

MINIFLEX® 3-BFNH L-HD

0.3 mm pitch, 0.9 mm height, improved retention force, equipped with hold-down, horizontal mating, backflip FPC connector

Product Specifications:

Contact Pitch		0.3 mm
Board Pitch		0.6 mm
Contact Mating Length		Contact A: 1.0 mm
		Contact B: 0.45 mm
Mated Size	Height	0.9 +/- 0.1 mm
	Width	2.1 + (0.3 x pin count) mm
	Depth	Open: 2.95 mm
		Close: 3.5 mm
Available Pin Count *		39, 61

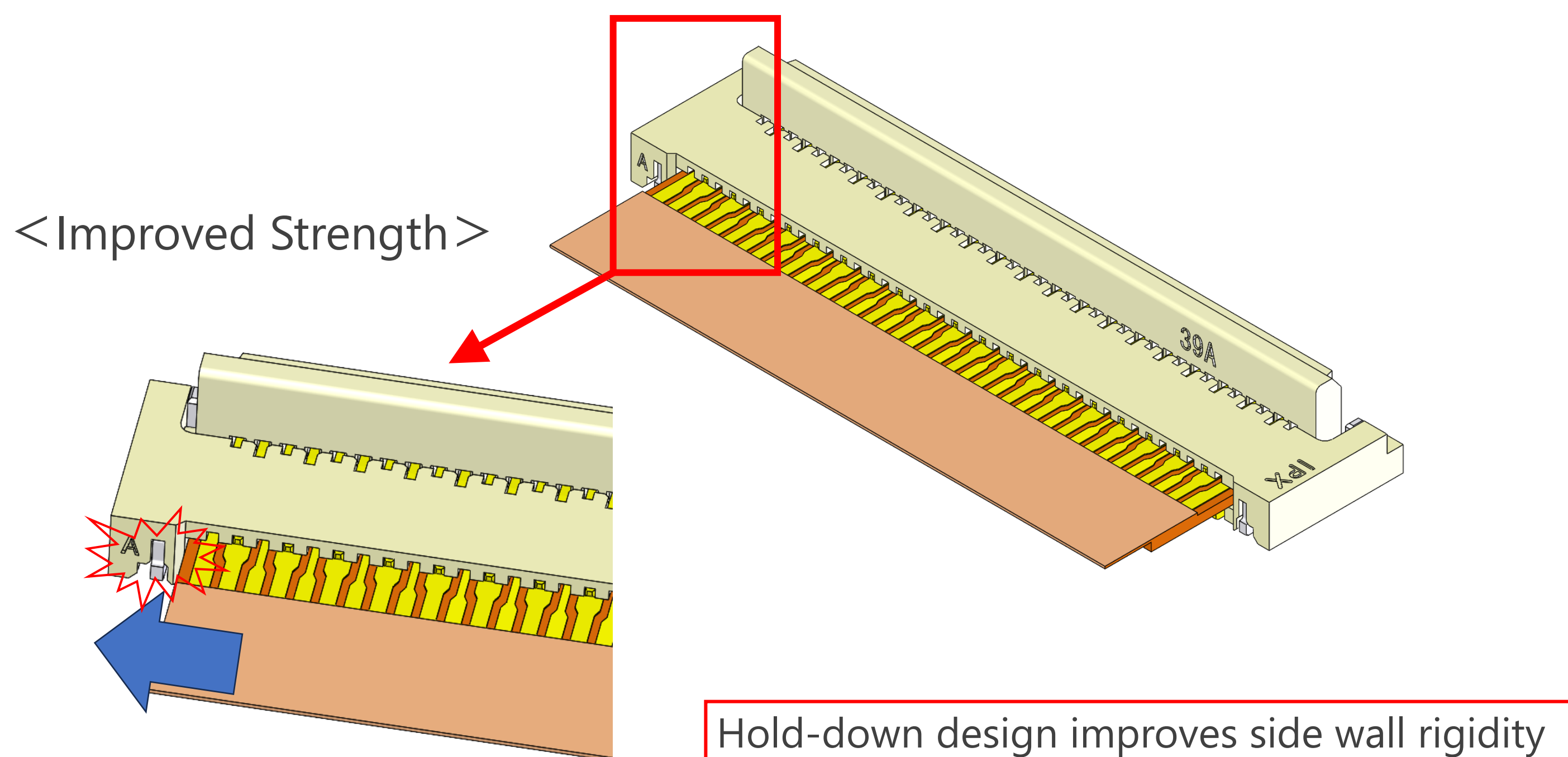
* Please inquire for pin counts not listed or outside of the pin count range.

Applicable FPC/FFC:

FPC / FFC Contact Pitch	0.3 mm
FPC / FFC Contact Point	Top and Bottom
FPC / FFC Thickness	0.2 +/- 0.03 mm

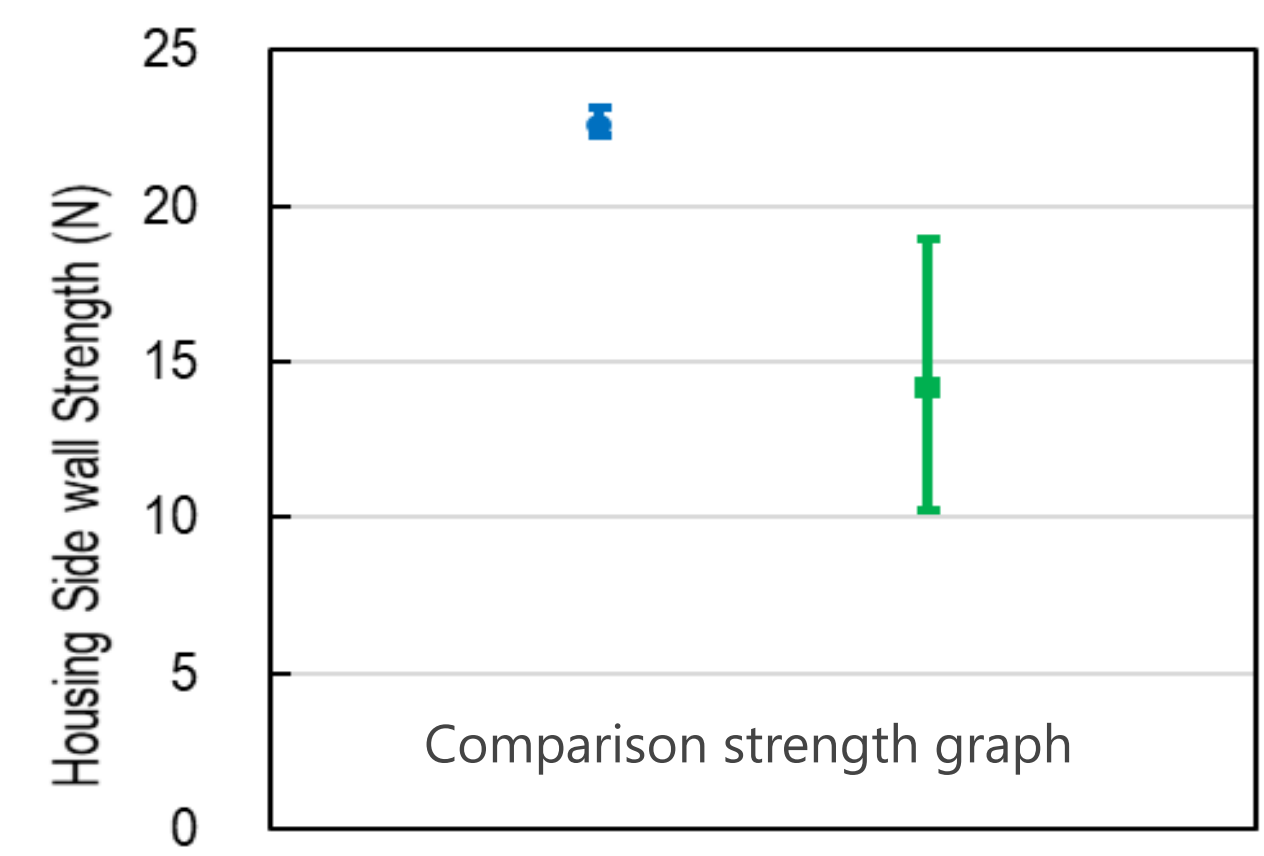


► Hold down to improve strength of side wall



Comparison chart for side wall strength

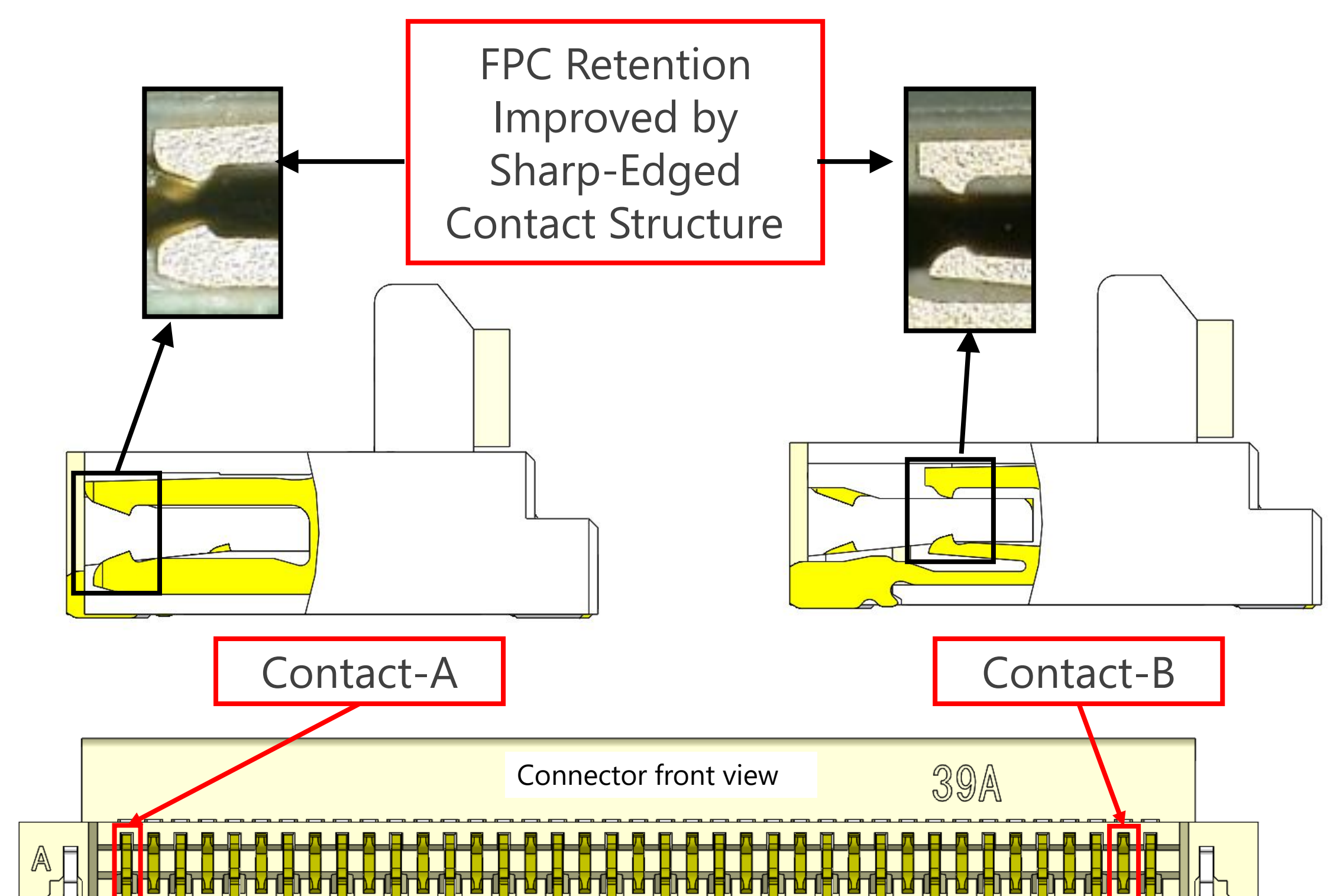
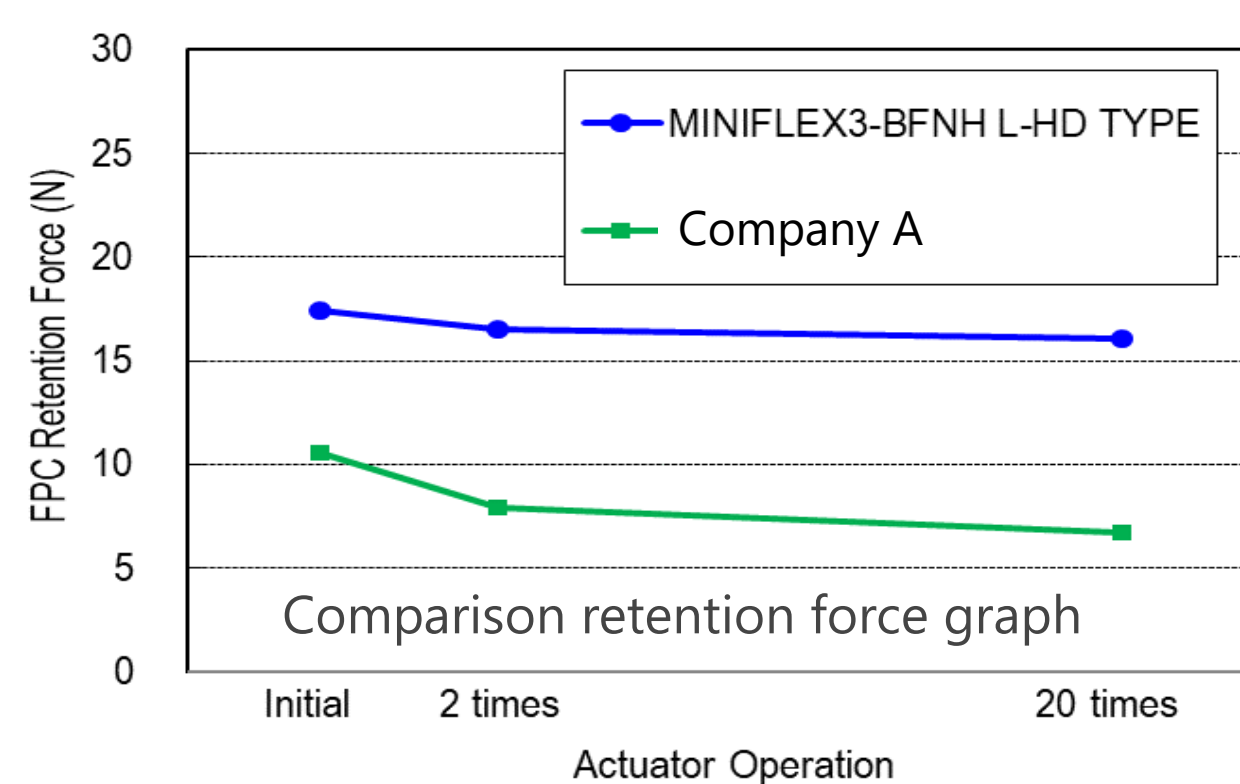
FPC thickness t=0.20	MINIFLEX 3-BFNH L-HD TYPE (39 pin)	Company A (Front Flip 39 pin)
AVE.	22.620 N	14.162 N
MAX.	23.15 N	18.94 N
MIN.	22.25 N	10.22 N



► Designed with sharp edge for stronger FPC retention force

FPC Retention Force Comparison Test

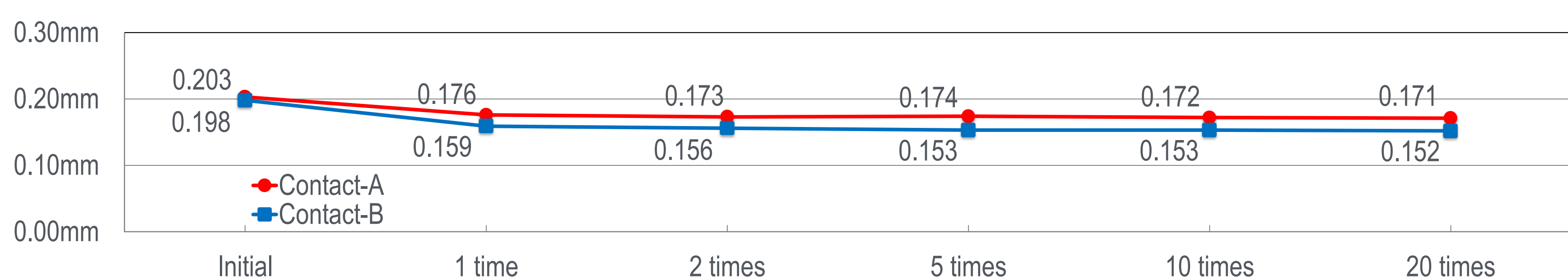
FPC thickness t=0.190	Initial	Actuator operation	
		After 2 times	After 20 times
MINIFLEX 3-BFNH L-HD TYPE (39 pin)	17.432 N	16.538 N	16.052 N
Company A (Front Flip 39 pin)	10.590 N	7.900 N	6.747 N



► Usability for closing actuator without FPC

The connector will still function even if the actuator is accidentally closed without the FPC being inserted after the SMT process

- Connector will still function reliably (contact gap graph 39 pins before and after operating actuator without FPC inserted)

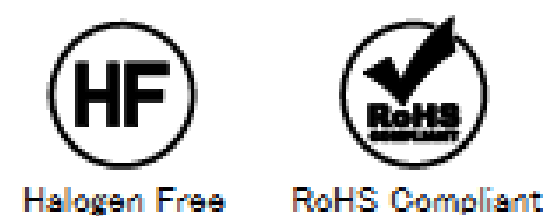
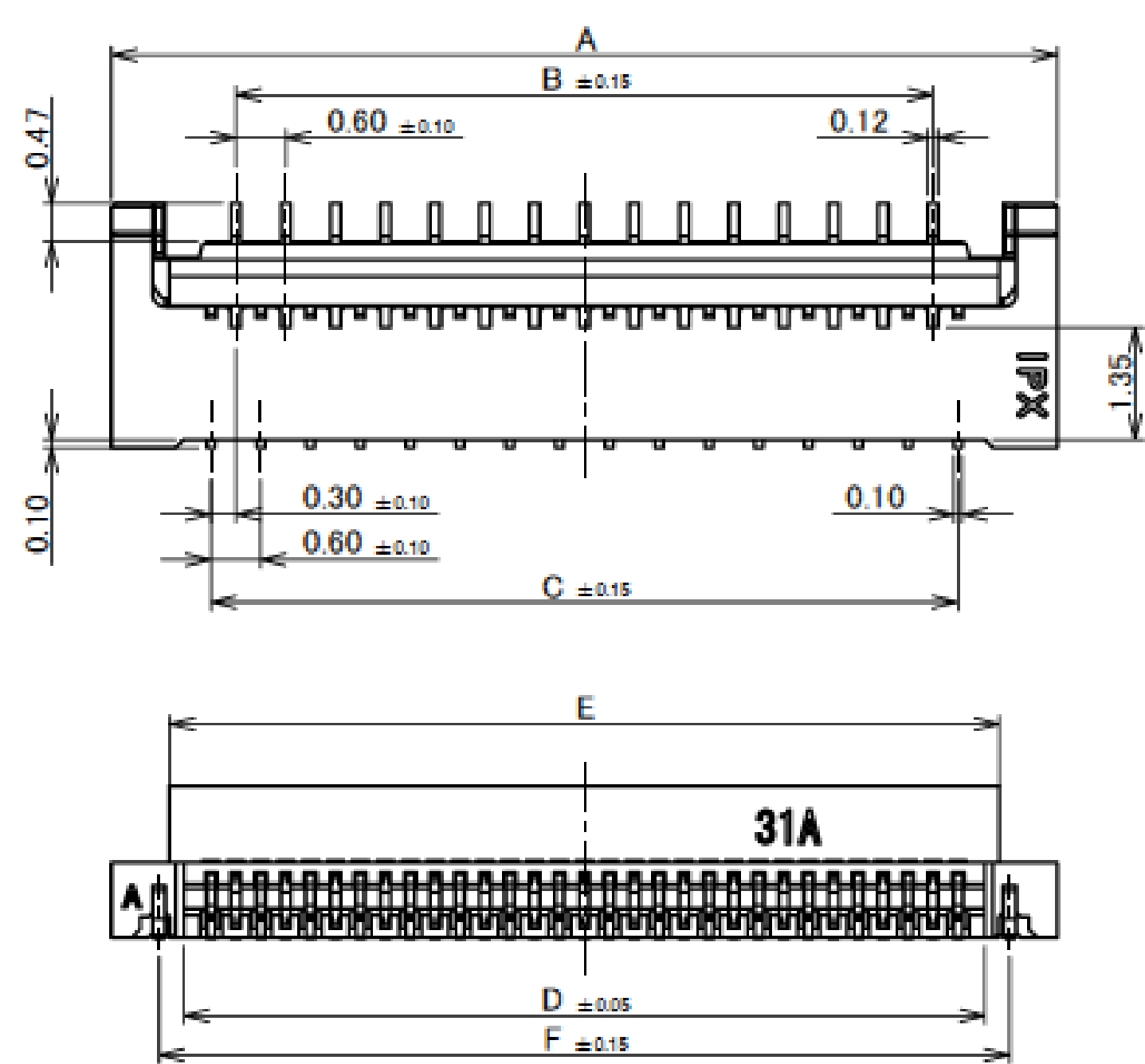


- Insertion force of connector goes up
- Retention force of connector does not change greatly

Component Parts Details

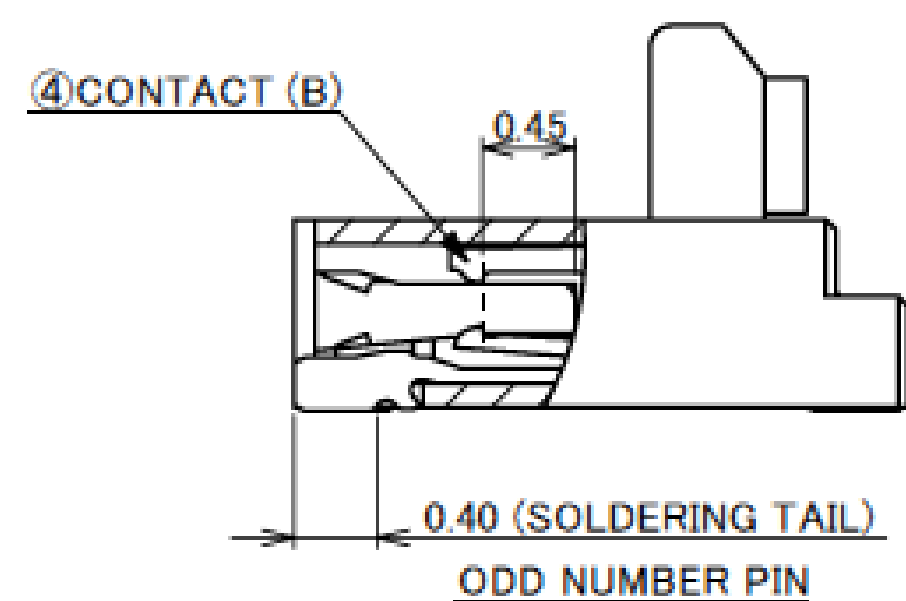
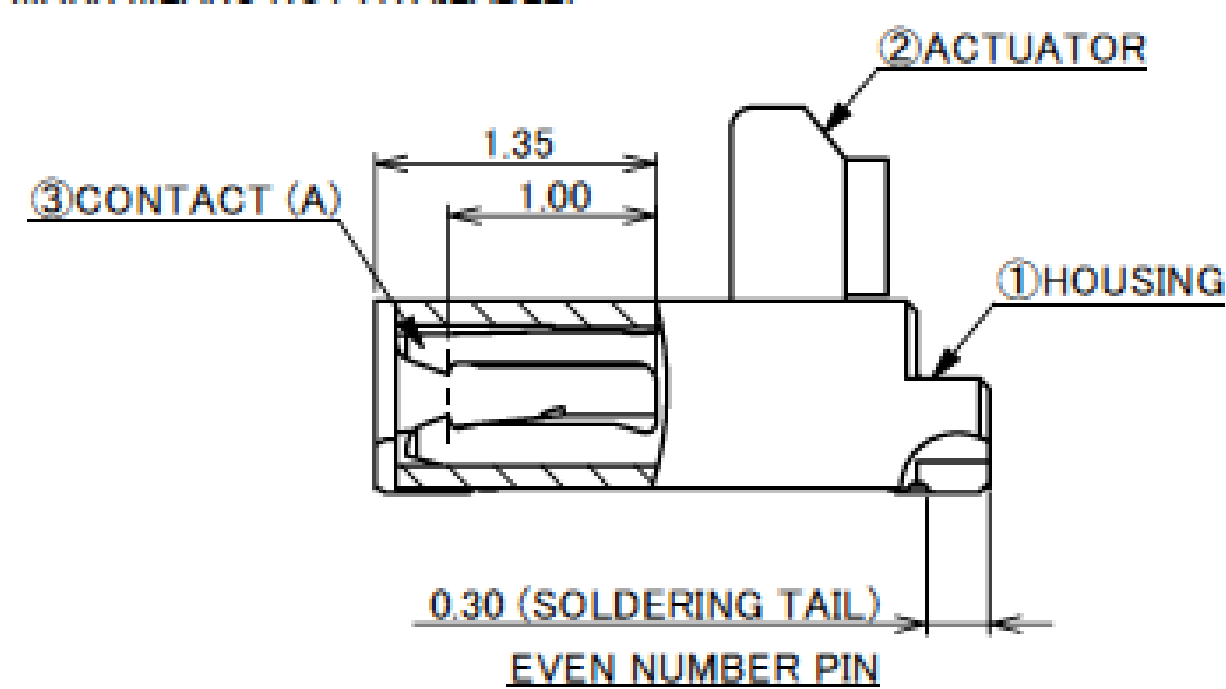
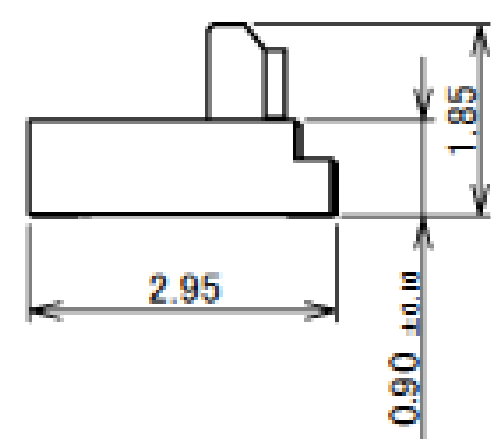
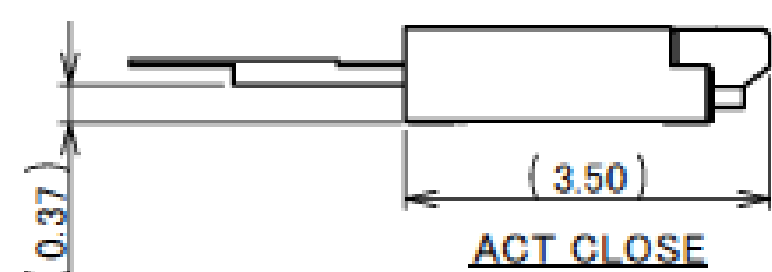
Connector Assembly

Recommended P/N	20660-0**E-01
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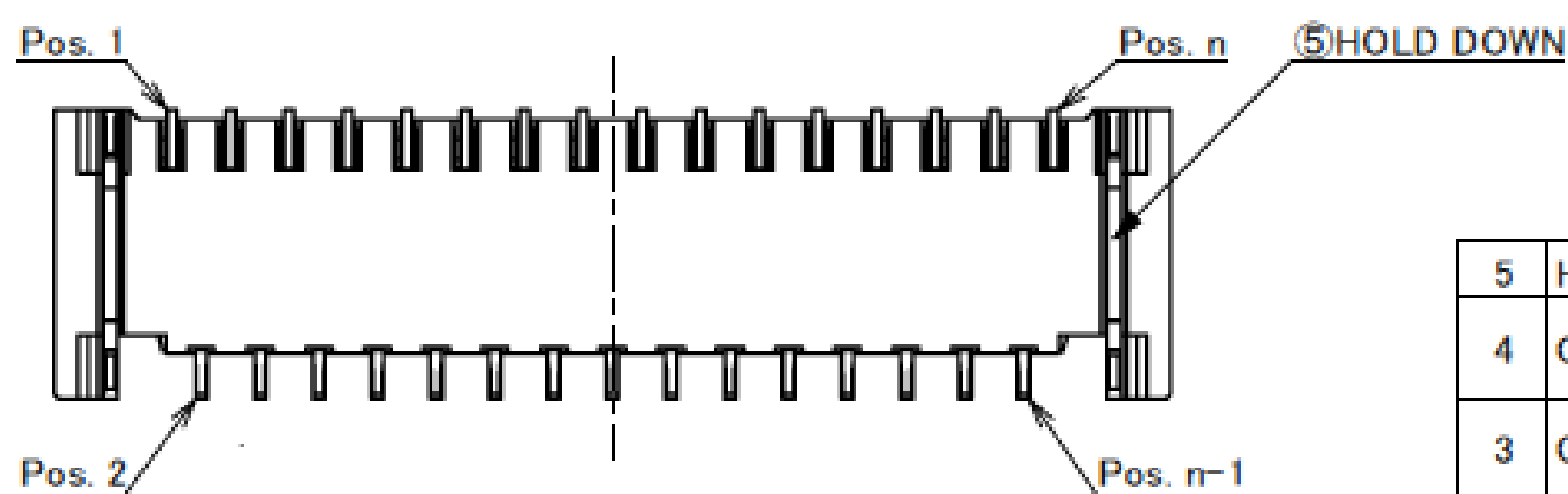


PART No.	Pos.	A	B	C	D	E	F
◆ 20660-031E-01	31P	11.40	8.40	9.00	9.65	10.00	10.25
20660-039E-01	39P	13.80	10.80	11.40	12.05	12.40	12.65
20660-061E-01	61P	20.40	17.40	18.00	18.65	19.00	19.25
◆ 20660-071E-01	71P	23.40	20.40	21.00	21.65	22.00	22.25

◆ MARK MEANS NOT AVAILABLE.



NOTE
1. CONTACT POINT: TOP AND BOTTOM CONTACT

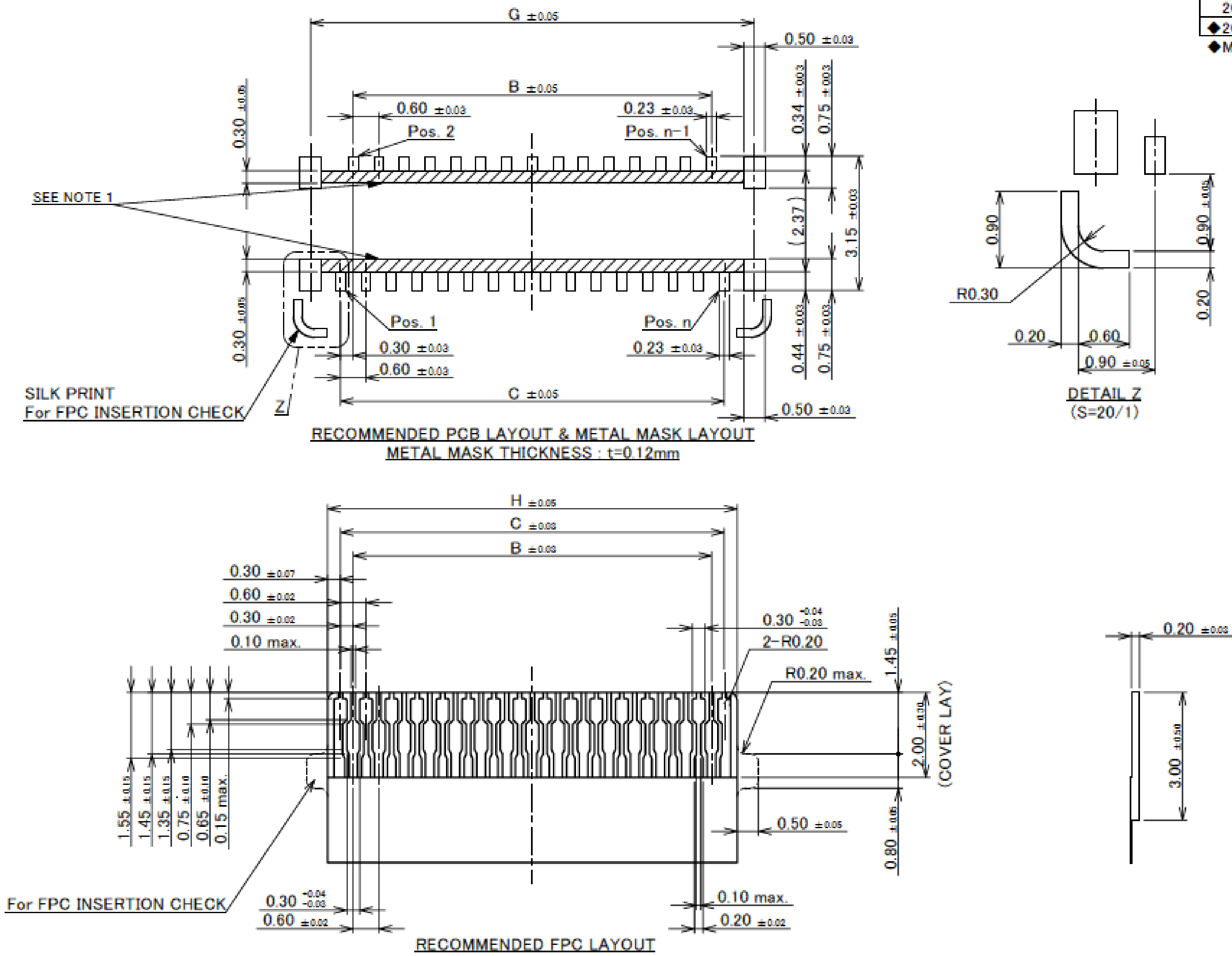


5	HOLD DOWN	BRASS	
4	CONTACT(B)	PHOSPHOR BRONZE	CONTACT AREA : Au 0.1 μ m MIN. OVER Ni 1.0 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.0 μ m MIN.
3	CONTACT(A)	PHOSPHOR BRONZE	CONTACT AREA : Au 0.1 μ m MIN. OVER Ni 1.0 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.0 μ m MIN.
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE
NO.	DISCRIPTION	MATERIAL	REMARKS

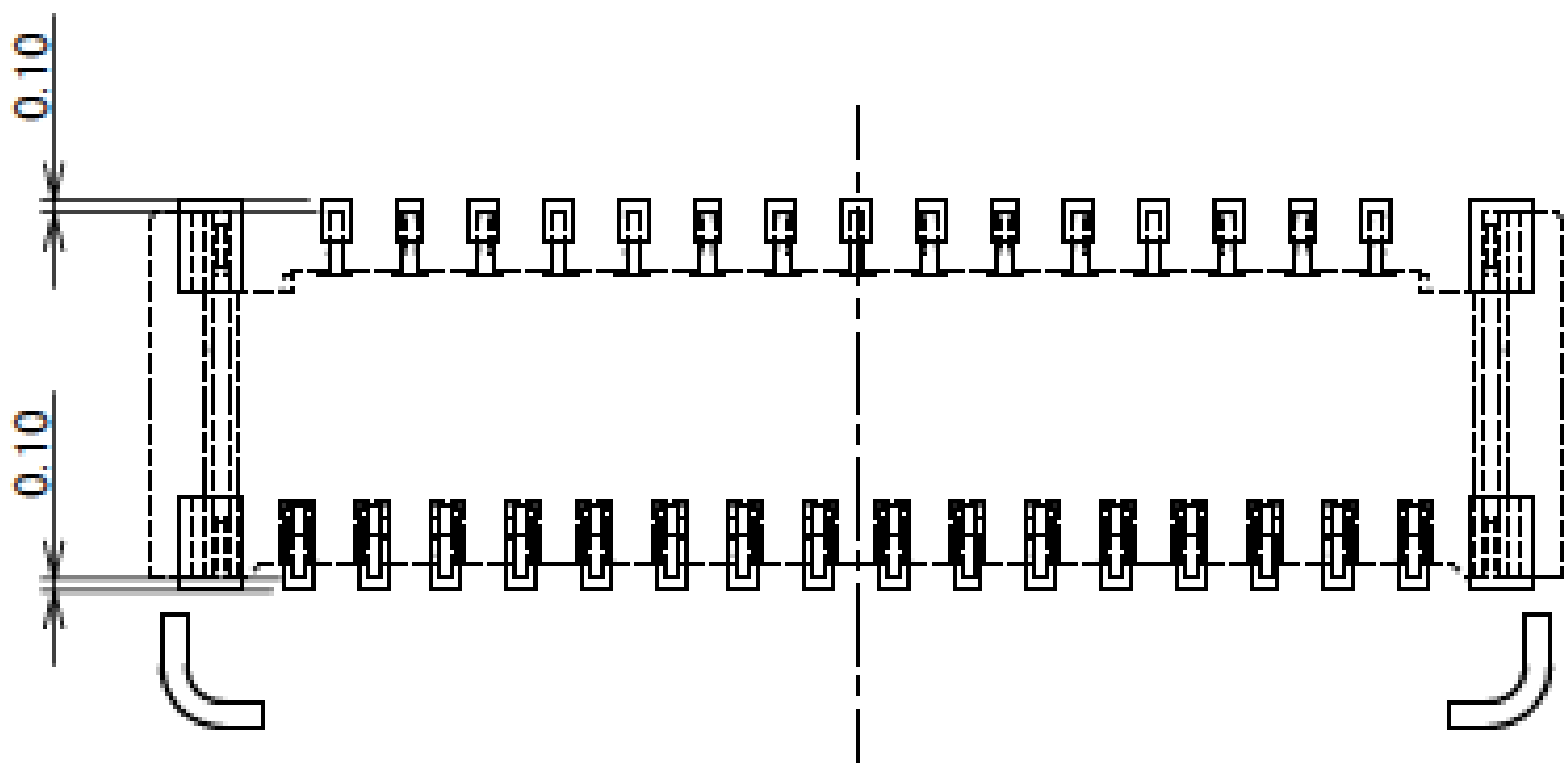
Connector Assembly

PART No.	Pos.	B	C	G	H
◆20660-031E-01	31P	8.40	9.00	10.40	9.60
20660-039E-01	39P	10.80	11.40	12.80	12.00
20660-061E-01	61P	17.40	18.00	19.40	18.60
◆20660-071E-01	71P	20.40	21.00	22.40	21.60

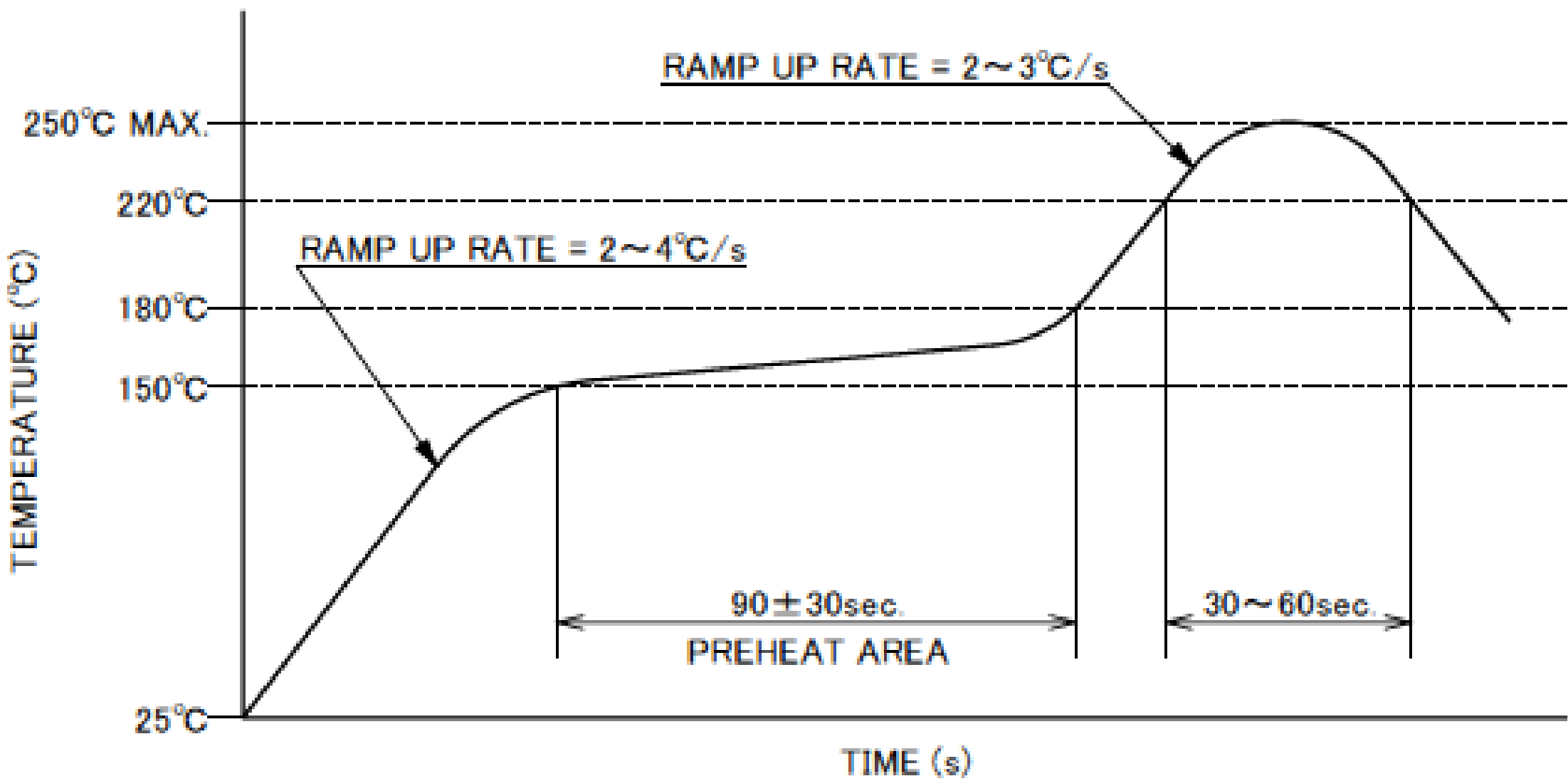
◆MARK MEANS NOT AVAILABLE.



Rev.11



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.11

Connector Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC/DC (PER CONTACT PIN)
RATING AMPERAGE	0.3A DC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K(-40℃~+85℃)
OPERATING HUMIDITY	85% MAX.
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : $\triangleleft$ 40mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20TH CYCLES
ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL : 0.245N(24.5gf) × n MAX. / 20TH CYCLES : 0.245N(24.5gf) × n MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL : 0.014N(1.4gf) × n MIN. / 20TH CYCLES : 0.014N(1.4gf) × n MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL : 0.13N(13gf) × n MIN. / AFTER TEST : 0.10N(10gf) × n MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2073
TEST REPORT	TR-15025
PACKING STANDARD	PST-15042
INSTRUCTION MANUAL	HIM-14004
APPEARANCE CRITERIA No.	QLS-A***

※ “n” IS THE NUMBER OF PIN



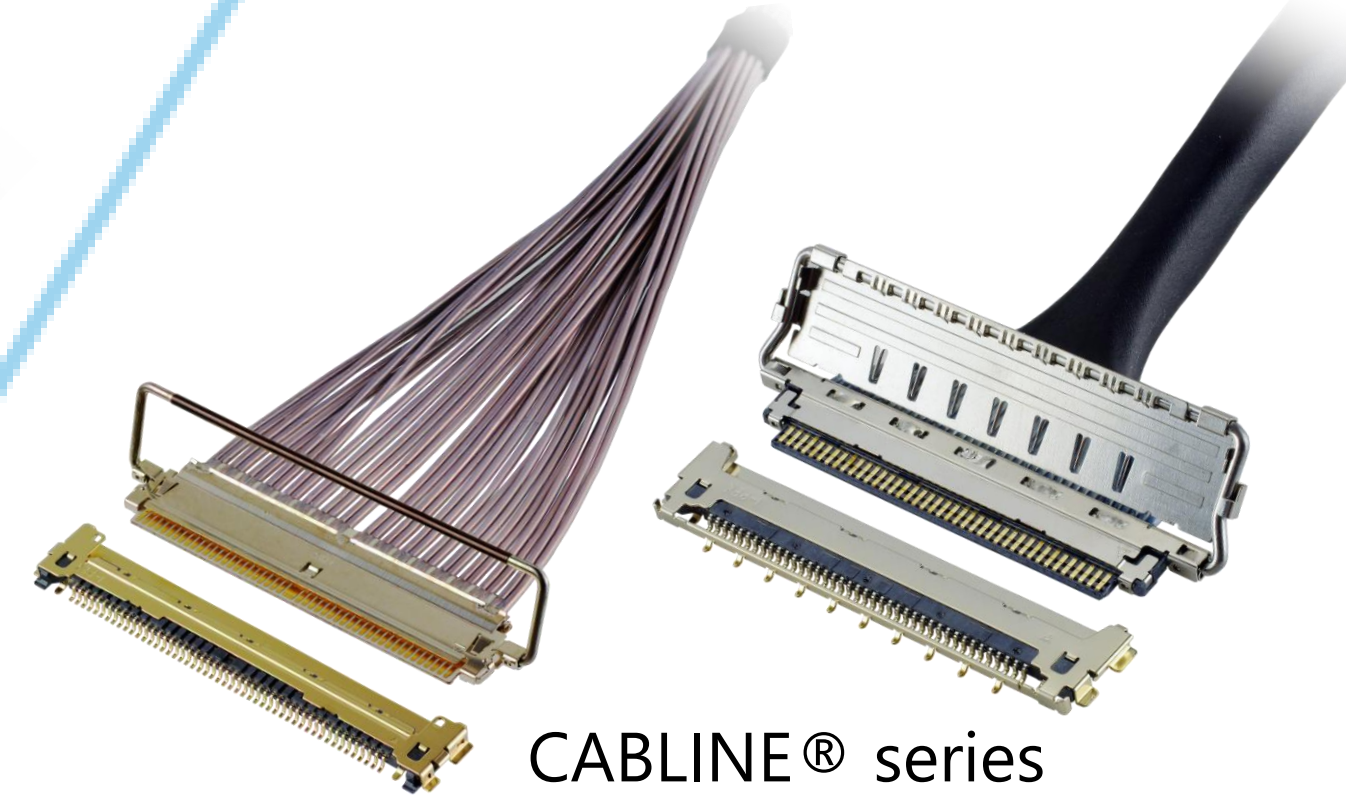
CAUTION

PLEASE BE SURE TO READ AND UNDERSTAND “INSTRUCTION MANUAL” BEFORE YOU USE OUR PRODUCTS.

Custom Connectors Available

RF Connectors

MHF® series



CABLINE® series

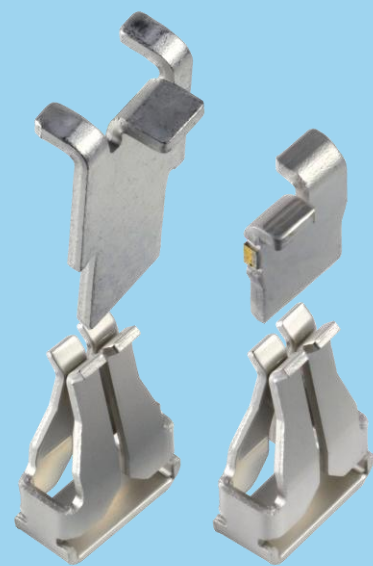


Micro-Coaxial/Twinaxial Connectors

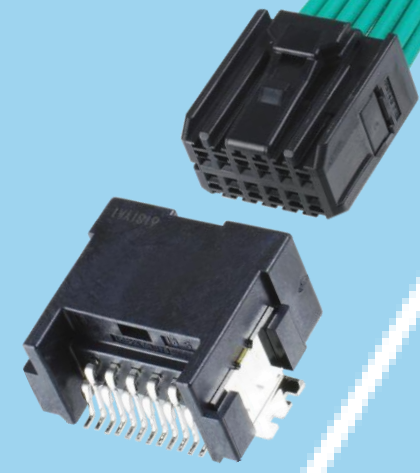


Wire-to-Board Connectors/ Terminals

AP series



ISH® series



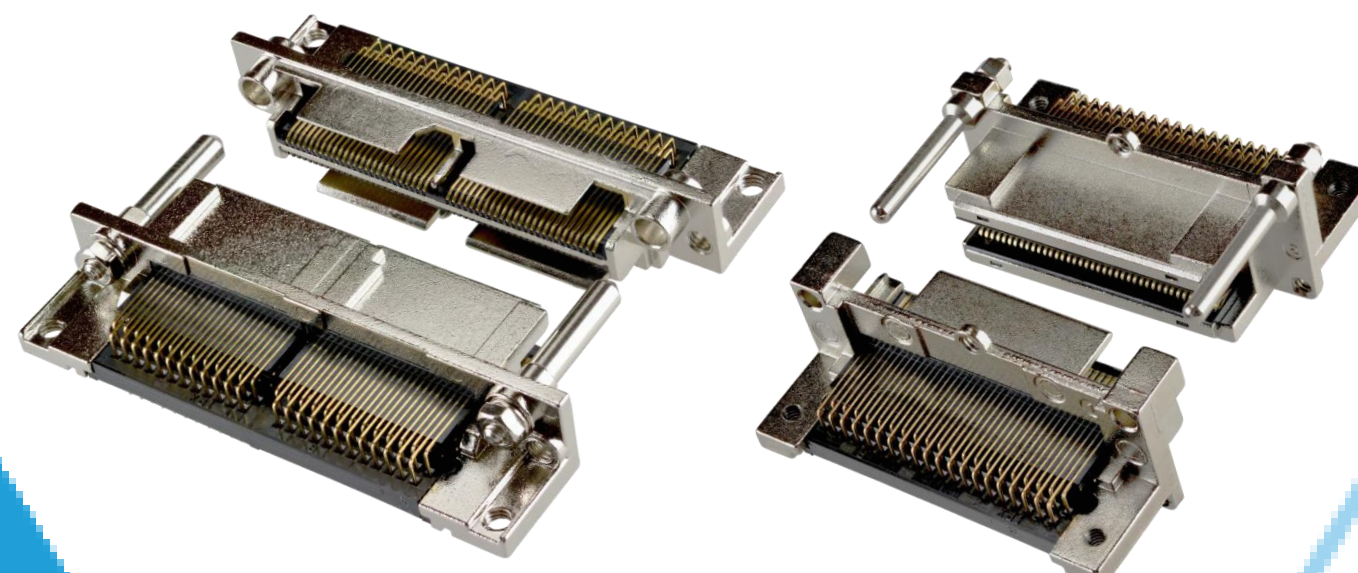
NOVASTACK® series



Board-to-Board Connectors



I/O Connectors



MINIDOCK™ series

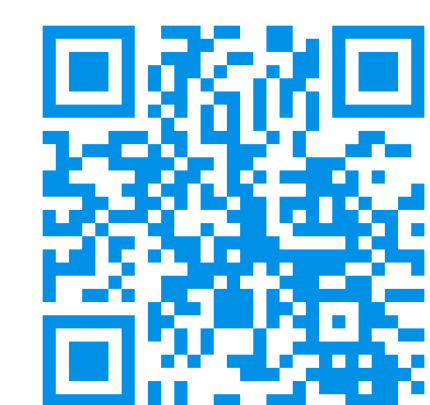
MINIFLEX® series EVAFLEX® series



FPC/FFC Connectors



Inquiry



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