

CABLINE®-CAL IIF

超薄(嵌合高度 0.9 mm max.), 全屏蔽设计和机械锁扣, 适用于高速数据传输 (32 Gbps/lane), 0.4mm 间距, 水平对插款的FPC连接器

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

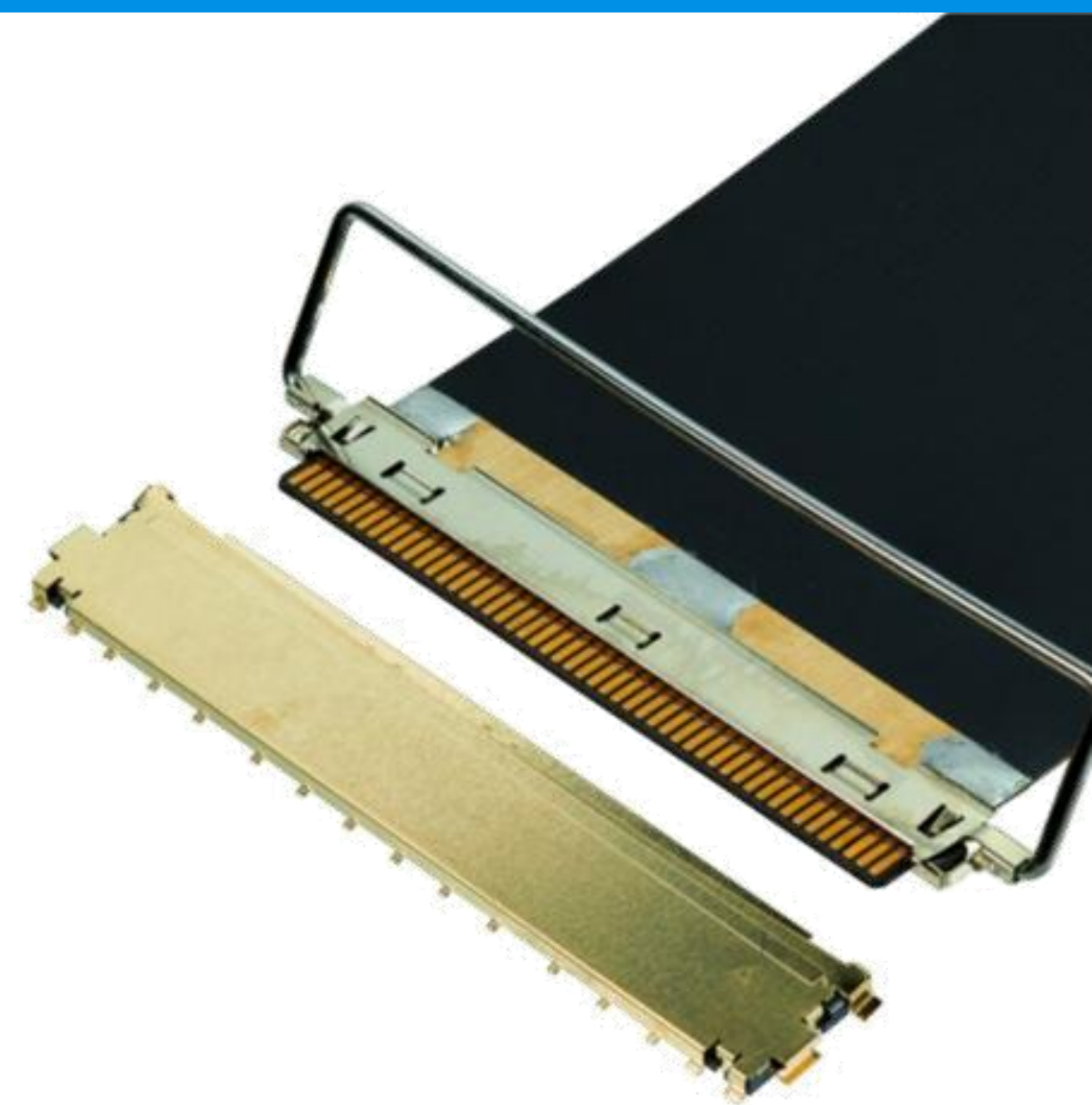
Applicable FPC

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

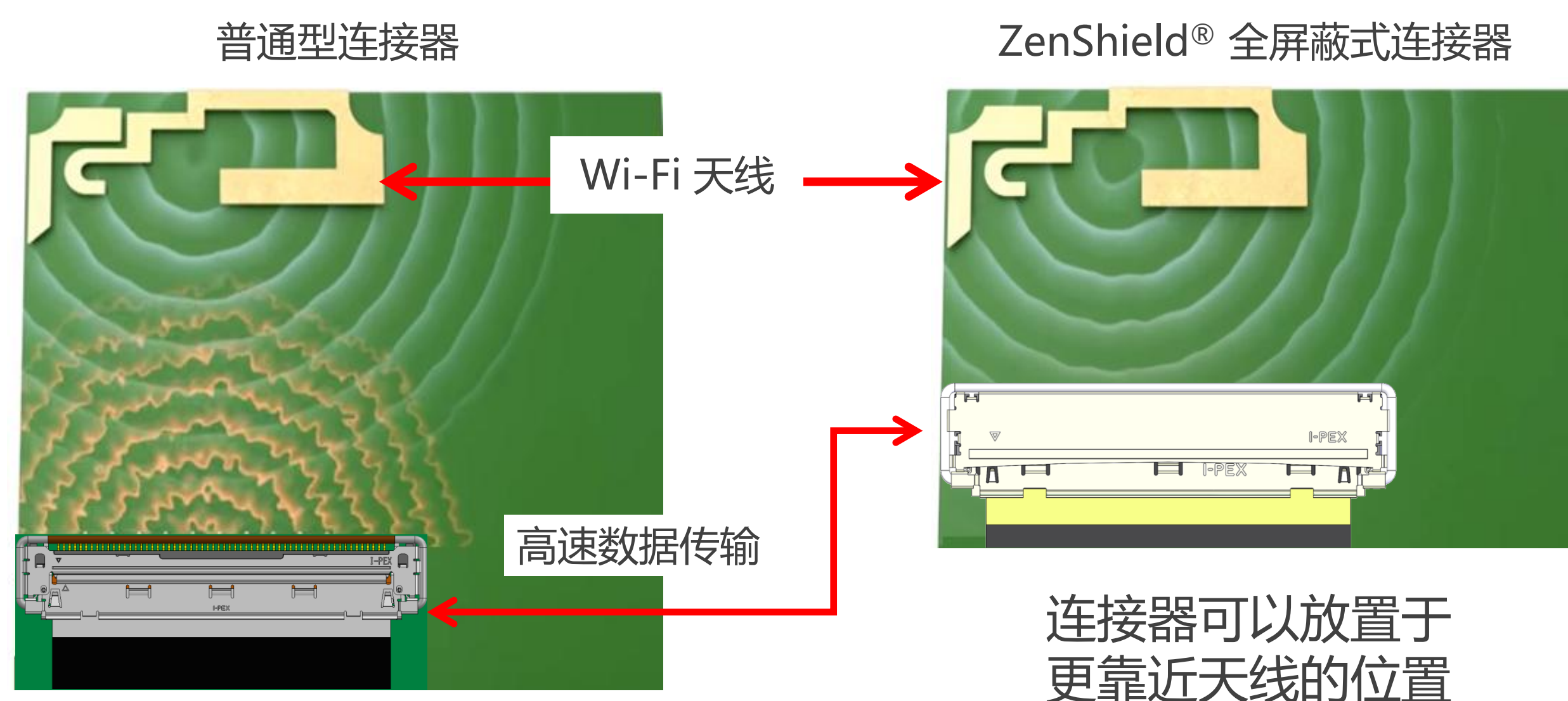
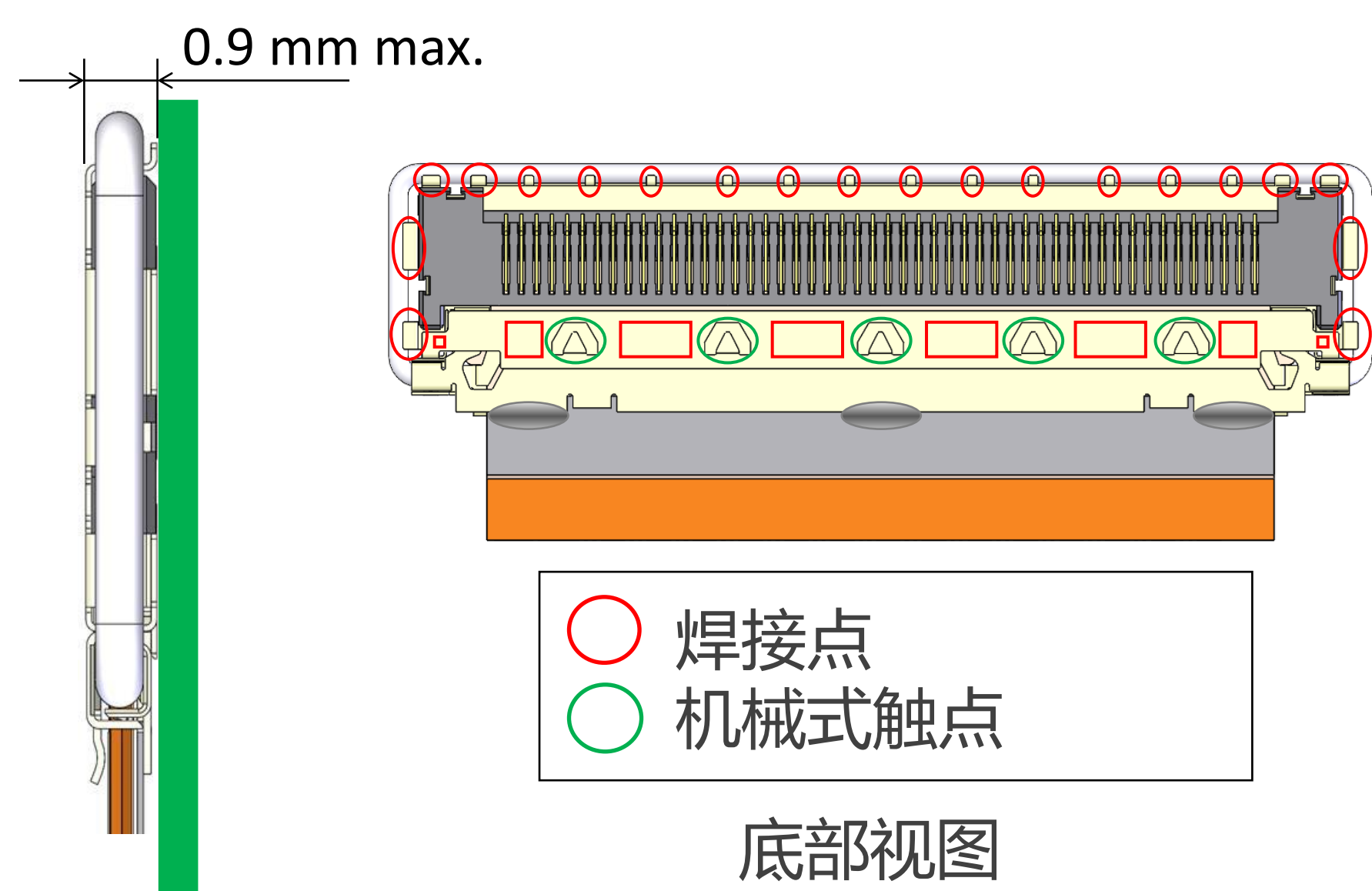
Applicable Standards (Reference Only):

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

*如您需要了解未列出或不在范围内的Pin数, 请咨询我们。



超薄(嵌合高度 0.9 mm max.), ZenShield® 的全屏蔽设计和多点接地结构, EMC 解决方案的理想选择



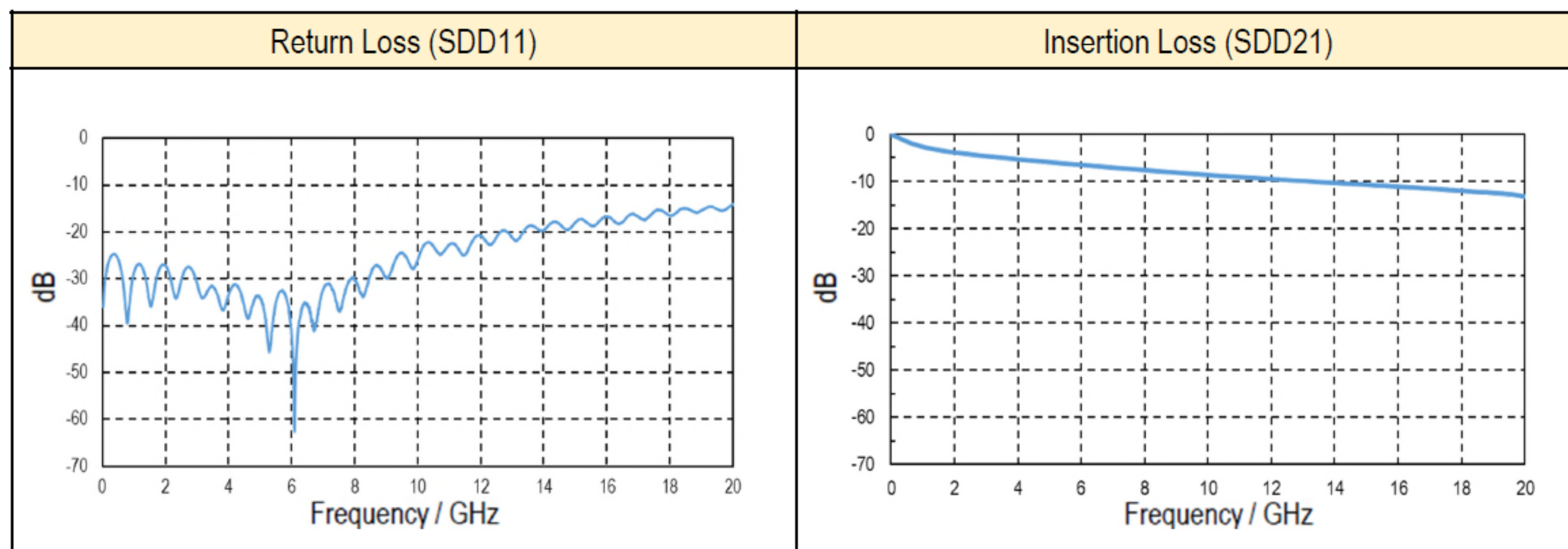
高速率传输, 32Gbps/lane应用的理想之选

Measurement results

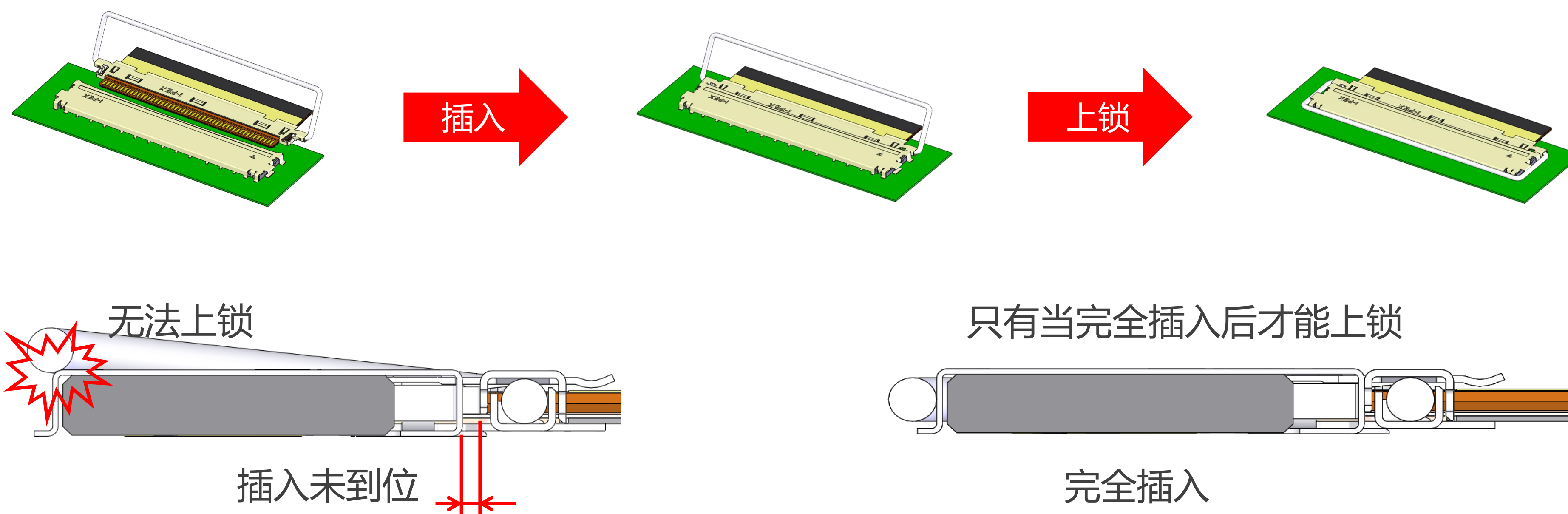
Connector: CABLINE-CAL IIF 50P

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

Pin Assignment: GSSGSSG

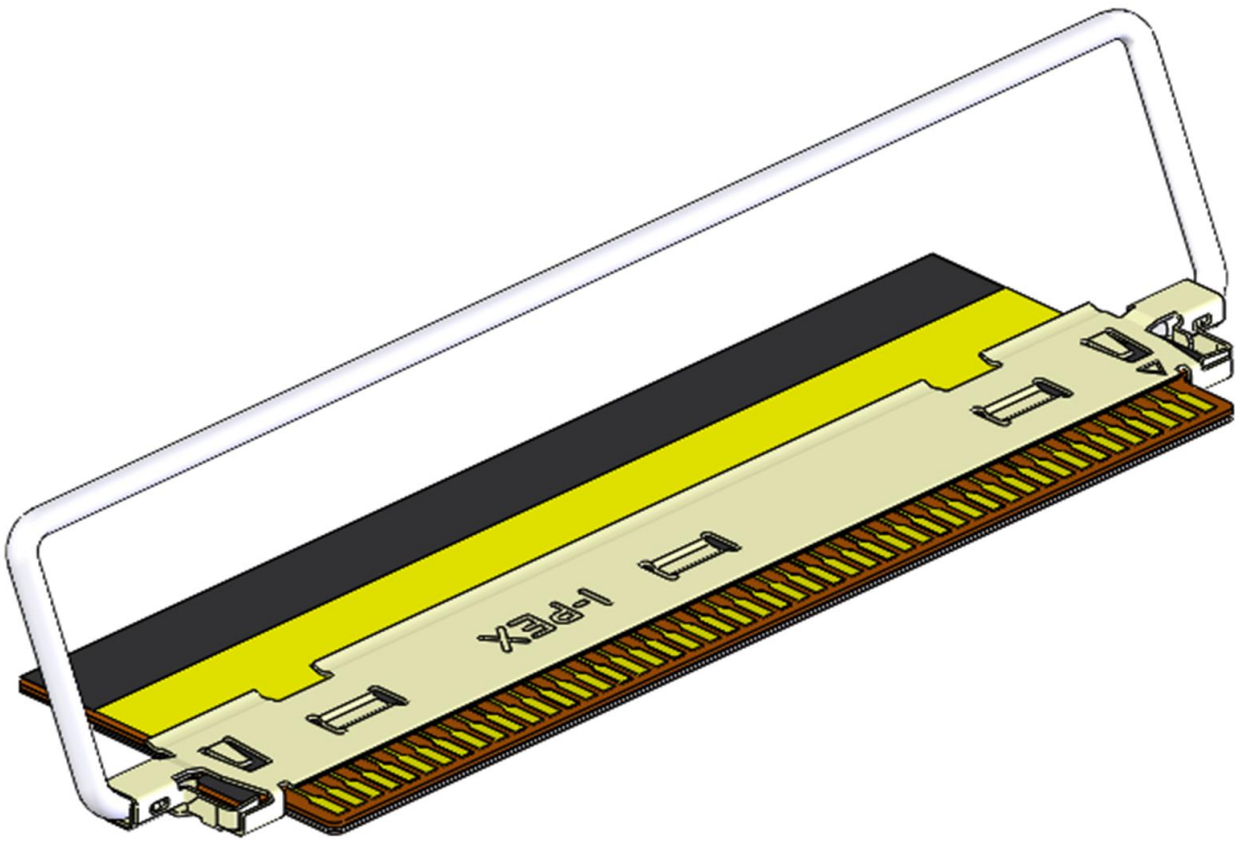
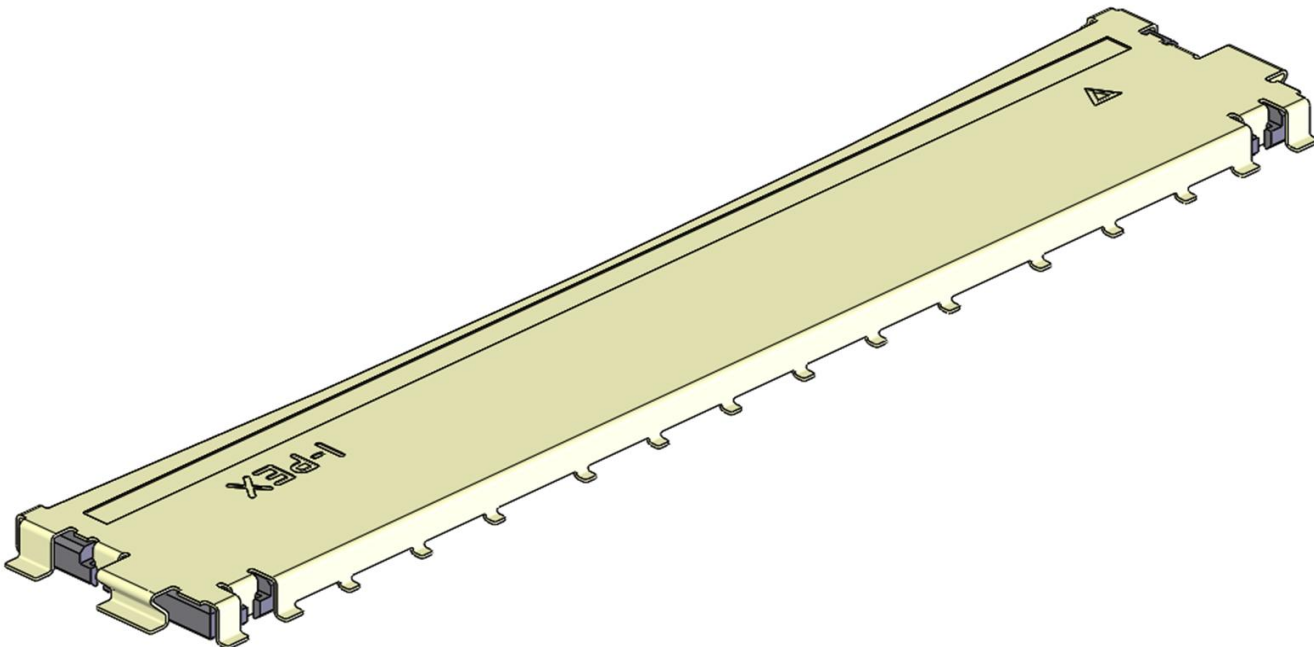


机械式锁扣罩防止连接器不完全嵌合及脱落



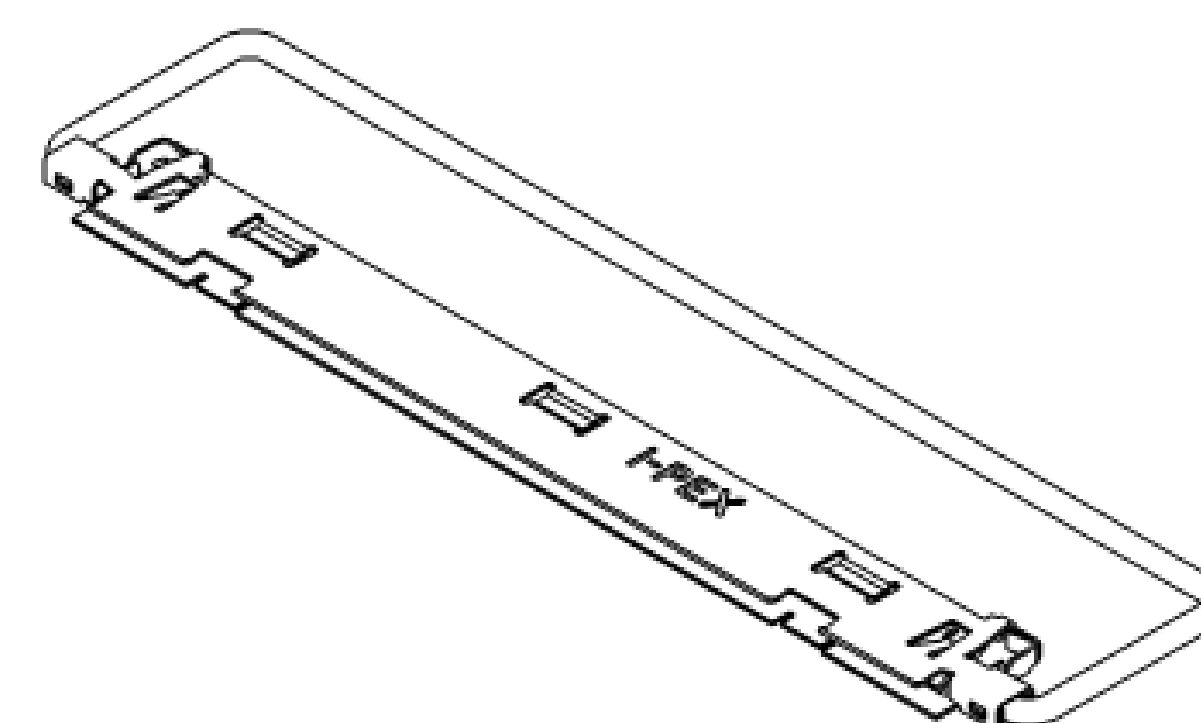
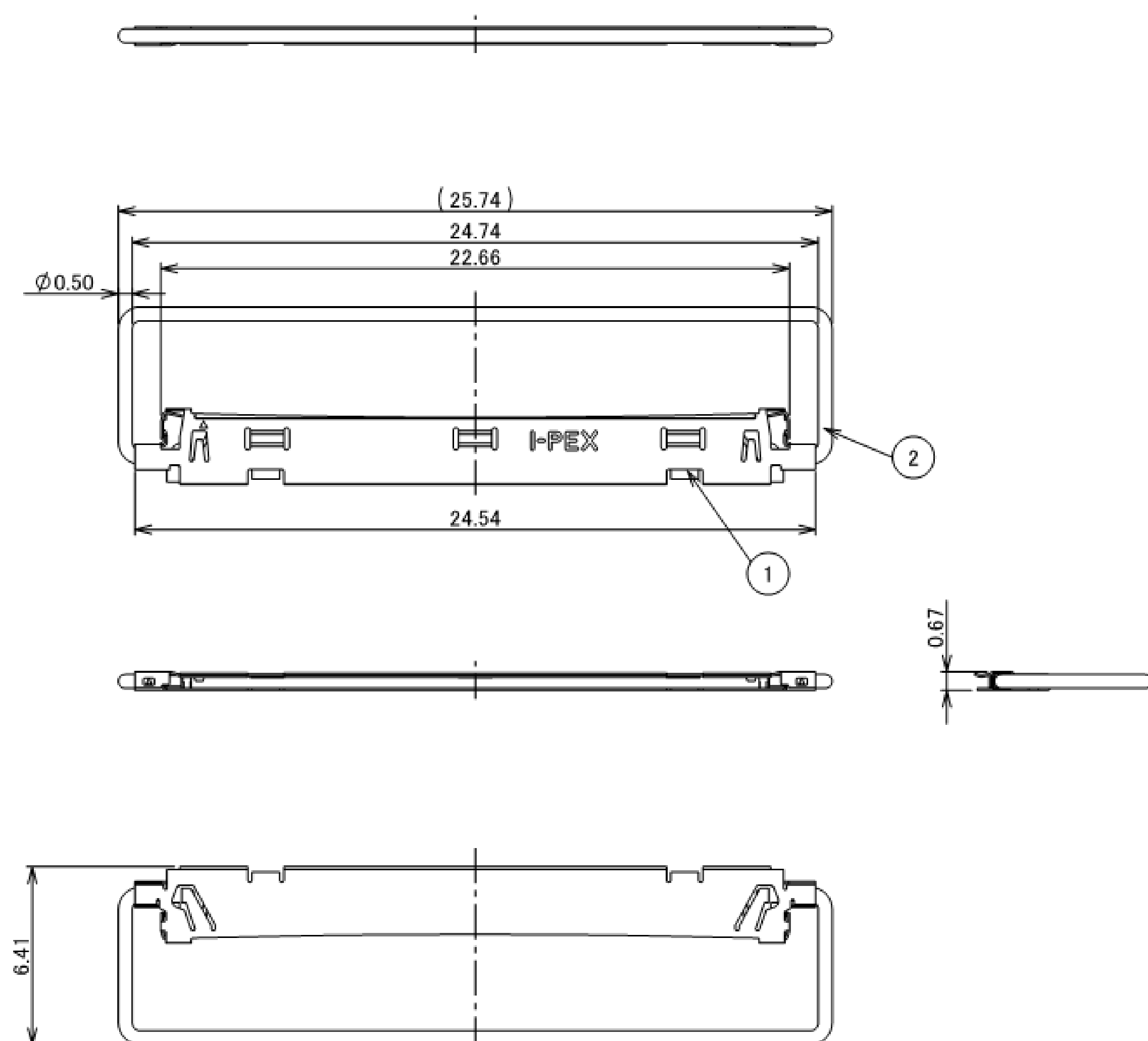
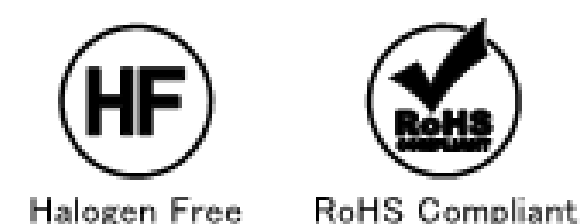
Component Parts Details

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	

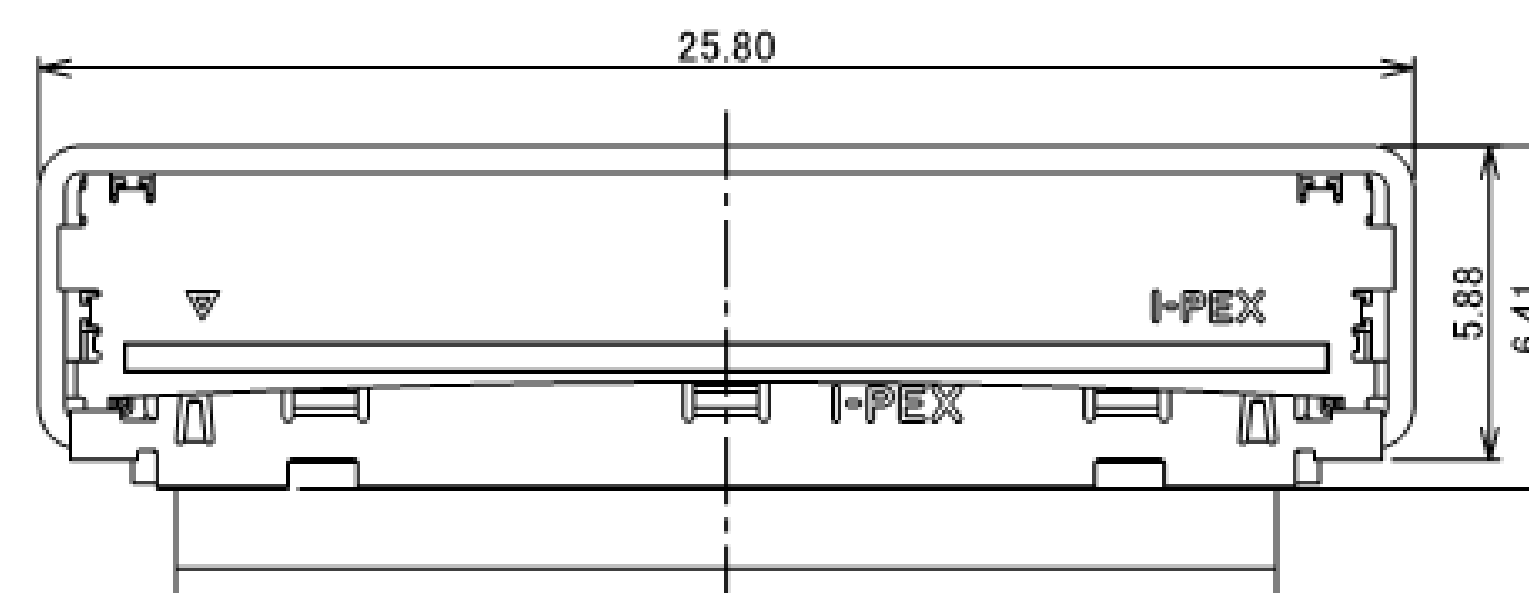
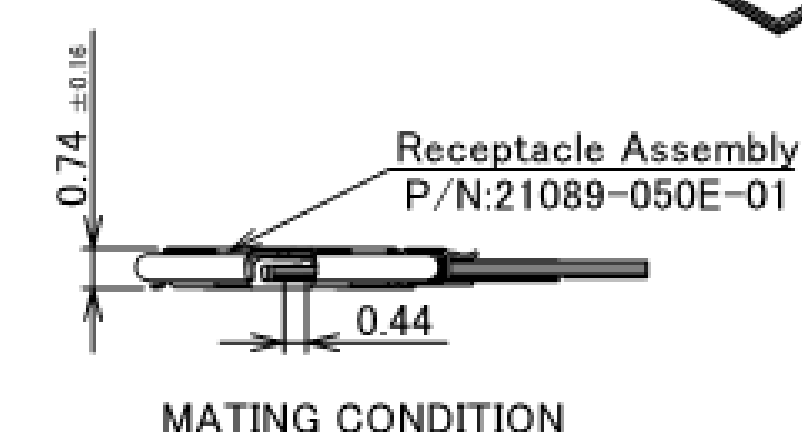
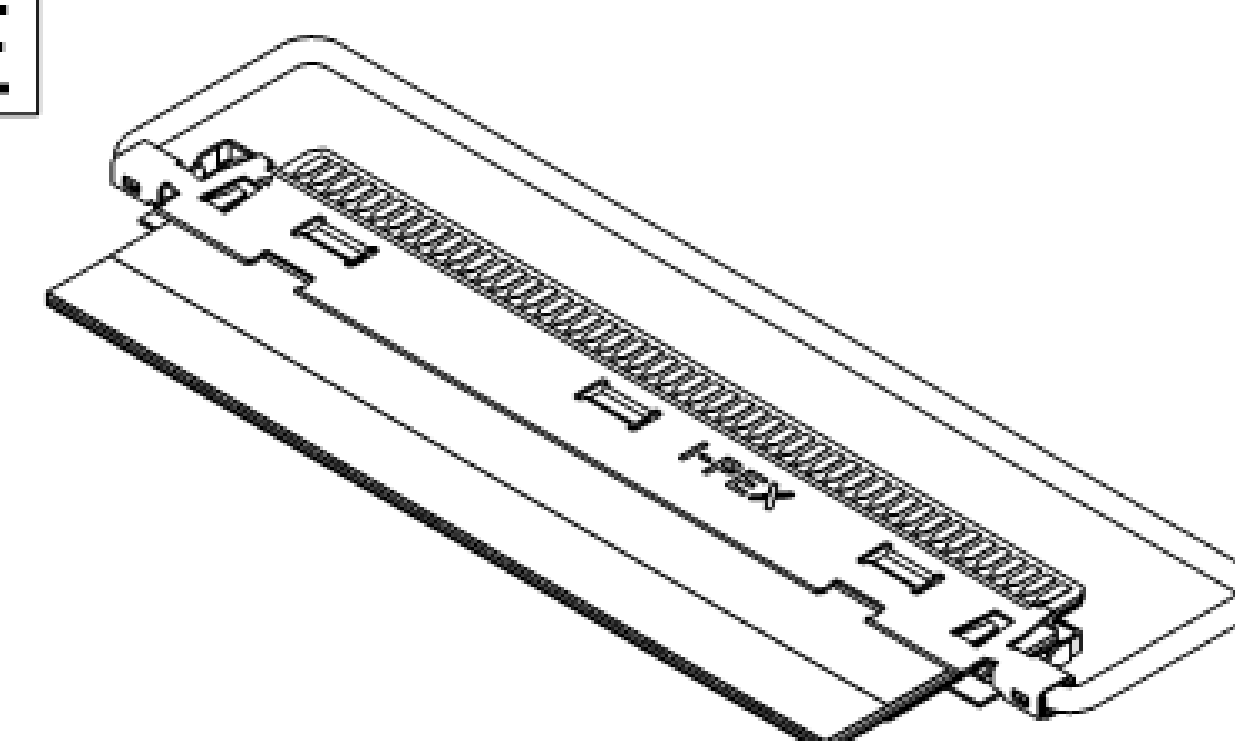
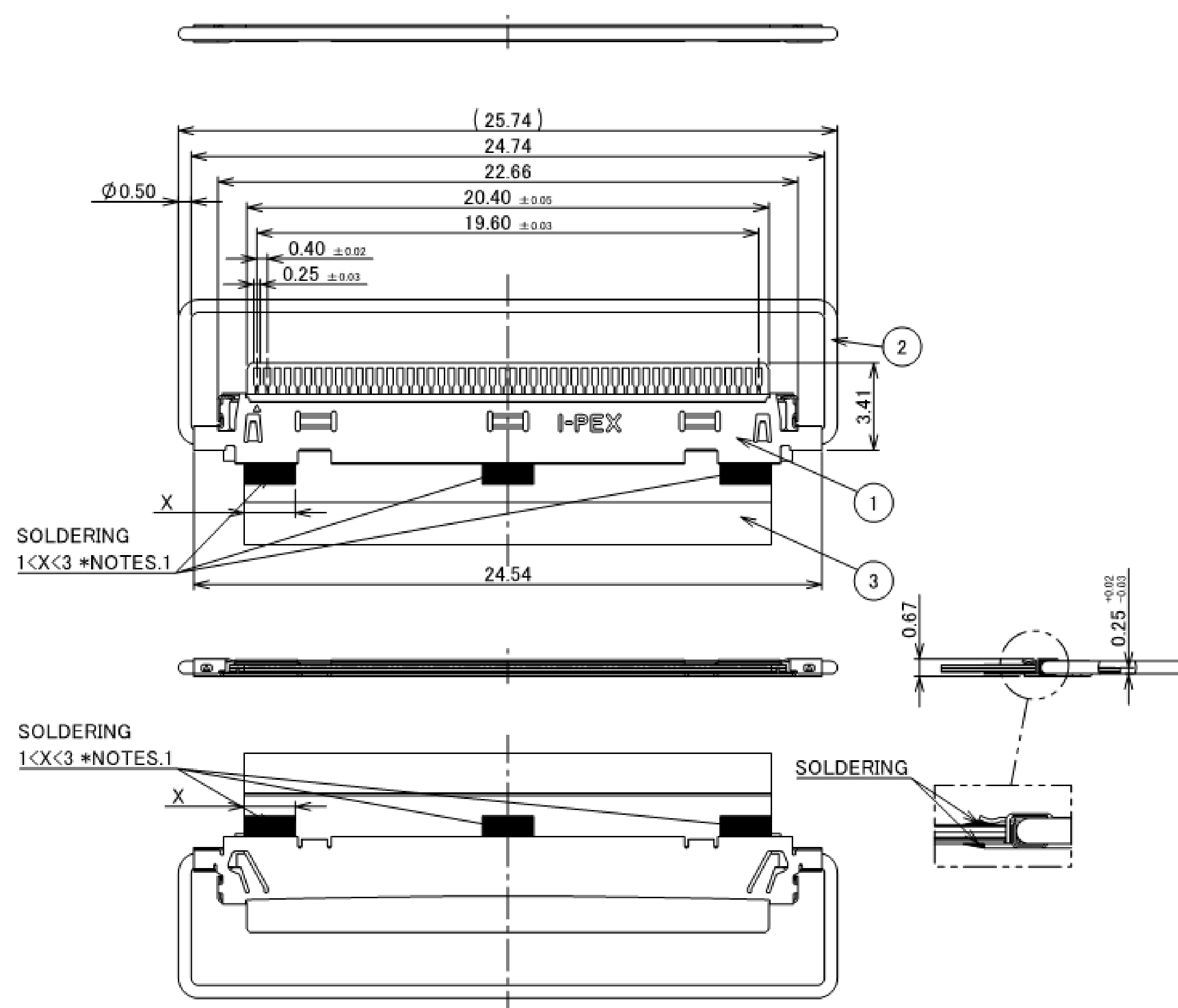


2	LOCK BAR	SUS	-
1	SHELL	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

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

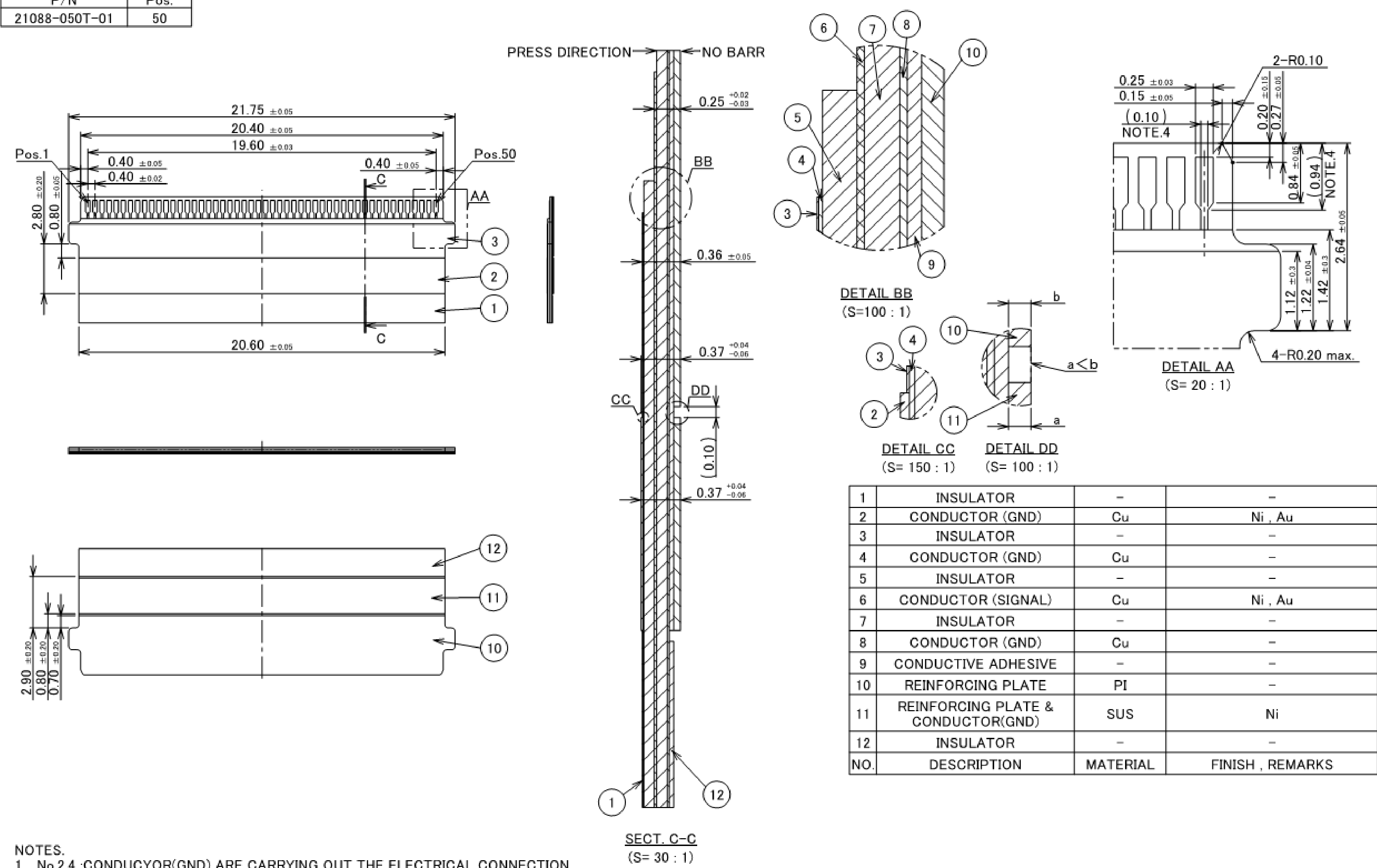
NOTES.

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



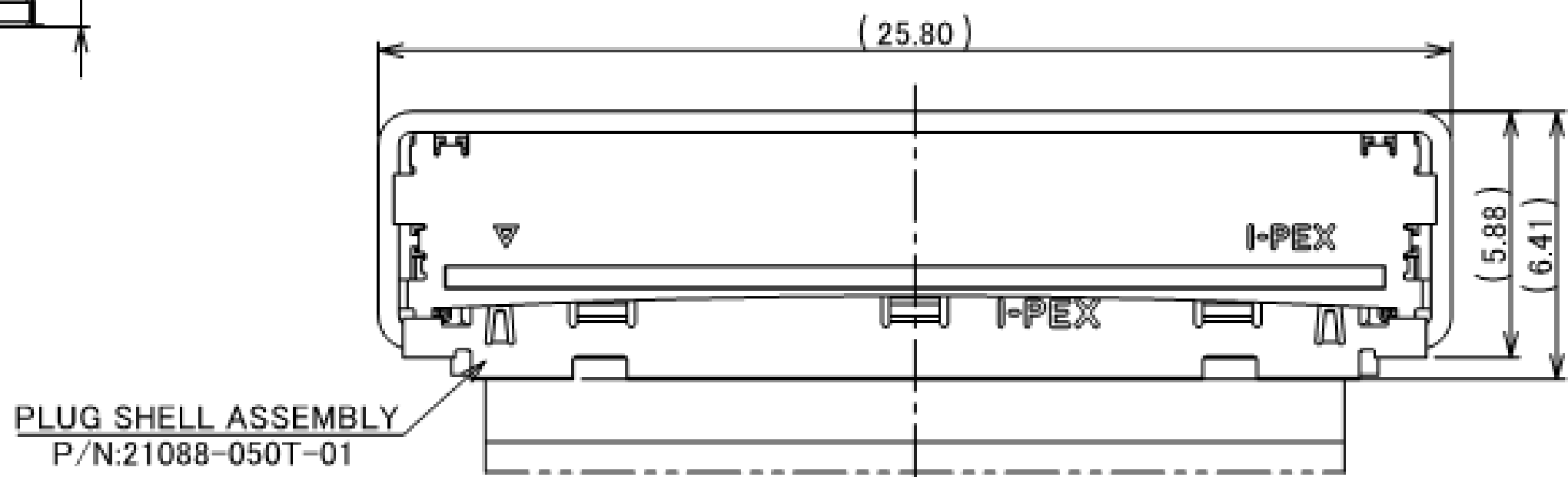
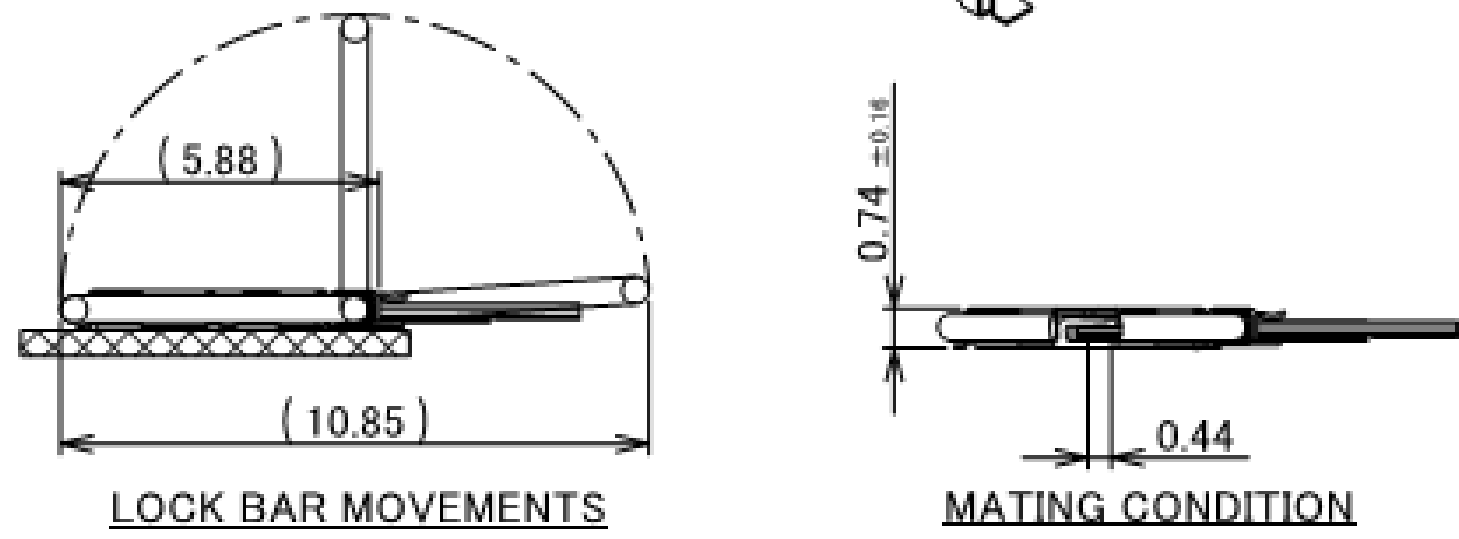
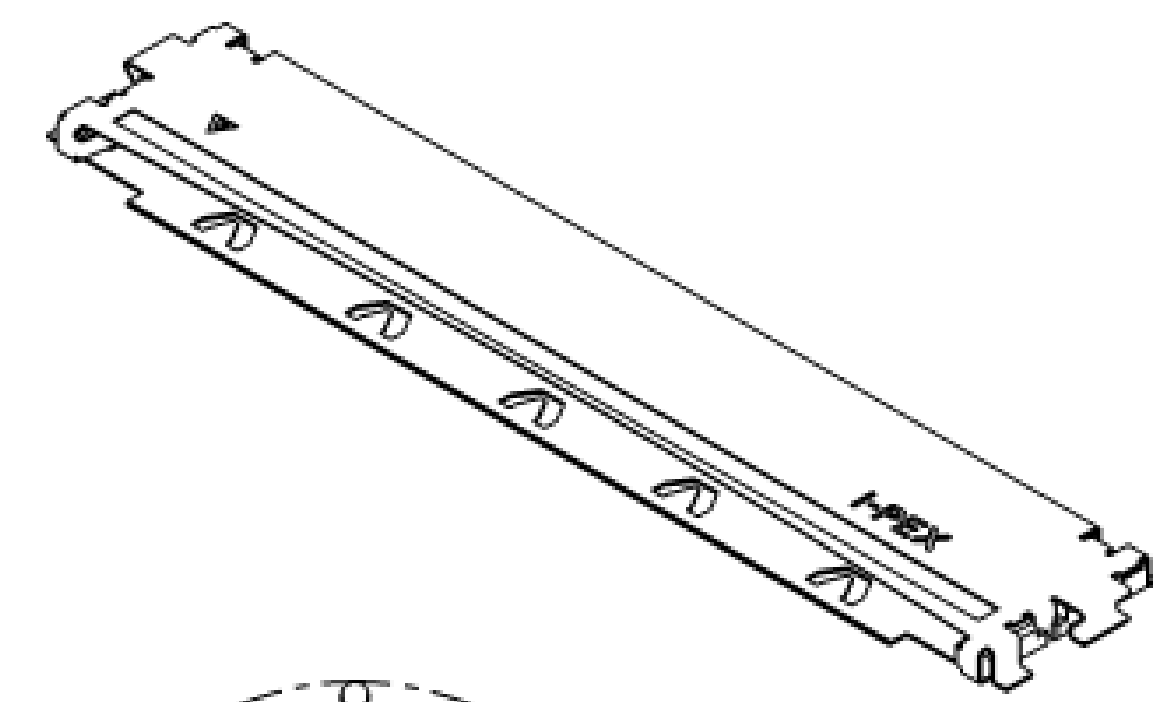
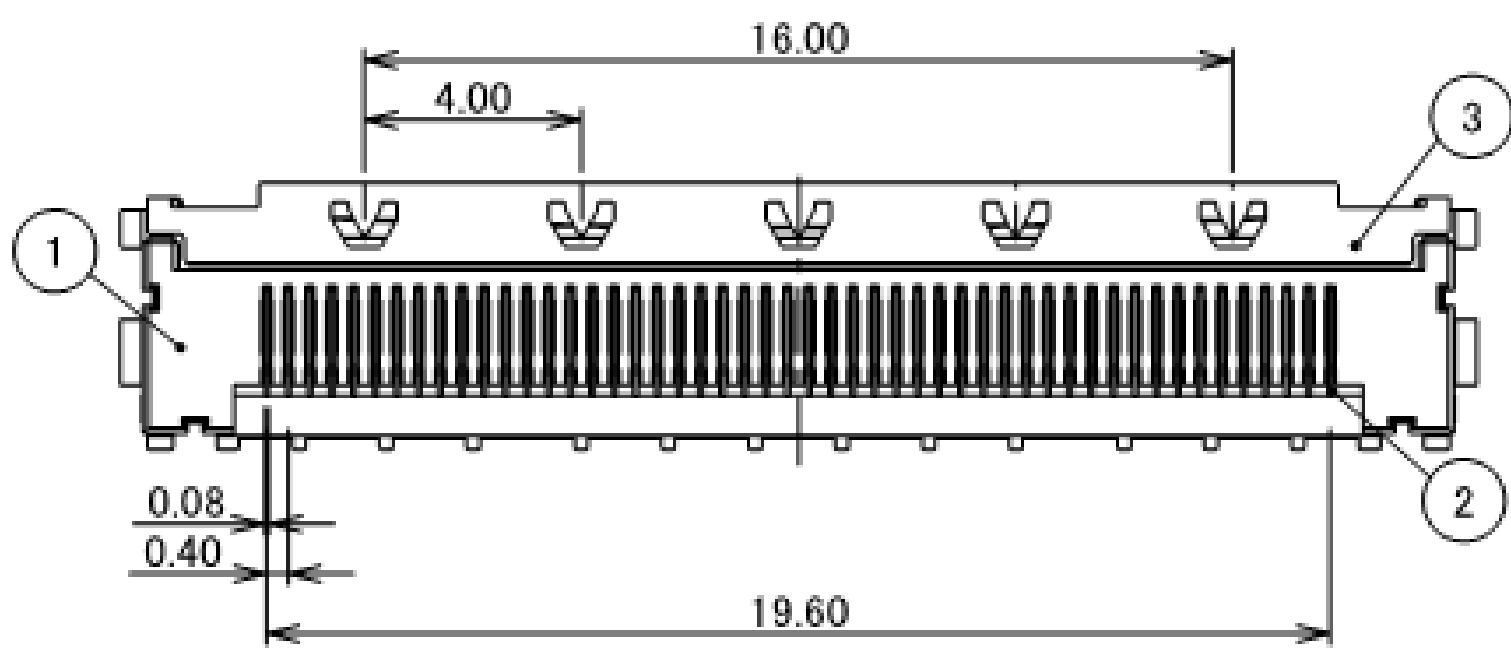
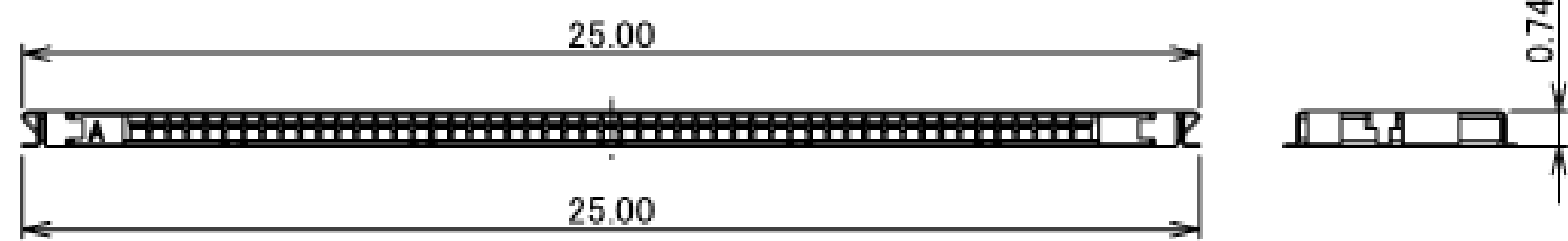
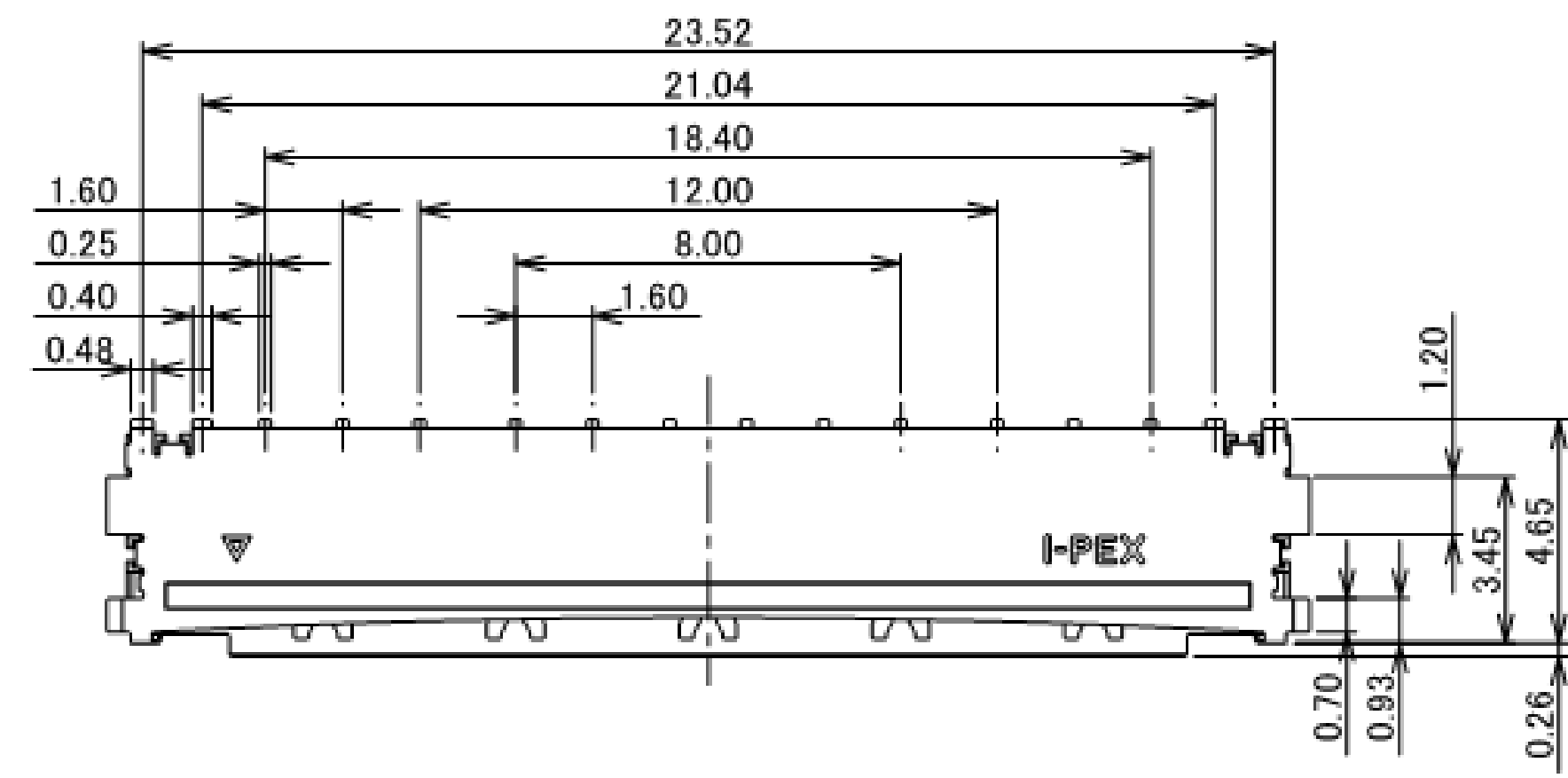
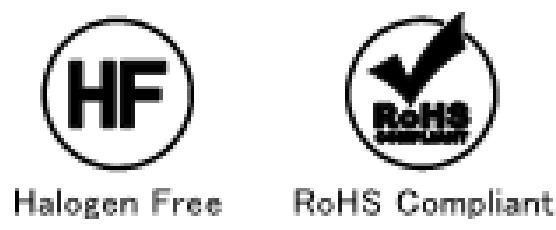
Rev.0

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 : ≦40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : ≦40mohm 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

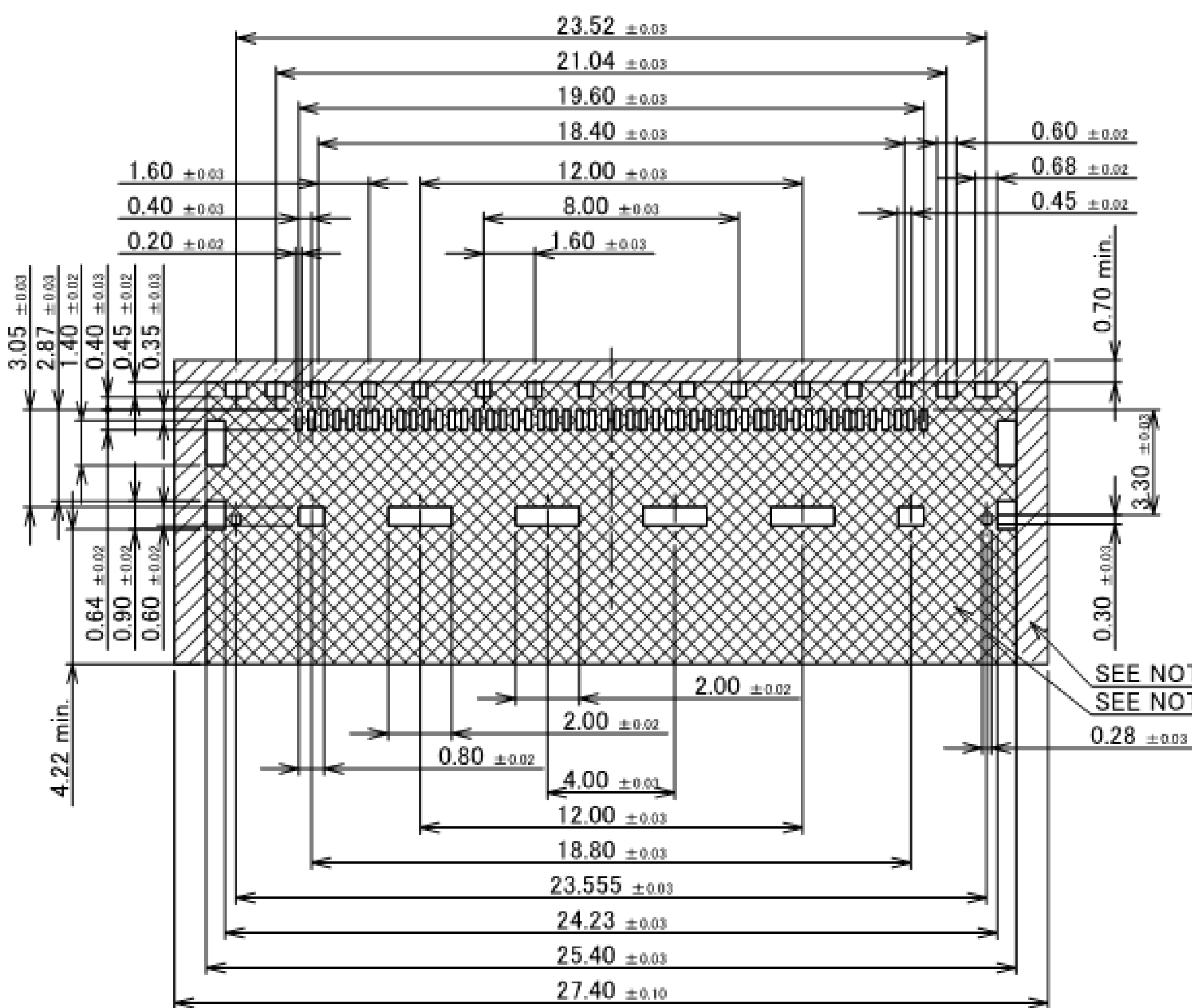
Recommended P/N		21089-050E-01
P/N	Pos.	
21089-050E-01	50	



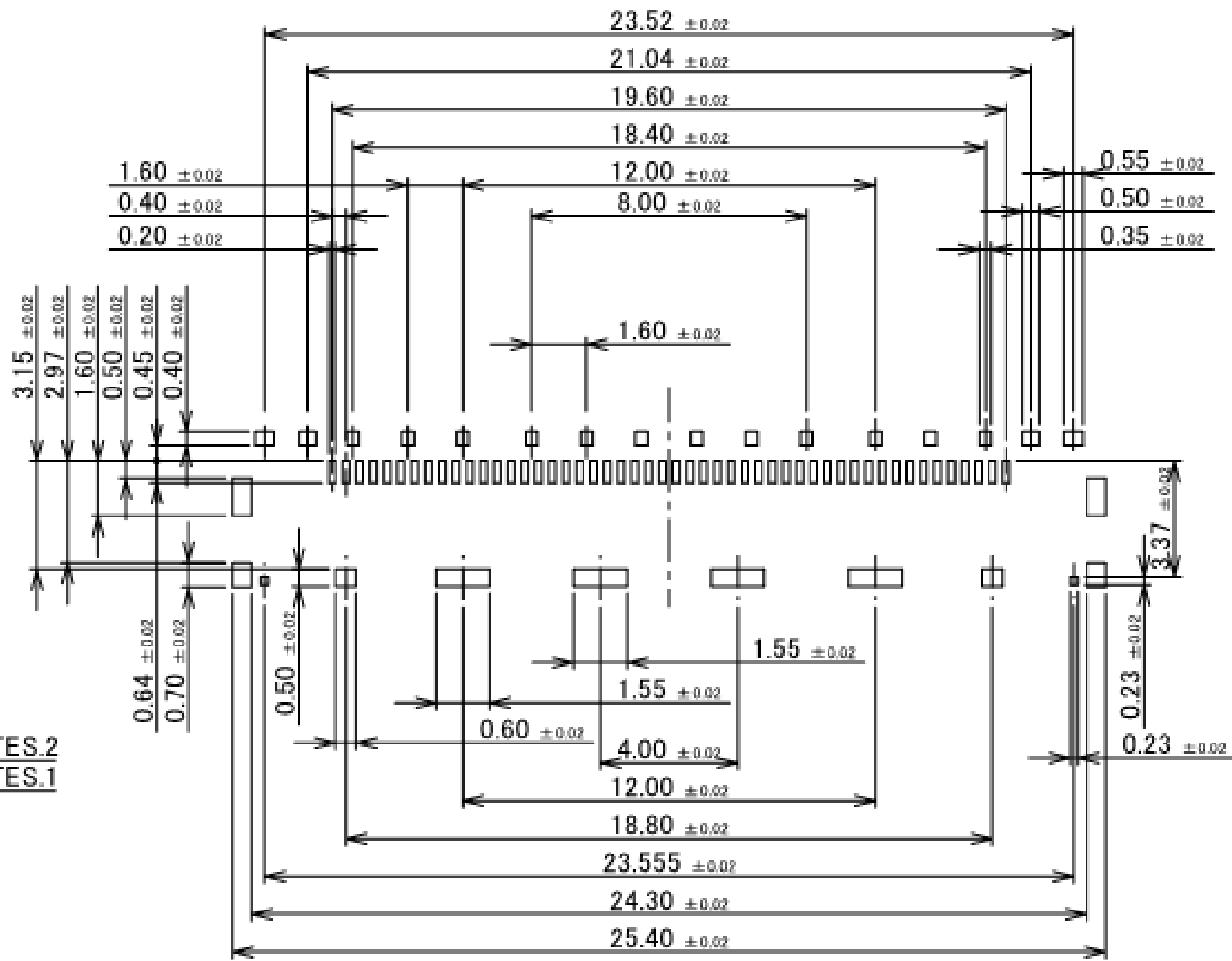
3	SHELL	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. Au 0.01 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT AREA Au 0.10 μ m MIN. SOLDERING AREA Au 0.03 μ m MIN.
1	HOUSING	LCP	-
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

Rev.0

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



RECOMMENDED FOOTPRINT PATTERN LAYOUT



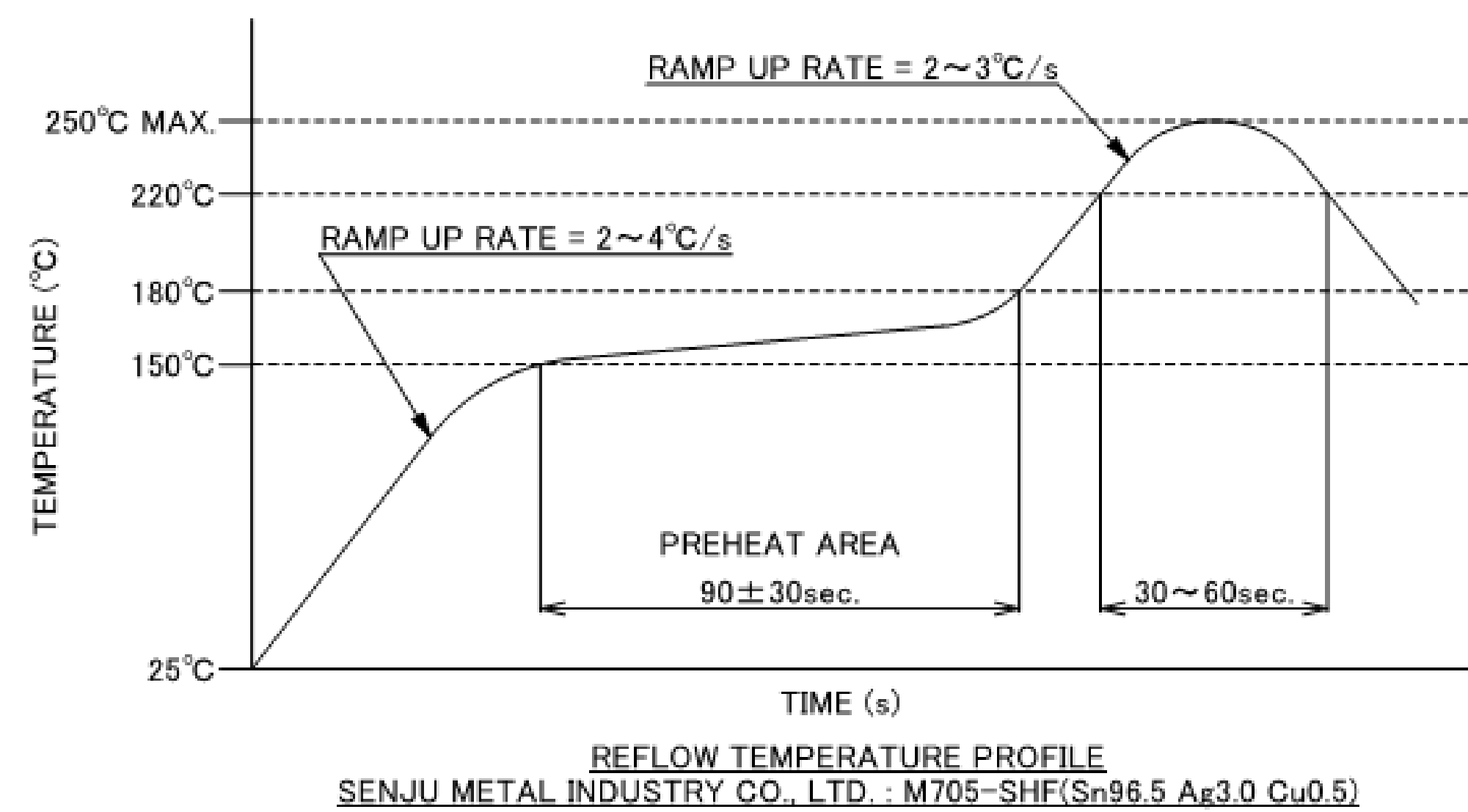
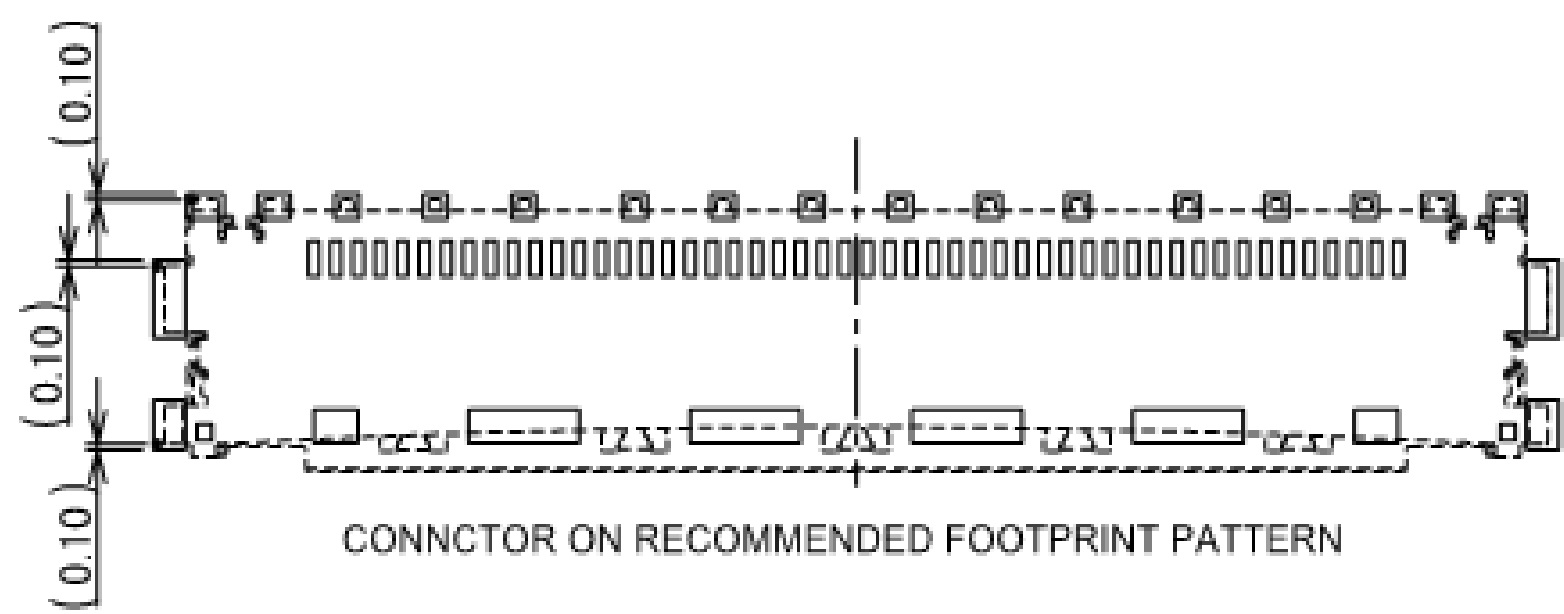
RECOMMENDED METAL MASK PATTERN LAYOUT
METAL MASK THICKNESS : t=0.12

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

Rev.0

Receptacle Assembly

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



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 : ≦40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : ≦40mohm 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

Custom Connectors Available

 RF
Connectors

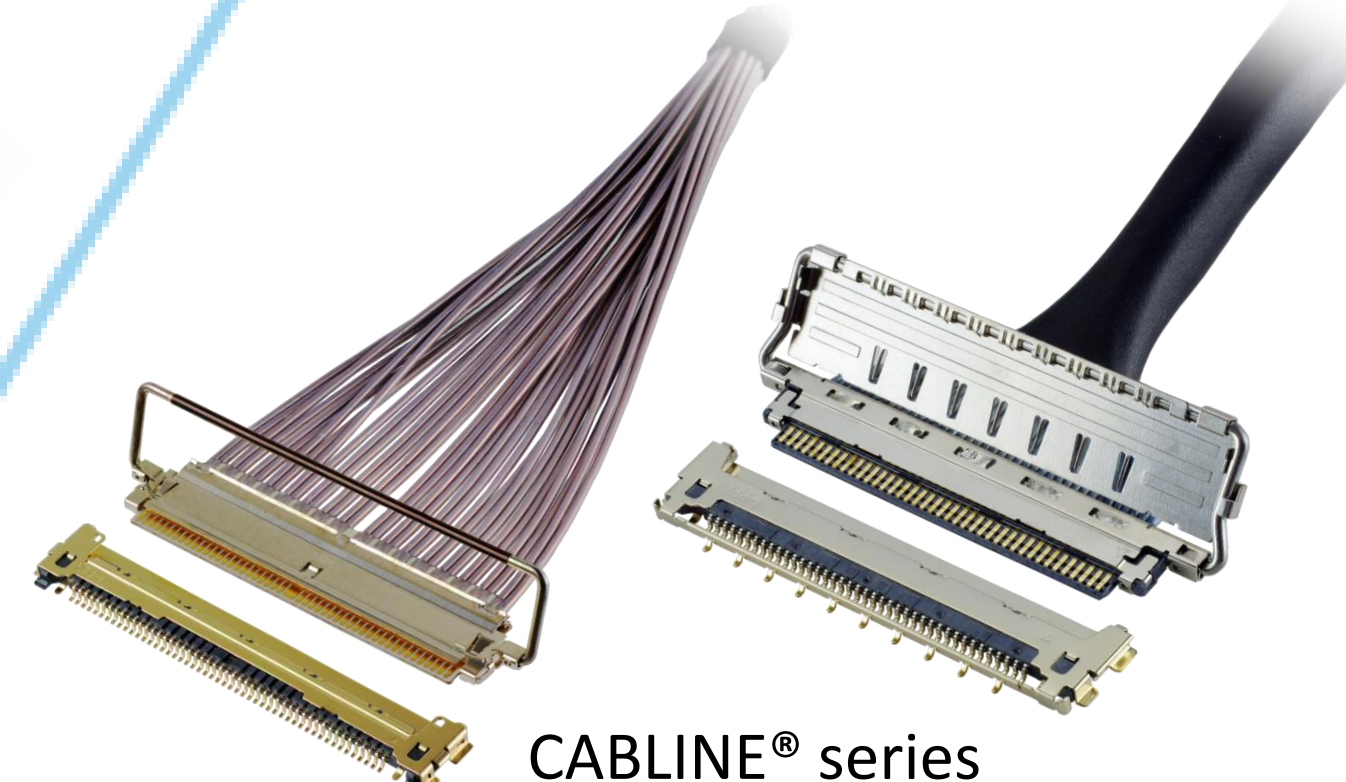
MHF® series



CABLINE® series



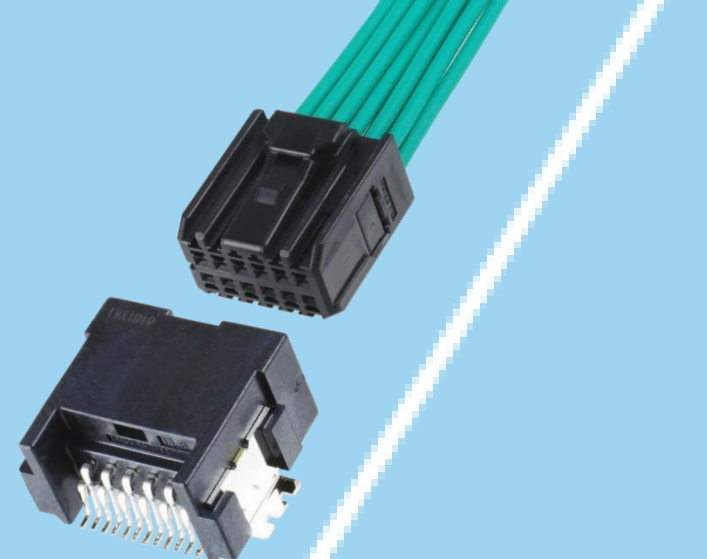
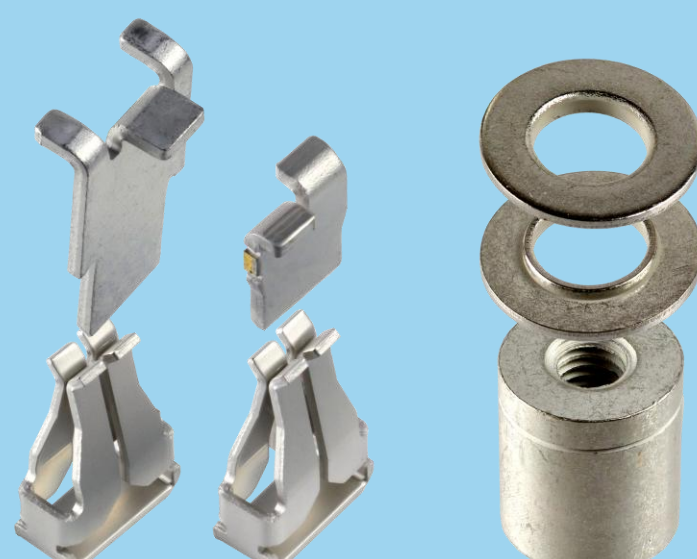
Micro-Coaxial/Twinaxial
Connectors



Wire-to-Board
Connectors/
Terminals

AP series

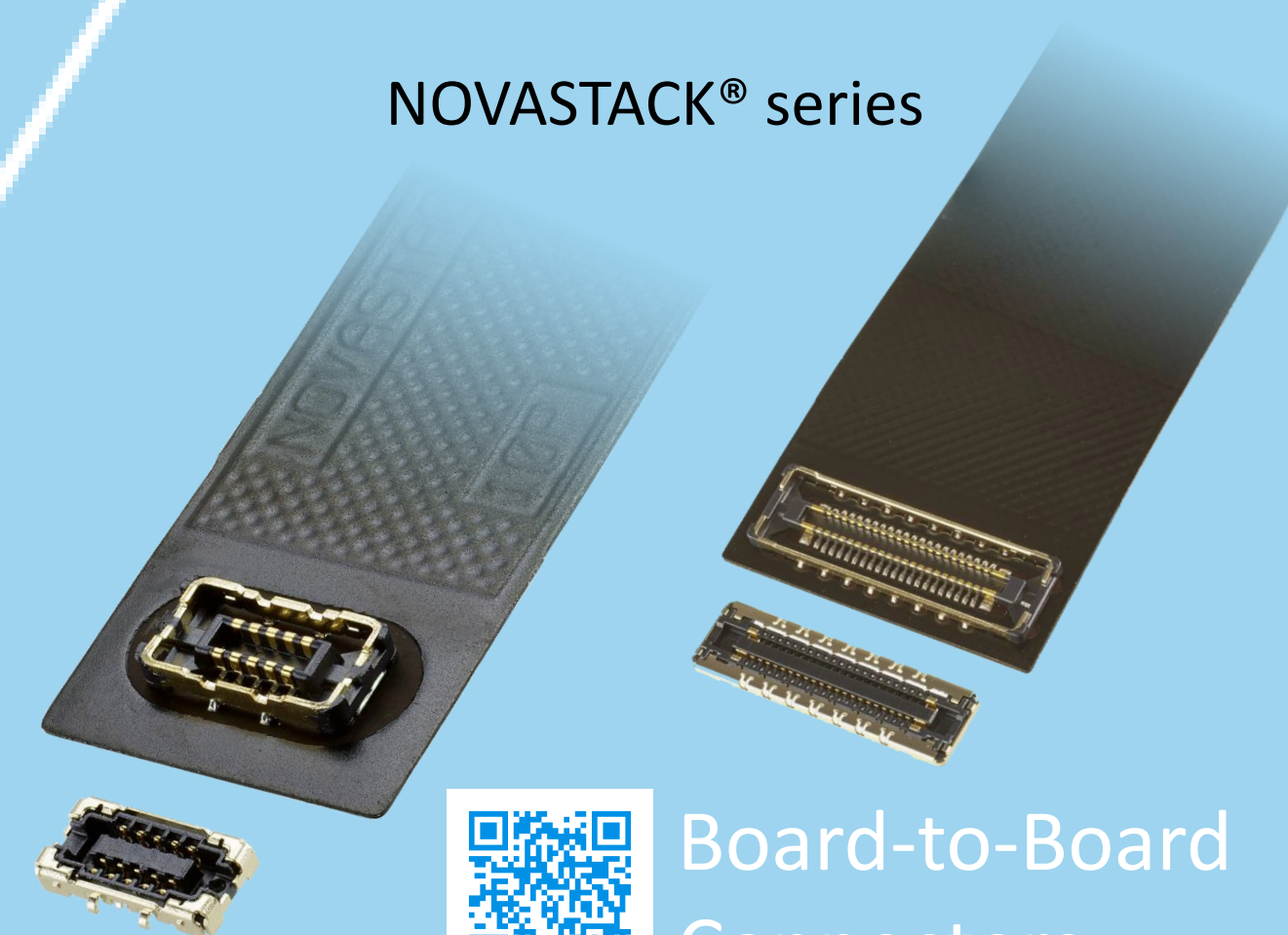
ISH® series



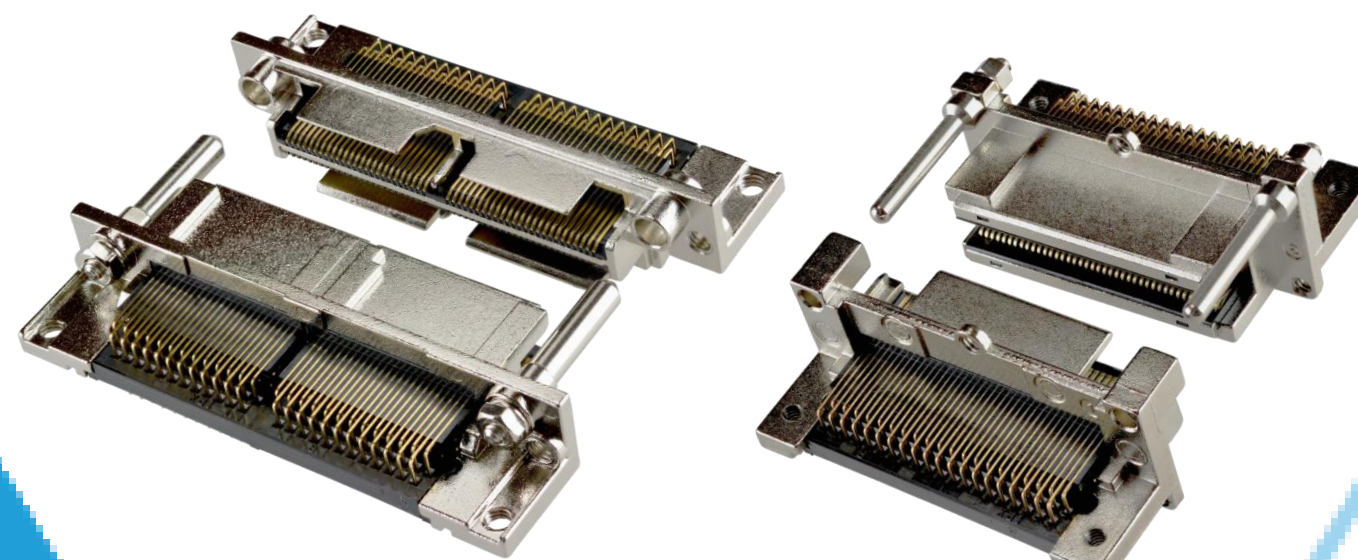
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



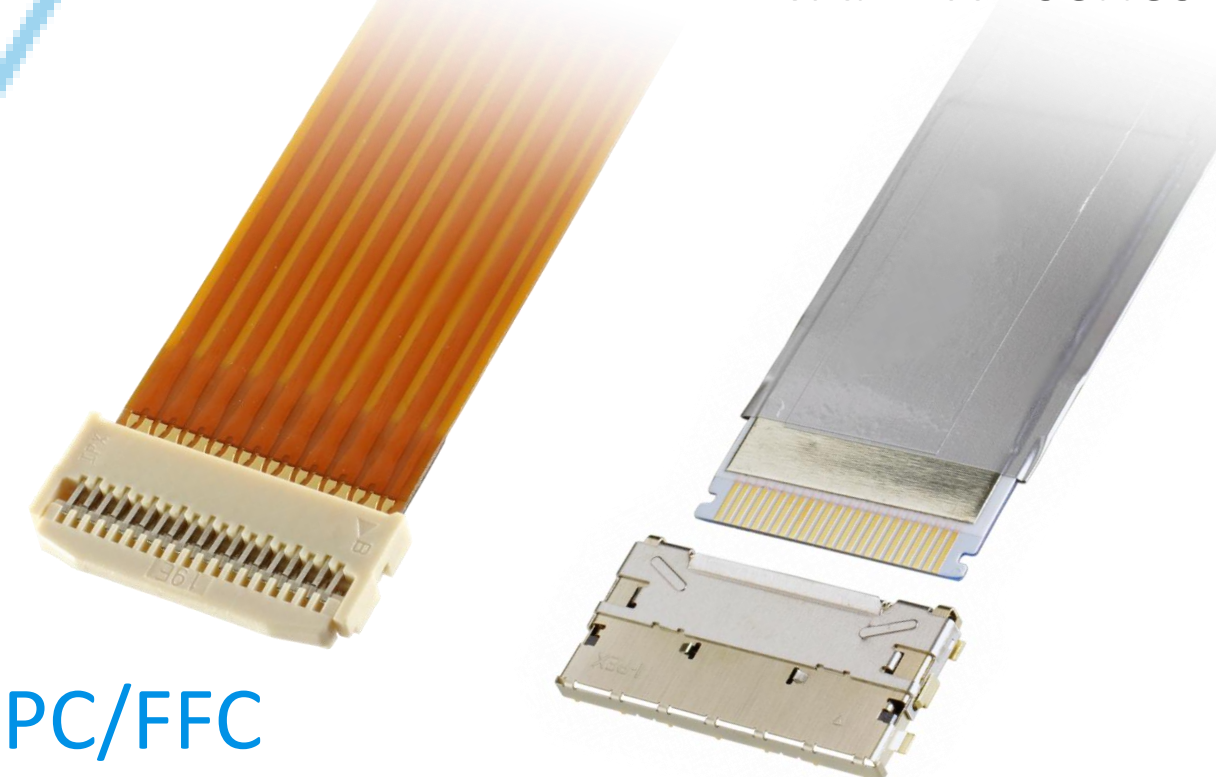
MINIDOCK™ series

MINIFLEX® series

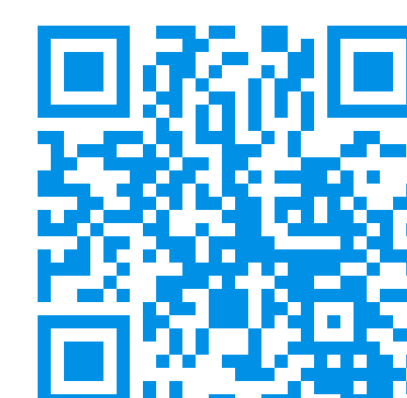
EVAFLEX® series



FPC/FFC
Connectors



Inquiry



I-PEX, MHF, CABLINE, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCK and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative
or more detailed information.

www.i-pex.com



I-PEX

© I-PEX Inc. 2025
All rights reserved