Applicable FPC

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

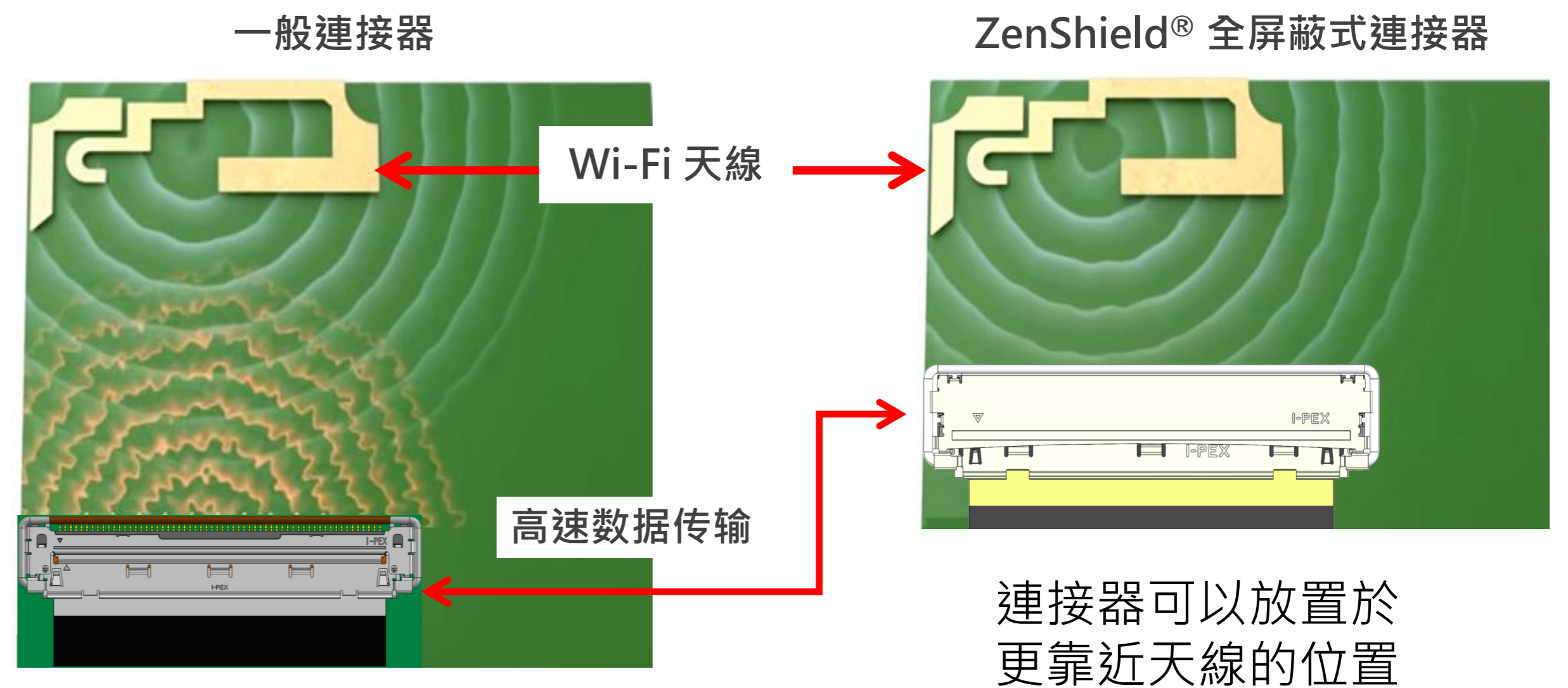
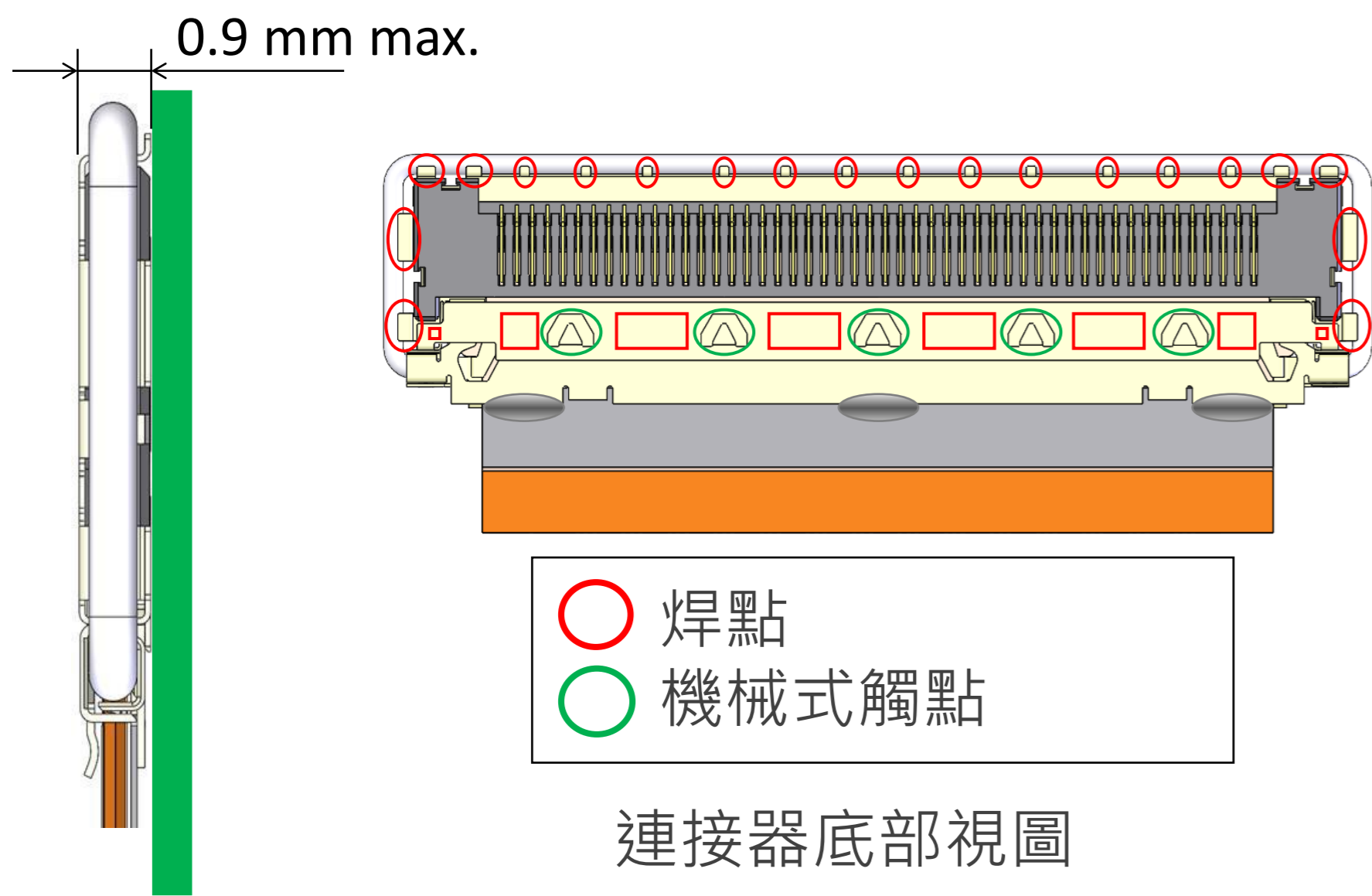
Applicable Standards (Reference Only):

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



*若有規格外 Pin 數需求,請與當地負責業務窗口聯繫。

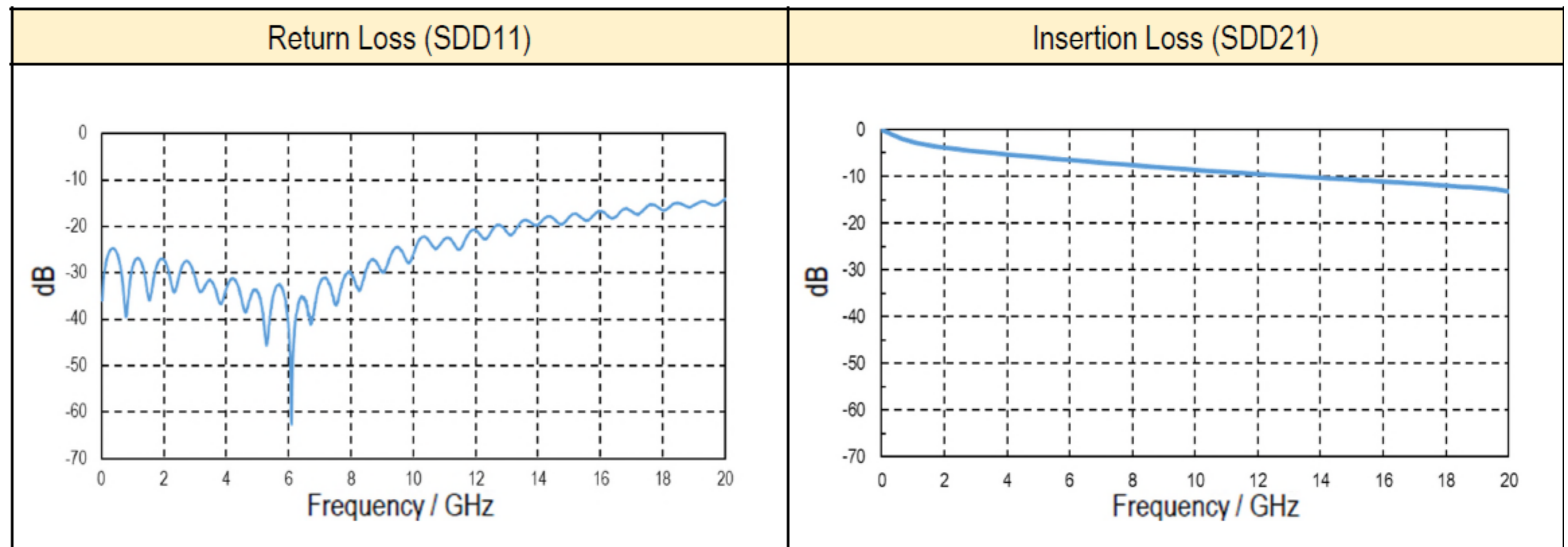
超薄(嵌合高度 0.9 mm max.)，ZenShield®的全屏蔽設計和多點接地結構，EMC 解決方案的理想選擇



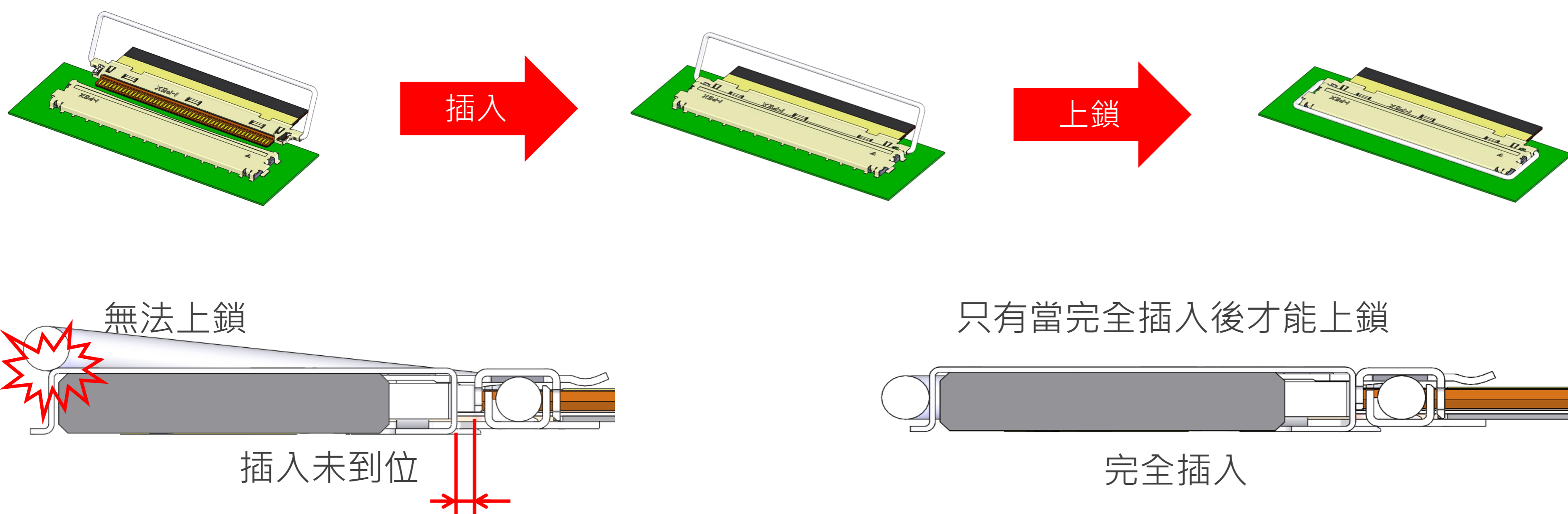
高速率傳輸, 32Gbps/lane應用的理想選擇

Measurement results

Connector: CABLINE-CAL IIF 50P
FPC: Shielded FPC, Differential 90 ohm
Length : 100 mm
Pin Assignment: GSSGSSG



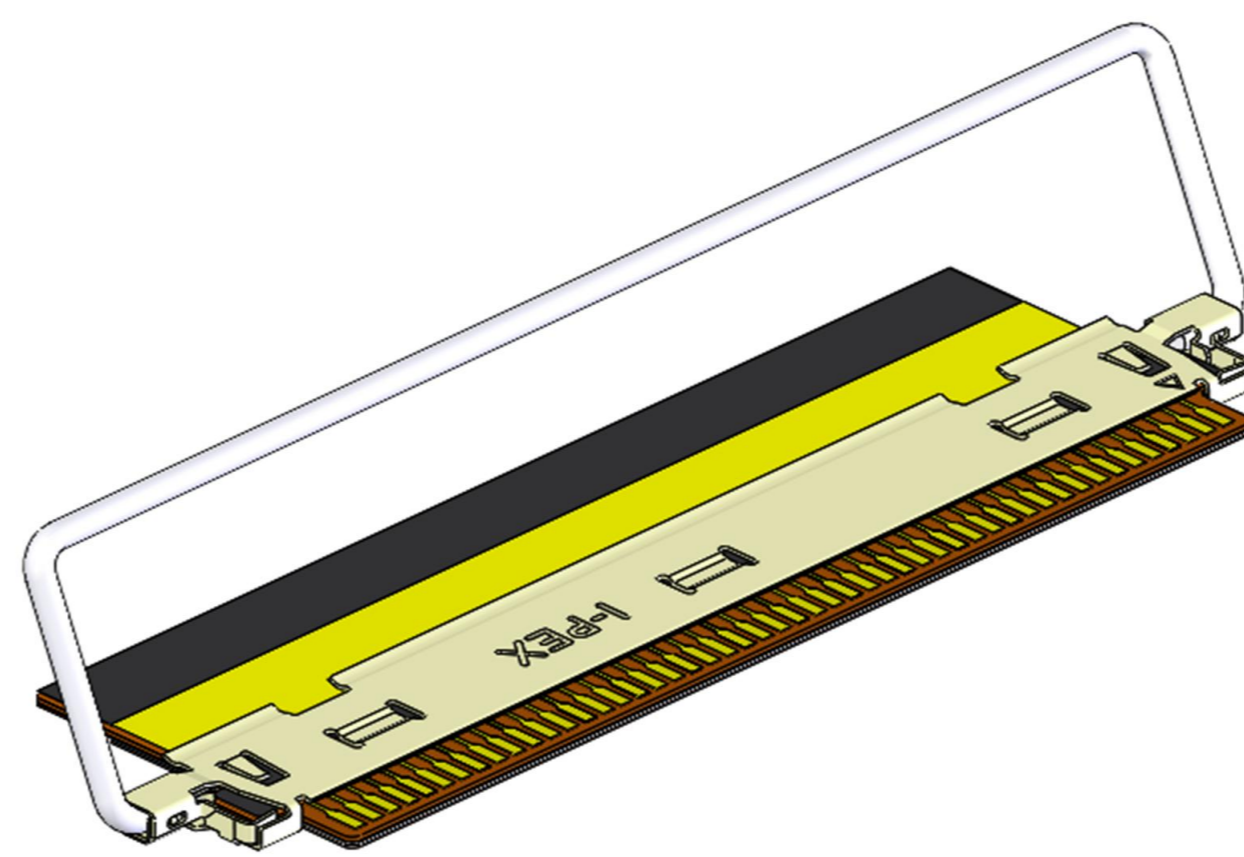
機械式鎖扣罩防止連接器不完全嵌合及脫落



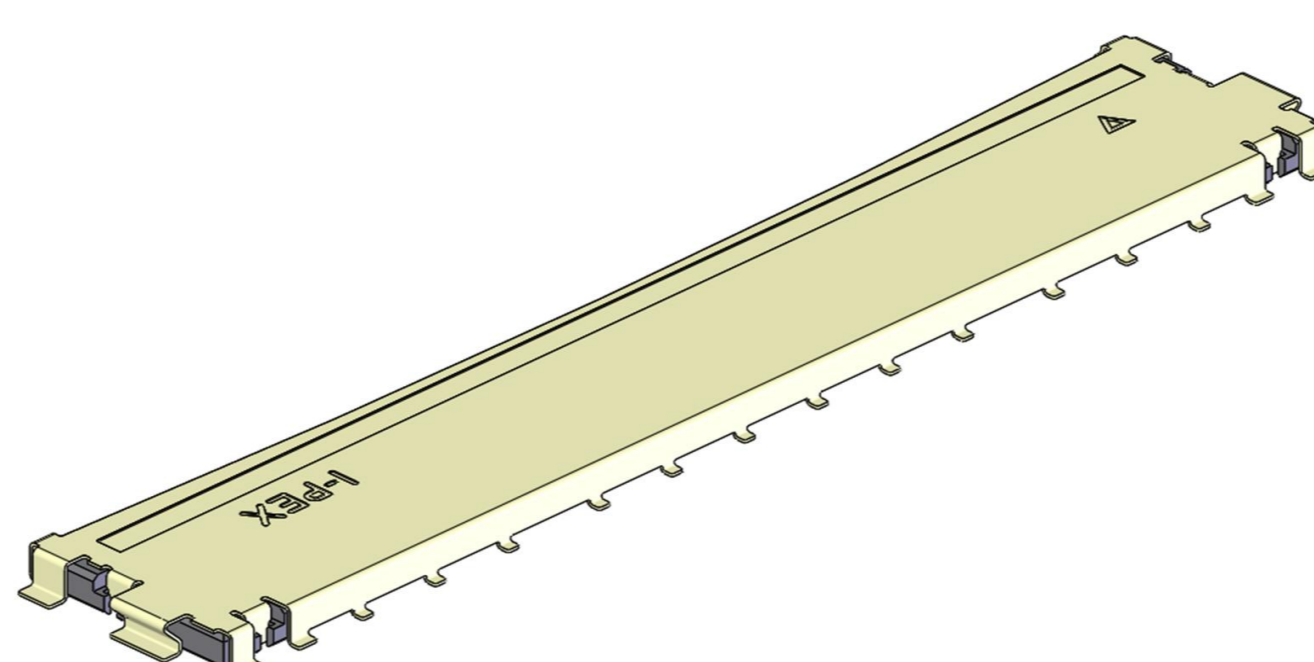
Component Parts Details

Component Parts

Connector parts



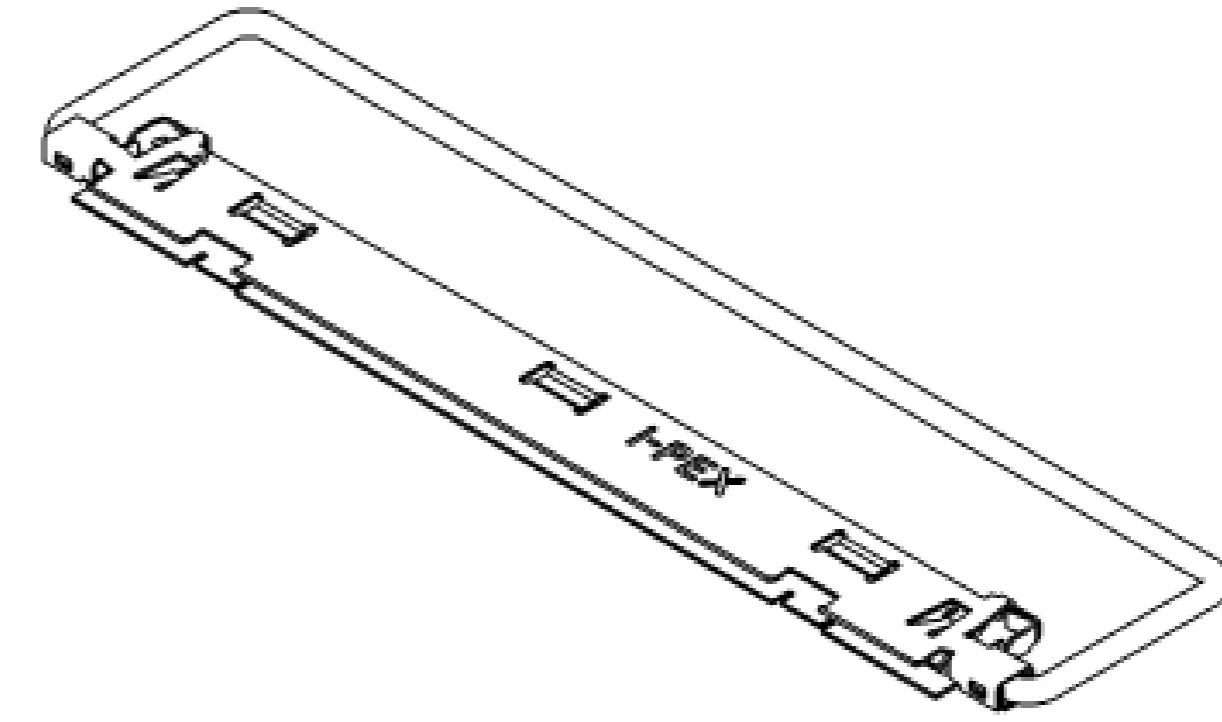
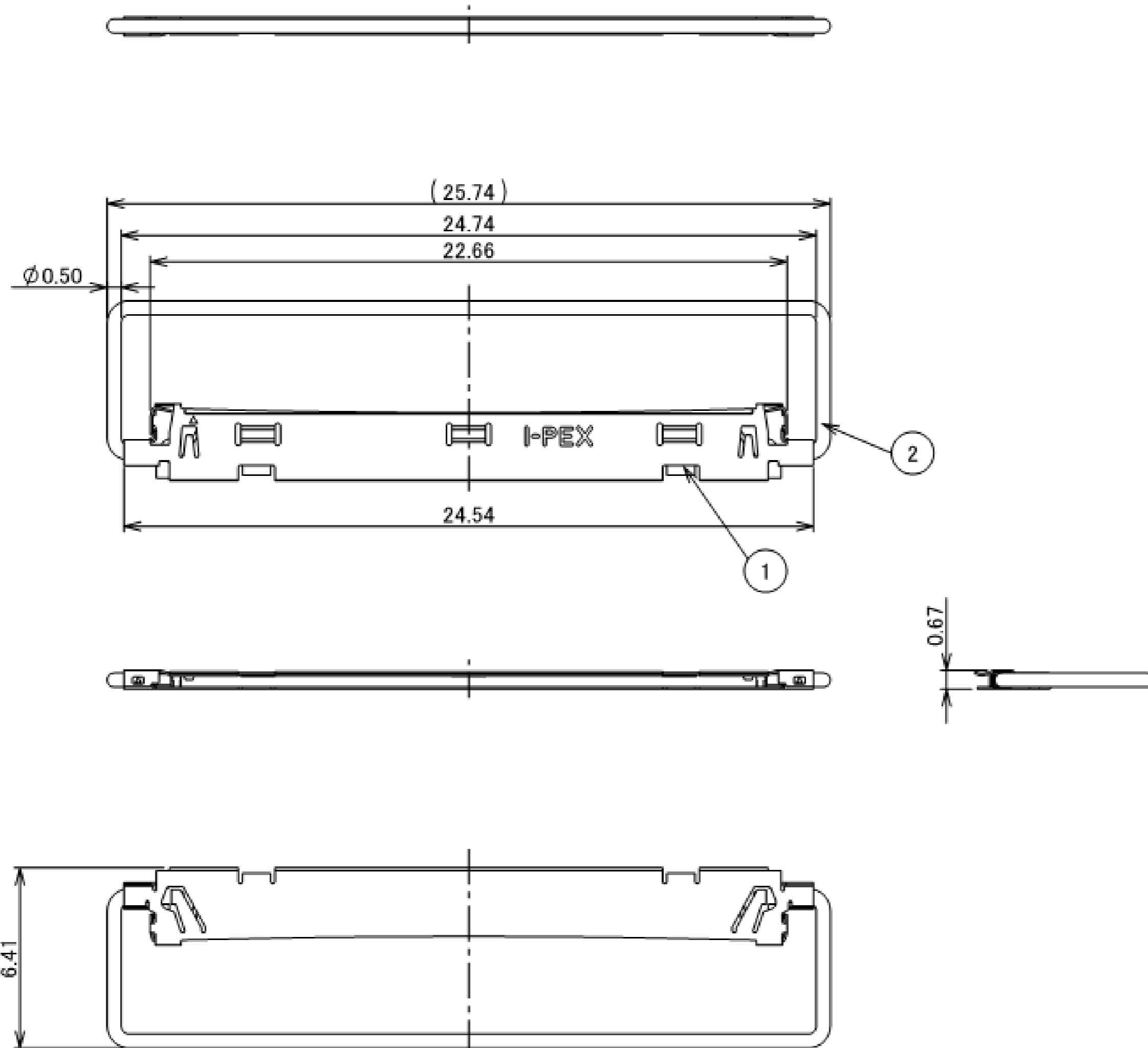
CABLINE-CAL IIF PLUG with FPC



CABLINE-CAL IIF RECEPTACLE

Shell Assembly

Recommended P/N		21088-050T-01
P/N	Pos.	
21088-050T-01	50	

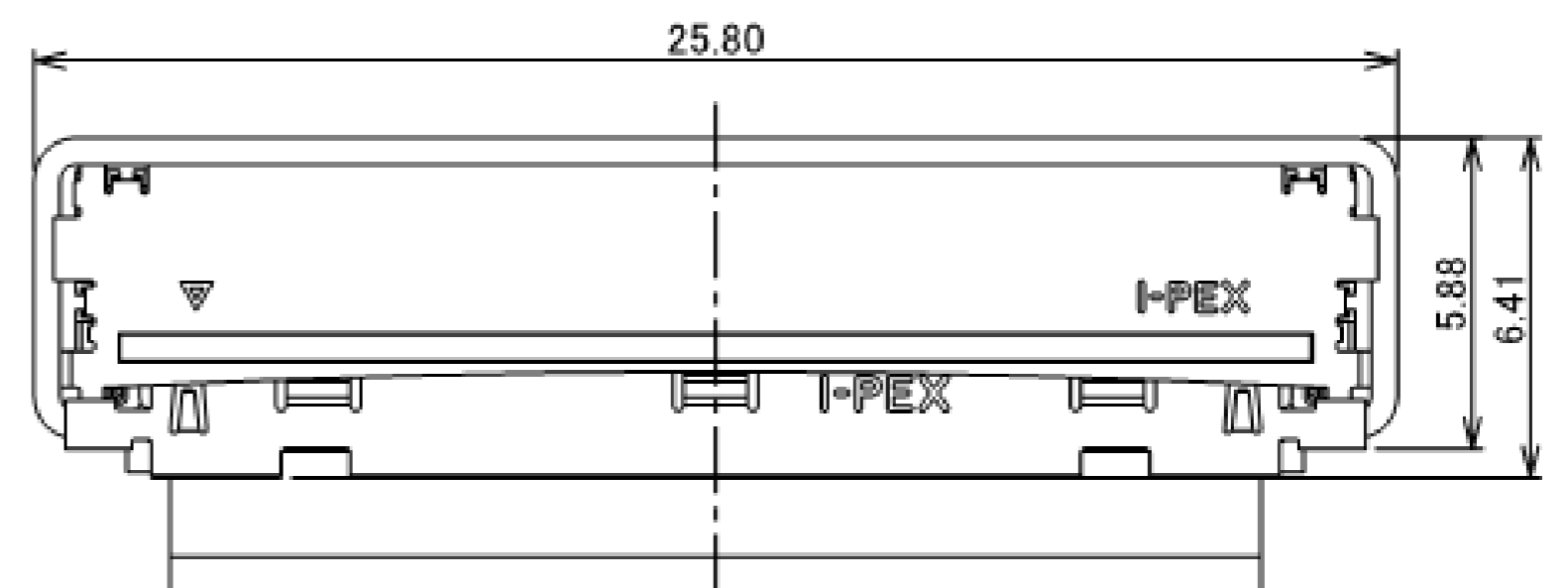
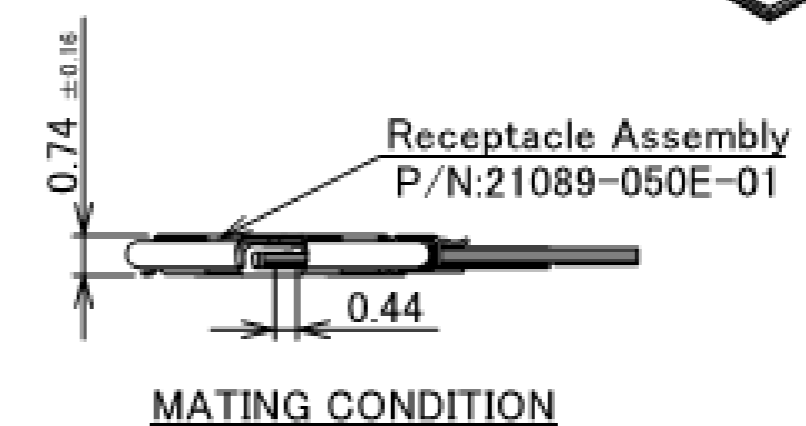
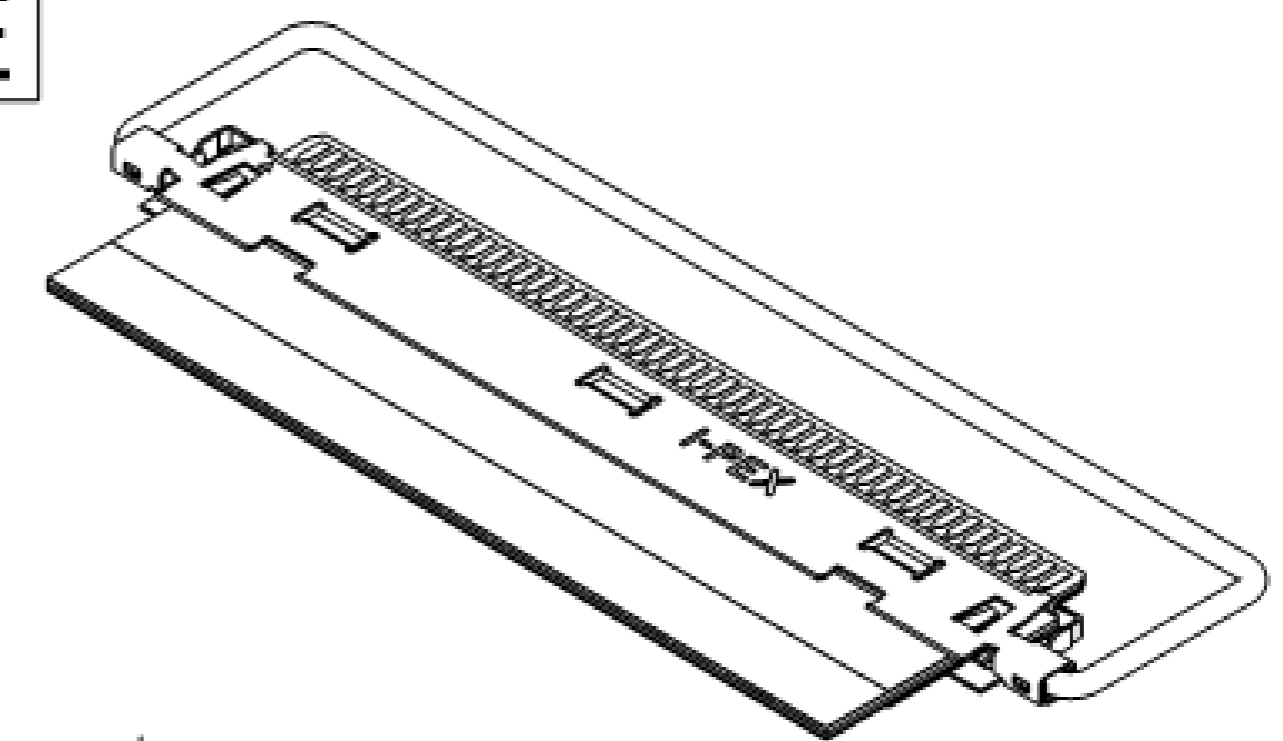
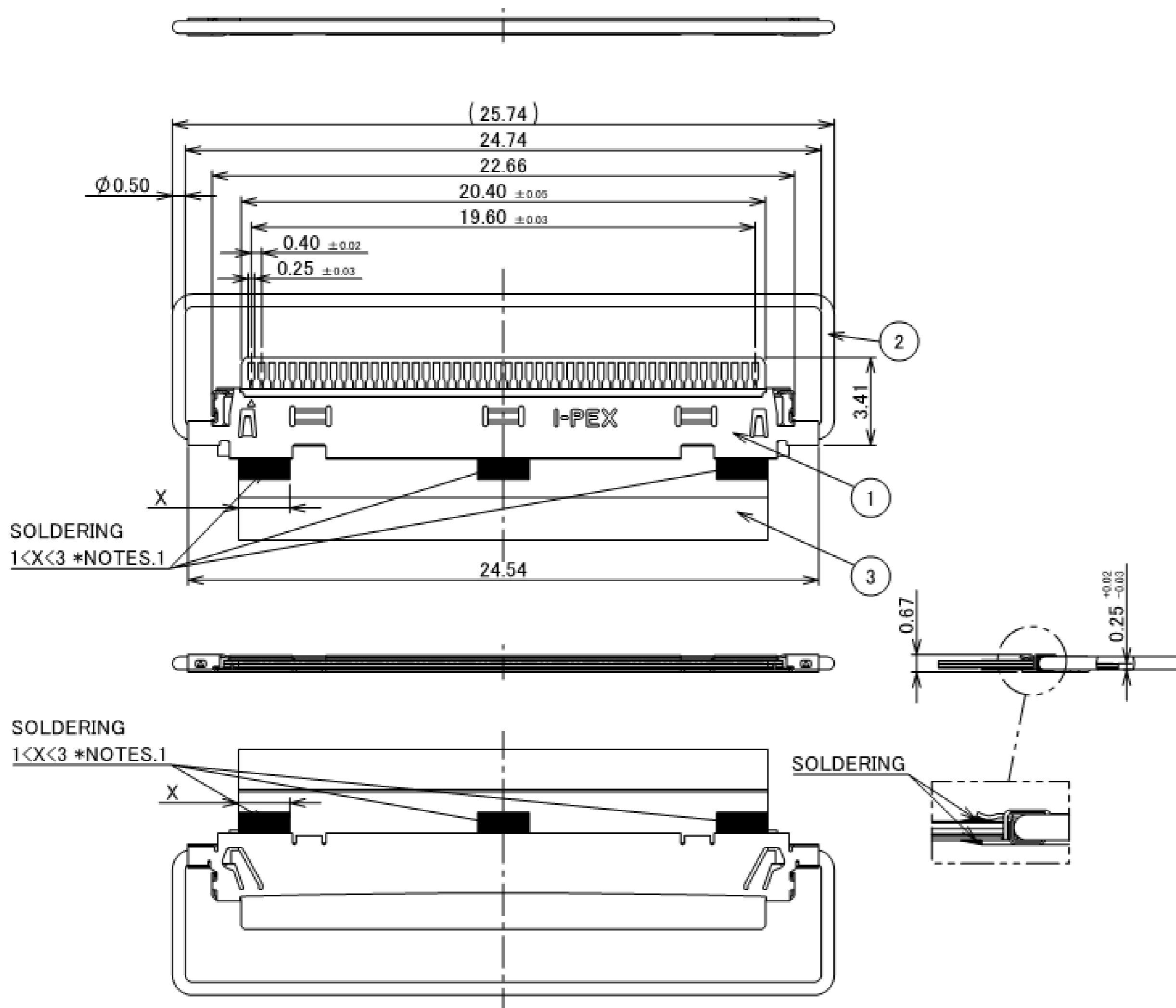


2	LOCK BAR	SUS	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

Rev.0

P/N	Pos.
21088-050T-01	50

FPC ASSEMBLY STATE



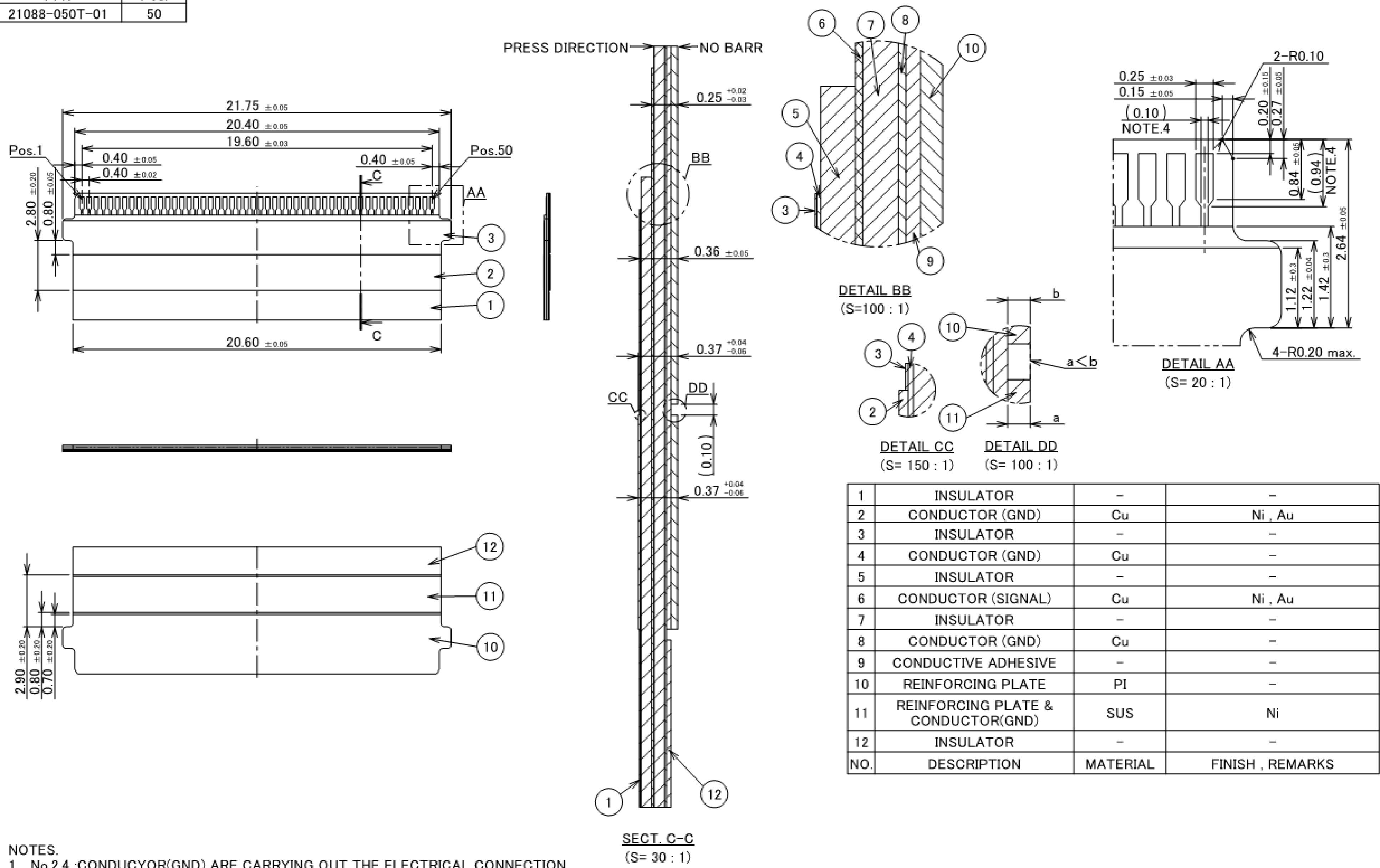
3	FPC	-	-
2	LOCK BAR	SUS	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

NOTES.
1. SOLDERING AREA X IS RECOMMENDED DIMENSION.
IT DOES NOT MATTER IF IT MIGHT BE EXCEED THE RECOMMENDED DIMENSION.

Rev.0

Shell Assembly

P/N	Pos.
21088-050T-01	50



- NOTES.
- No.2,4 : CONDUCTOR(GND) ARE CARRYING OUT THE ELECTRICAL CONNECTION.
 - No.6 : SIGNAL Pos. AND No.2,4,8,11 : CONDUCTOR(GND) ARE NOT CONTACTING.
 - ADHESIVE SHOULD USE THERMOSETTING.
 - NUMBERS WITHIN PARENTHESES ARE ARBITRARY DIMENSIONS.
CHANGE DIMENSIONS IN ACCORDANCE WITH CHARACTERISTIC IMPEDANCE VALUE.

NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
1	INSULATOR	-	-
2	CONDUCTOR (GND)	Cu	Ni , Au
3	INSULATOR	-	-
4	CONDUCTOR (GND)	Cu	-
5	INSULATOR	-	-
6	CONDUCTOR (SIGNAL)	Cu	Ni , Au
7	INSULATOR	-	-
8	CONDUCTOR (GND)	Cu	-
9	CONDUCTIVE ADHESIVE	-	-
10	REINFORCING PLATE	PI	-
11	REINFORCING PLATE & CONDUCTOR(GND)	SUS	Ni
12	INSULATOR	-	-
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

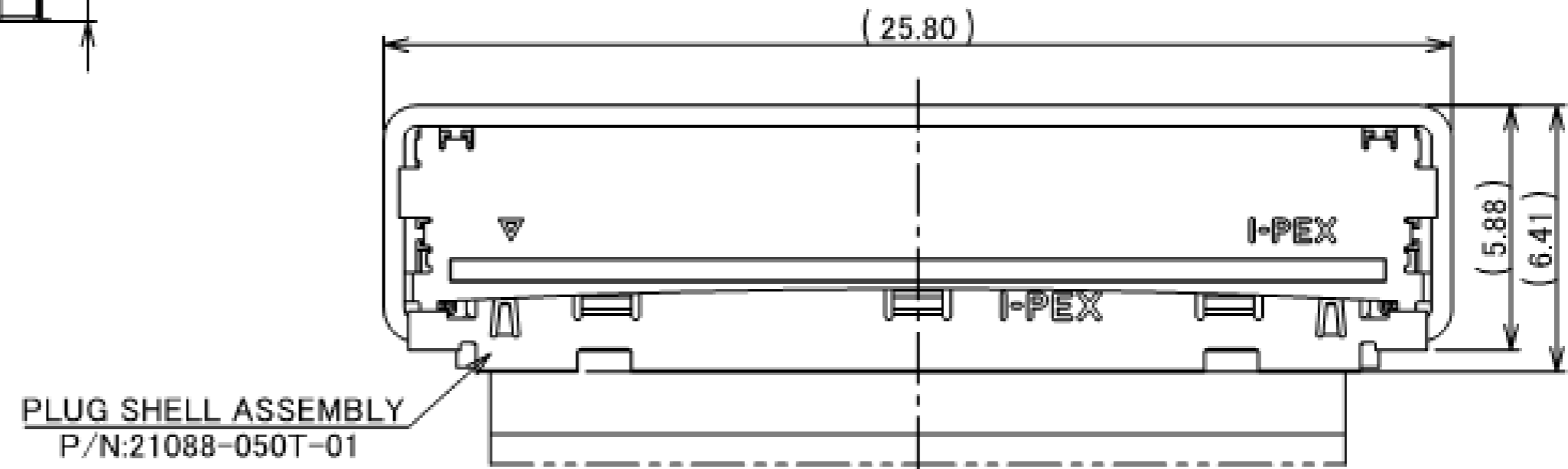
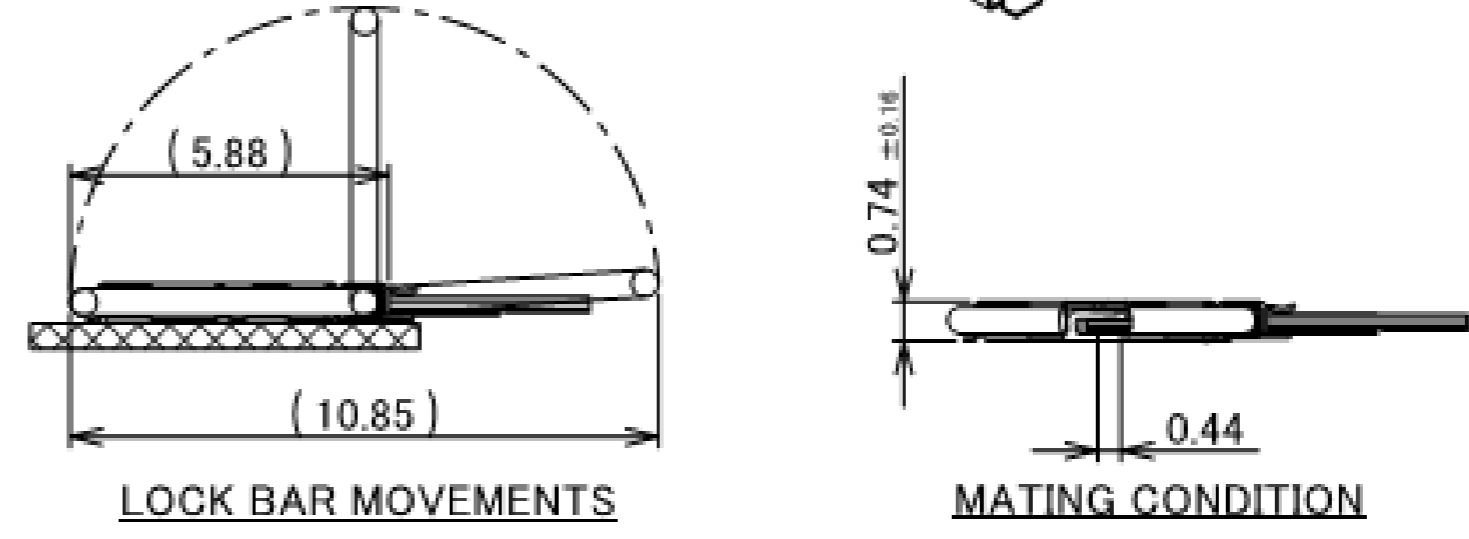
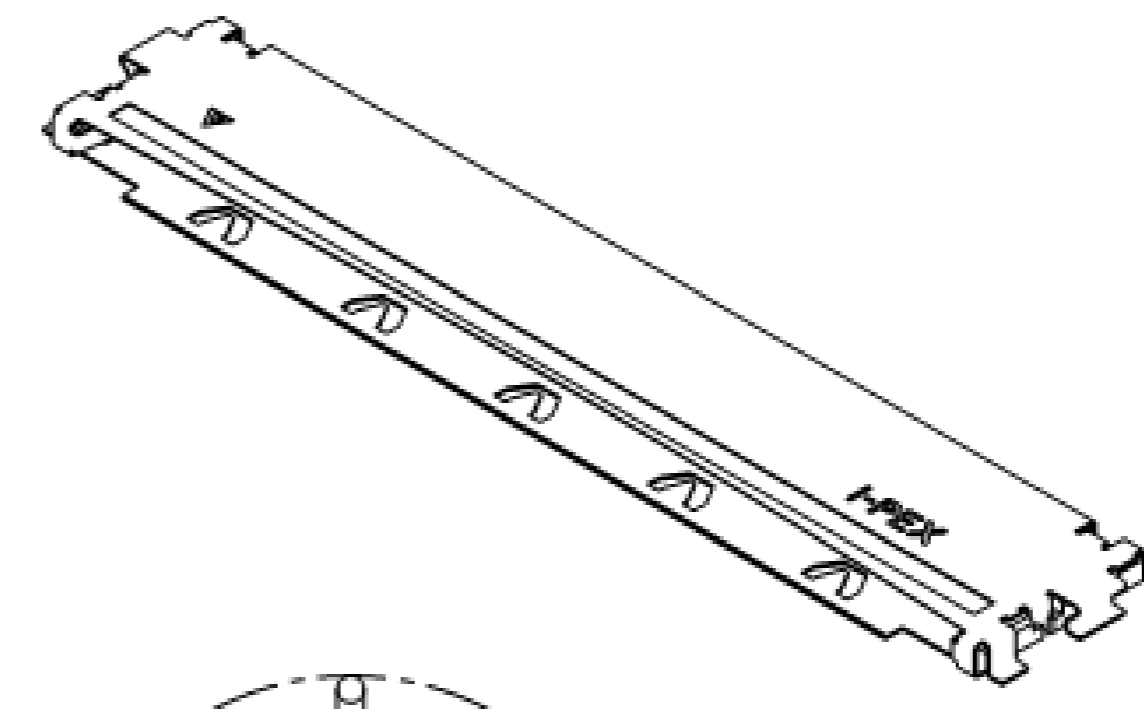
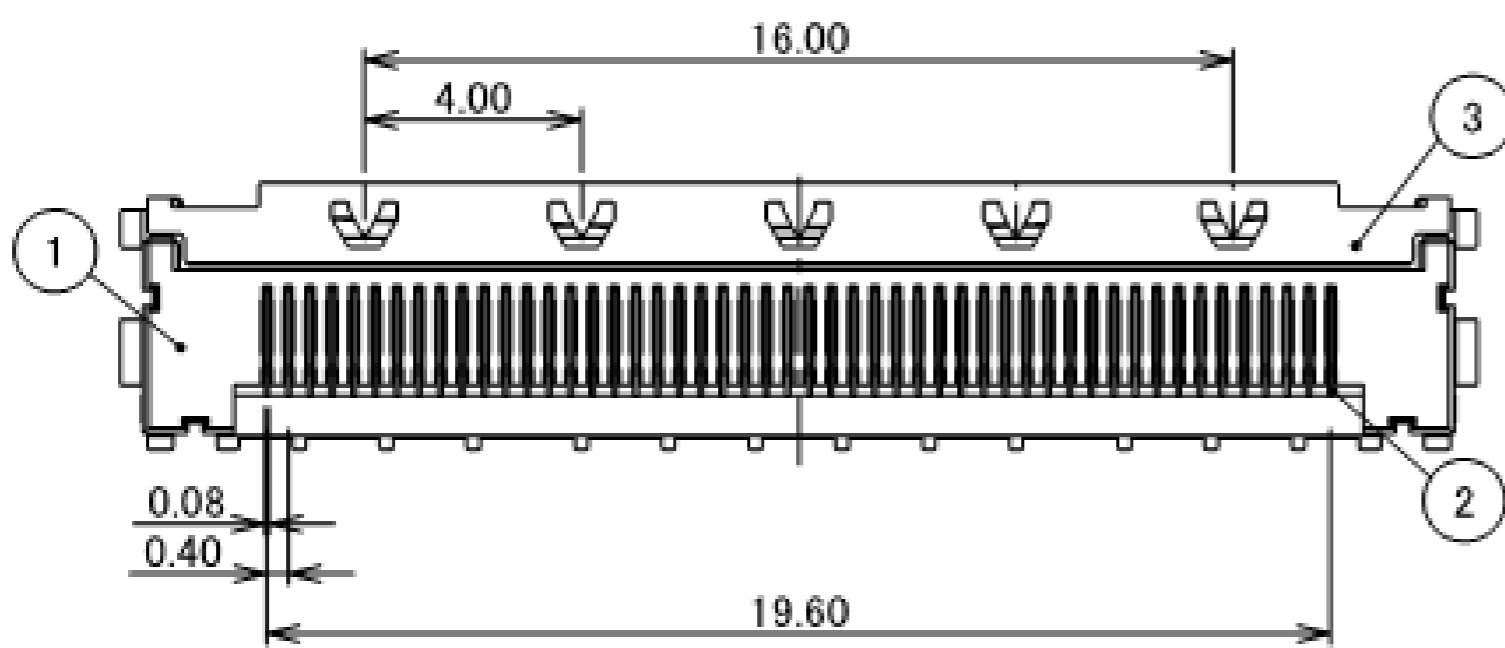
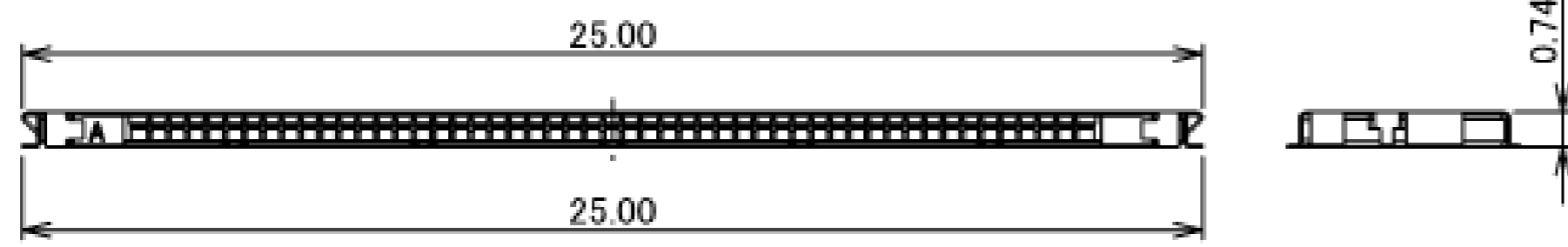
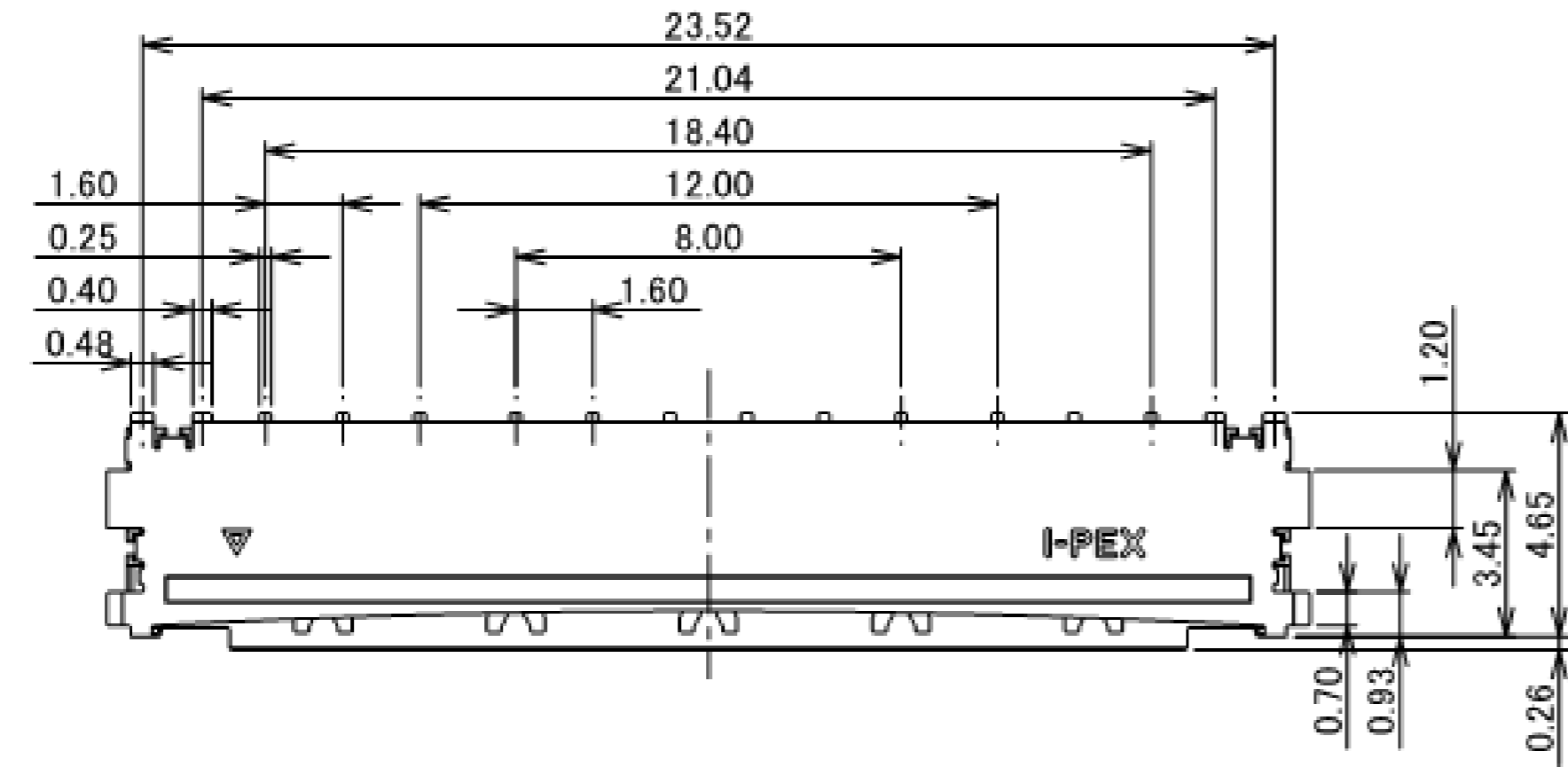
Rev.0

ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.26A AC/DC (per contact) ※ TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \triangleleft40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \triangleleft40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	50P : 15.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	50P : 1.00N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2917
TEST REPORT	TR-24059
PACKING STANDARD	PST-24040
INSTRUCTION MANUAL	HIM-24027
APPEARANCE CRITERIA No.	QLS-A***

Rev.0

Receptacle Assembly

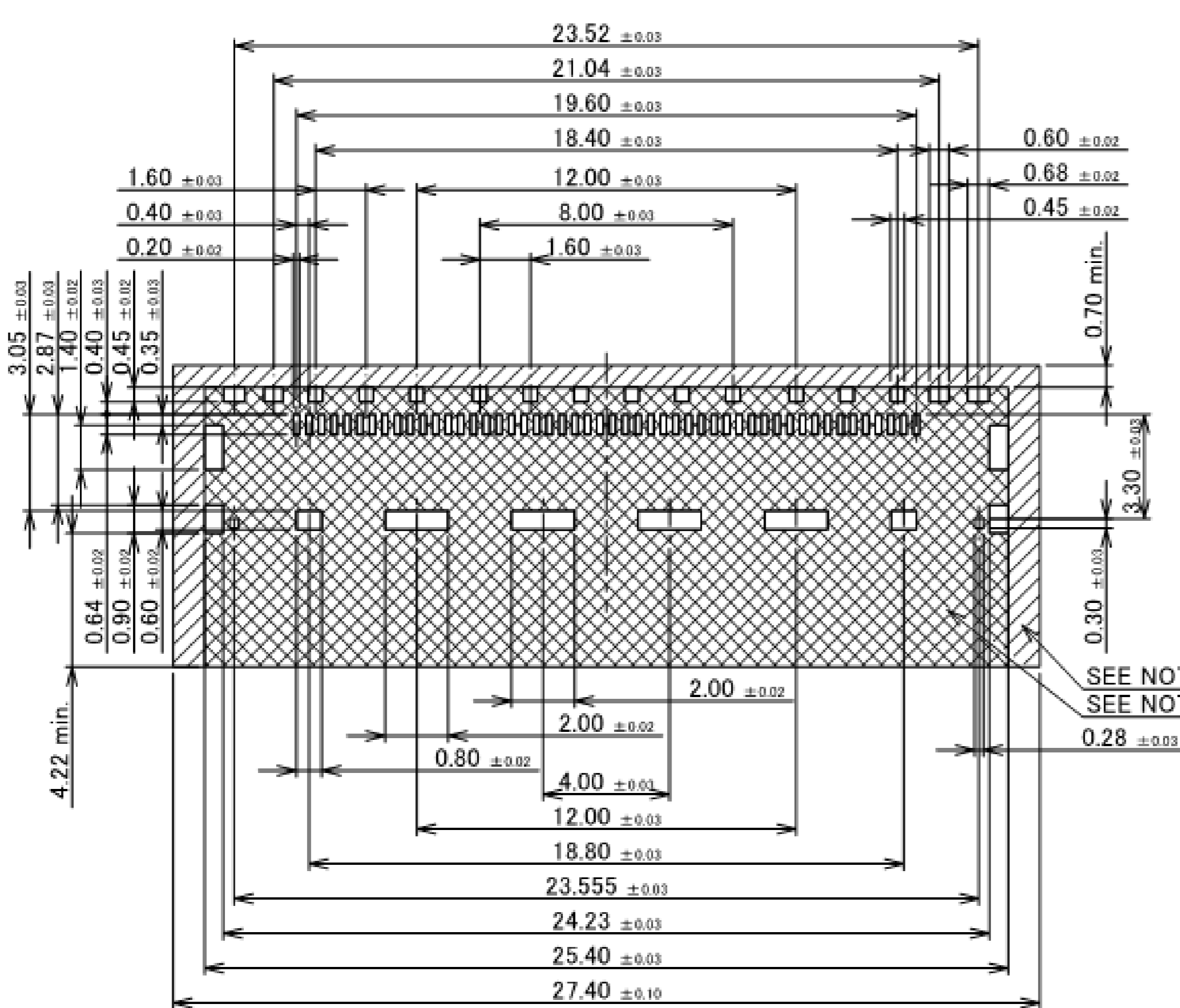
Recommended P/N	21089-050E-01
P/N	Pos.
21089-050E-01	50



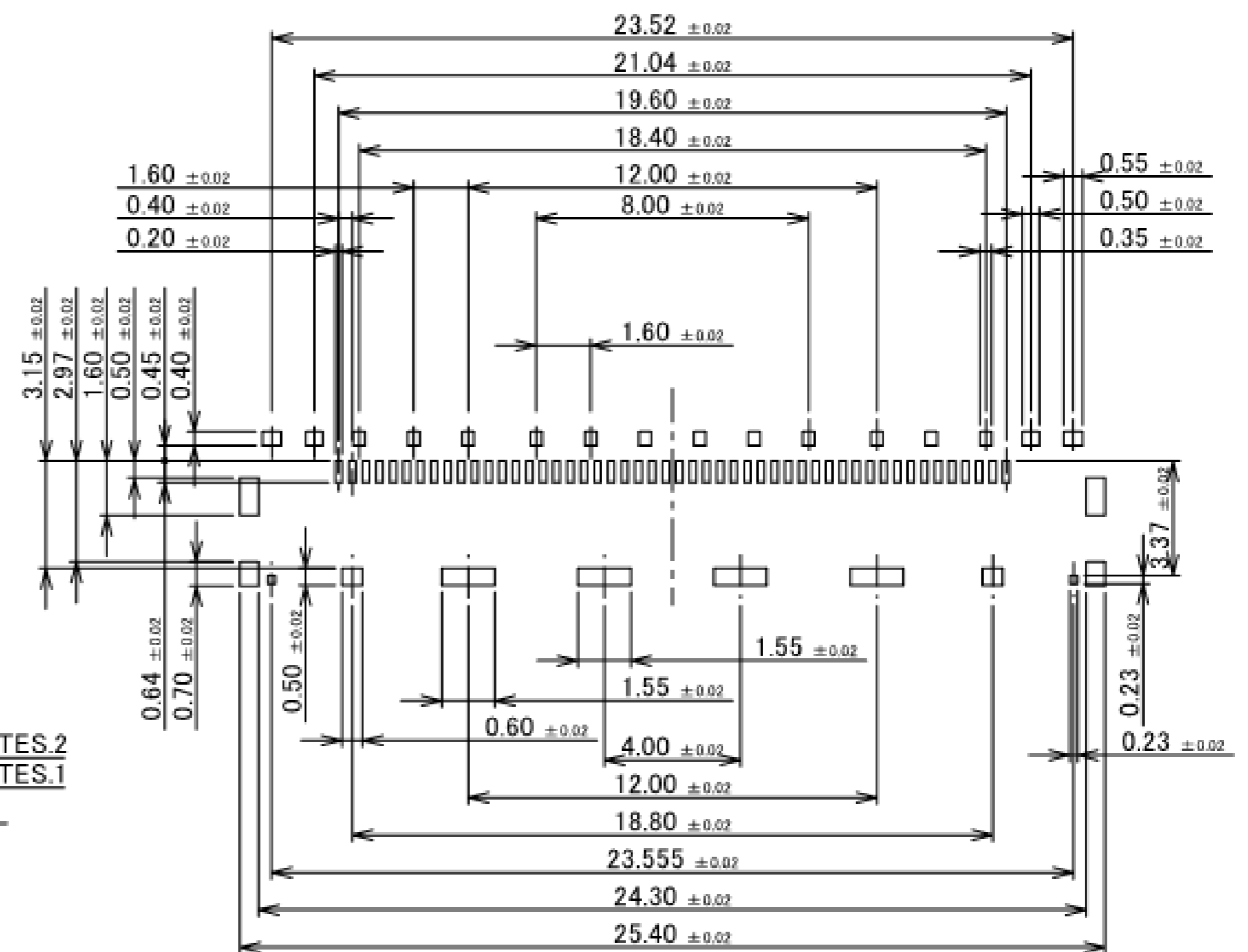
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. Au 0.01 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT AREA Au 0.10 μm MIN. SOLDERING AREA Au 0.03 μm MIN.
1	HOUSING	LCP	-

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P/N	Pos.
21089-050E-01	50



RECOMMENDED FOOTPRINT PATTERN LAYOUT



RECOMMENDED METAL MASK PATTERN LAYOUT
METAL MASK THICKNESS : t=0.12

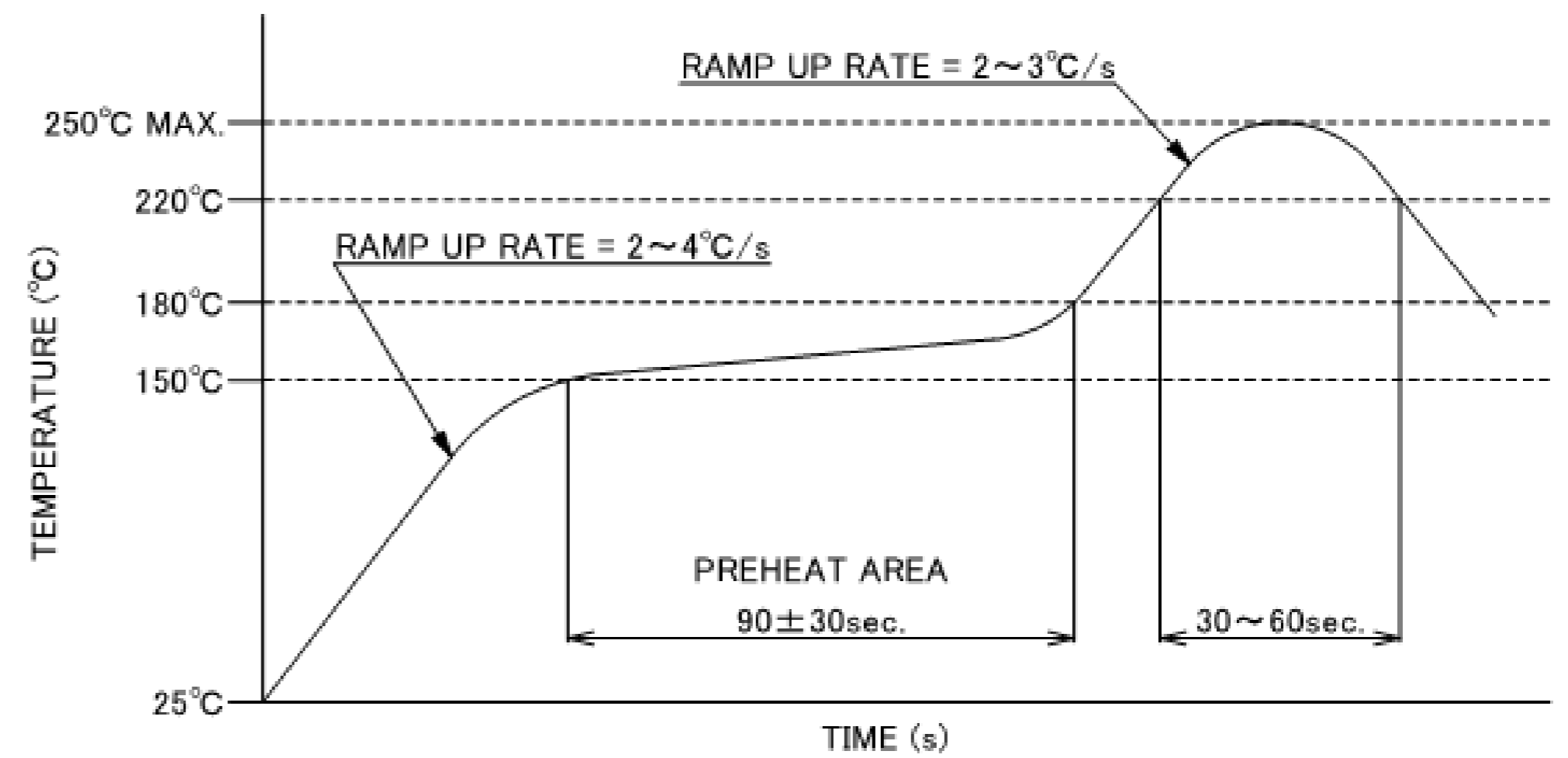
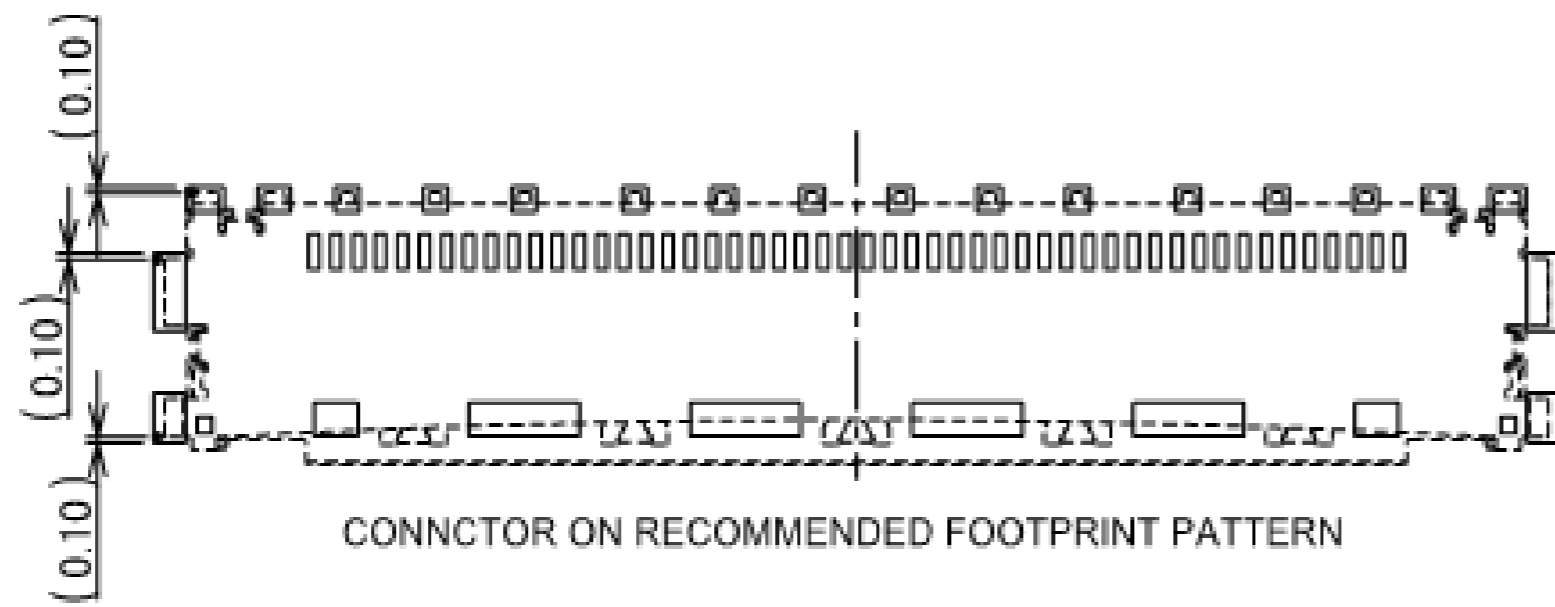
NOTES.

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

Rev.0

Receptacle Assembly

P/N	Pos.
21089-050E-01	50



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

Rev.0

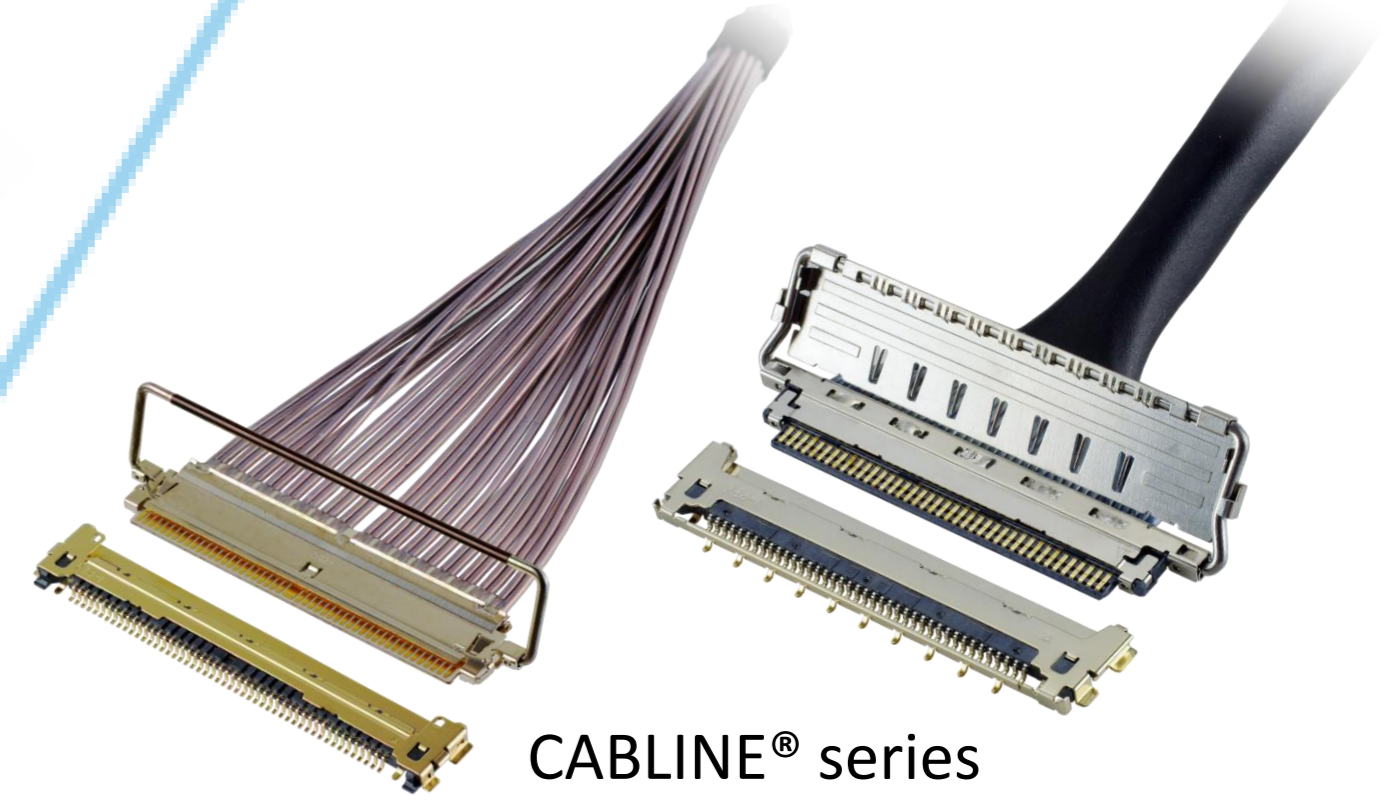
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OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
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GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \triangle 40mohm MAX.
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PRODUCT SPECIFICATION	PRS-2917
TEST REPORT	TR-24059
PACKING STANDARD	PST-24040
INSTRUCTION MANUAL	HIM-24027
APPEARANCE CRITERIA No.	QLS-A***

Rev.0

Custom Connectors Available

 RF Connectors

MHF® series



CABLINE® series

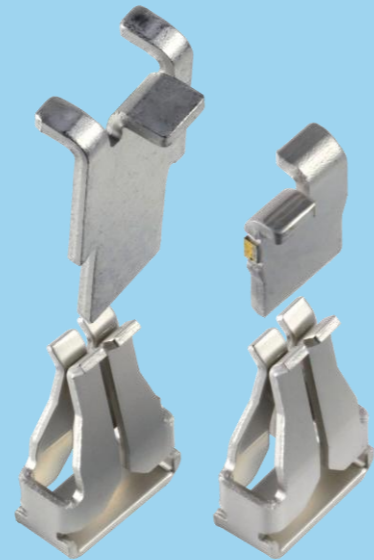


Micro-Coaxial/Twinaxial Connectors

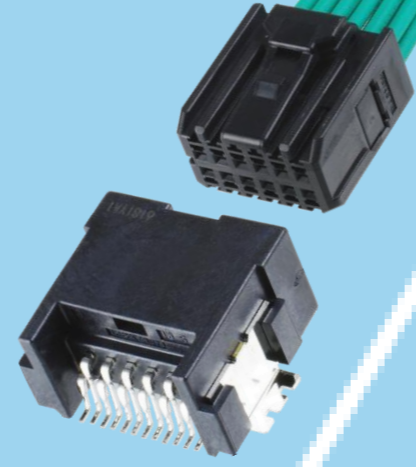


Wire-to-Board Connectors/Terminals

AP series



ISH® series



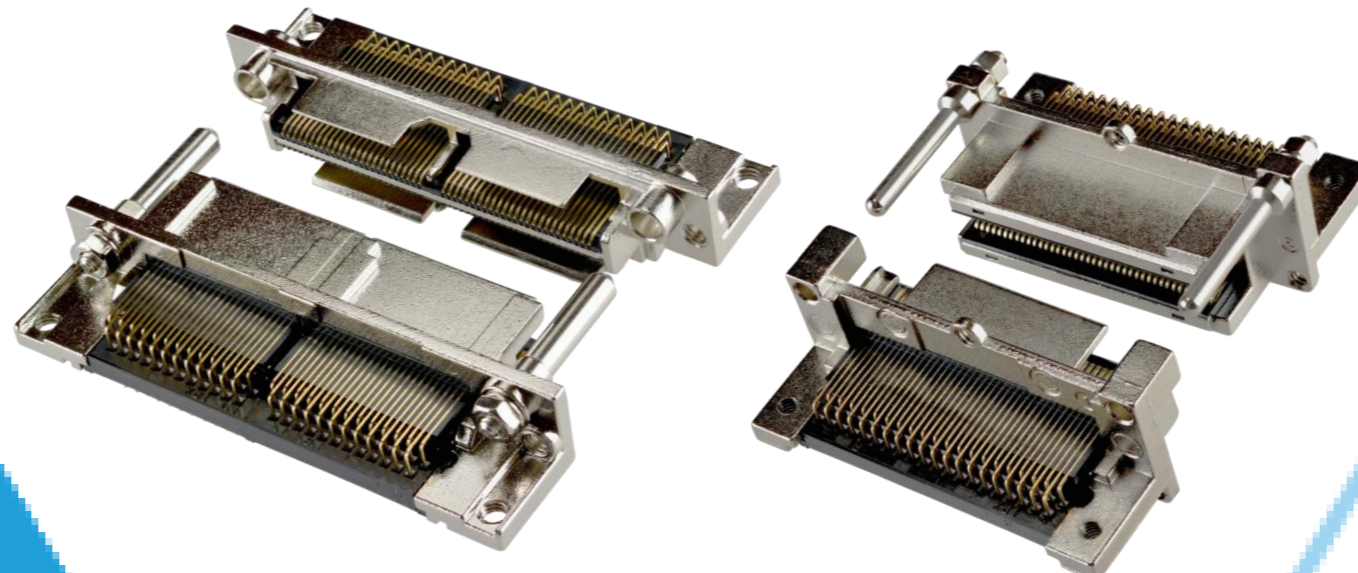
NOVASTACK® series



Board-to-Board Connectors



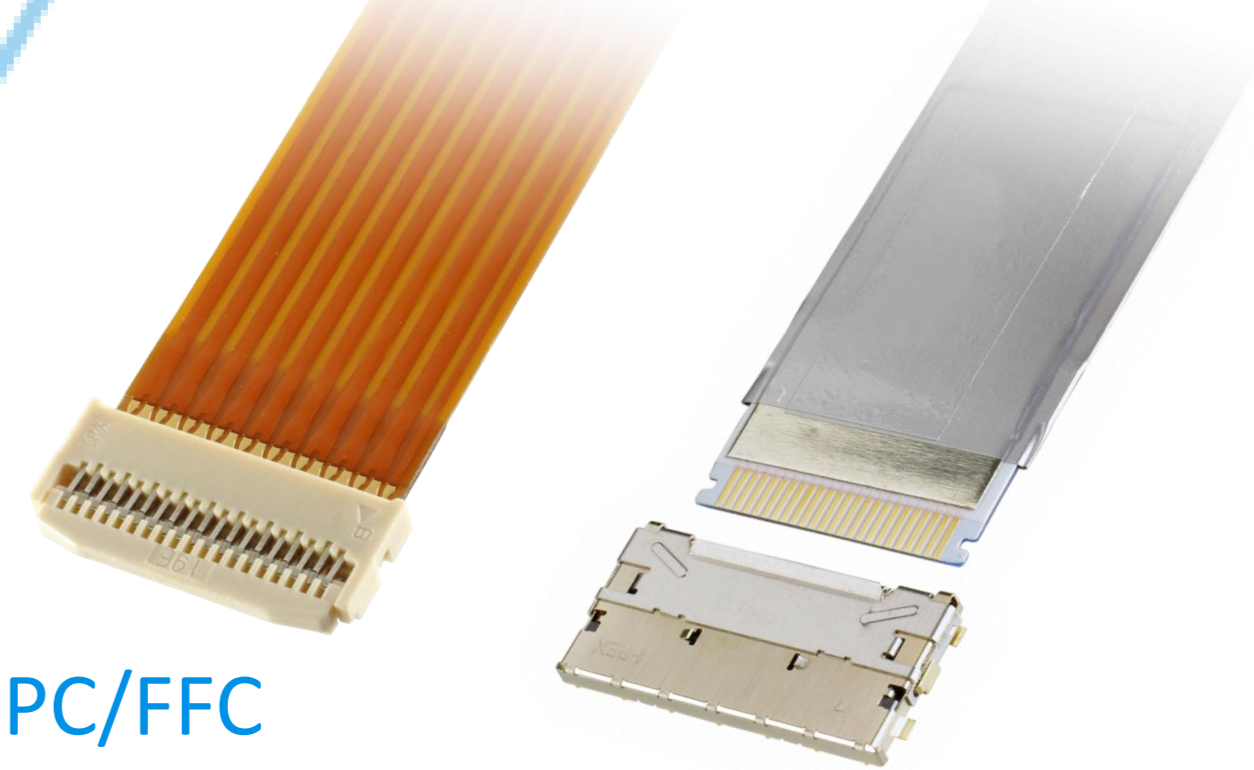
I/O Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC Connectors



Inquiry



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