

# MINIFLEX® 5-BFN II LK

기계식 Lock 기능, 보강판에 의한 견고성, 고온 대응(125°C),  
저배 (높이 1.0 mm), 0.5 mm Pitch, 수평 결합, 백플립

## Product Specifications:

Board Pitch		0.5 mm
Wiping Length		1 mm
Size	Height	1.0 +/- 0.1 mm
	Width	2.7 + (0.5 x pin count) mm
	Depth	Open: 3.0 mm
		Close: 3.5 mm
Pin Counts	Range	4 to 28
	Available	4, 6, 8, 10, 12, 14, 16, 18, 20, 24

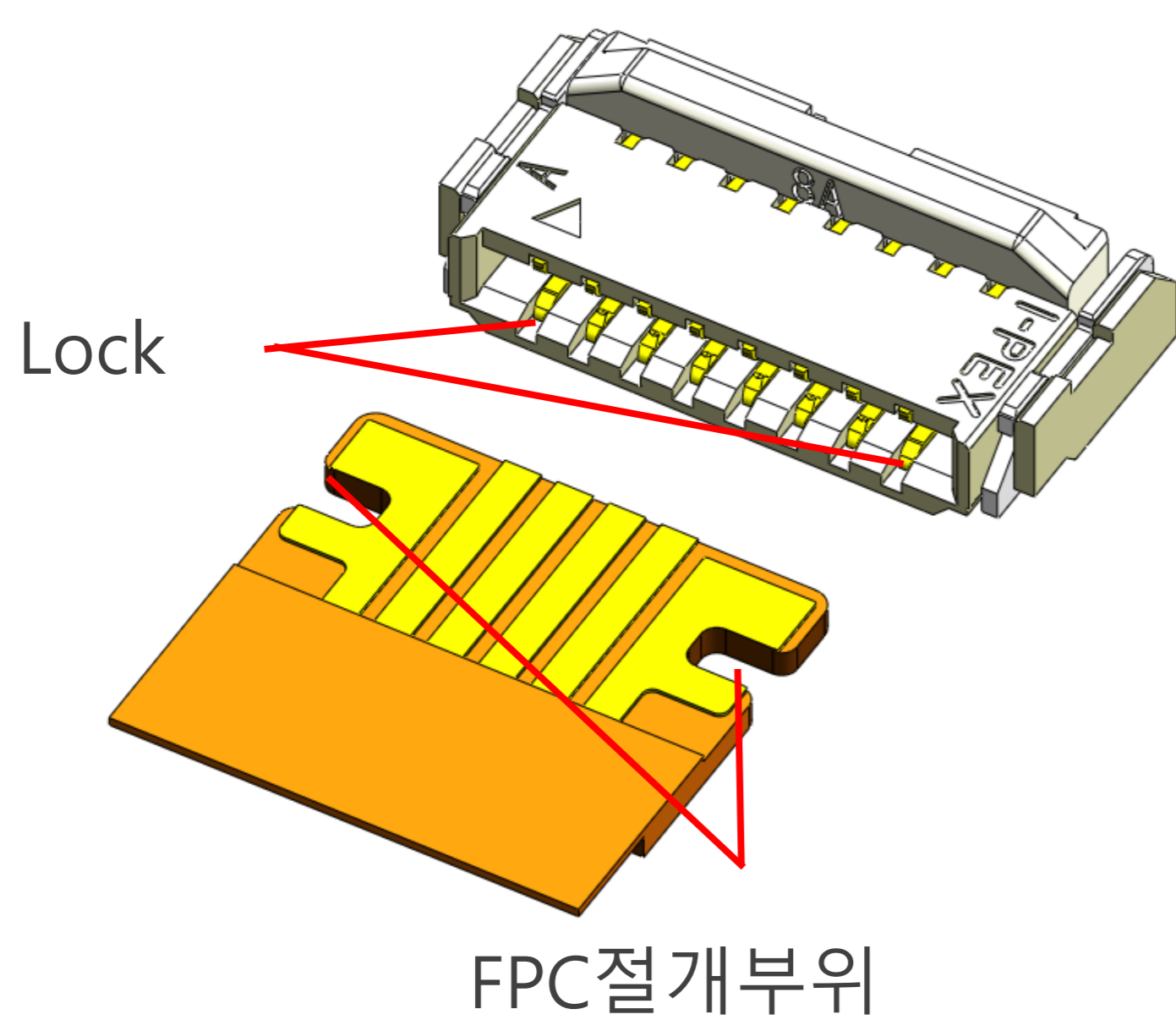
\*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁드립니다.

## Applicable FPC/FFC:

FPC/FFC Contact Pitch	0.5
FPC/FFC Contact Point	Top and Bottom
FPC/FFC Thickness	0.3 +/- 0.05 mm



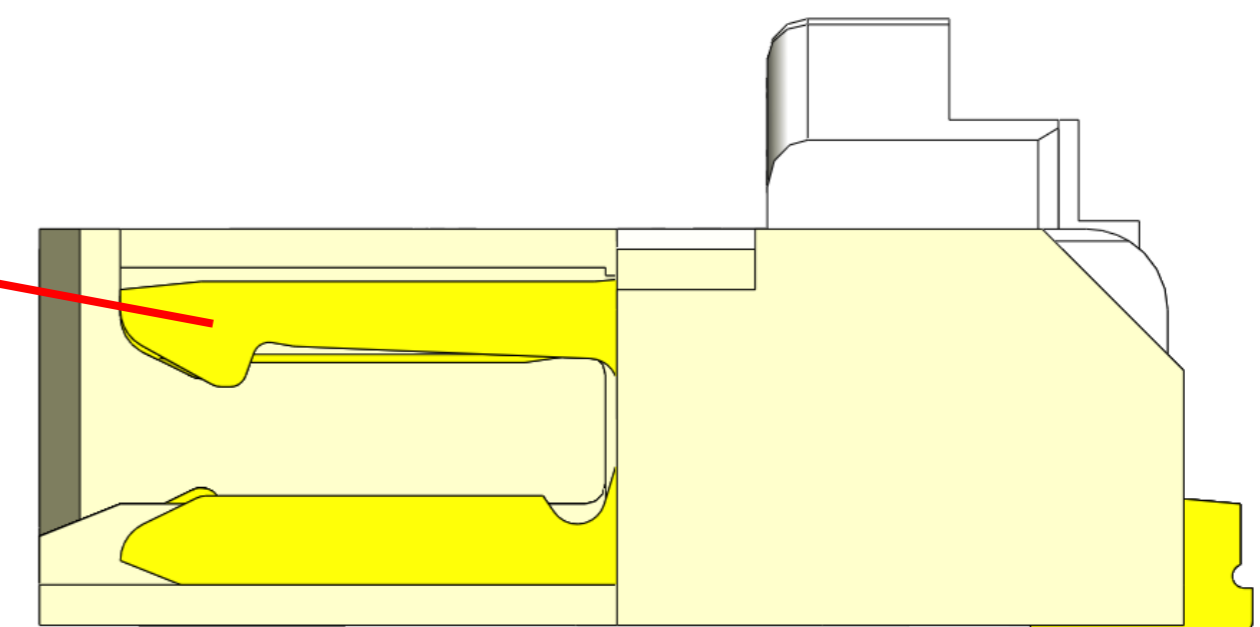
## ▶ 기계식 Lock 기능에 의한 높은 FPC 유지력



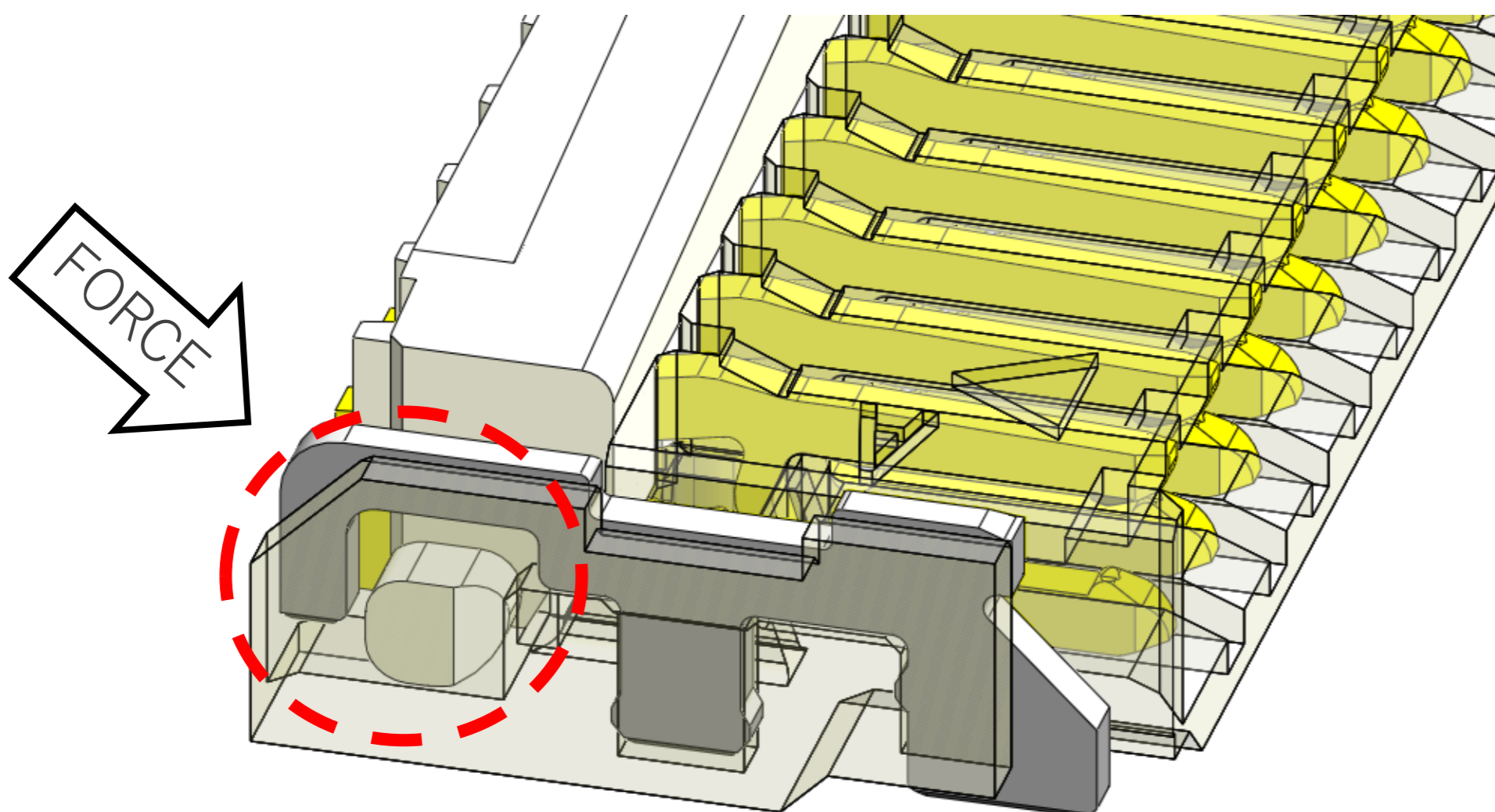
FPC Lock 강도비교 (6 pin)

MF5-BFN II LK	MF5-BFN II
10.59 N	4.17 N

FPC Lock 메커니즘에 따른  
높은 Lock강도



## ▶ 독자적인 보강판 형상을 통해 액추에이터의 탈락을 방지



100 N 의 힘으로도 Actuator의 탈락이 없음

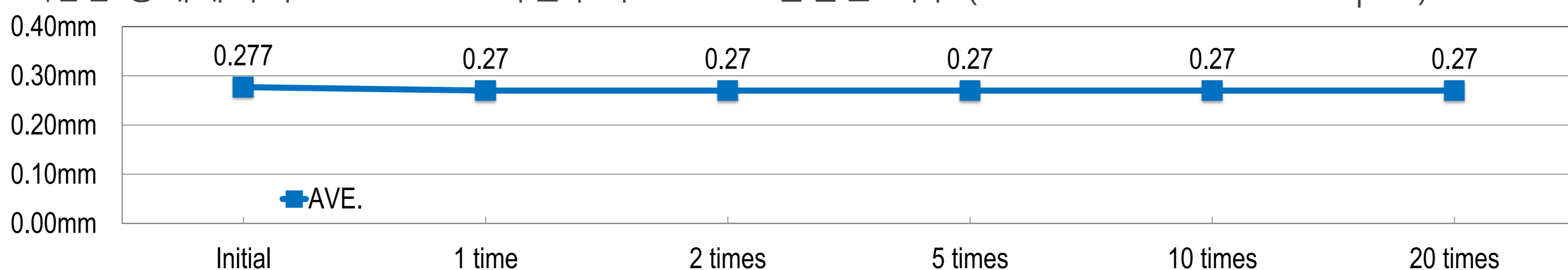
\*먼저, Housing의 파손이 발생

\*Actuator가 빠지기 쉬운 30도로 기울어진 상태에서  
힘의 Vektor를 측정

## ▶ FPC 미삽입 상태에서도 액추에이터 닫기 조작 가능(단자 변형 최소화)

SMT Process후에 FPC가 삽입되지 않은 상태에서 Actuator조작을 하게 된 경우에도  
Contact는 정상적으로 기능합니다

■ FPC미삽입 상태에서의 Actuator 조작전후의 Contact 접점간 치수 ( MINIFLEX® 5-BFN II 22 pins)



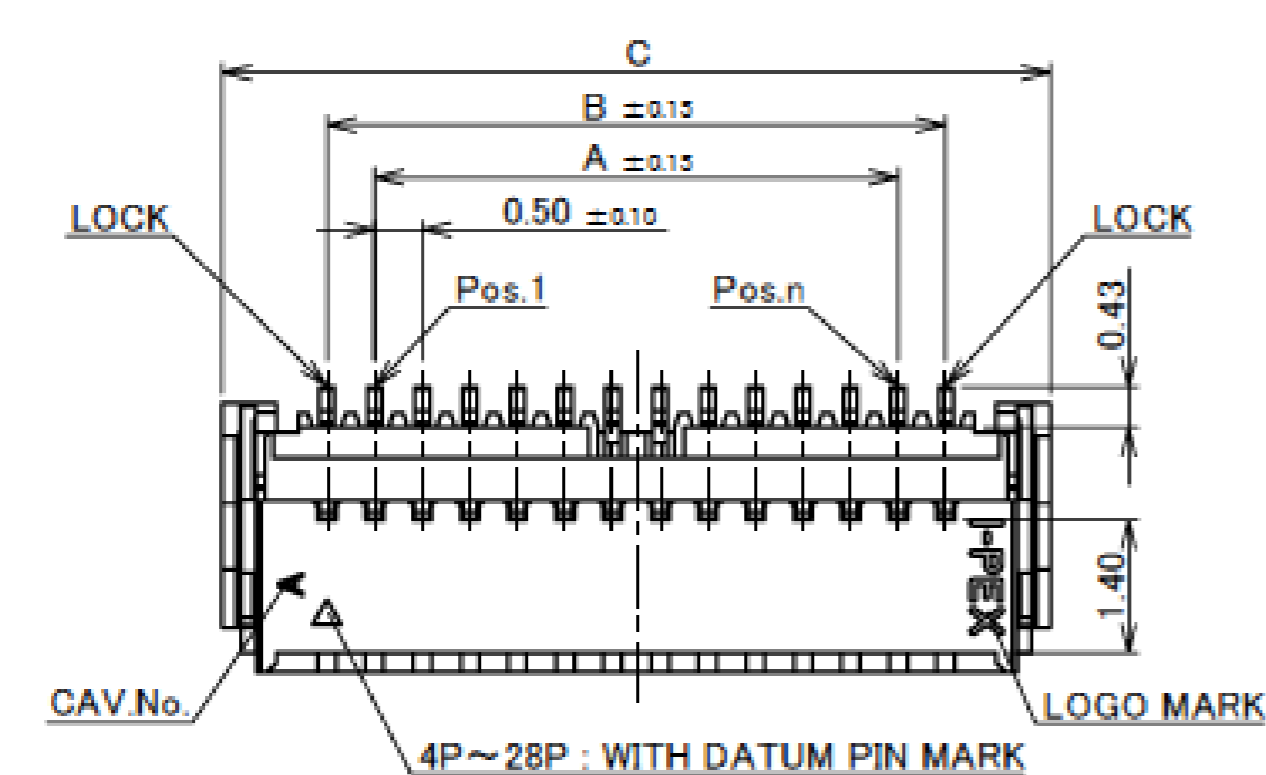
■ FPC삽입력은 상승하게 됩니다

■ FPC Lock강도에 있어서는 큰 변화가 없습니다

# Component Parts Details

## Connector Assembly

Recommended P/N 20600-0\*\*E-01



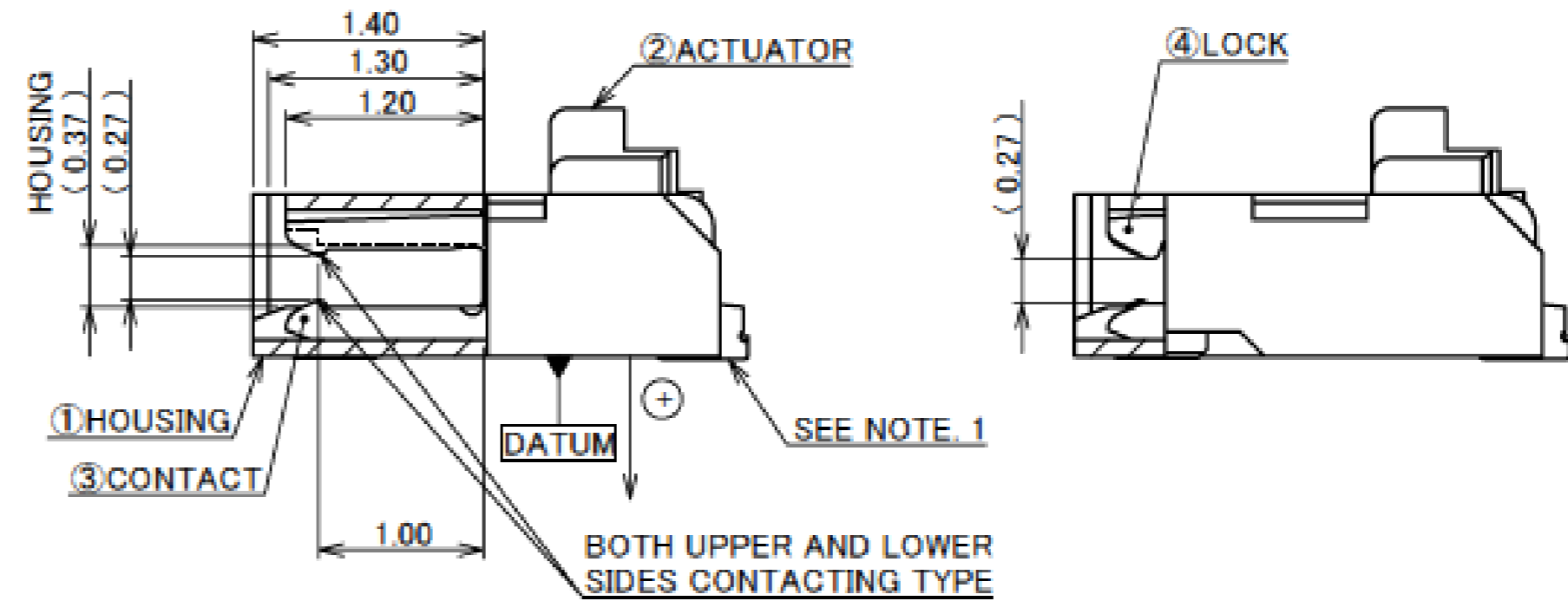
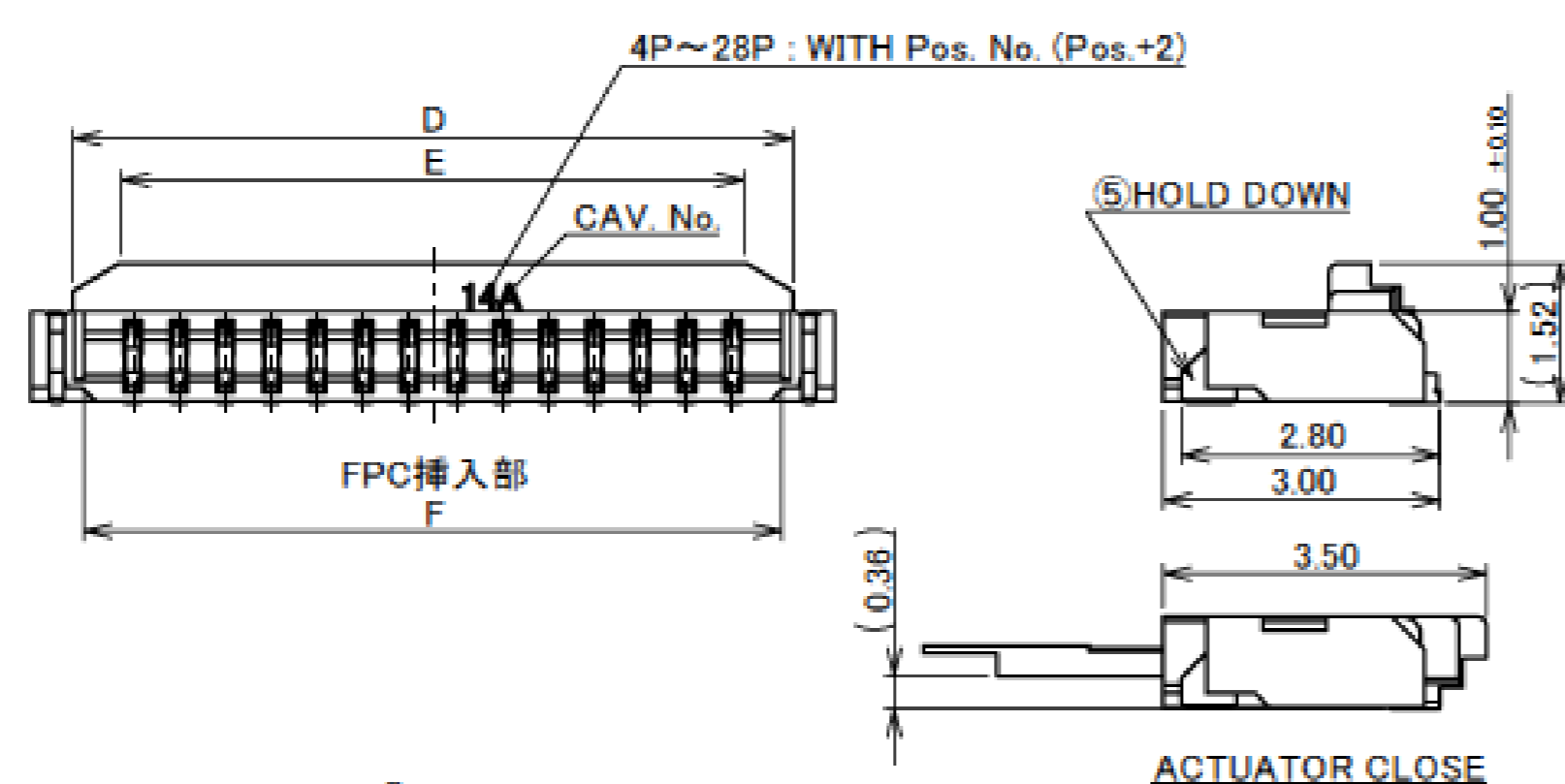
Halogen Free



RoHS Compliant

PART No.	POS.	A	B	C	D	E	F	G
20600-004E-01	4	1.50	2.50	4.70	3.80	2.80	3.56	4.15
20600-006E-01	6	2.50	3.50	5.70	4.80	3.80	4.56	5.15
20600-008E-01	8	3.50	4.50	6.70	5.80	4.80	5.56	6.15
20600-010E-01	10	4.50	5.50	7.70	6.80	5.80	6.56	7.15
20600-012E-01	12	5.50	6.50	8.70	7.80	6.80	7.56	8.15
20600-014E-01	14	6.50	7.50	9.70	8.80	7.80	8.56	9.15
20600-016E-01	16	7.50	8.50	10.70	9.80	8.80	9.56	10.15
20600-018E-01	18	8.50	9.50	11.70	10.80	9.80	10.56	11.15
20600-020E-01	20	9.50	10.50	12.70	11.80	10.80	11.56	12.15
◆20600-022E-01	22	10.50	11.50	13.70	12.80	11.80	12.56	13.15
20600-024E-01	24	11.50	12.50	14.70	13.80	12.80	13.56	14.15
◆20600-026E-01	26	12.50	13.50	15.70	14.80	13.80	14.56	15.15
◆20600-028E-01	28	13.50	14.50	16.70	15.80	14.80	15.56	16.15

◆MARK MEANS NOT AVAILABLE.



5	HOLD DOWN	PHOSPHOR BRONZE	Sn 2~6 $\mu$ m MIN.OVER Ni 1.0 $\mu$ m MIN.
4	LOCK	PHOSPHOR BRONZE	Au 0.03 $\mu$ m MIN. OVER Ni 1.0 $\mu$ m MIN.
3	CONTACT	PHOSPHOR BRONZE	CONTACT AREA : Au 0.1 $\mu$ m MIN. OVER Ni 1.0 $\mu$ m MIN. SOLDERING AREA : Au 0.03 $\mu$ m MIN. OVER Ni 1.0 $\mu$ m MIN.
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-12019 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

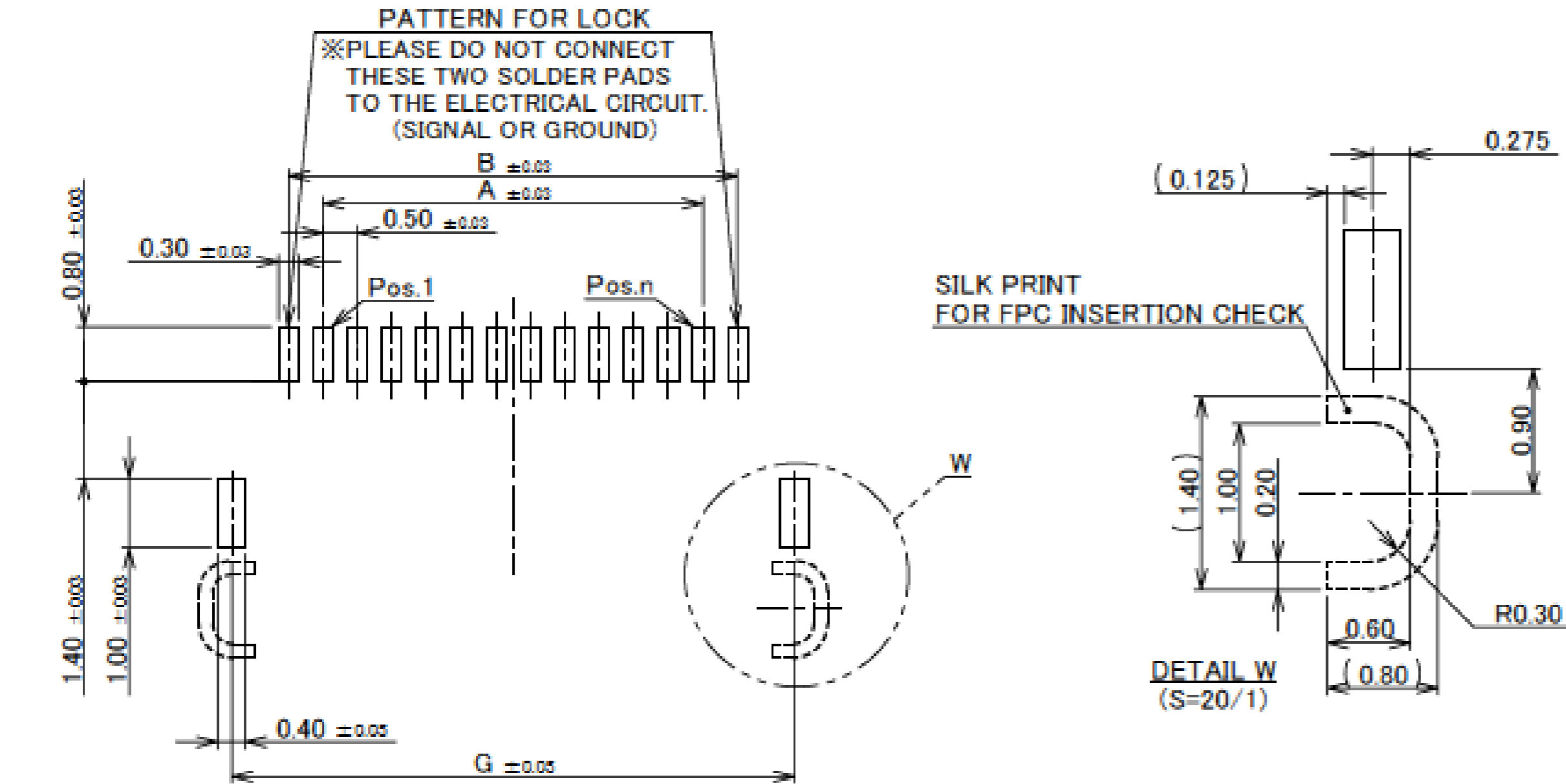
NOTES  
1. CONTACT TAIL IS PROJECTION FROM HOUSING IN THE + DIRECTION. (0~0.06)

Rev.10

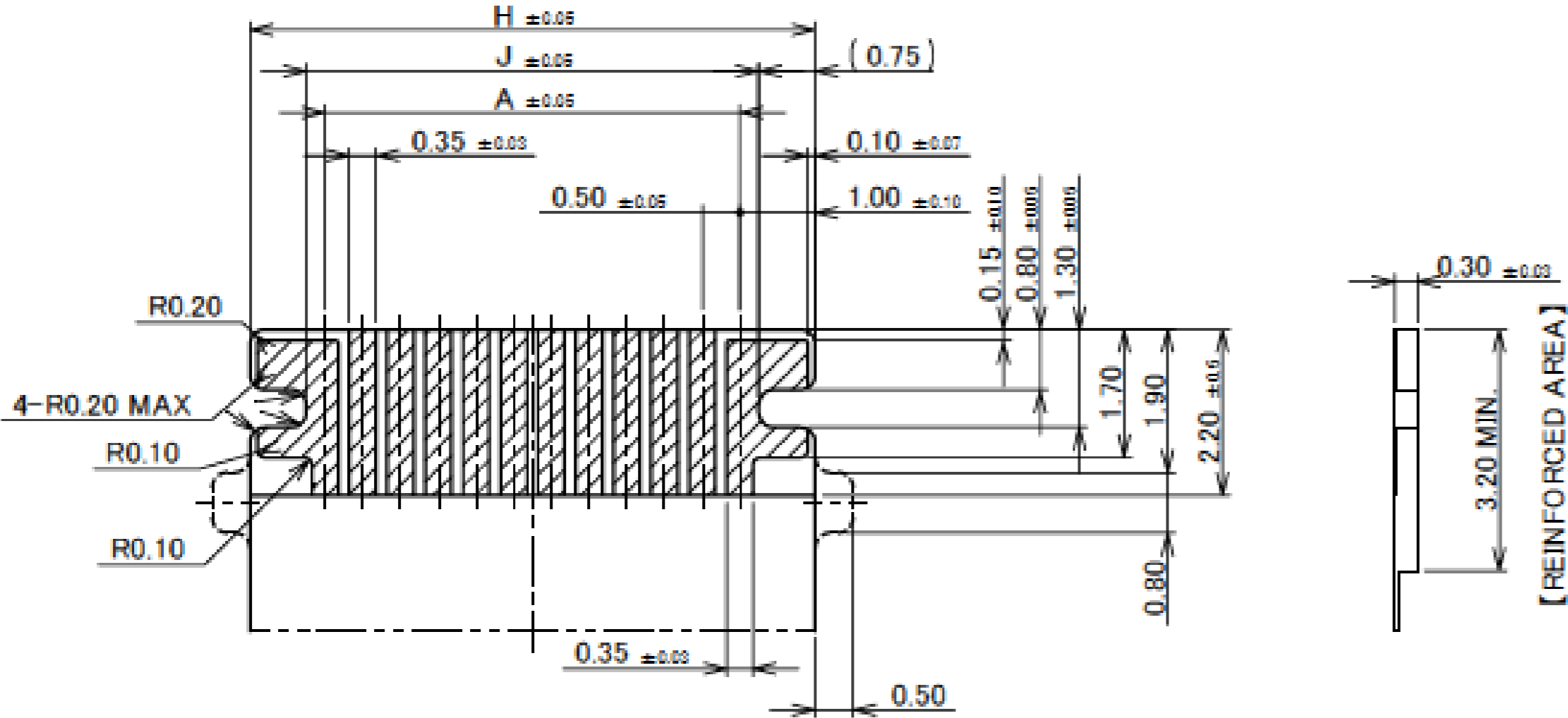
Connector Assembly

PART No.	POS.	A	B	G	H	J
20600-004E-01	4	1.50	2.50	4.15	3.50	2.00
20600-006E-01	6	2.50	3.50	5.15	4.50	3.00
20600-008E-01	8	3.50	4.50	6.15	5.50	4.00
20600-010E-01	10	4.50	5.50	7.15	6.50	5.00
20600-012E-01	12	5.50	6.50	8.15	7.50	6.00
20600-014E-01	14	6.50	7.50	9.15	8.50	7.00
20600-016E-01	16	7.50	8.50	10.15	9.50	8.00
20600-018E-01	18	8.50	9.50	11.15	10.50	9.00
20600-020E-01	20	9.50	10.50	12.15	11.50	10.00
◆20600-022E-01	22	10.50	11.50	13.15	12.50	11.00
◆20600-024E-01	24	11.50	12.50	14.15	13.50	12.00
◆20600-026E-01	26	12.50	13.50	15.15	14.50	13.00
◆20600-028E-01	28	13.50	14.50	16.15	15.50	14.00

◆MARK MEANS NOT AVAILABLE.

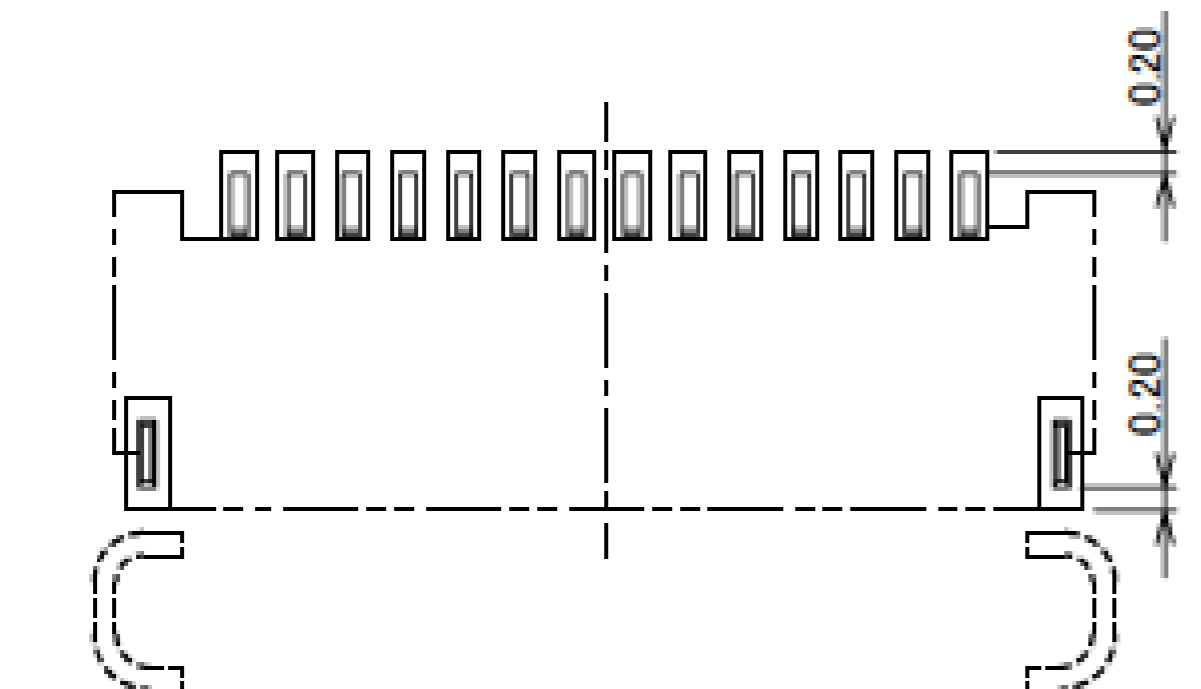


RECOMMENDED PCB LAYOUT & METAL MASK LAYOUT  
METAL MASK THICKNESS : t=0.12mm

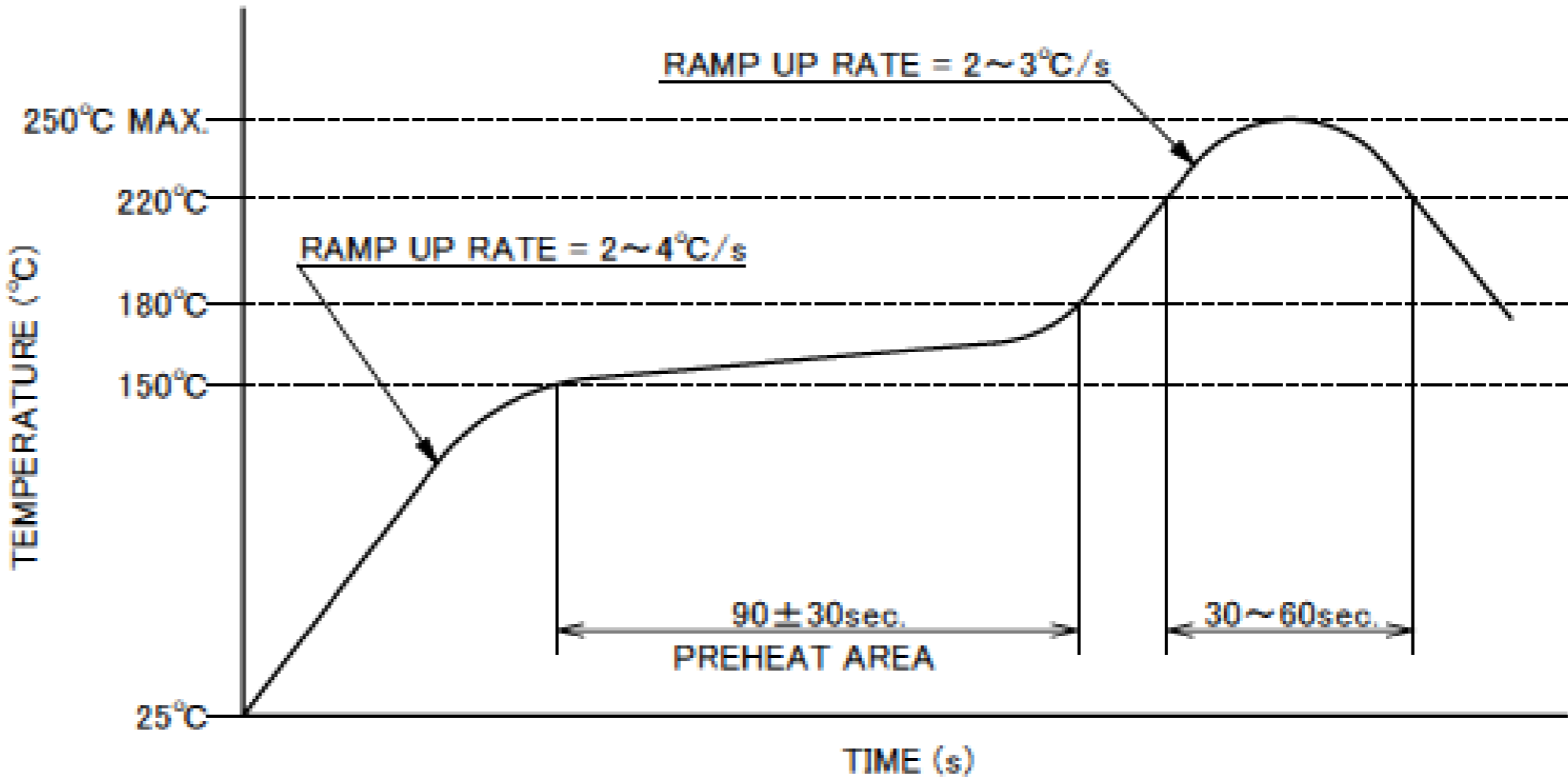


RECOMMENDED FPC LAYOUT

NOTES  
2.MATERIAL  
COVER FILM : PI  
CONDUCTOR : COPPER(RARE)  
BASE FILM : PI  
STIFFENER : PI  
ADHESIVE : THERMOSETTING ADHESIVE  
3.FINISH  
Au OVER Ni PLATING.



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

# Connector Assembly

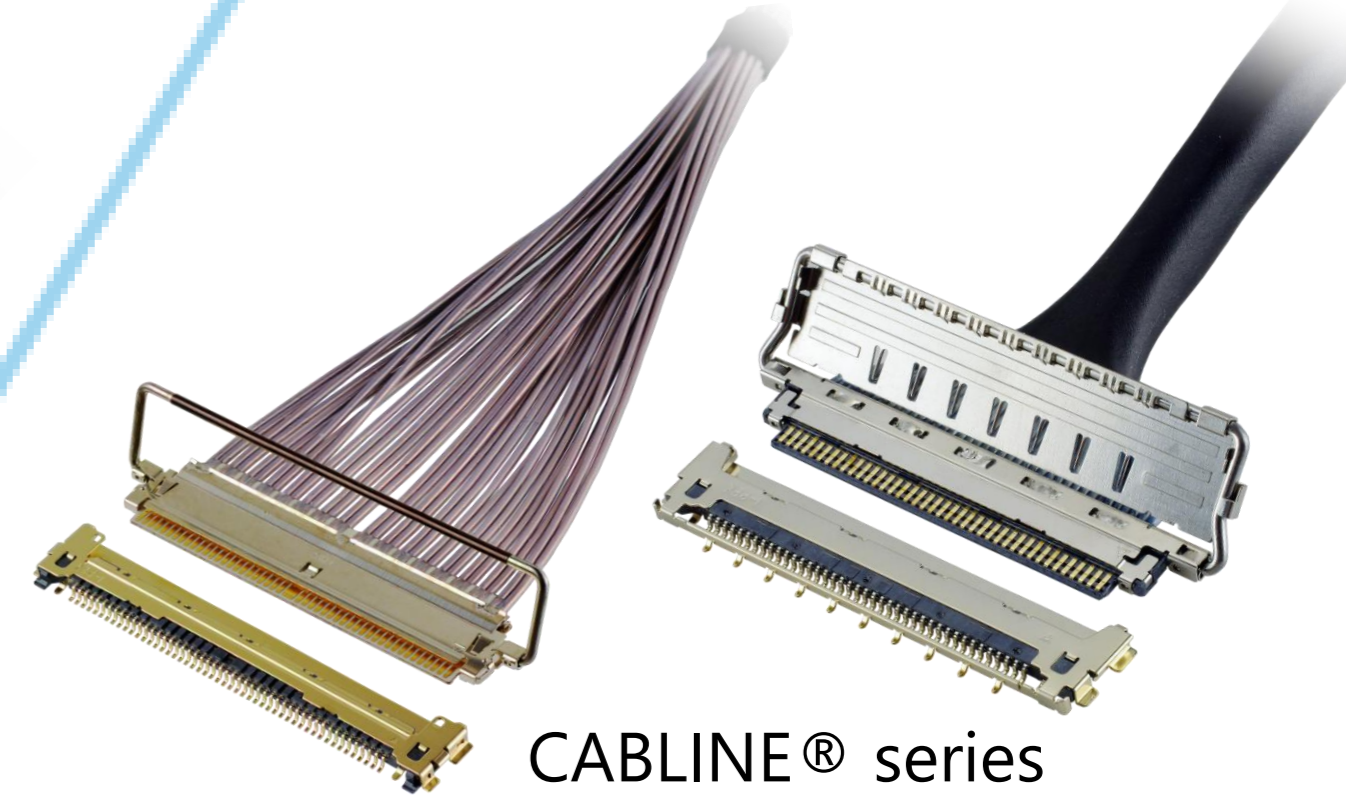
ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT PIN)
RATING AMPERAGE	0.5A DC (PER CONTACT PIN) 7.0A DC (PER CONNECTOR)
OPERATING TEMPERATURE	233~398K(-40℃~125℃)
OPERATING HUMIDITY	80% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 40mohm MAX. / AFTER TEST : $\leq$ 20mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	20TH CYCLES
ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL/ 20TH CYCLES : $0.6N(61gf) \times (n + 2)$ MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL/ 20TH CYCLES : $0.05N(5gf) \times (n + 2)$ MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL : $0.15N(15gf) \times n + 2.0N$ MIN. / AFTER TEST : $0.15N(15gf) \times n + 1.0N$ MIN.
COPLANARITY	0.08 MAX.
PRODUCT SPECIFICATION	PRS-1841
TEST REPORT	TR-14132
PACKING STANDARD	PST-13031
INSTRUCTION MANUAL	HIM-12019
APPEARANCE CRITERIA No.	QLS-A***

※ “n” IS THE NUMBER OF PIN

# Custom Connectors Available

## RF Connectors

MHF® series



CABLIN® series



## Micro-Coaxial/Twinaxial Connectors

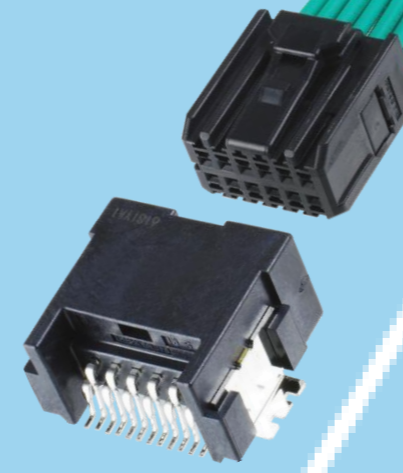


## Wire-to-Board Connectors/ Terminals

AP series



ISH® series



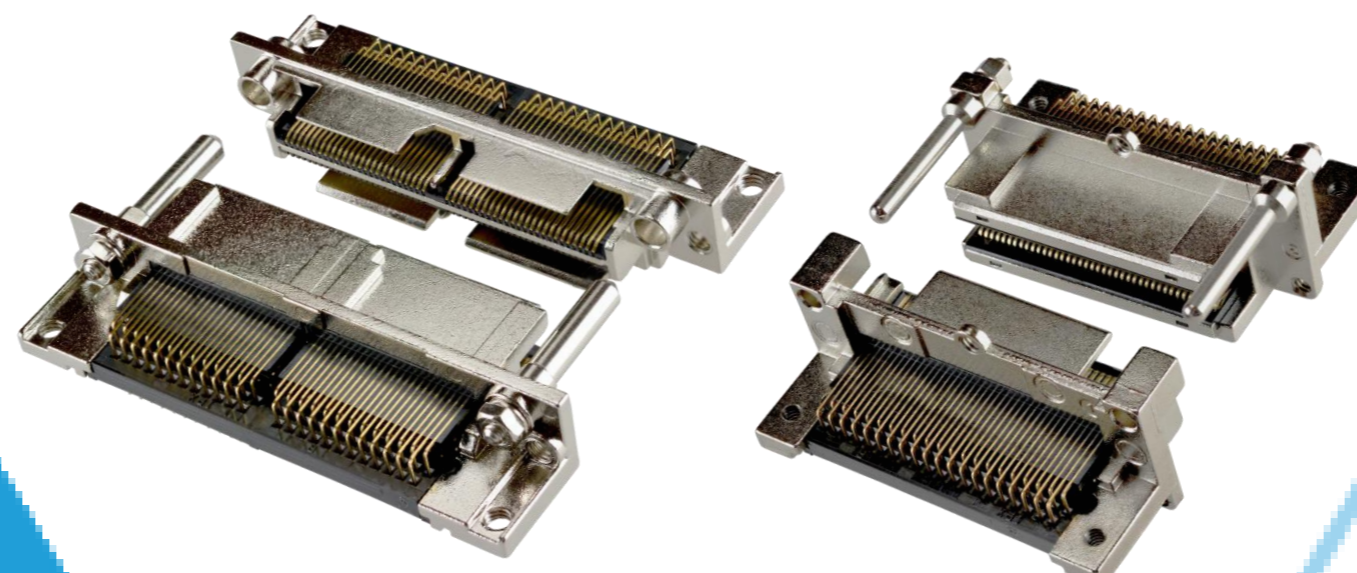
NOVASTACK® series



## Board-to-Board Connectors



## I/O Connectors



MINIDOCK™ series

MINIFLEX® series EVAFLEX® series



## FPC/FFC Connectors



Inquiry



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