

# EVAFLEX® 5-SE-G HT

單手作業的自動鎖扣特色，高溫環境(125°C)，高速數據傳輸，水平插拔，0.5 mm 間距帶屏蔽的FFC/FPC連接器

## Product Specifications:

Board Pitch (mm)	0.5	
Wiping Length (mm)	1.2	
Size (mm)	Height	3.65 +/- 0.20
	Width	Formula: 8.00 + (0.5*?p)
	Depth	7.00 +/- 0.30
Pin counts	Range	20 - 60
	Available	30, 50

\*若有規格外 Pin 數需求,請與當地負責業務窗口聯繫。

## Applicable FPC/FFC:

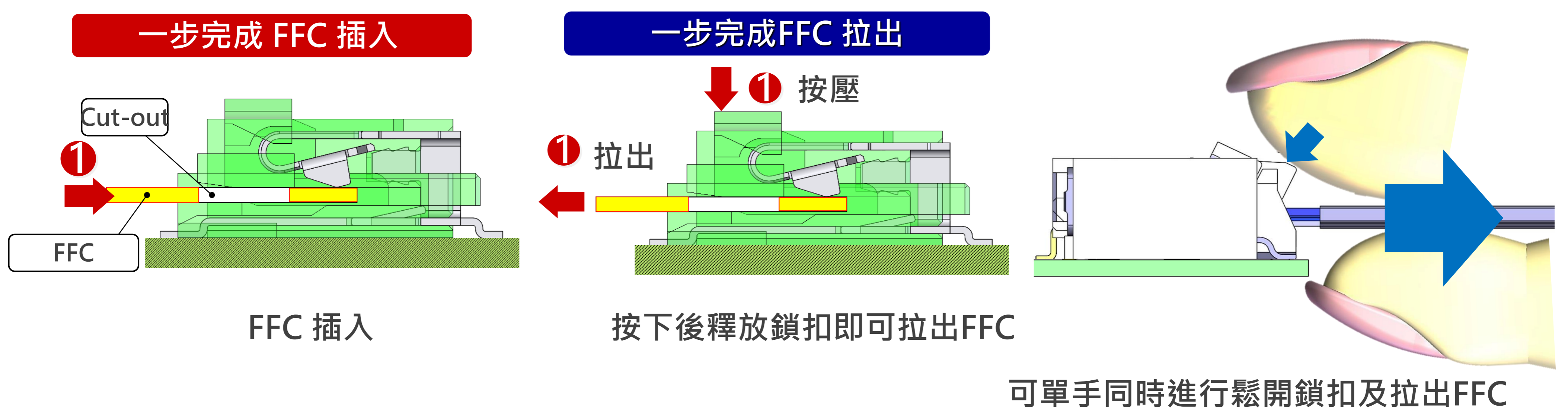
FPC/FFC Type	Shielded FFC, Non-shielded FFC/FPC
FPC/FFC Contact Point	Bottom
FPC/FFC Thickness (mm)	0.30 +/- 0.03

## Applicable Standards (Reference Only):

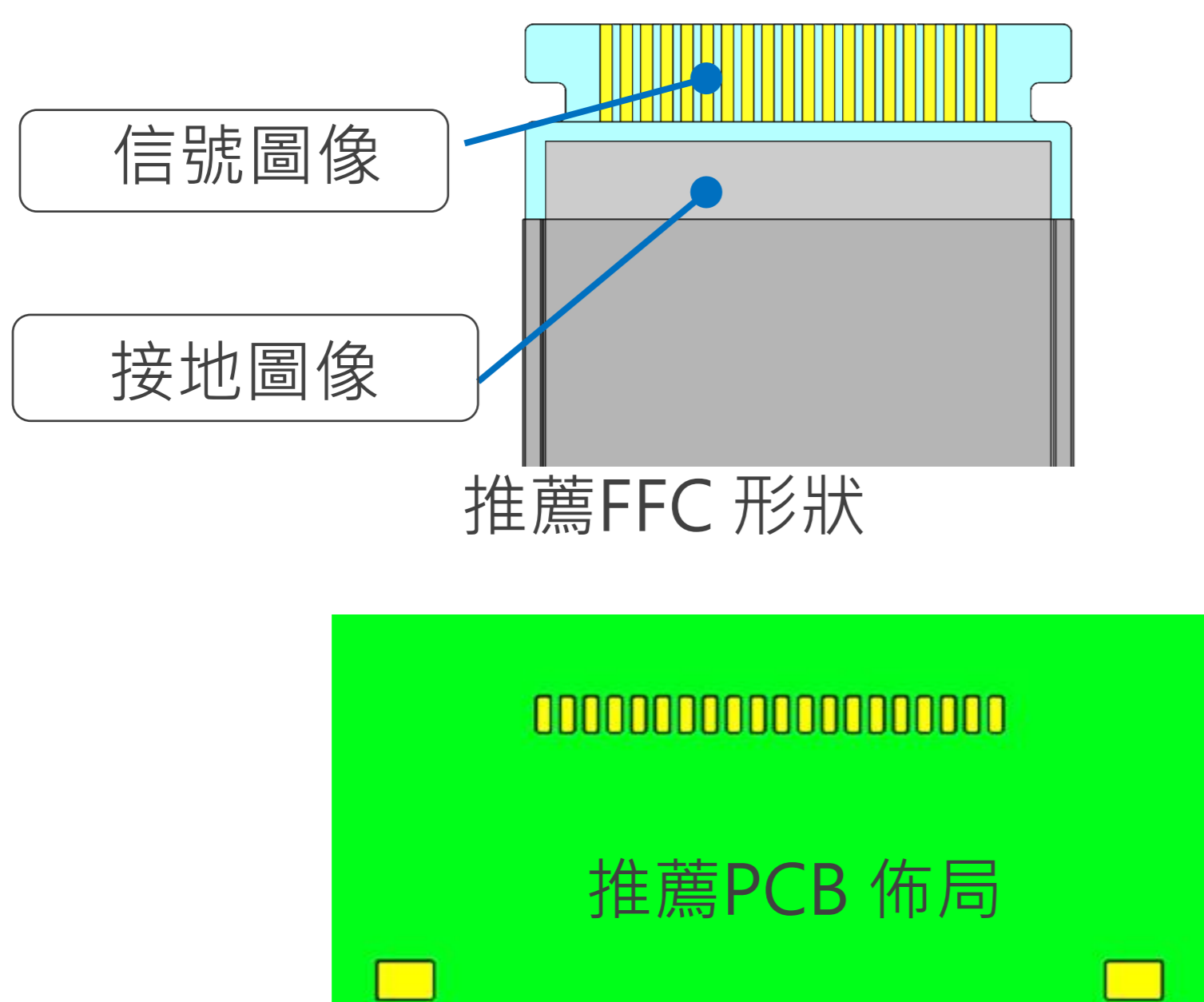
eDP (2.7 Gbps) V-By-One HS 1.4 (4 Gbps)



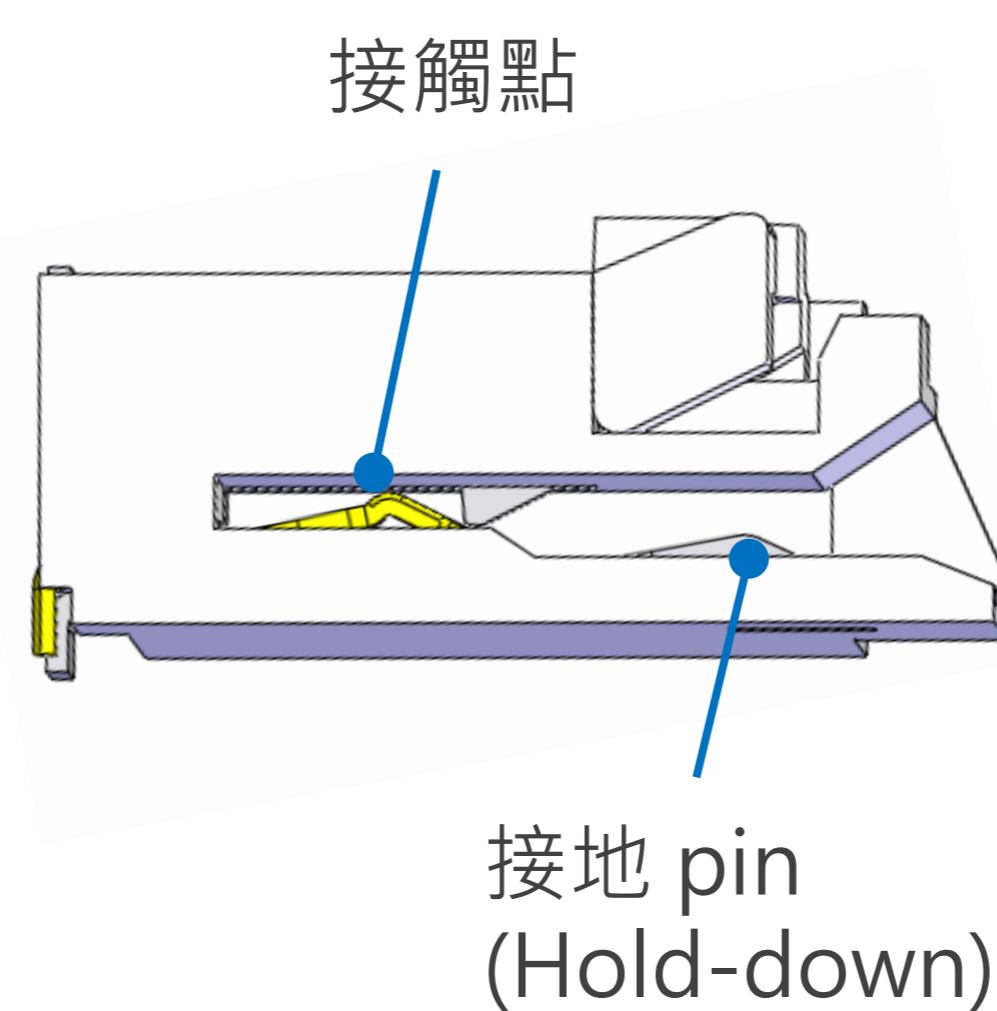
## 自動鎖扣的設計可實現單手作業,適用於手動 或 機器人裝配



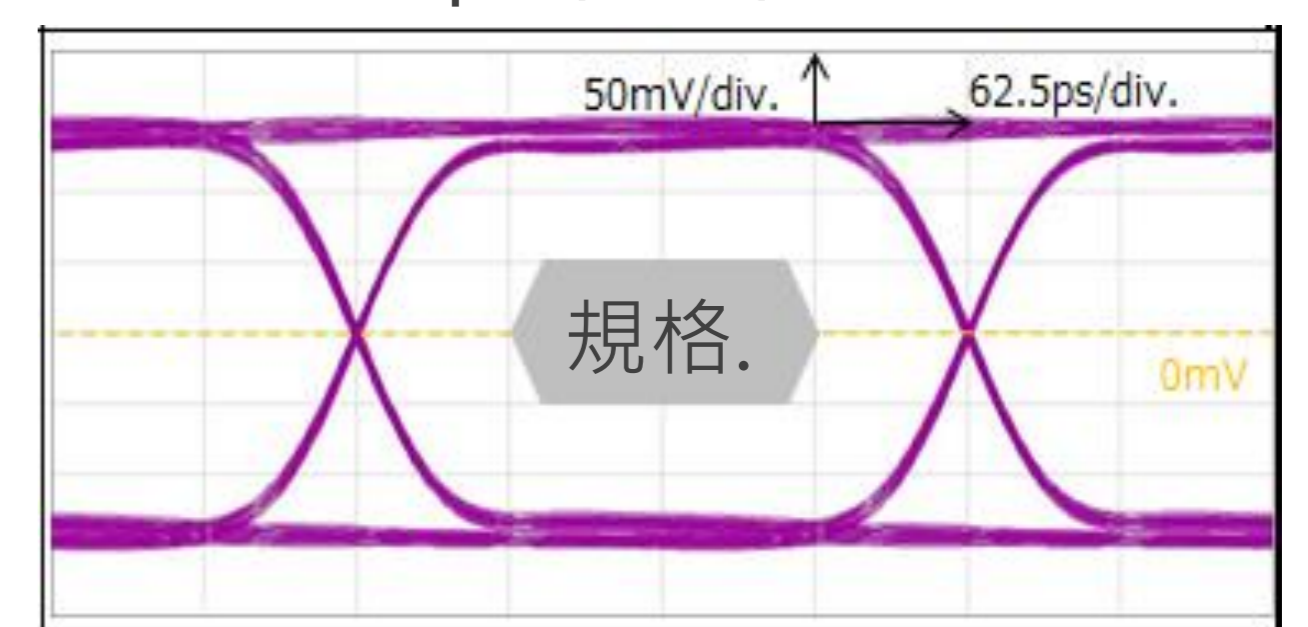
## 專為高速傳輸而設計(4+ Gbps V-by-One® HS)



Hold down 結構可做為接地使用,可支援高速數據傳輸,目標速度: up to 4+ Gbps (V-by-One® HS)



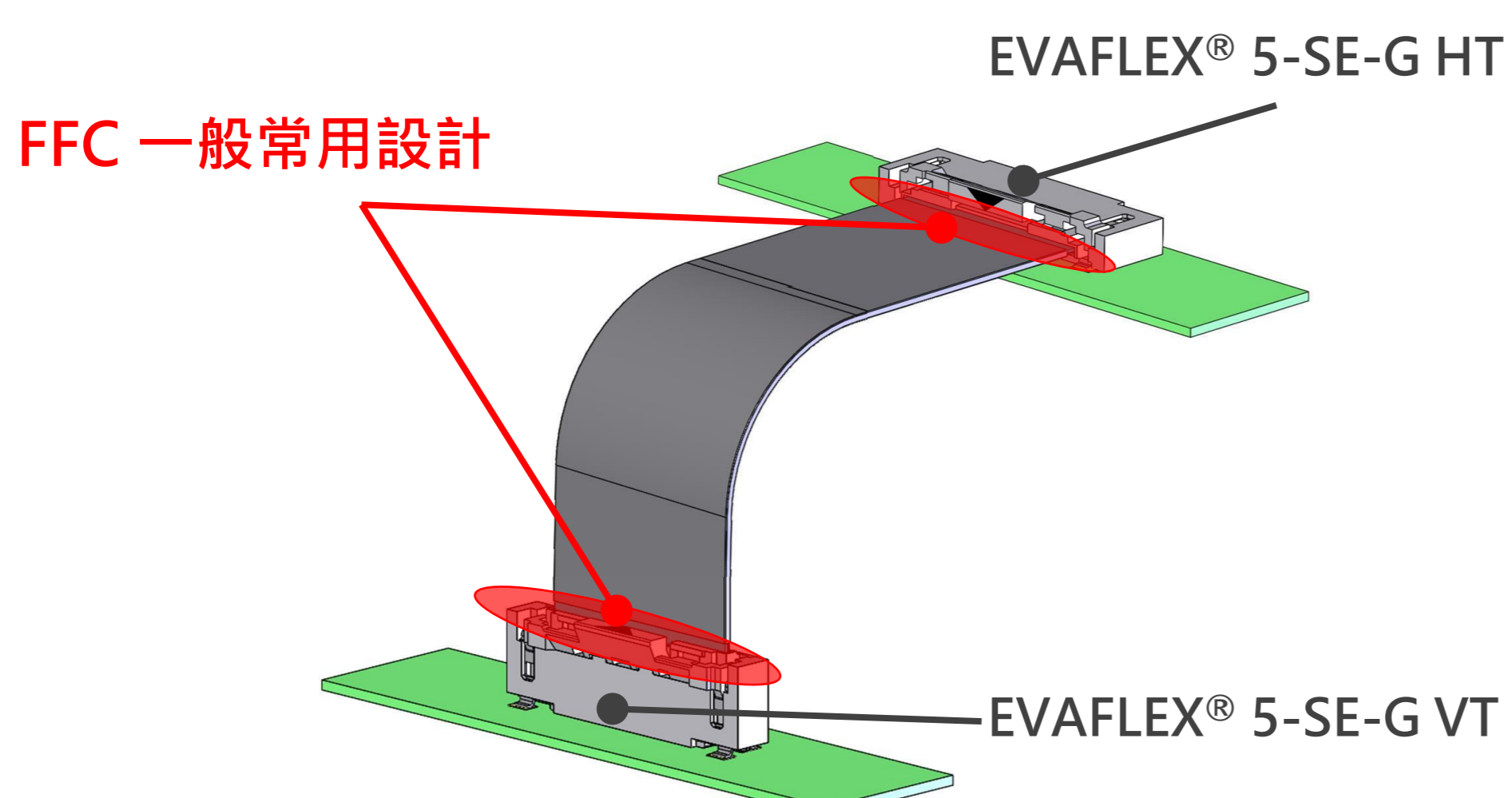
眼圖 4 Gbps (實際)



## 延伸 EVAFLEX® 系列產品自帶鎖扣連接器 還有其他選擇

可與垂直對插類型共用 FFC: EVAFLEX® 5-SE-G VT

更高速傳輸以及更小型化款式: EVAFLEX® 5-VS Type CH



	EVAFLEX® 5-SE-G VT	EVAFLEX® 5-VS
Height (mm)	6.60 +/- 0.1	1.90 +/- 0.1
Operation Temperature	~ 125°C	~ 105°C
Reference Performance	V-by-one HS 1.4 (4+ Gbps)	PCIe Gen 3 (8+ Gbps)

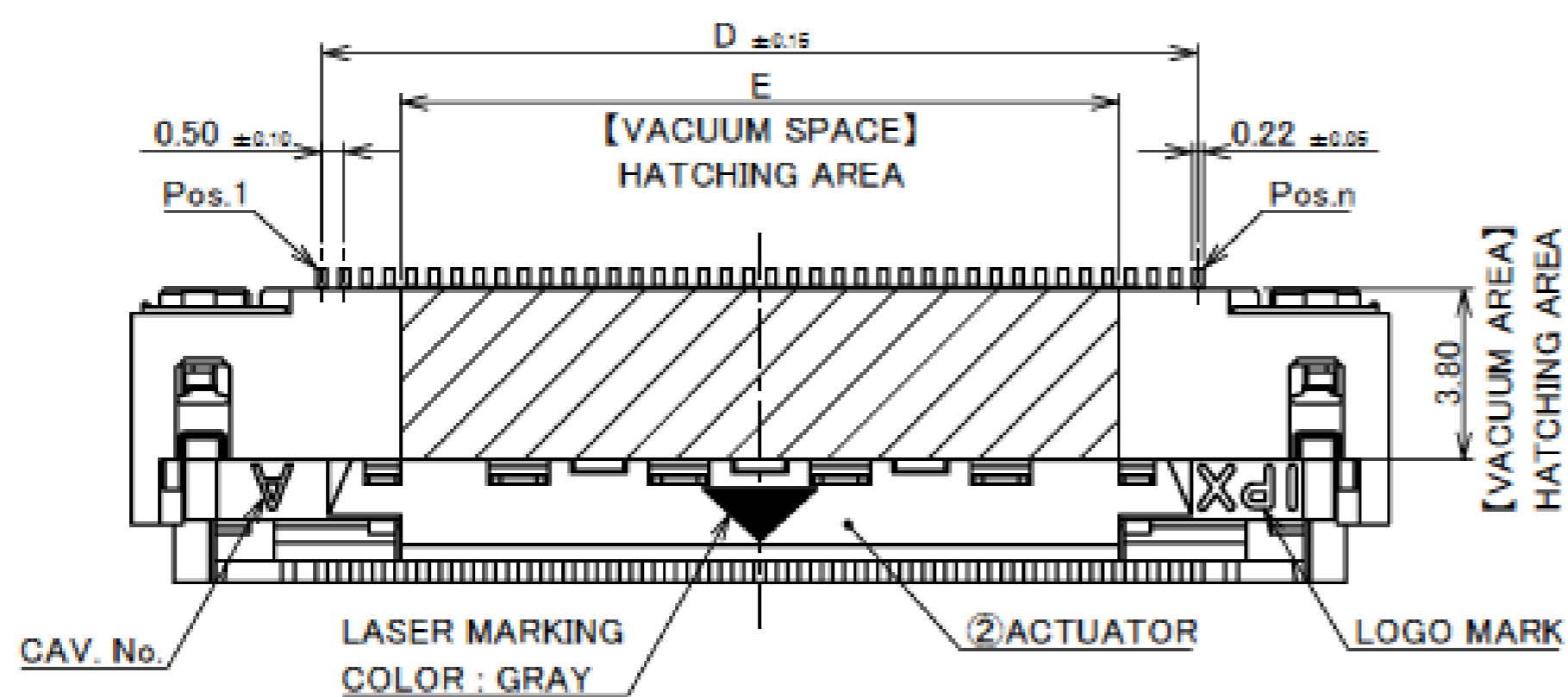




# Component Parts Details

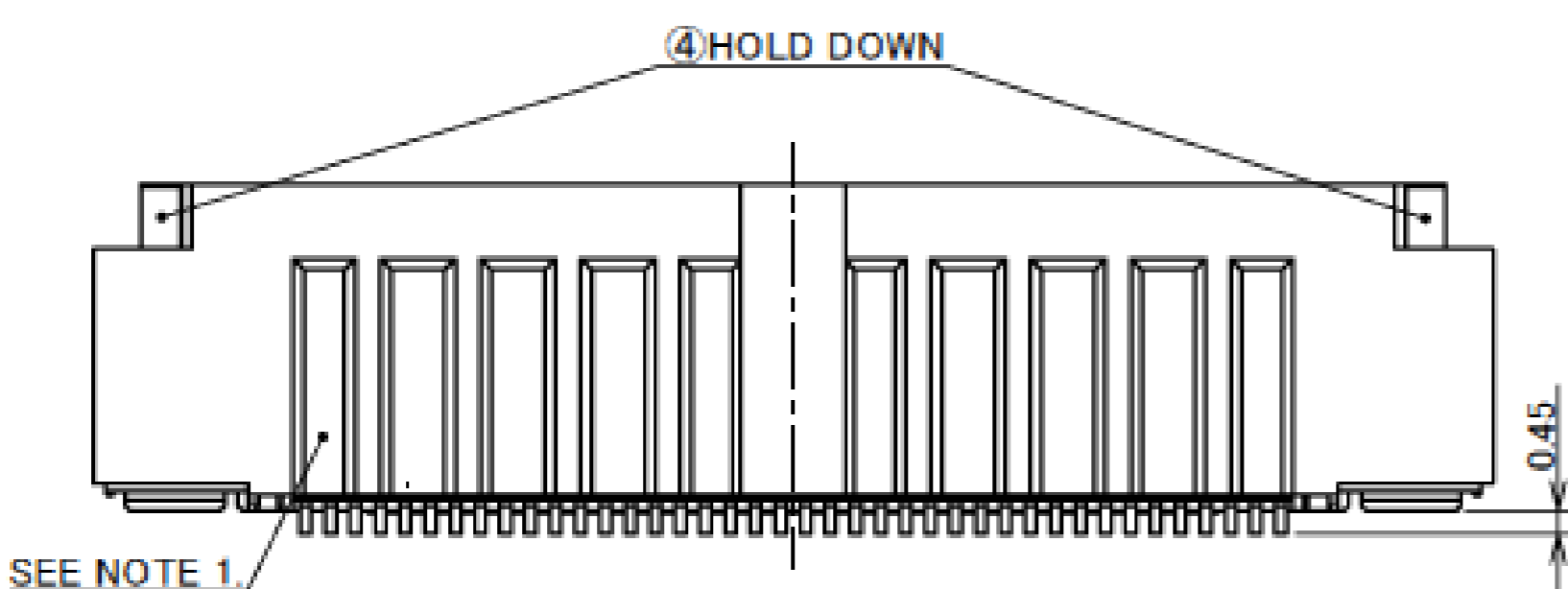
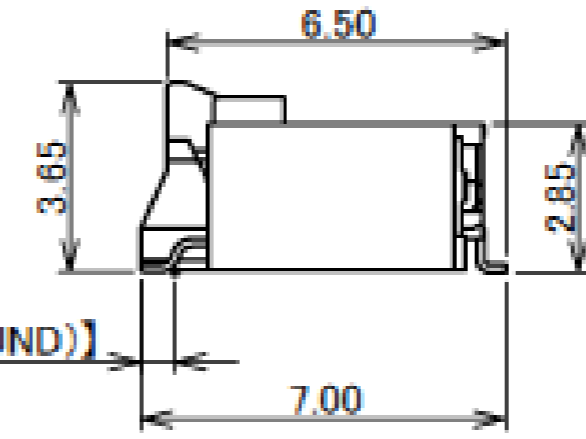
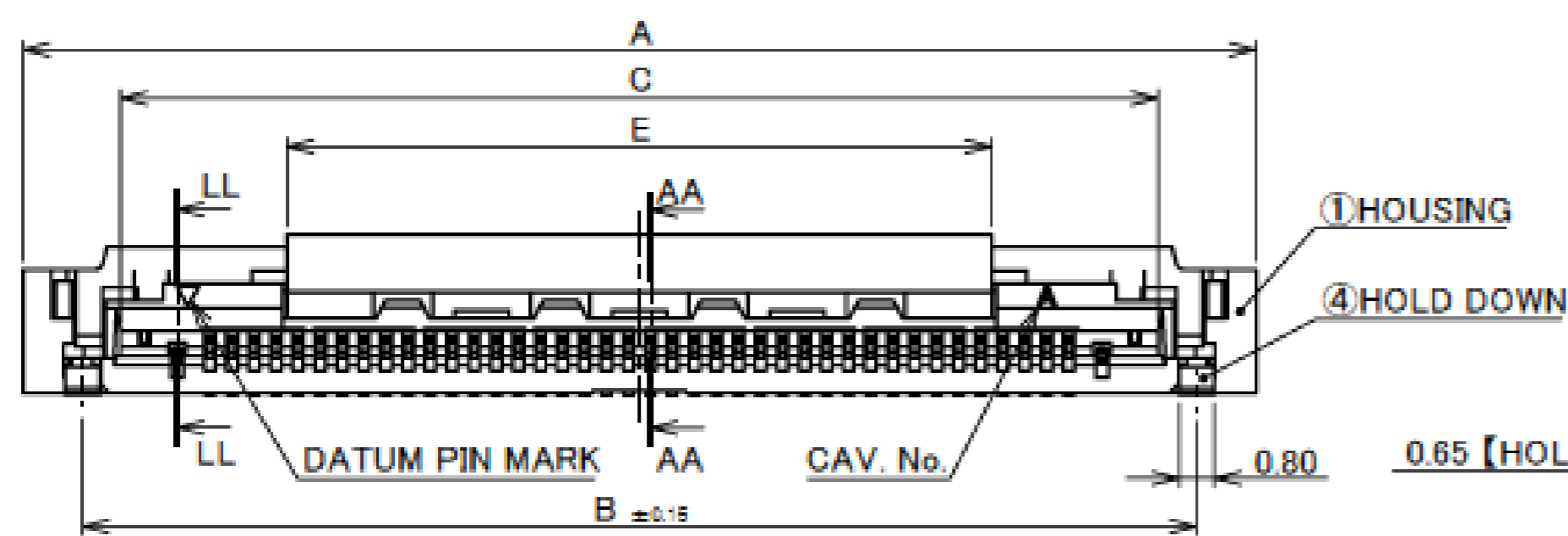
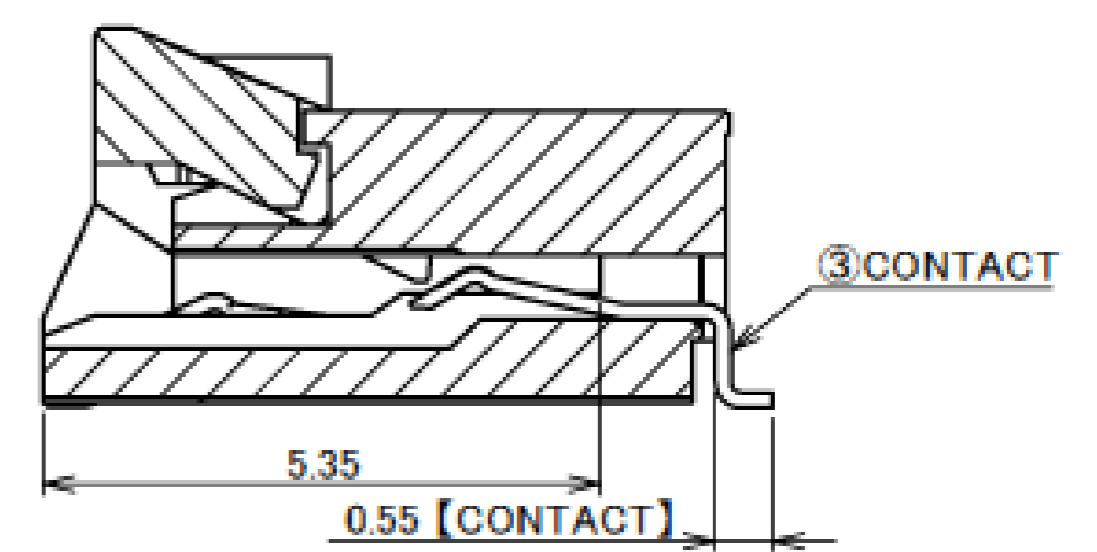
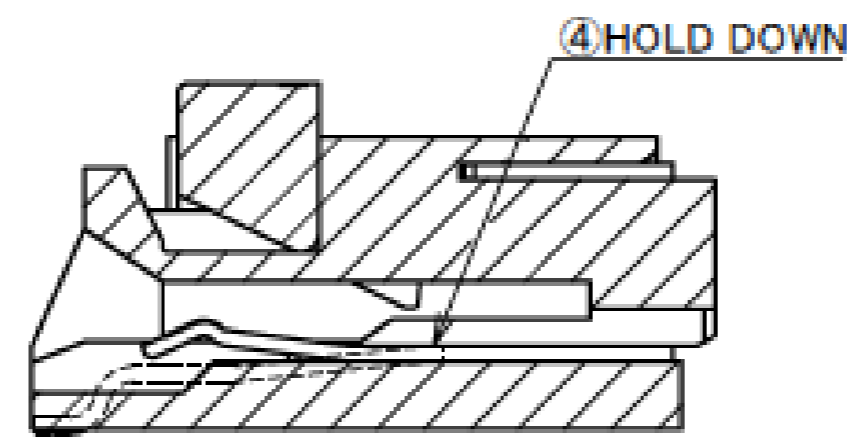
## Connector Assembly

Recommended P/N 20899-0\*\*E-01



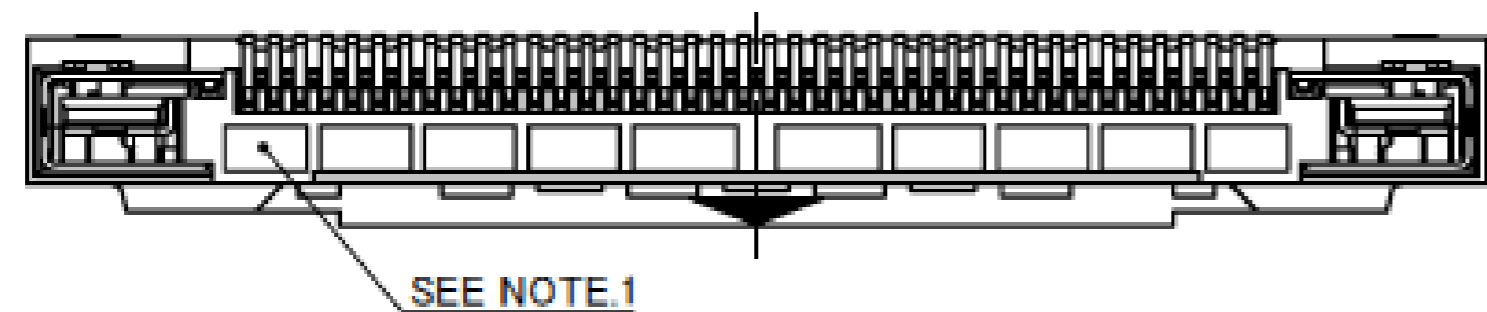
PART No.	A	B	C	D	E
◆20899-020E-01	18.00	15.30	13.56	9.50	6.00
20899-030E-01	23.00	20.30	18.56	14.50	11.00
◆20899-040E-01	28.00	25.30	23.56	19.50	16.00
20899-050E-01	33.00	30.30	28.56	24.50	21.00
◆20899-060E-01	38.00	35.30	33.56	29.50	26.00

◆MARK MEANS NOT AVAILABLE.



NOTES.  
1. DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE.  
DENT SHAPE AND QUANTITY MIGHT CHANGE FROM DIFFERENT PIN COUNT AND DIFFERENT TOOLING.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	HOLD DOWN	CORSON ALLOY	SOLDERING AREA : Au 0.03μm MIN. OVER Ni 1.00μm MIN.
3	CONTACT	CORSON ALLOY	CONTACT AREA AND SOLDERING AREA : Au 0.03μm MIN. OVER Ni 1.00μm MIN.
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE

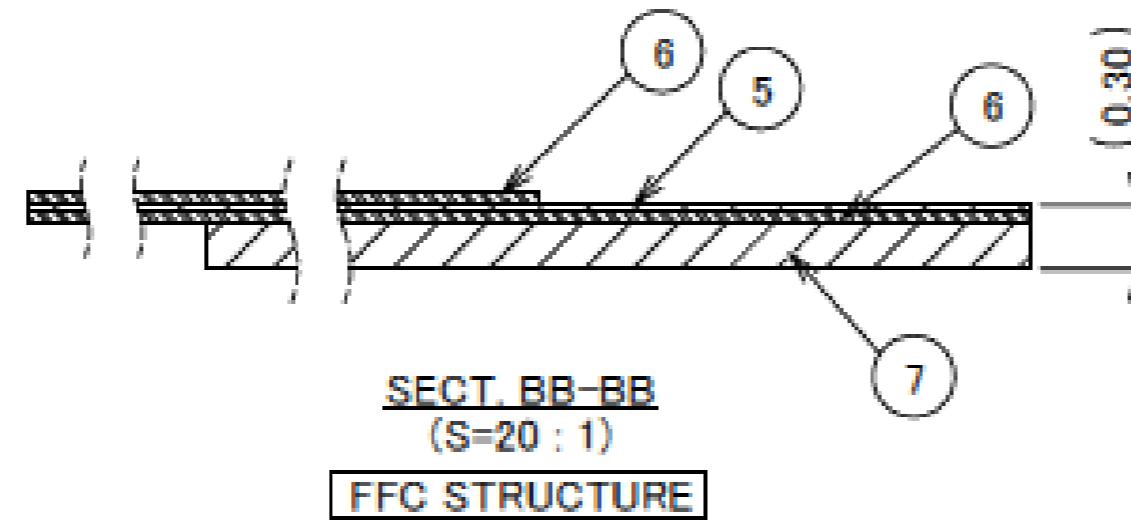
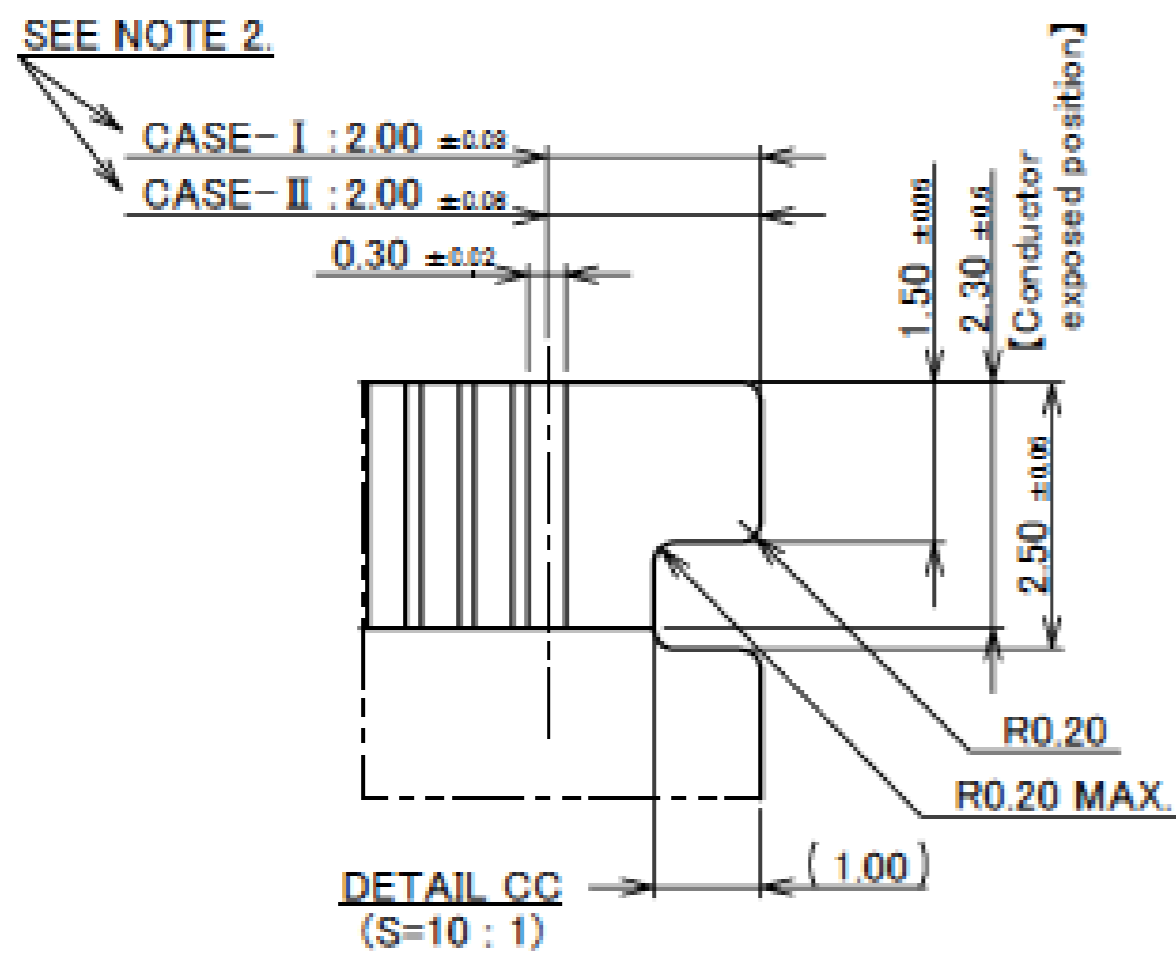
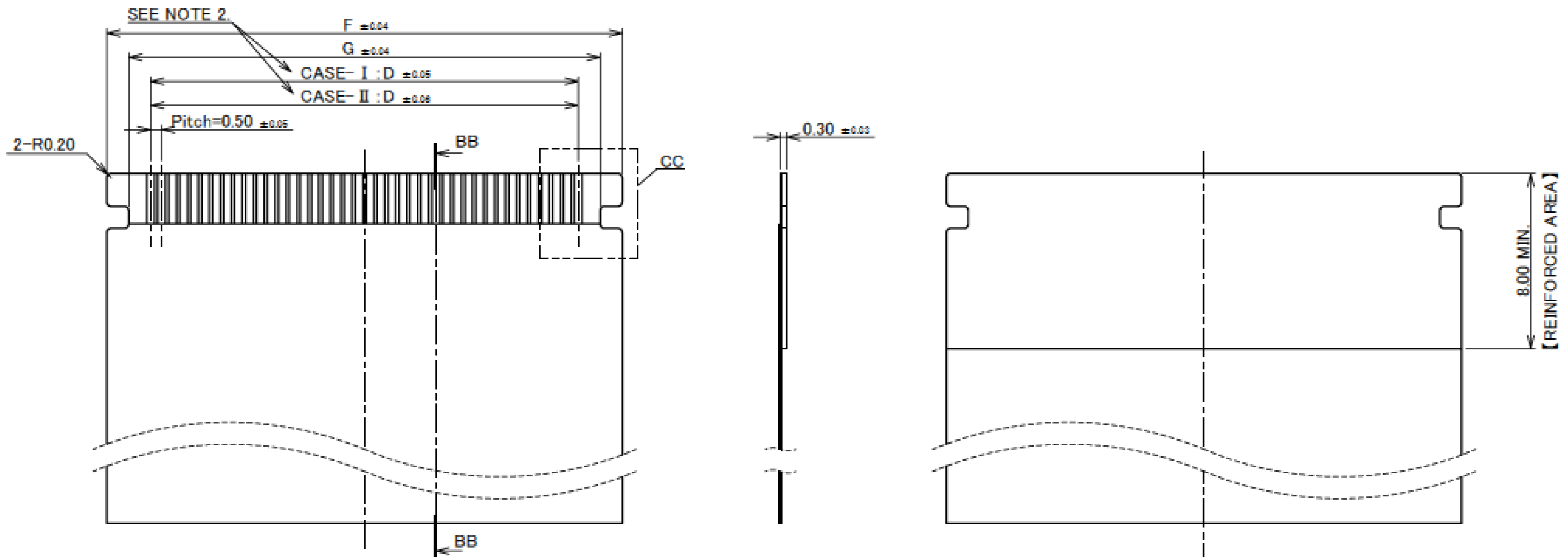


# Connector Assembly

PART No.	D	F	G
◆20899-020E-01	9.50	13.50	11.50
20899-030E-01	14.50	18.50	16.50
◆20899-040E-01	19.50	23.50	21.50
20899-050E-01	24.50	28.50	26.50
◆20899-060E-01	29.50	33.50	31.50

◆MARK MEANS NOT AVAILABLE.

## RECOMMENDED FFC LAYOUT 【NON SHIELDED TYPE】



### NOTES.

- MANUFACTURE CASE- I or II
- SELECT A MATERIAL WITH A SOFTENING TEMPERATURE OF 85°C OR HIGHER FOR THE PATTERN ADHESIVE PART OF FFC.

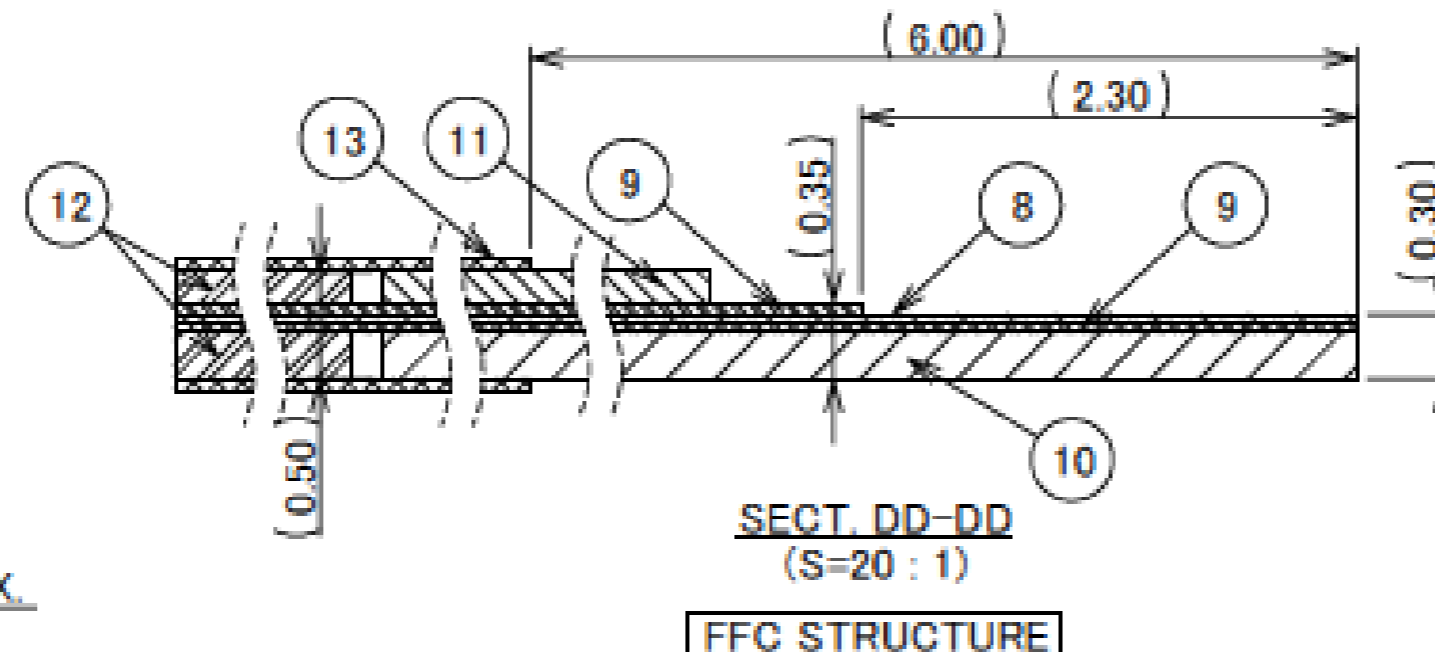
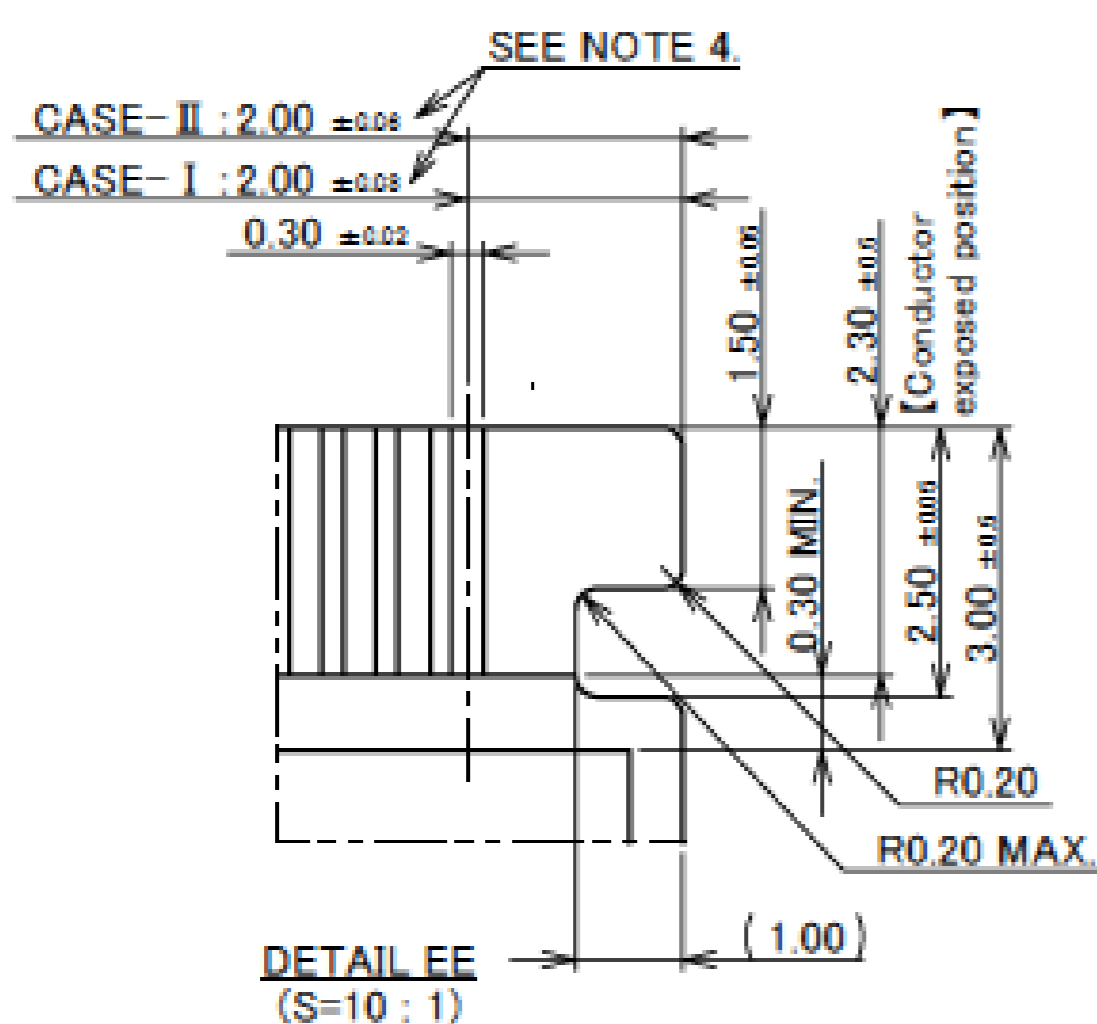
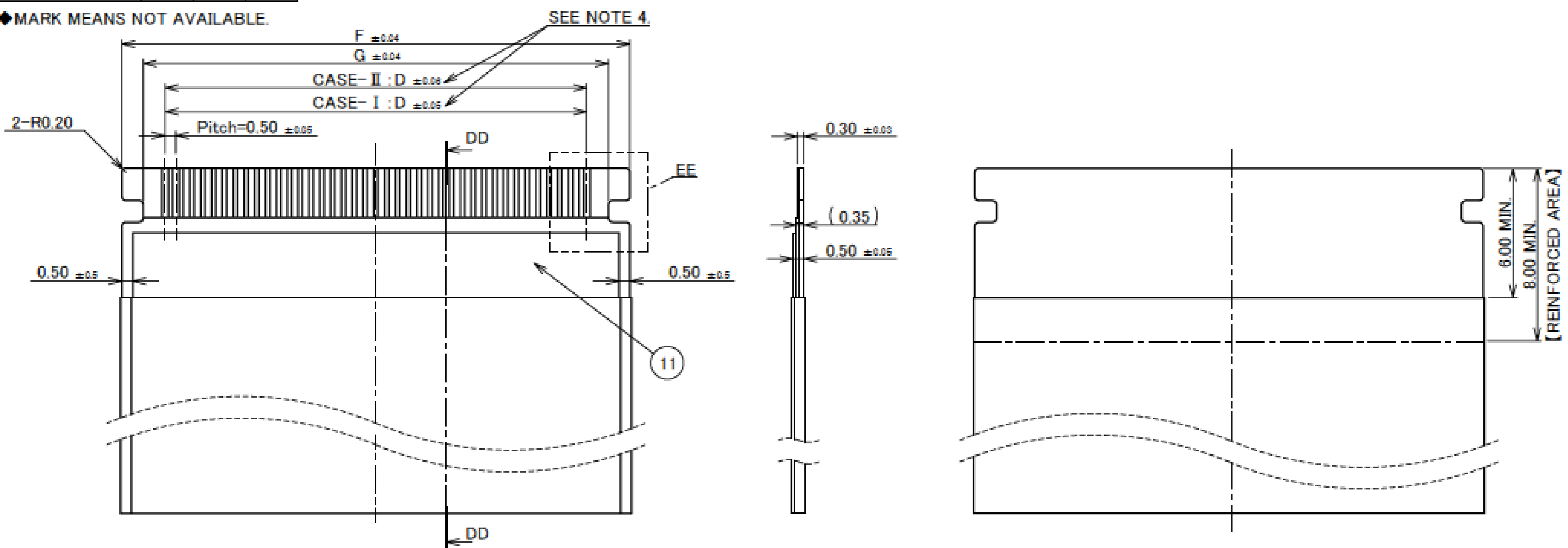
NO.	COMPONENTS	MATERIAL	FINISH
7	REINFORCED TAPE	ARBITRARY	
6	INSULATION FILM	ARBITRARY	
5	CONDUCTOR	COPPER ALLOY	CONTACT AREA : Au 0.05 μm MIN. OVER Ni 0.5 μm MIN.

Rev.5

PART No.	D	F	G
◆20899-020E-01	9.50	13.50	11.50
20899-030E-01	14.50	18.50	16.50
◆20899-040E-01	19.50	23.50	21.50
20899-050E-01	24.50	28.50	26.50
◆20899-060E-01	29.50	33.50	31.50

◆MARK MEANS NOT AVAILABLE.

## RECOMMENDED FFC LAYOUT 【SHIELDED TYPE】



### NOTES.

- MANUFACTURE CASE- I or II
- DIFFERENTIAL IMPEDANCE : 100±10 Ω
- SELECT A MATERIAL WITH A SOFTENING TEMPERATURE OF 85°C OR HIGHER FOR THE PATTERN ADHESIVE PART OF FFC.

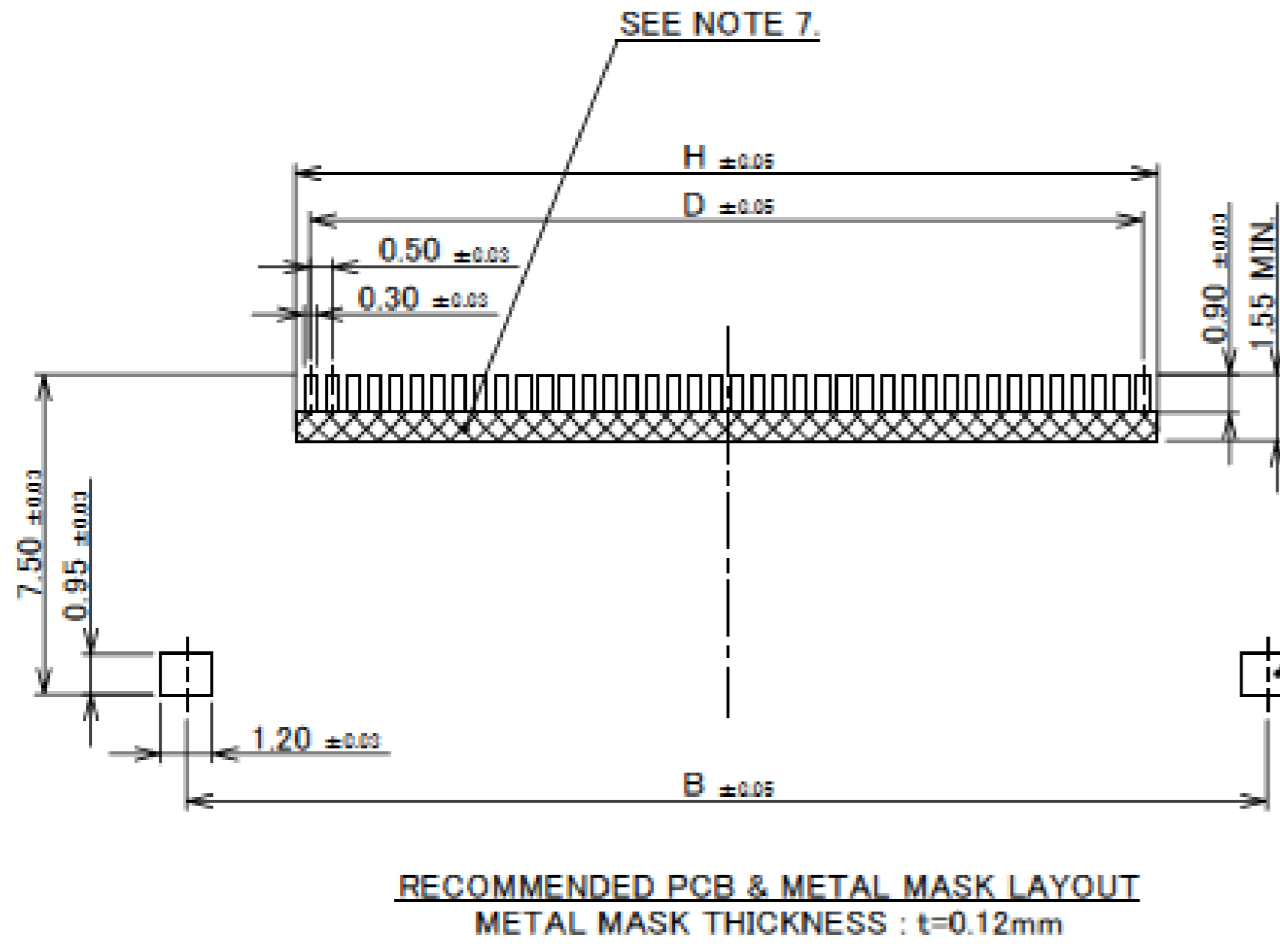
NO.	COMPONENTS	MATERIAL	FINISH
13	SHIELD TAPE	METALLIC FILM	
12	INTERLAYER	ARBITRARY	
11	GROUND PLATE	METALLIC FILM	POLISH or HALF POLISH Sn PLATING
10	REINFORCED TAPE	ARBITRARY	
9	INSULATION FILM	ARBITRARY	
8	CONDUCTOR	COPPER ALLOY	CONTACT AREA : Au 0.05 μm MIN. OVER Ni 0.5 μm MIN.

Rev.5

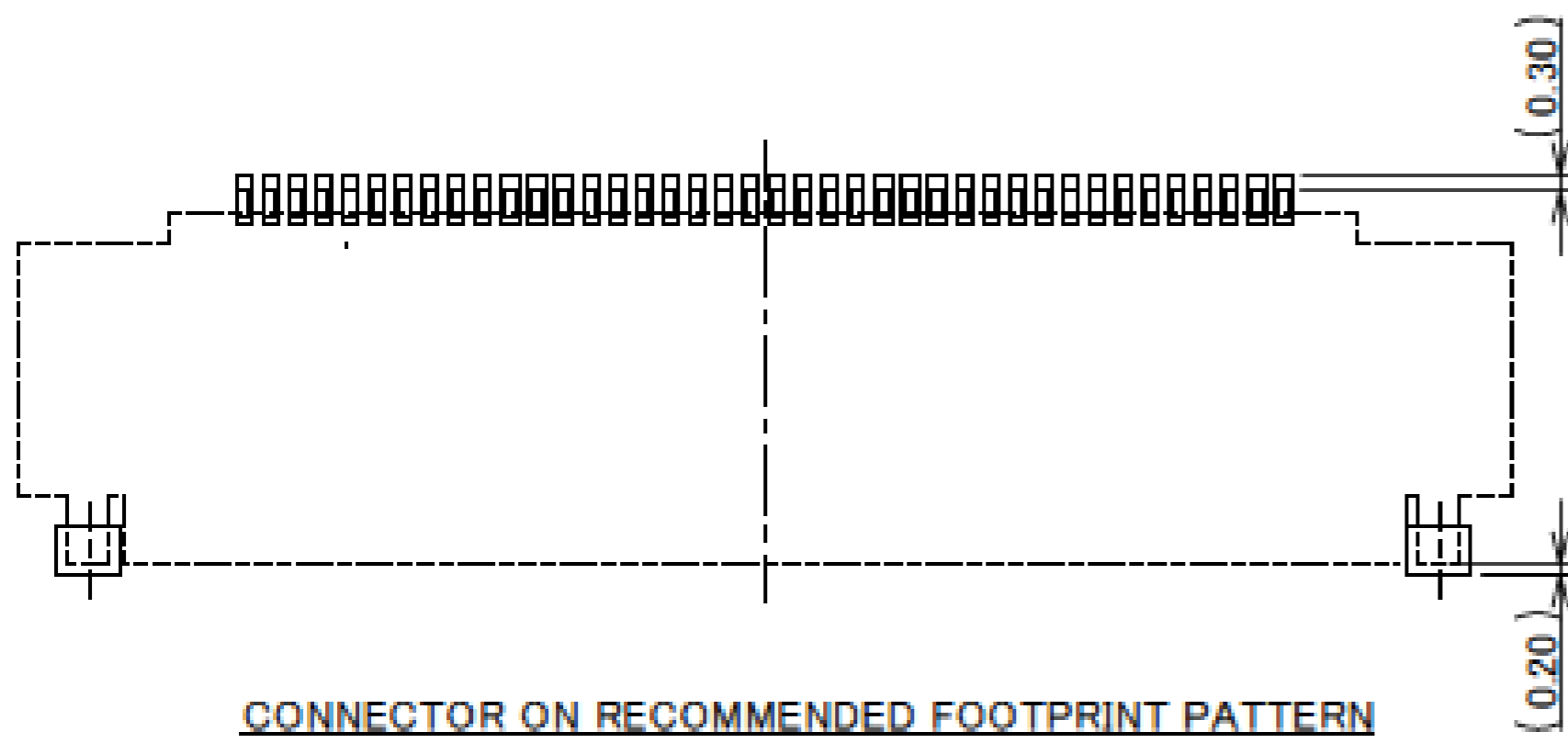
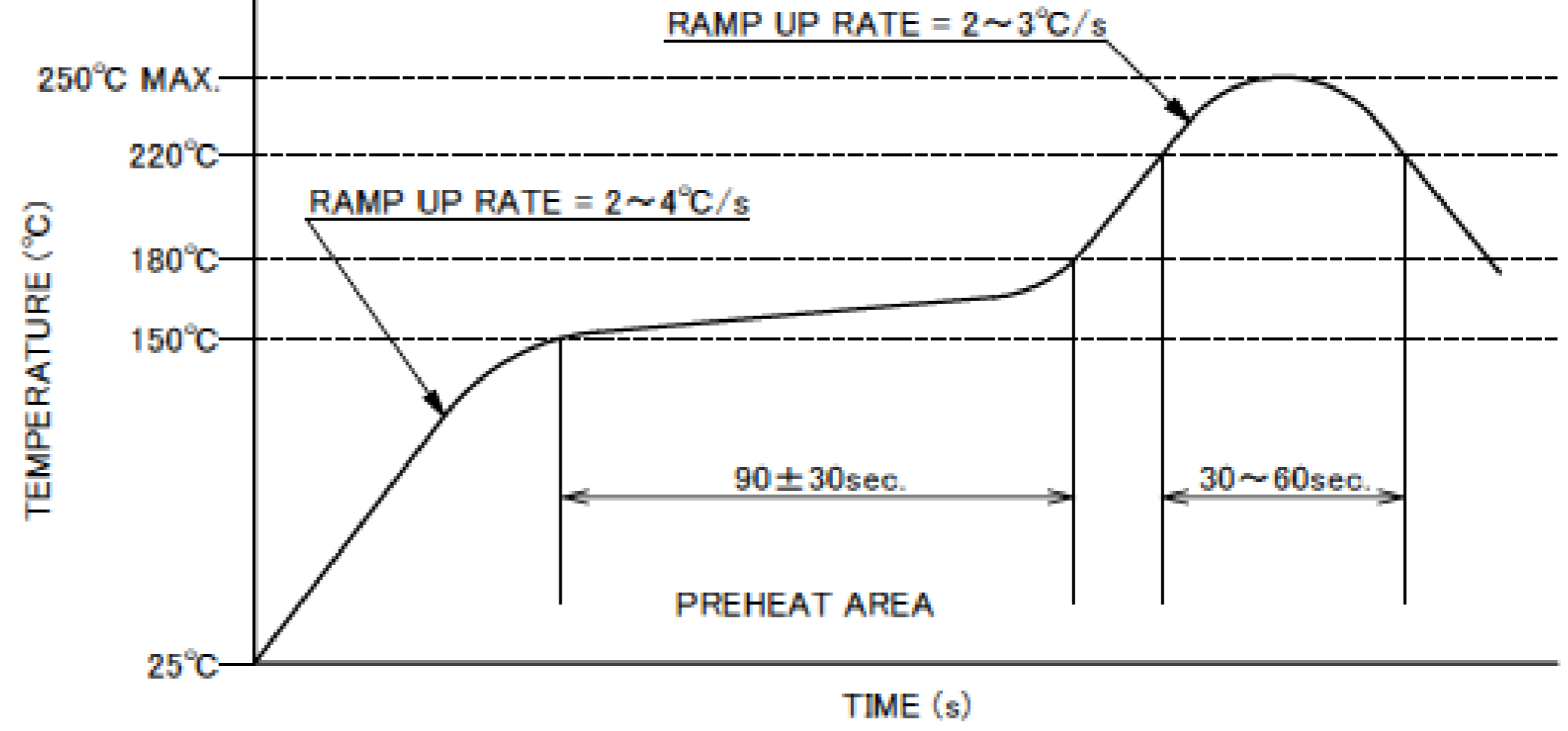
# Connector Assembly

PART No.	B	D	H
◆20899-020E-01	15.30	9.50	10.20
20899-030E-01	20.30	14.50	15.20
◆20899-040E-01	25.30	19.50	20.20
20899-050E-01	30.30	24.50	25.20
◆20899-060E-01	35.30	29.50	30.20

◆MARK MEANS NOT AVAILABLE.



HOLD DOWN / ※GROUND PAD  
(※WITH SHIELDED FPC / FFC)



NOTES

7. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Rev.5

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC/DC (PER CONTACT PIN)
RATING AMPERAGE	0.35A AC/DC (PER CONTACT PIN) AVAILABLE FOR ALL CONTACTS 0.5A AC/DC (PER CONTACT PIN) AVAILABLE UP TO 15 CONTACTS
OPERATING TEMPERATURE	233~398K(-40°C~+125°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : <math>\triangleleft</math>40mohm MAX.
INSULATION RESISTANCE	500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	50TH CYCLES
FPC/FFC MATING FORCE (INITIAL / 50TH CYCLES)	20P : 15.00 N MAX. 30P : 22.00 N MAX. 40P : 29.00 N MAX. 50P : 36.00 N MAX. 60P : 43.00 N MAX.
FPC/FFC UNMATING FORCE (INITIAL / 50TH CYCLES)	20P : 2.00 N MIN. 30P : 2.70 N MIN. 40P : 3.40 N MIN. 50P : 4.10 N MIN. 60P : 4.80 N MIN.
FPC/FFC RETENTION FORCE (INITIAL / AFTER TEST)	20P : 11.00 N MIN. 30P : 11.70 N MIN. 40P : 12.40 N MIN. 50P : 13.10 N MIN. 60P : 13.80 N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2470
TEST REPORT	TR-18020
PACKING STANDARD	PST-19019
INSTRUCTION MANUAL	HIM-18018
APPEARANCE CRITERIA No.	QLS-A***

Rev.5



# 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

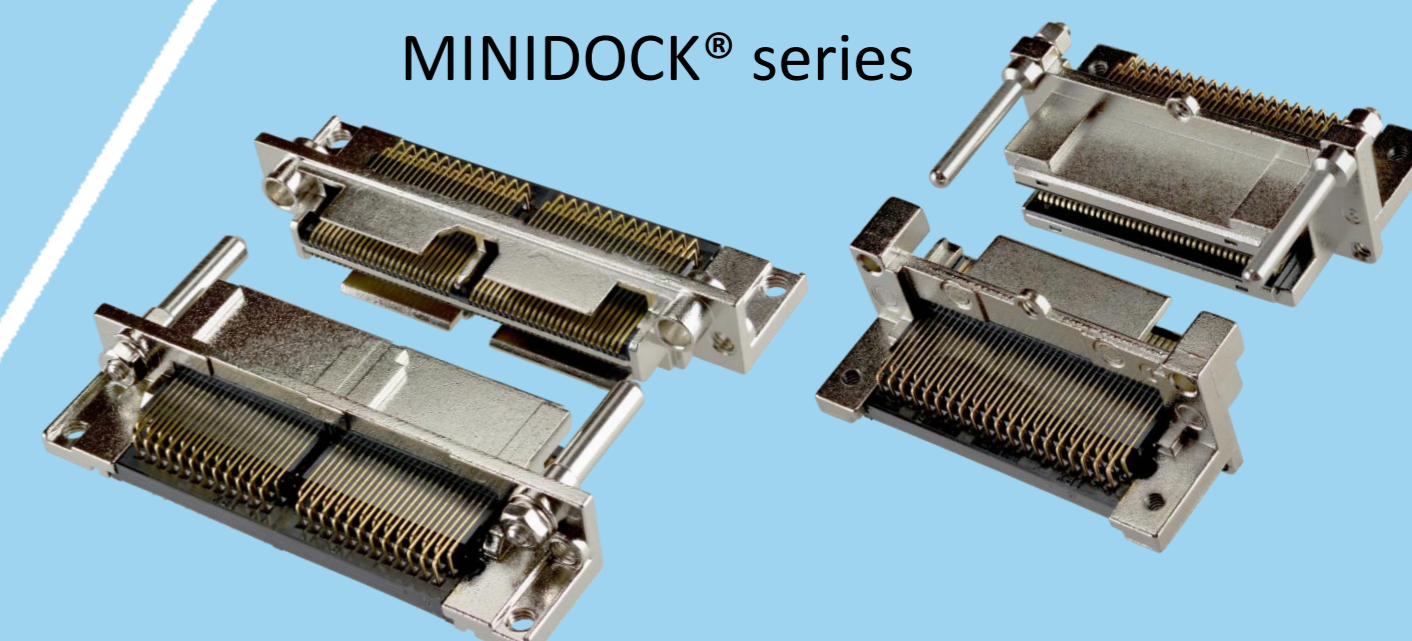


Inquiry



MINIDOCK® series

 I/O Connector



I-PEX, MHF, CABLINE, LIGHTPASS, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCKS 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](http://www.i-pex.com)



# I-PEX

© I-PEX Inc. 2024  
All rights reserved