

# EVAFLEX® 5-SE-G VT

One-handed auto-locking feature, high temperature (125°C), high-speed, vertical mate, 0.5 mm pitch shielded FFC/FPC connector



Product Specifications:

Board Pitch (mm)		0.5
Wiping Length (mm)		1.2
Size (mm)	Height	6.6 +/- 0.30
	Width	Formula: 8.00 + (0.5*?p)
	Depth	3.90 +/- 0.20
Pin counts	Range	20 - 60
	Available	20, 30, 40, 50, 60

Applicable FPC/FFC:

FPC/FFC Type	Shielded FFC, Non-shielded FFC/FPC
FPC/FFC Contact Point	Signal contact tail side
FPC/FFC Thickness (mm)	0.30 +/- 0.03

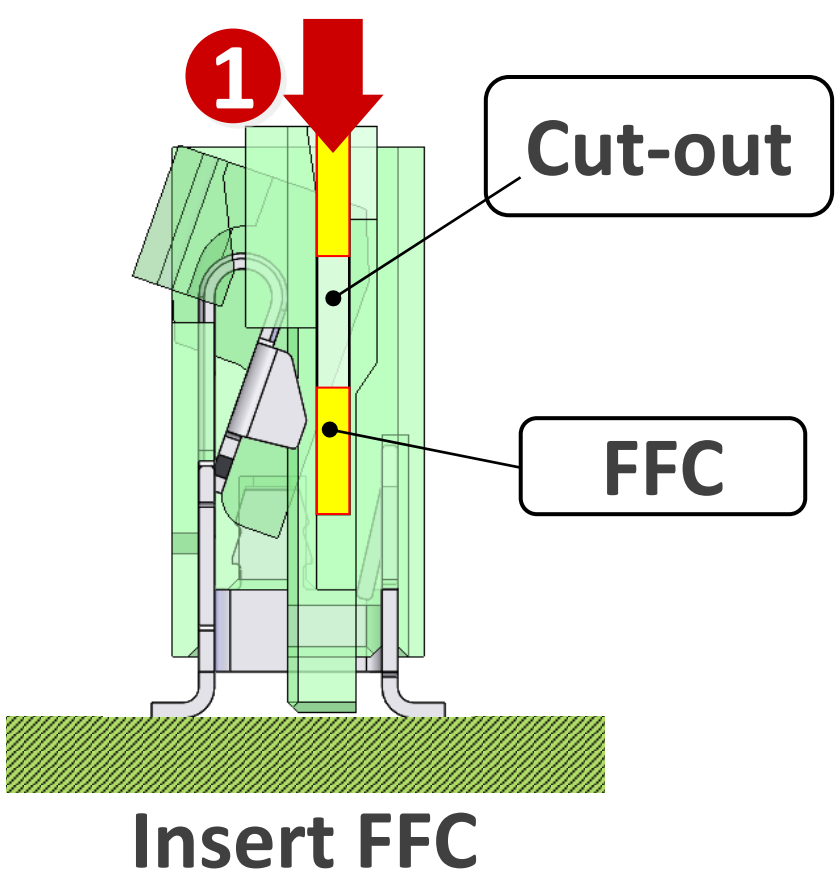
Applicable Standards (Reference Only):

eDP (2.7 Gbps) V-By-One HS 1.4 (4 Gbps)
USCAR II Vibration & Shock V1

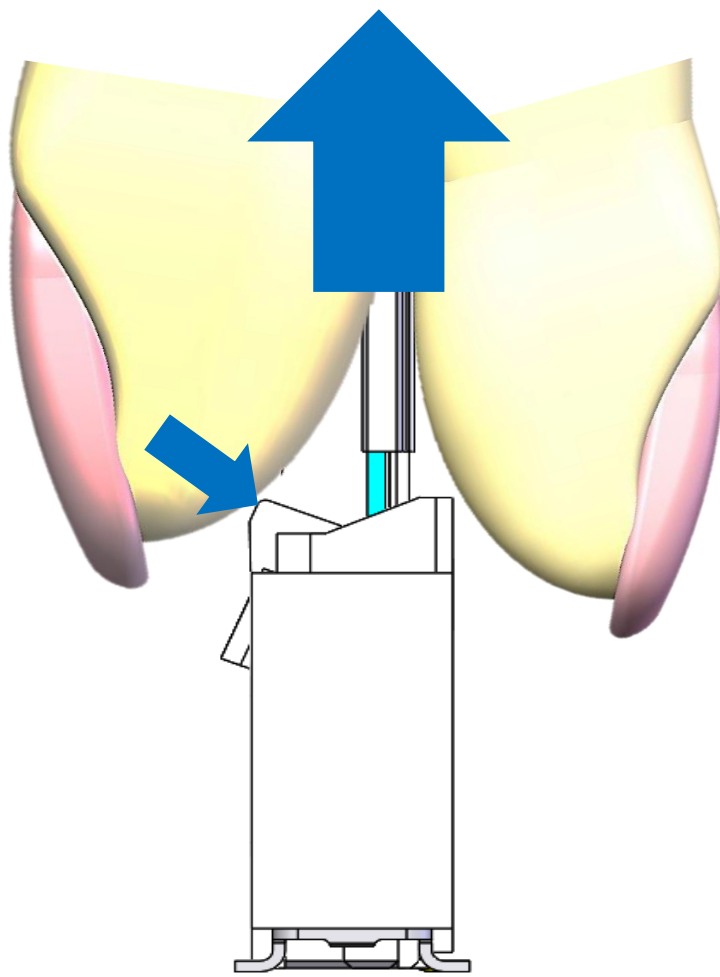
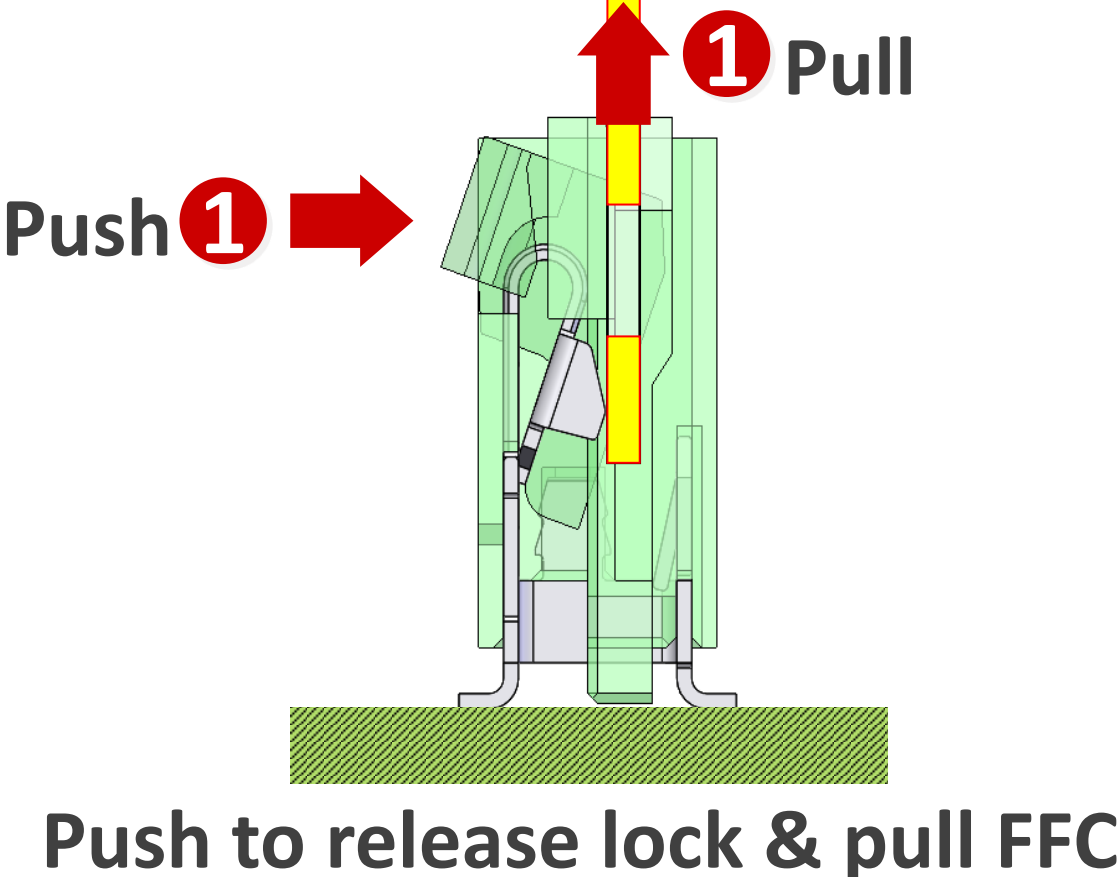
\* Please inquire for pin counts not listed or outside of the pin count range.

▶ One-handed operational auto-lock design, ideal for hand or robotic assembly

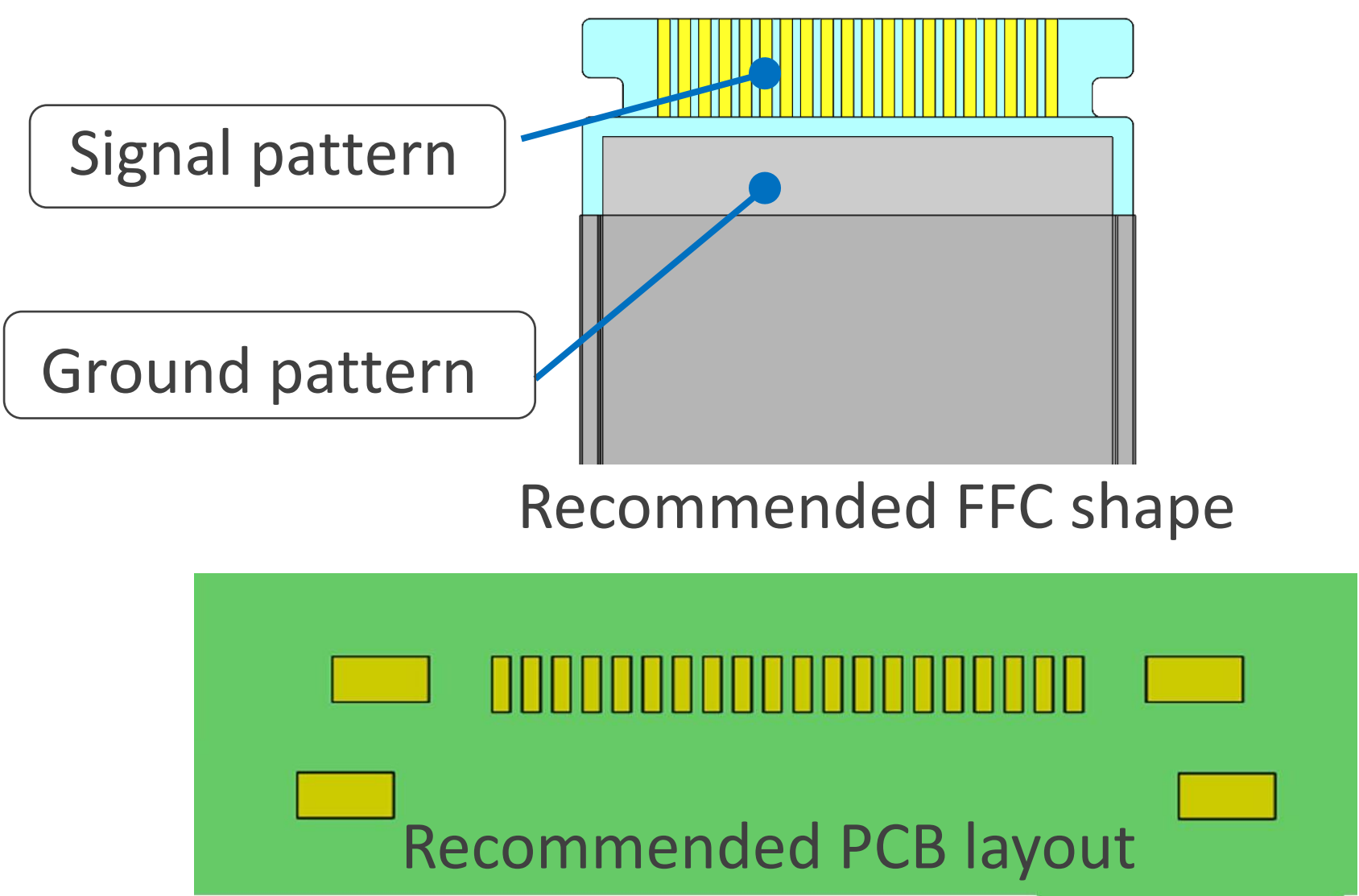
One action FFC mating



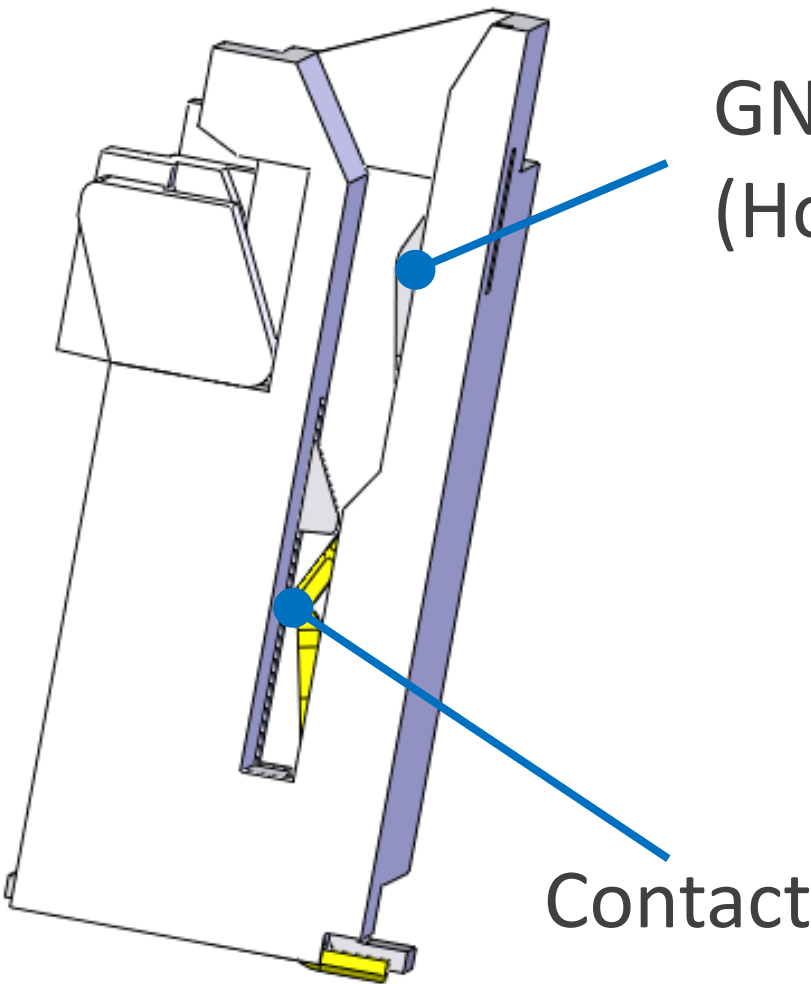
One action FFC removal



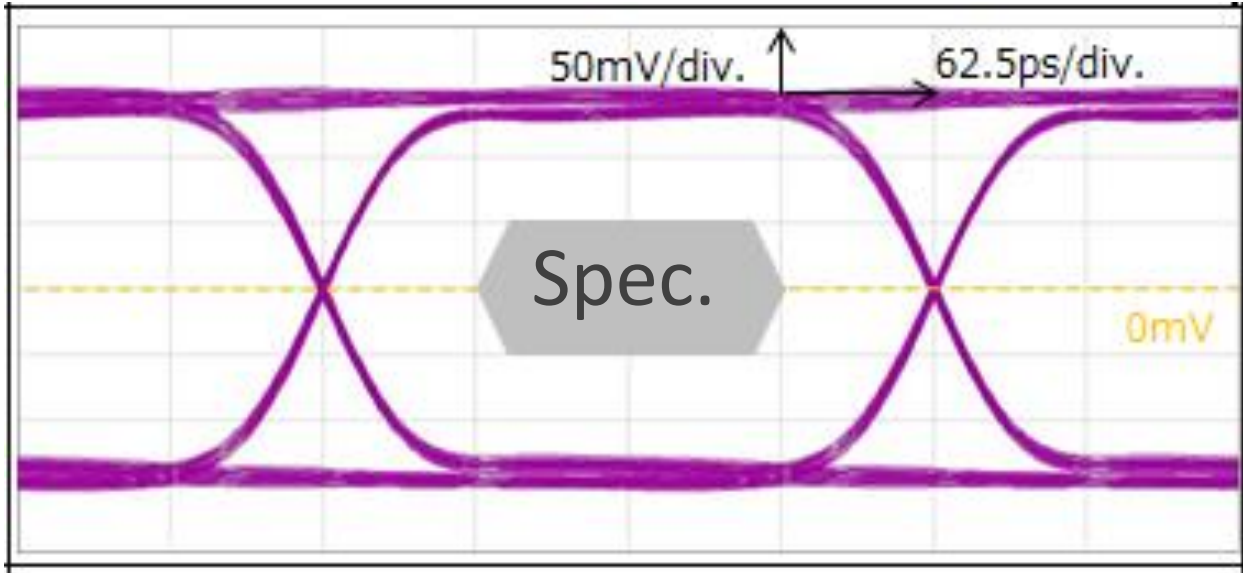
▶ Designed for high-speed transmission with grounding contacts (4+ Gbps V-By-One® HS)



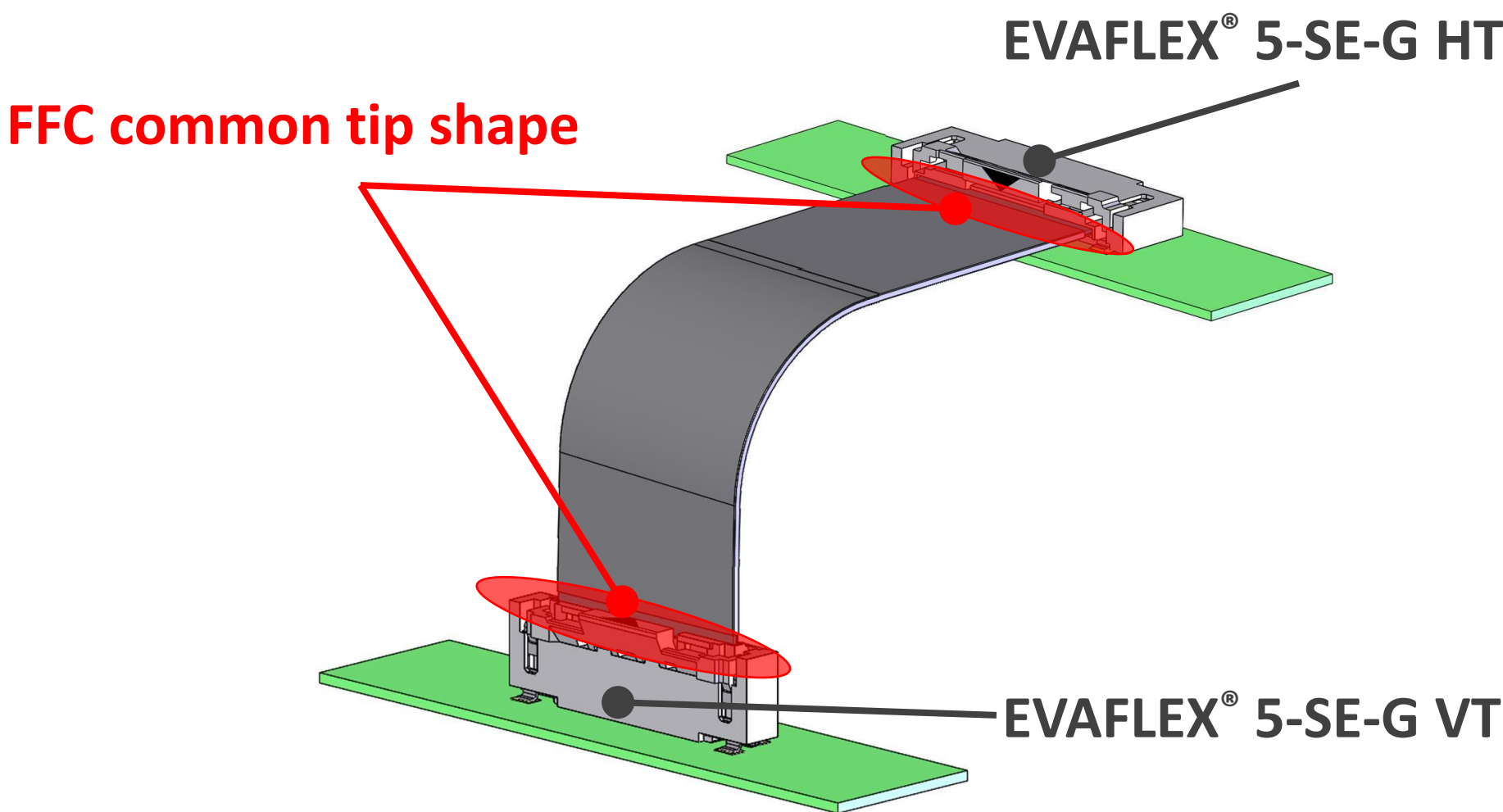
Extended hold down with GND pin for GND connection  
Target speed : up to 4+ Gbps (V-By-One® HS)



Eye pattern 4 Gbps (actual)



▶ Horizontal mate type using same FFC option as EVAFLEX® 5-SE-G HT



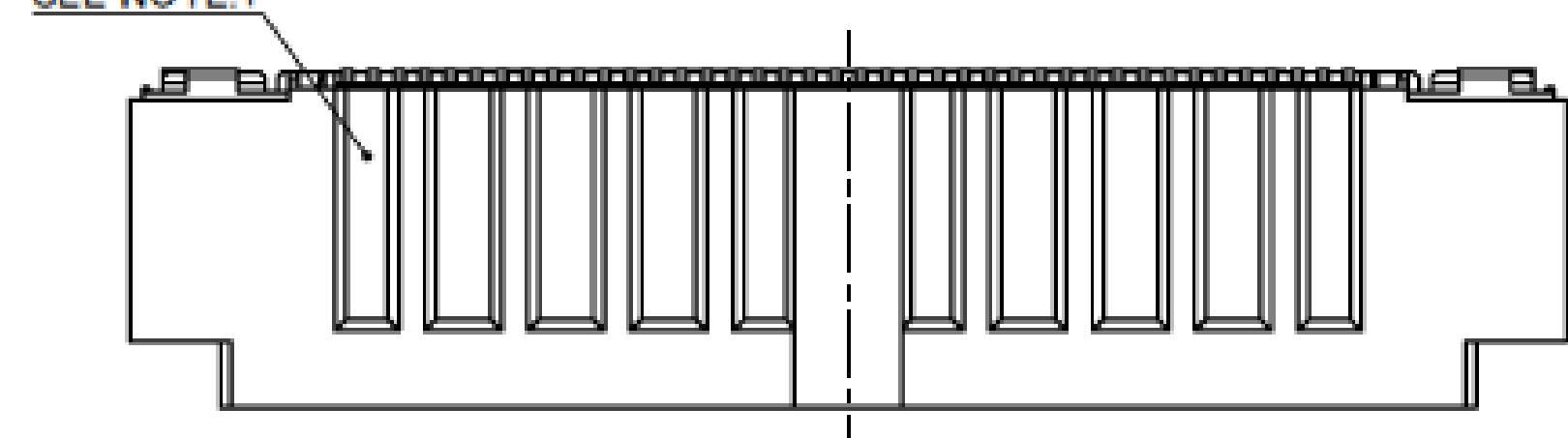
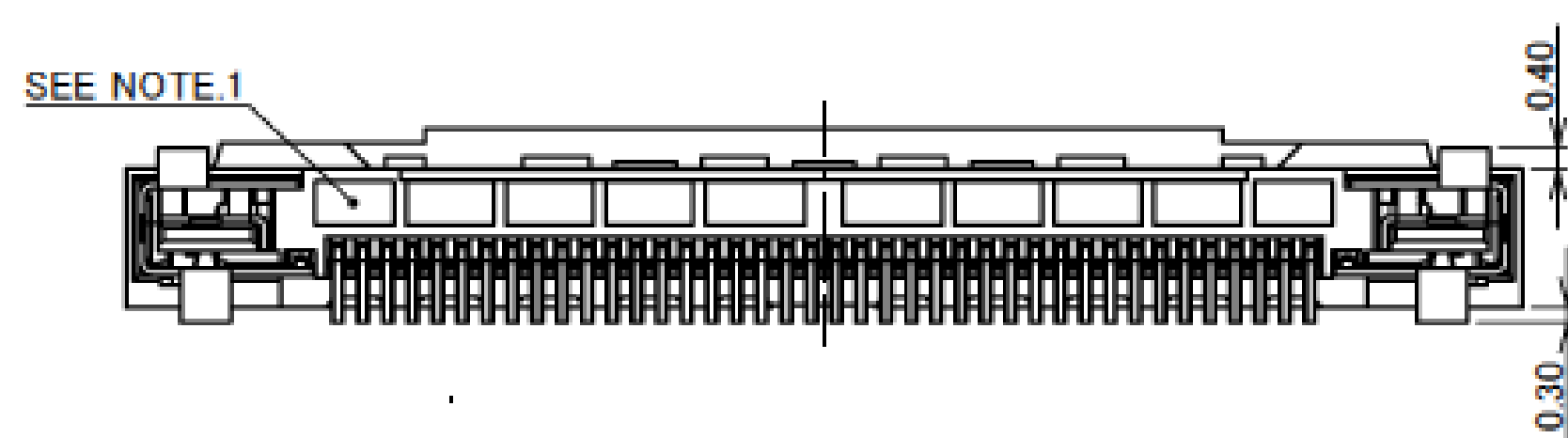
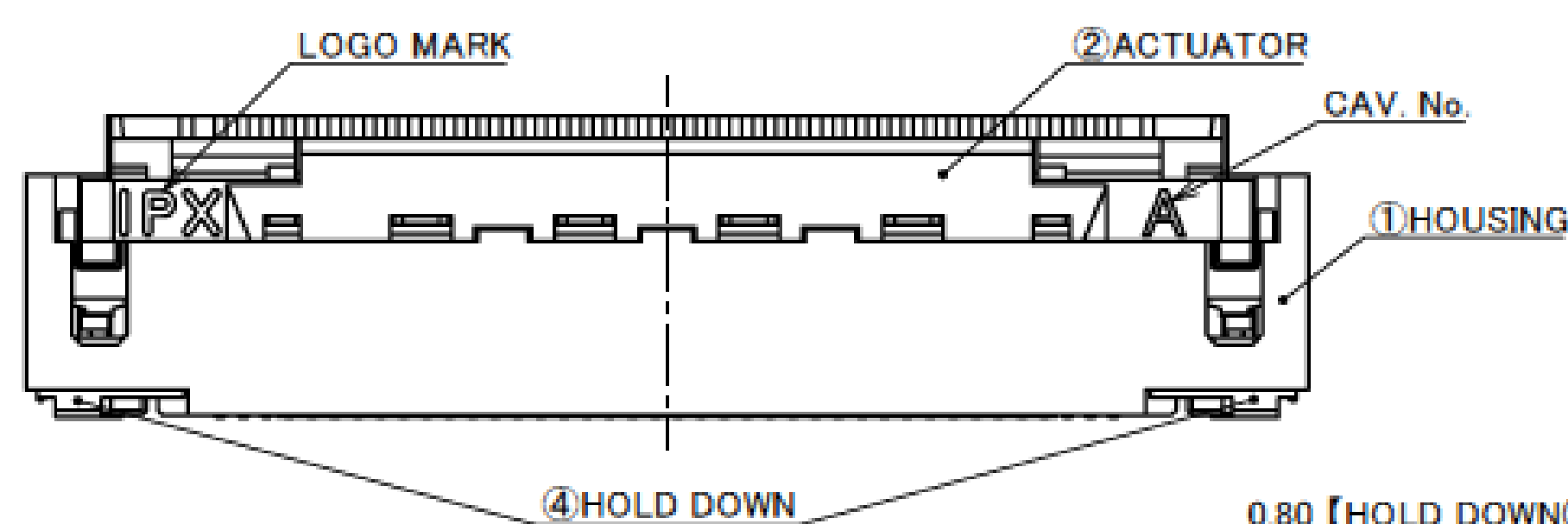
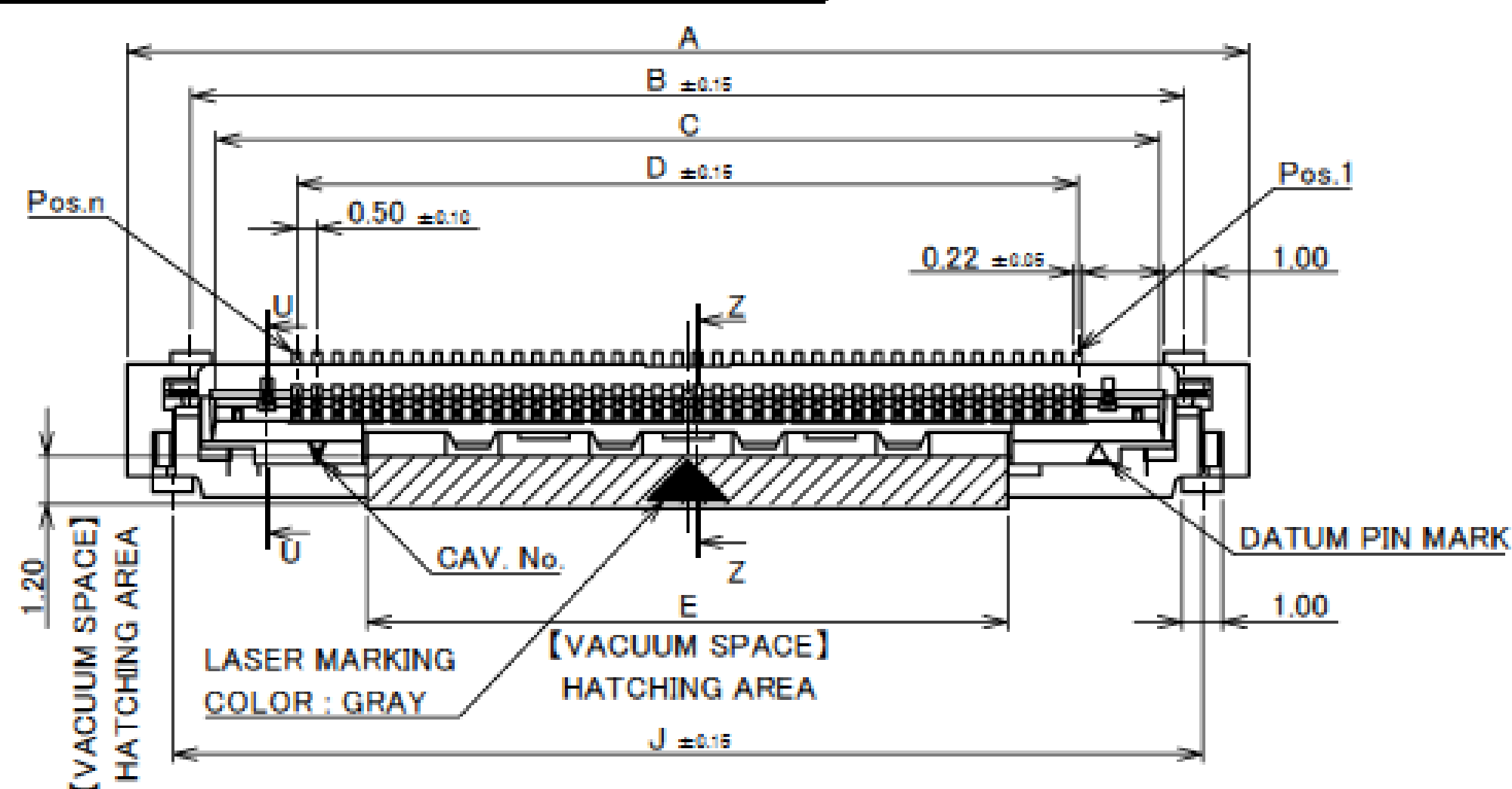
	EVAFLEX® 5-SE-G HT
Height (mm)	3.65 +/- 0.1
Depth (mm)	7.0



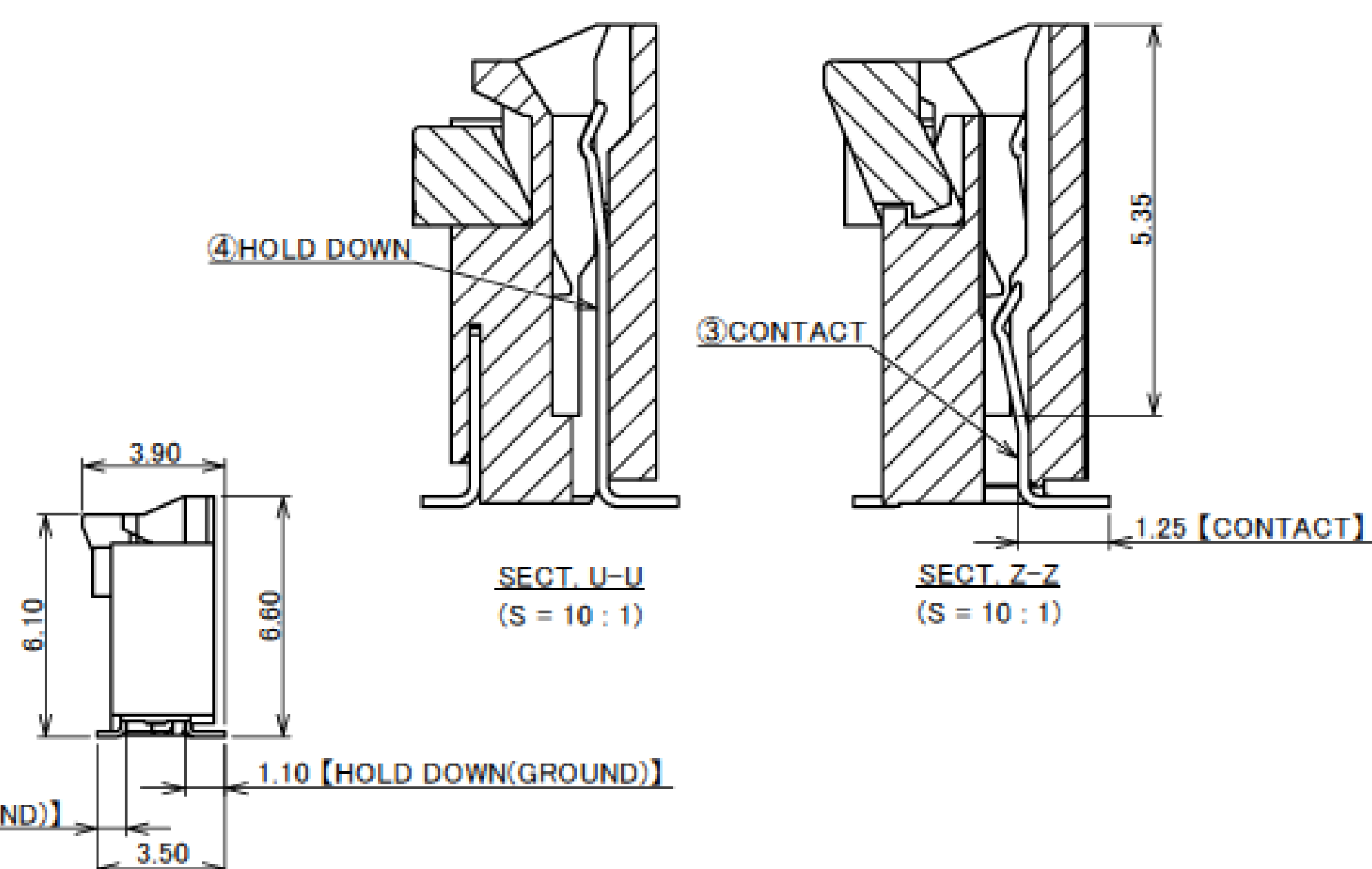
# Component Parts Details

## Connector Assembly

Recommended P/N	20799-0**E-01
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PART No.	A	B	C	D	E	J
20799-020E-01	18.00	14.80	13.56	9.50	6.00	15.70
20799-030E-01	23.00	19.80	18.56	14.50	11.00	20.70
20799-040E-01	28.00	24.80	23.56	19.50	16.00	25.70
20799-050E-01	33.00	29.80	28.56	24.50	21.00	30.70
20799-060E-01	38.00	34.80	33.56	29.50	26.00	35.70



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

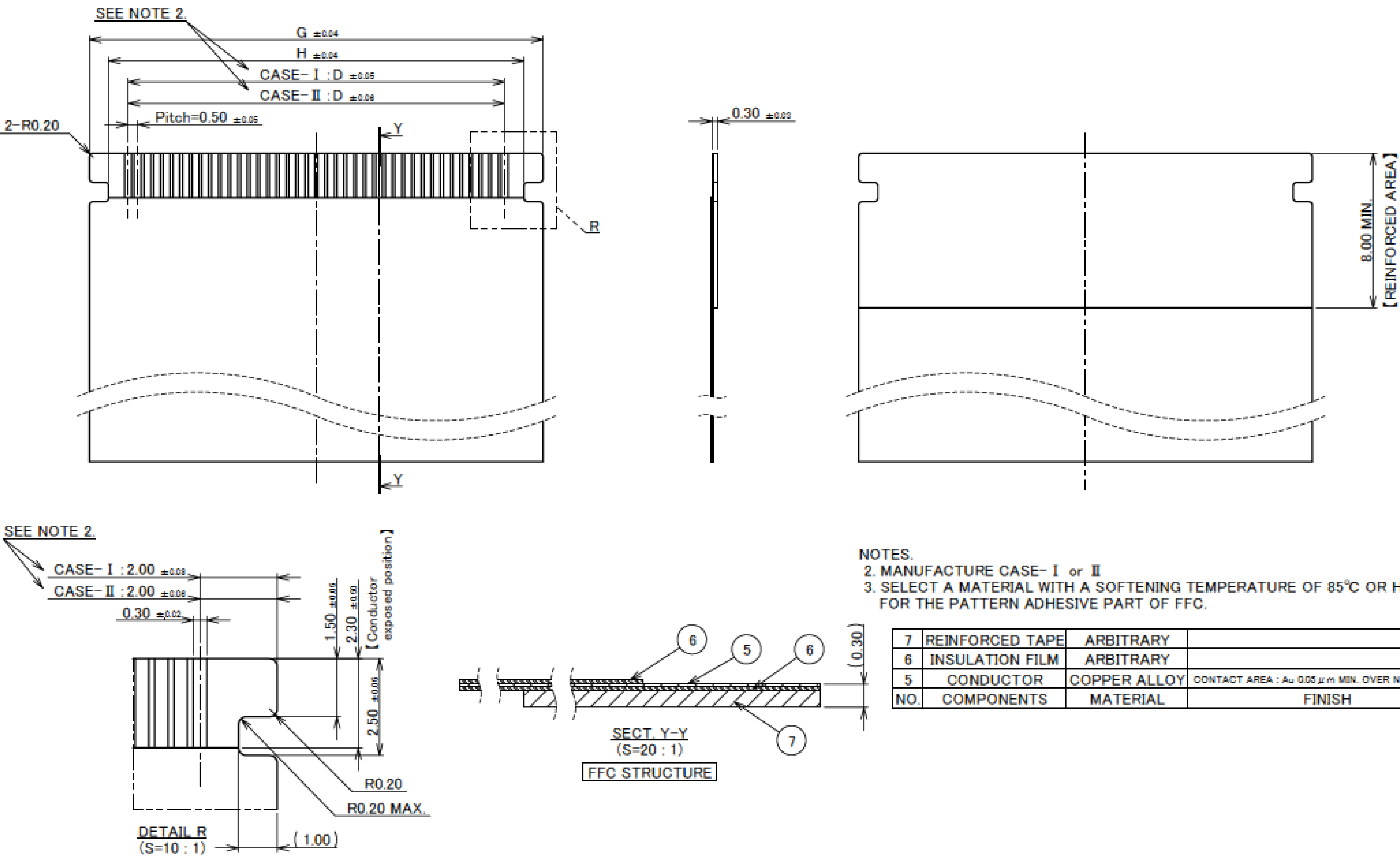
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	HOLD DOWN	CORSON ALLOY	SOLDERING AREA : Au 0.03μm MIN. OVER Ni 1.00μm MIN.
3	CONTACT	CORSON ALLOY	CONTACT AREA AND SOLDERING AREA : Au 0.03μm MIN. OVER Ni 1.00μm MIN.
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE



Connector Assembly

PART No.	D	G	H
20799-020E-01	9.50	13.50	11.50
20799-030E-01	14.50	18.50	16.50
20799-040E-01	19.50	23.50	21.50
20799-050E-01	24.50	28.50	26.50
20799-060E-01	29.50	33.50	31.50

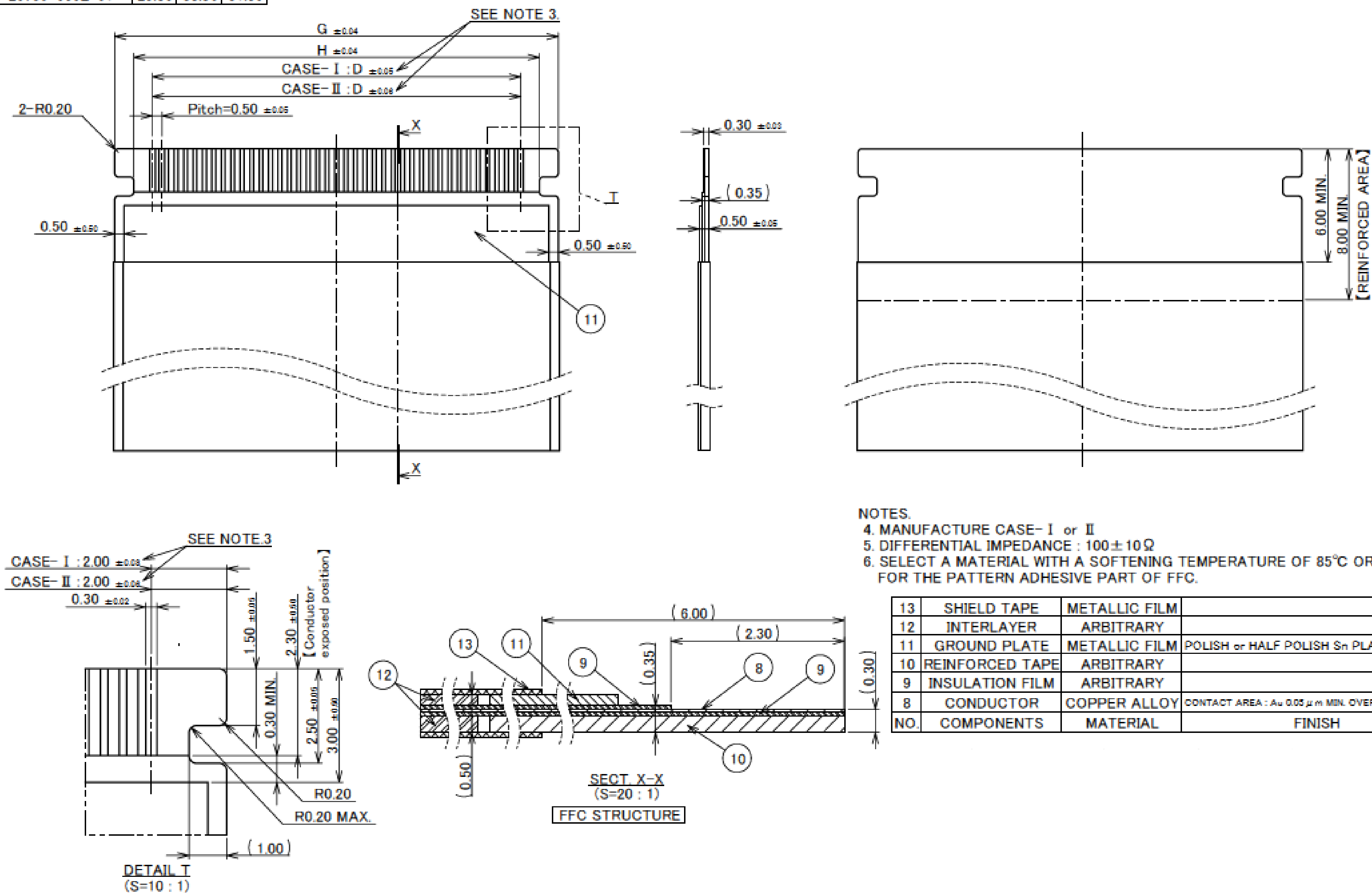
RECOMMENDED FFC LAYOUT  
【NON SHIELDED TYPE】



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PART No.	D	G	H
20799-020E-01	9.50	13.50	11.50
20799-030E-01	14.50	18.50	16.50
20799-040E-01	19.50	23.50	21.50
20799-050E-01	24.50	28.50	26.50
20799-060E-01	29.50	33.50	31.50

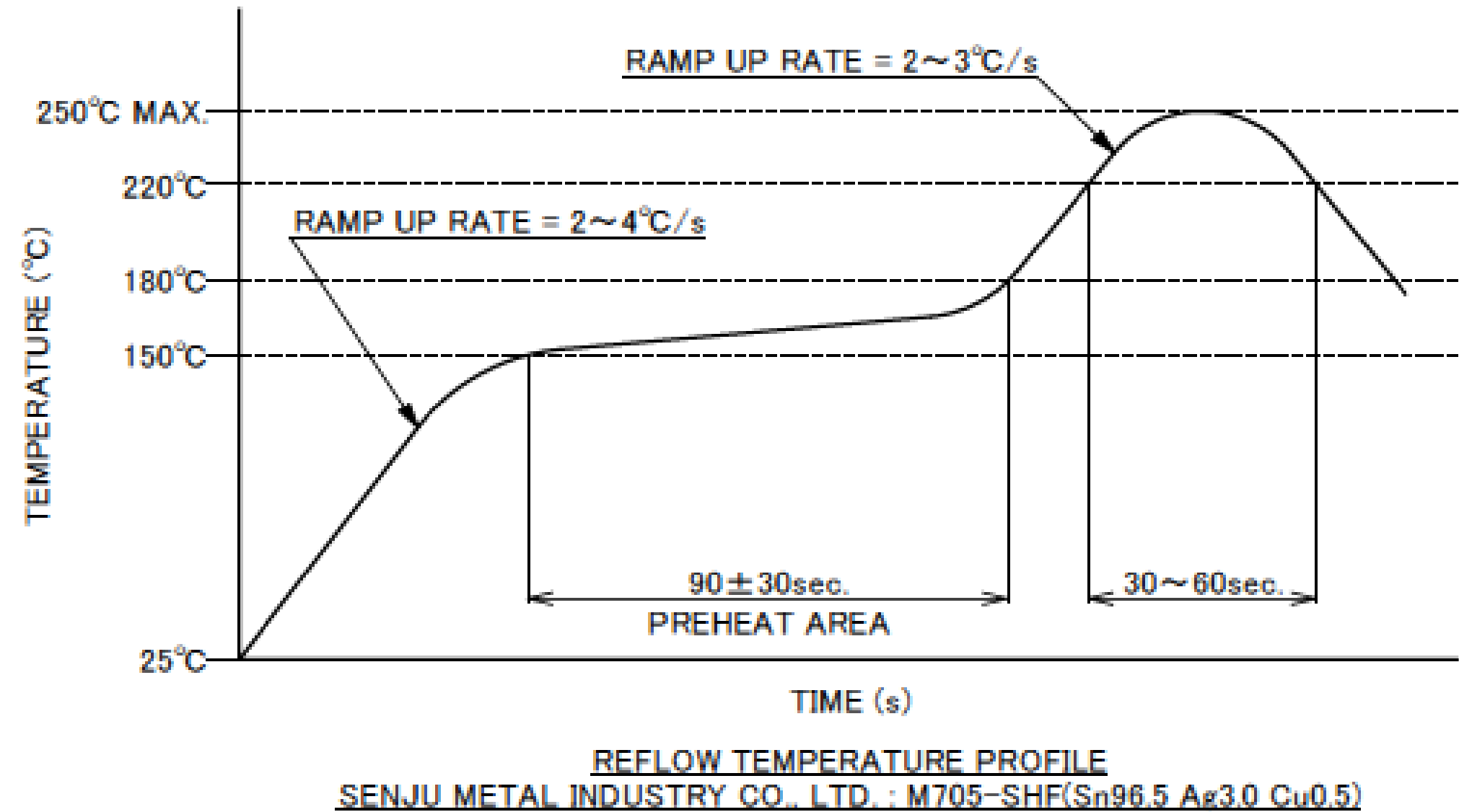
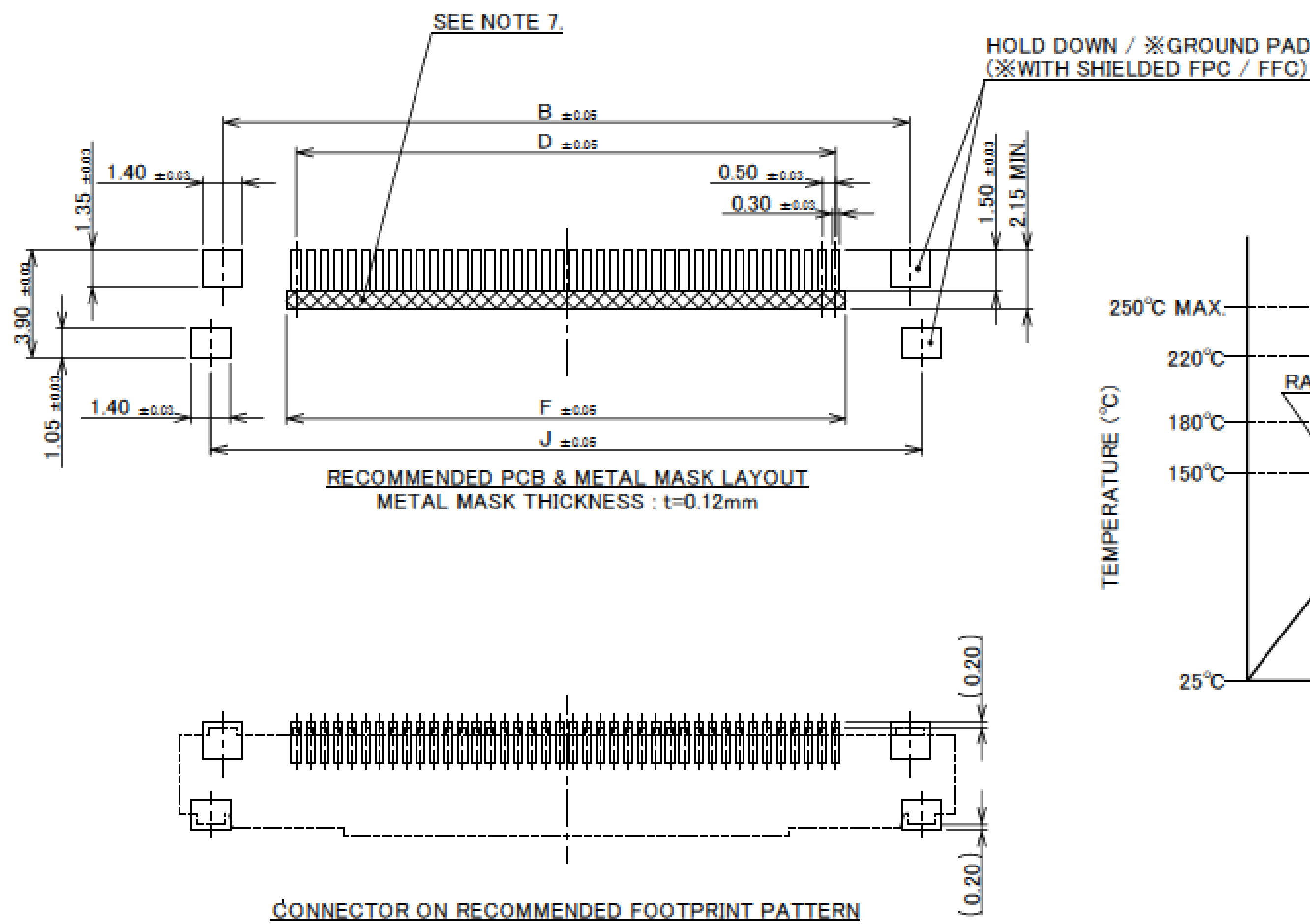
RECOMMENDED FFC LAYOUT  
【SHIELDED TYPE】



Rev.11

Connector Assembly

PART No.	B	D	F	J
20799-020E-01	14.80	9.50	10.20	15.70
20799-030E-01	19.80	14.50	15.20	20.70
20799-040E-01	24.80	19.50	20.20	25.70
20799-050E-01	29.80	24.50	25.20	30.70
20799-060E-01	34.80	29.50	30.20	35.70



NOTES  
7. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Rev.11

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.
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : ≦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-2305
TEST REPORT	TR-17100
PACKING STANDARD	PST-18002
INSTRUCTION MANUAL	HIM-16039
APPEARANCE CRITERIA No.	QLS-A***

Rev.11



# Custom Products Available

## RF Connector

MHF® series



## CABLINE® series Micro-coaxial/Twinax/ Discrete Wire Connector

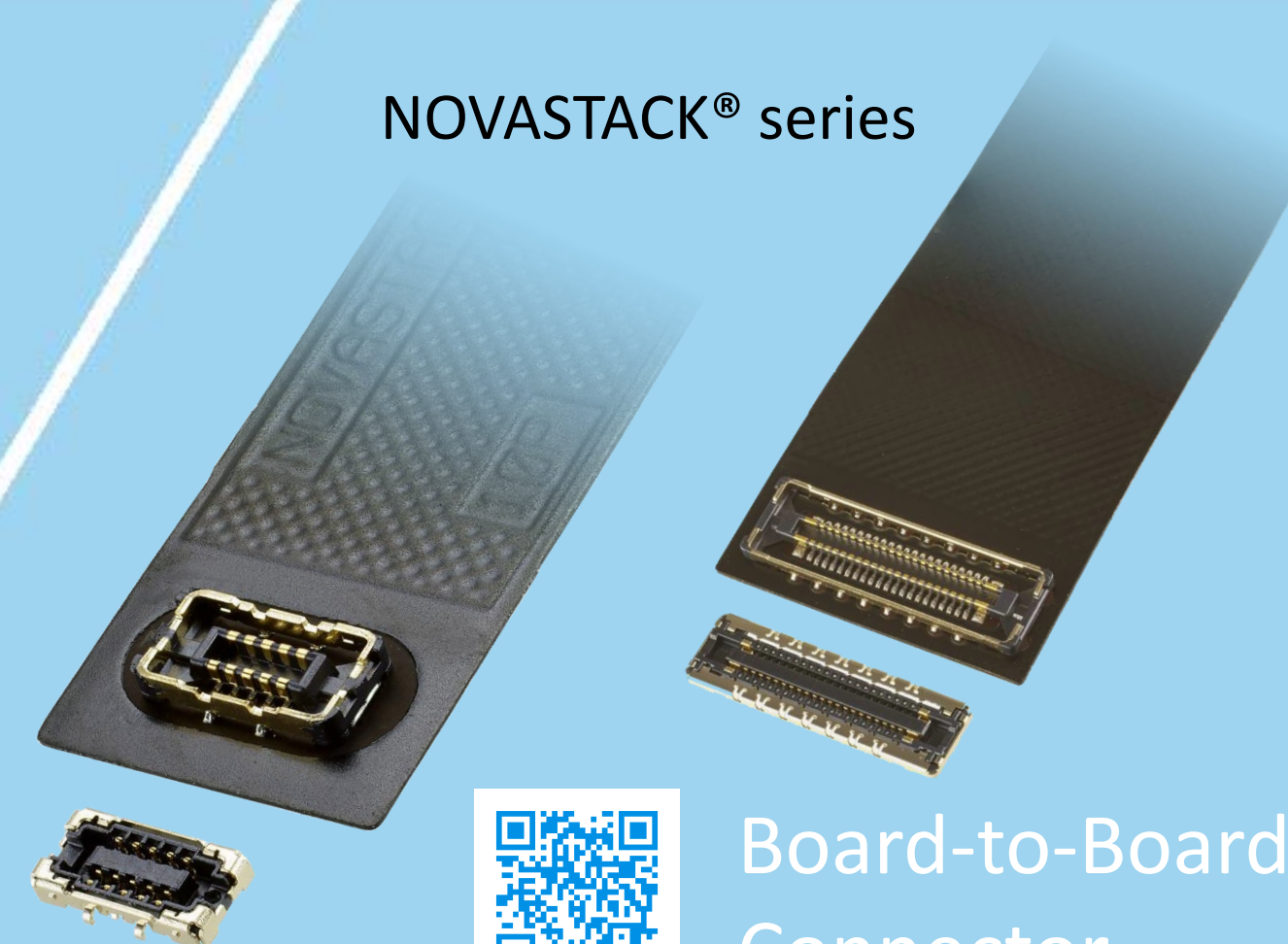


## Optical Module

LIGHTPASS® series



NOVASTACK® series



## Board-to-Board Connector

## Power Connector/ Terminal

AP series

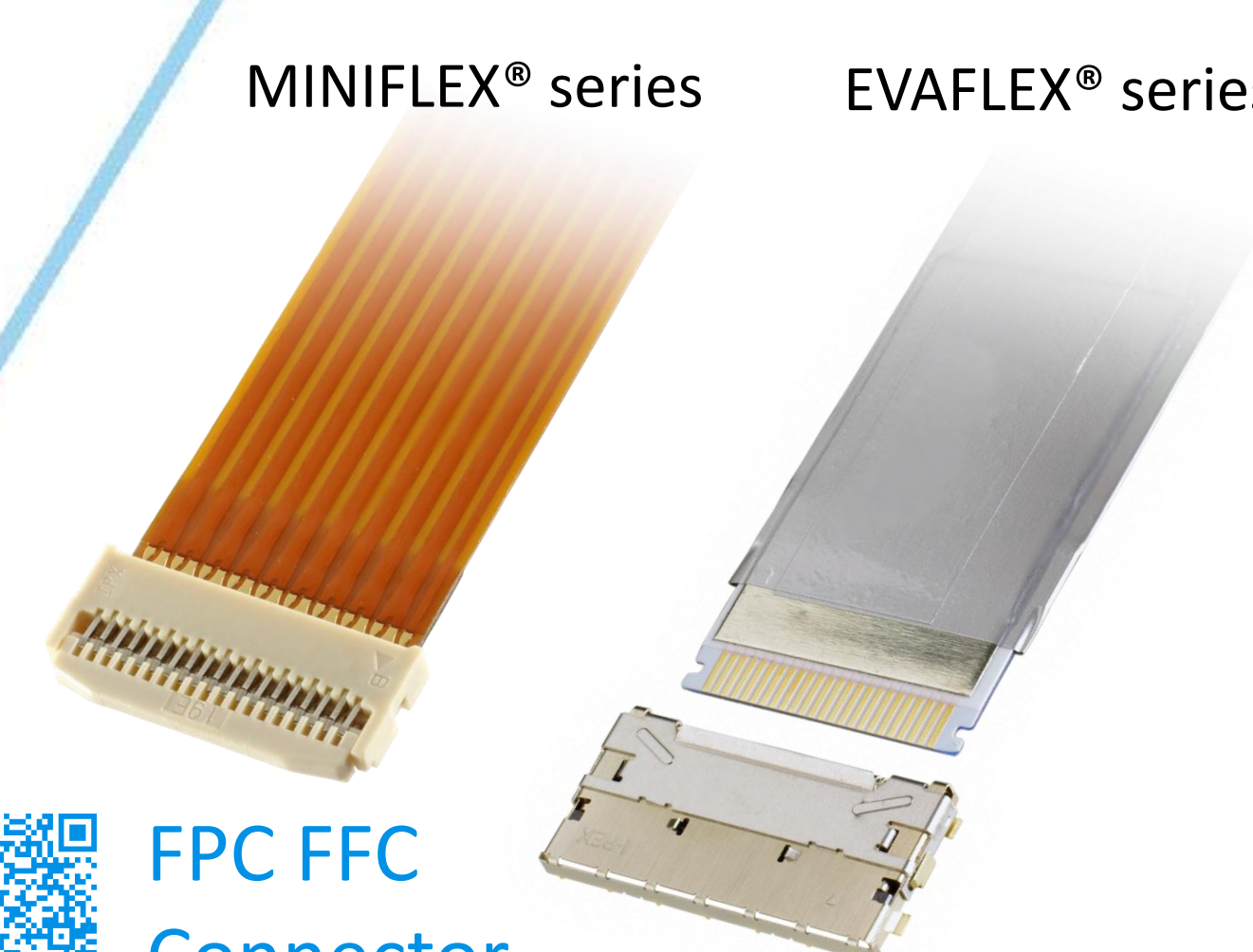
ISH® series



MINIFLEX® series

EVAFLEX® series

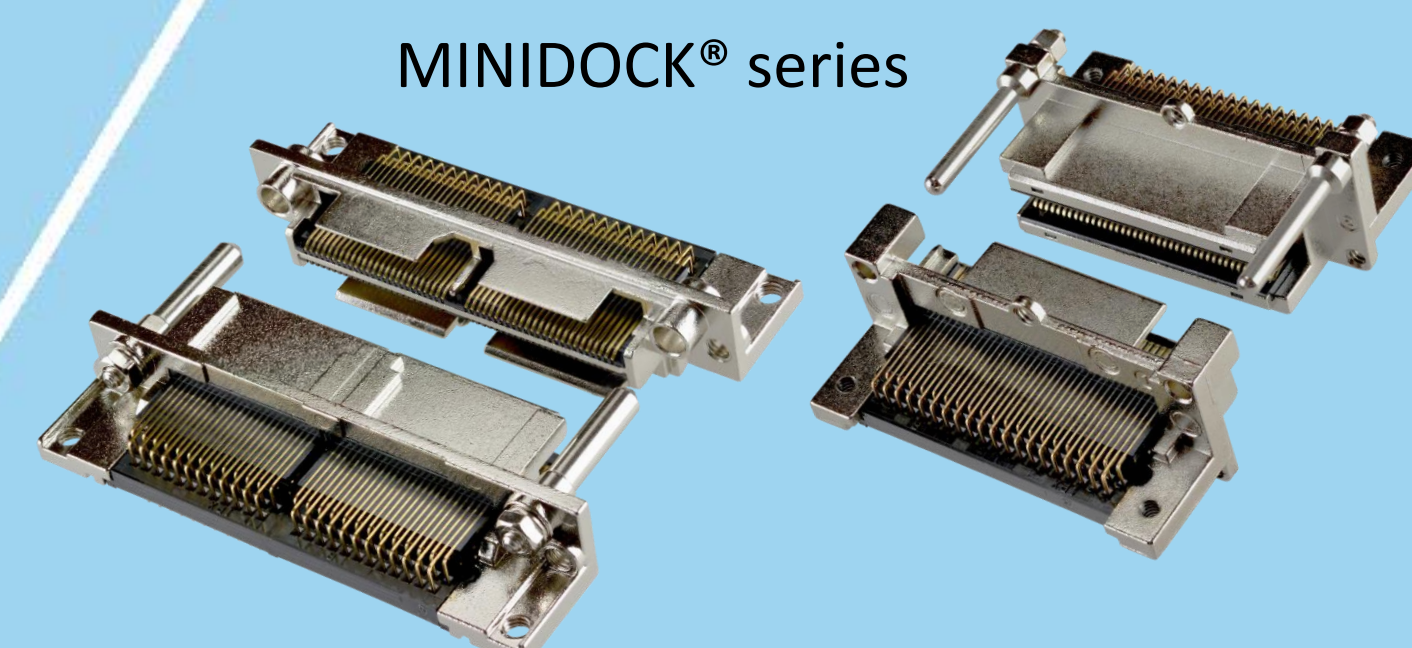
## FPC FFC Connector



Inquiry



MINIDOCK® series



## I/O Connector

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