

MINIFLEX® 3-BFN

저배 (높이 = 0.9 mm), 0.3 mm Pitch, 수평 결합, 백플립

Product Specifications:		Short Actuator	Long Actuator
Board Pitch (mm)		0.3	
Wiping Length (mm)		Contact A: 0.9 Contact B: 0.45	
Size (mm)	Height	0.90 mm ± 0.10 mm	
	Width	Formula: 0.9 +(0.3*?P)	
	Depth	Open: 2.55	Close: 3
Pin counts	Range	13-41 (odd)	33-65 (odd)
	Available	13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41	33, 35, 39, 41, 45, 49, 51, 55, 57, 61, 65

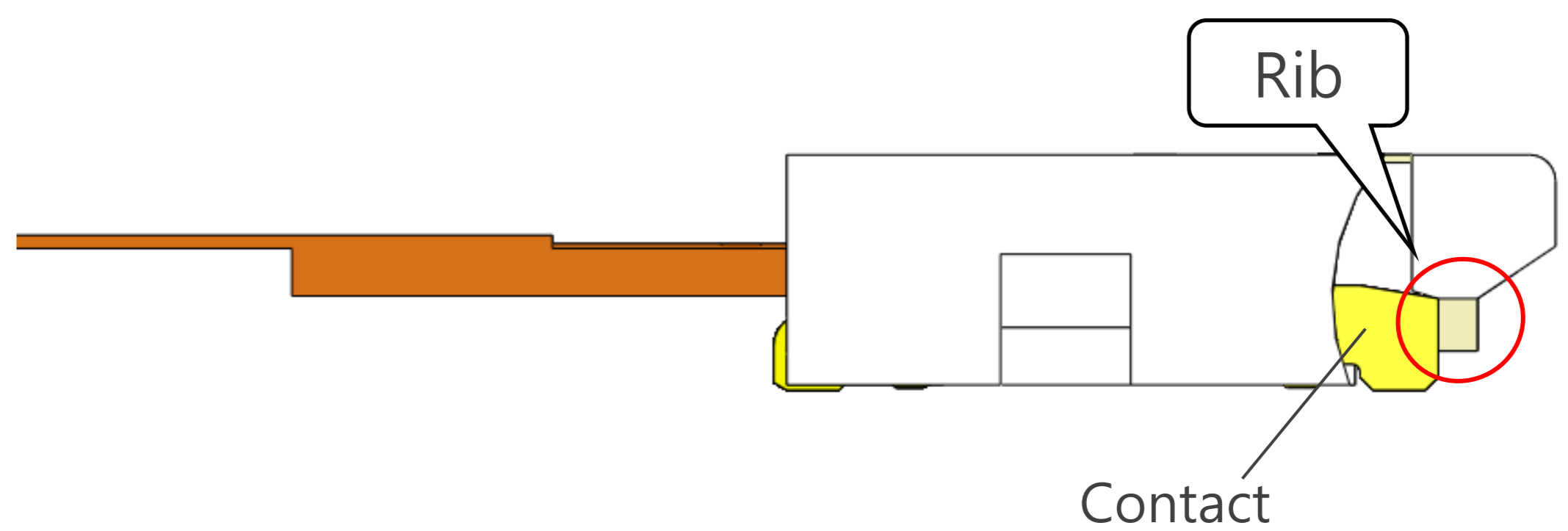
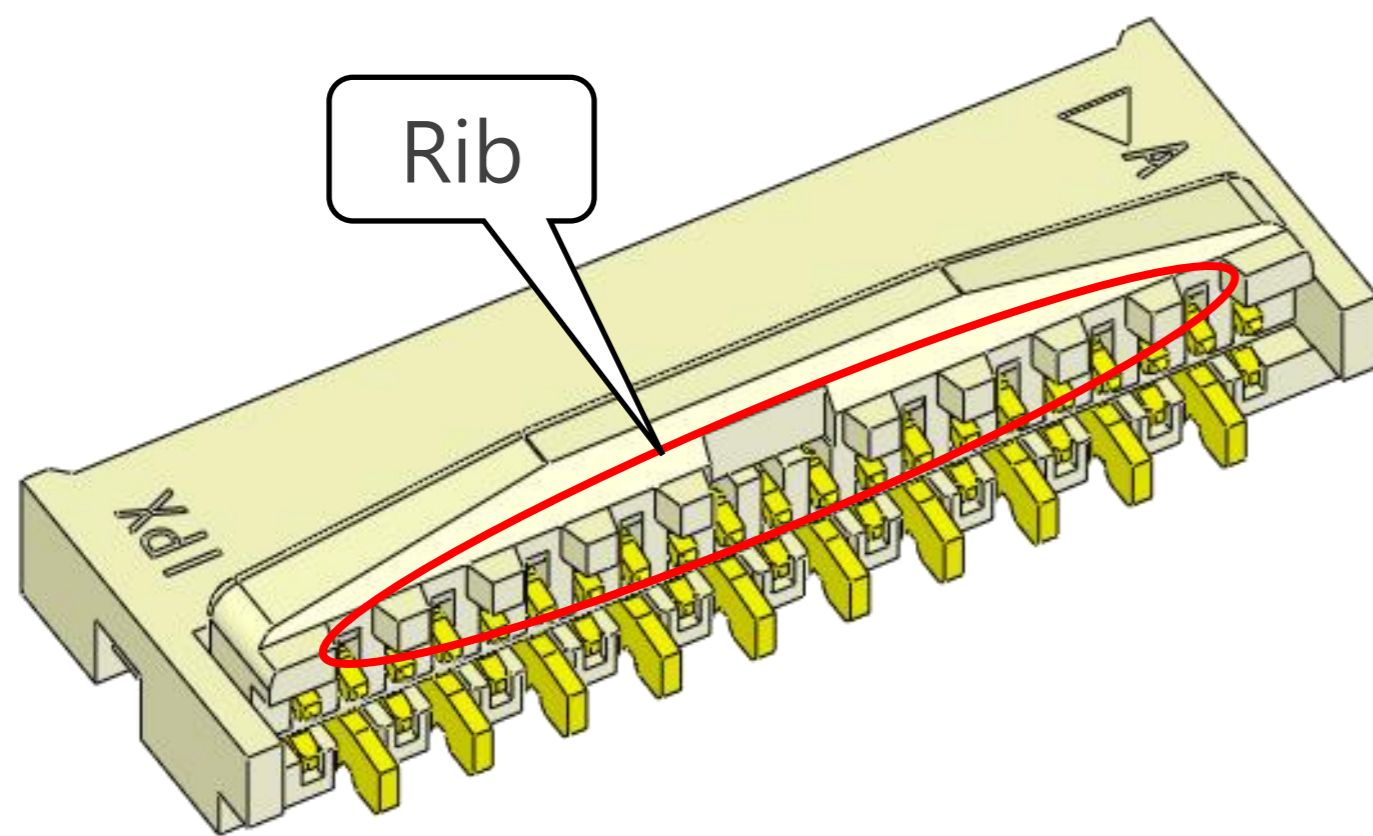
Applicable FPC/FFC:

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



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

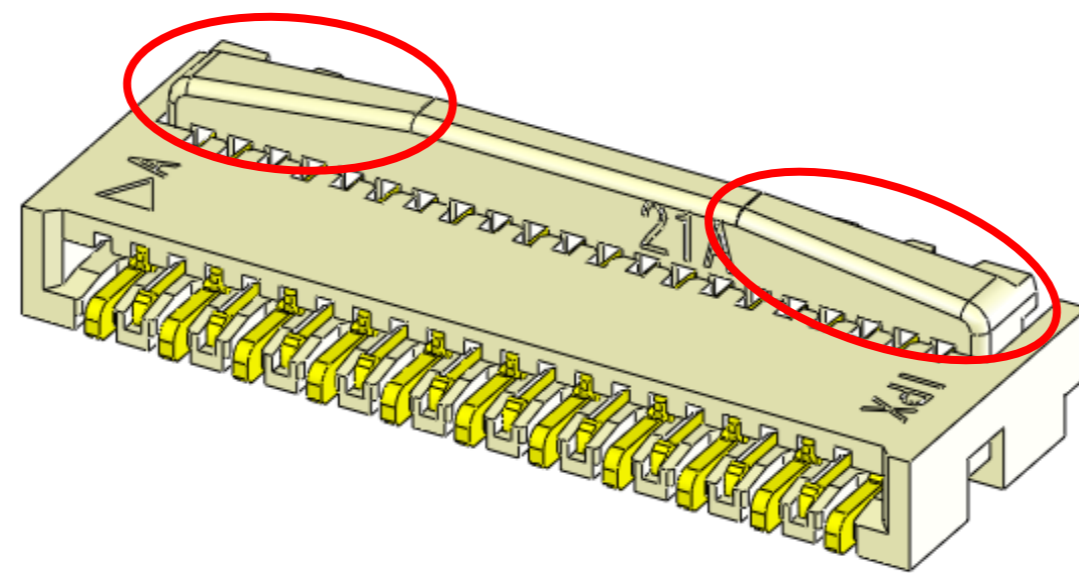
▶ 단자 변형 방지 설계



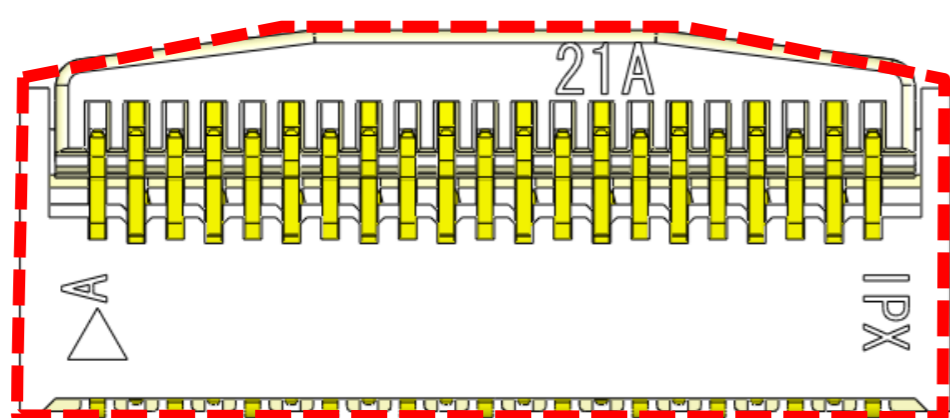
액추에이터를 열때 Contact가 위로 당겨지는 것을 Rib가 방지합니다

▶ 독자적인 액추에이터 형상에 의한 불완전 Lock 방지

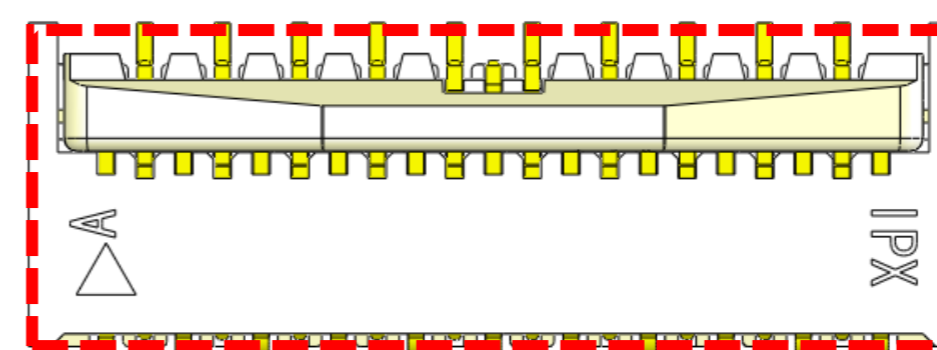
곡선형 디자인은 사용자가 액추에이터의 중심을 누르도록 하여 하프락을 방지합니다



위쪽에서 내려 보면 액추에이터가 닫힌 위치에 있는지 쉽게 확인할 수 있습니다



액추에이터 닫혀 있음

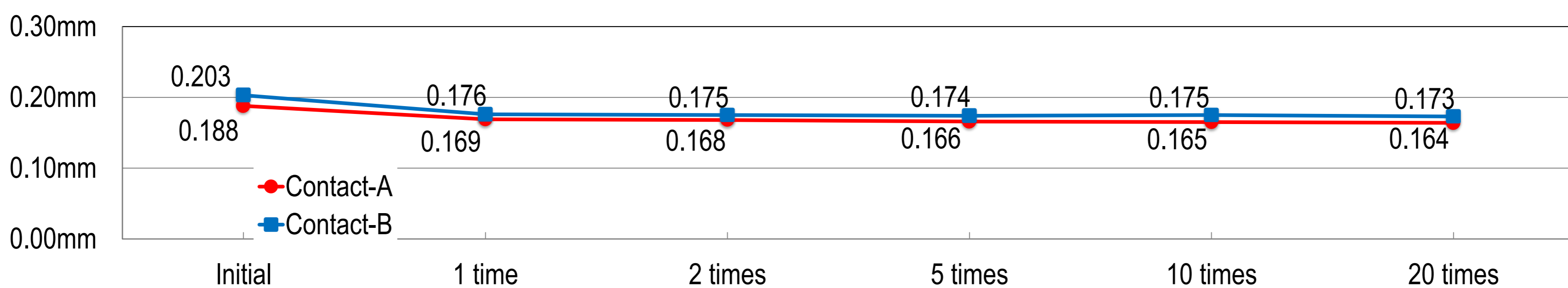


액추에이터 열려 있음

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

SMT 공정 후에 FPC를 삽입하지 않고 우연히 액추에이터를 닫은 경우에도 Contact 변형 최소화

- 커넥터가 여전히 안정적으로 작동합니다(FPC를 삽입하지 않은 상태에서 액추에이터 작동 전후 접촉 간격그래프 35핀)

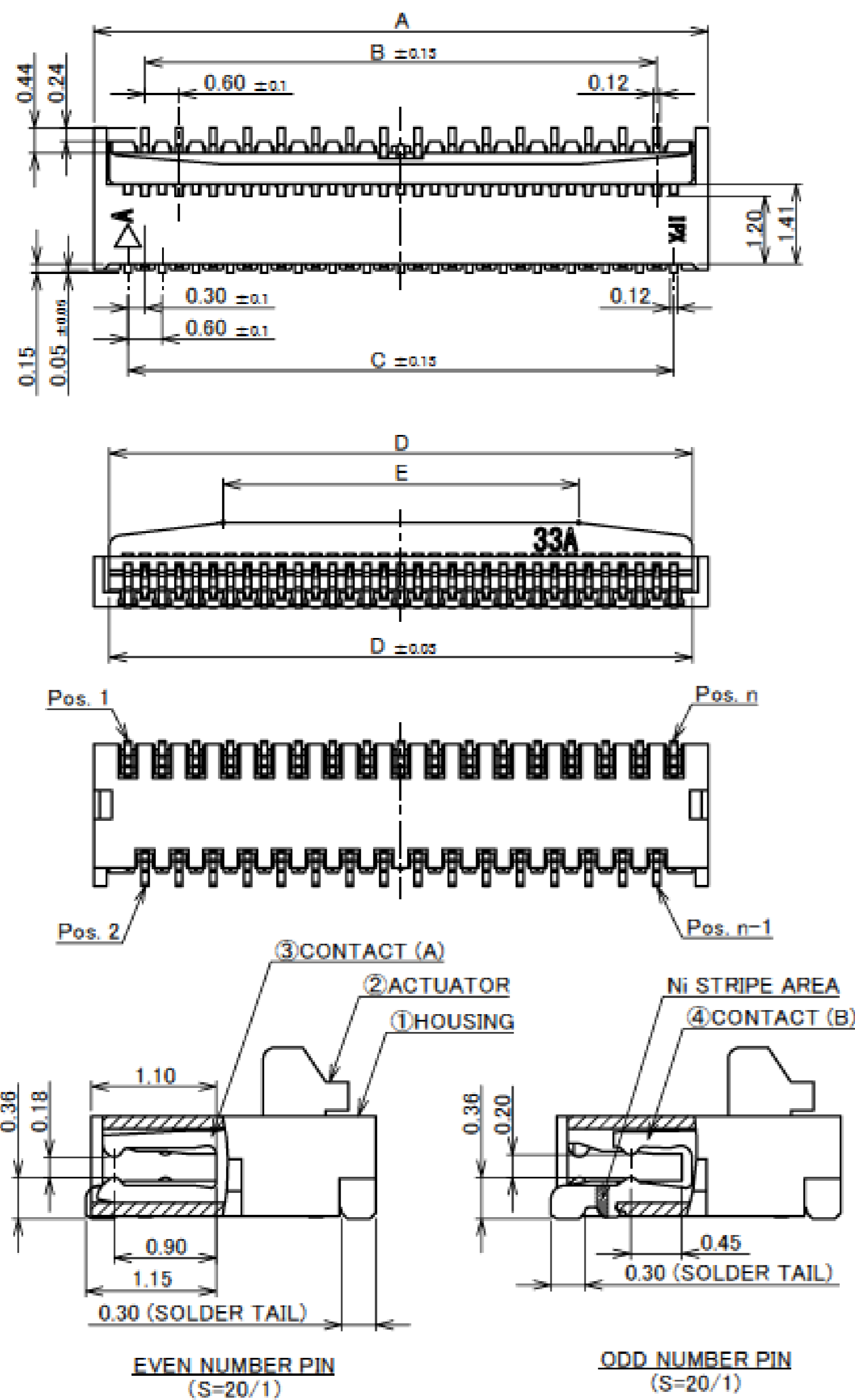


- 커넥터의 삽입력 상승
- 커넥터의 고정력은 큰 변화 없음

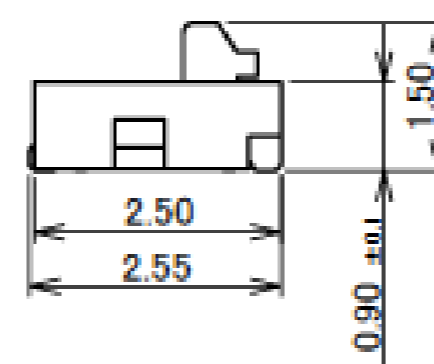
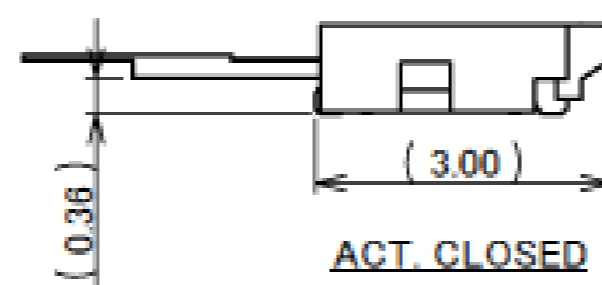
Component Parts Details

Connector Assembly

Recommended P/N 20527-0**E-01



PART NO.	Pos	A	B	C	D	E
20527-013E-0#	13P	4.80	3.00	3.60	4.25	2.25
20527-015E-0#	15P	5.40	3.60	4.20	4.85	2.85
20527-017E-0#	17P	6.00	4.20	4.80	5.45	3.45
20527-019E-0#	19P	6.60	4.80	5.40	6.05	4.05
20527-021E-0#	21P	7.20	5.40	6.00	6.65	2.65
20527-023E-0#	23P	7.80	6.00	6.60	7.25	3.25
20527-025E-0#	25P	8.40	6.60	7.20	7.85	3.85
20527-027E-0#	27P	9.00	7.20	7.80	8.45	4.45
20527-029E-0#	29P	9.60	7.80	8.40	9.05	5.05
20527-031E-0#	31P	10.20	8.40	9.00	9.65	5.65
20527-033E-0#	33P	10.80	9.00	9.60	10.25	6.25
20527-035E-0#	35P	11.40	9.60	10.20	10.85	6.85
20527-037E-0#	37P	12.00	10.20	10.80	11.45	7.45
20527-039E-0#	39P	12.60	10.80	11.40	12.05	8.05
20527-041E-0#	41P	13.20	11.40	12.00	12.65	8.65



NOTES
1. CONTACT POINT: TOP AND BOTTOM CONTACT

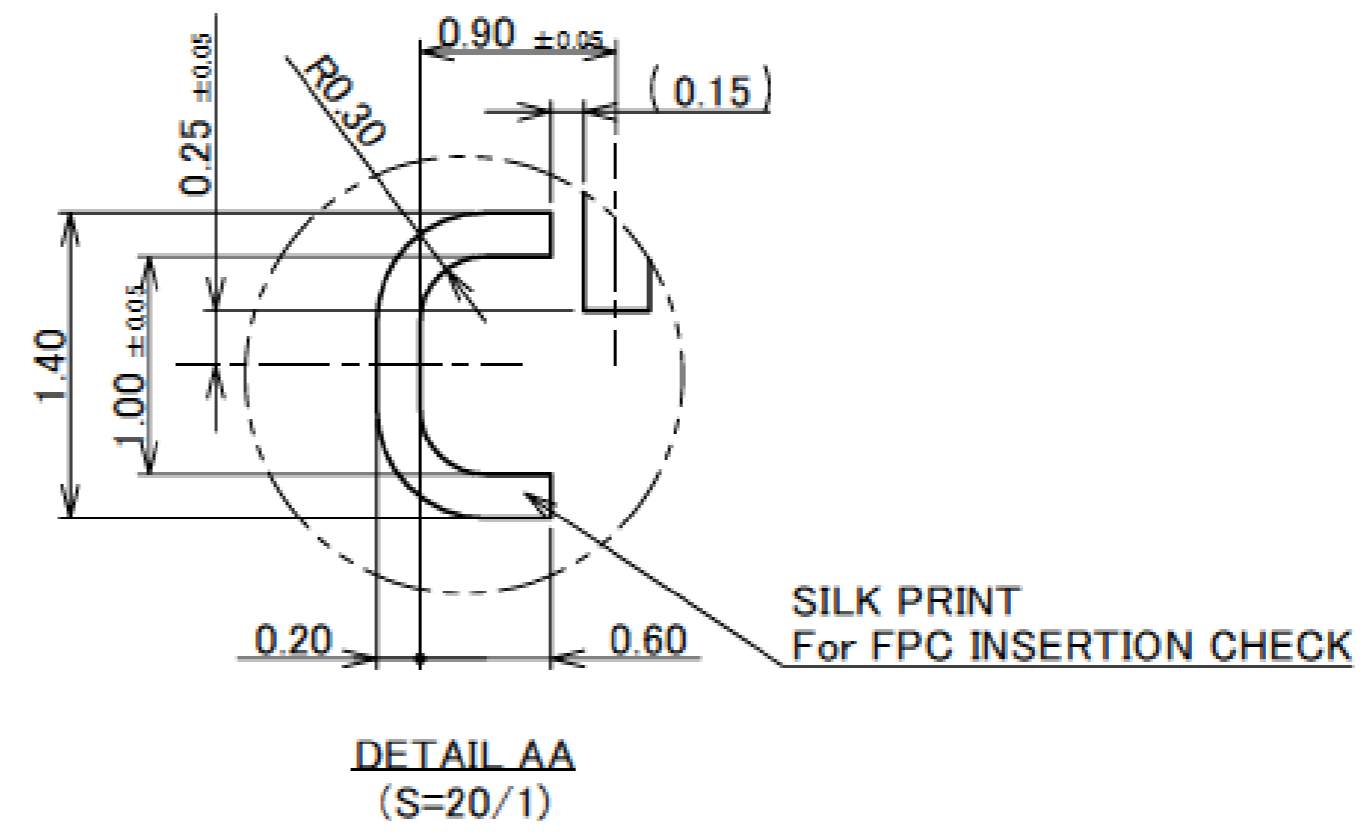
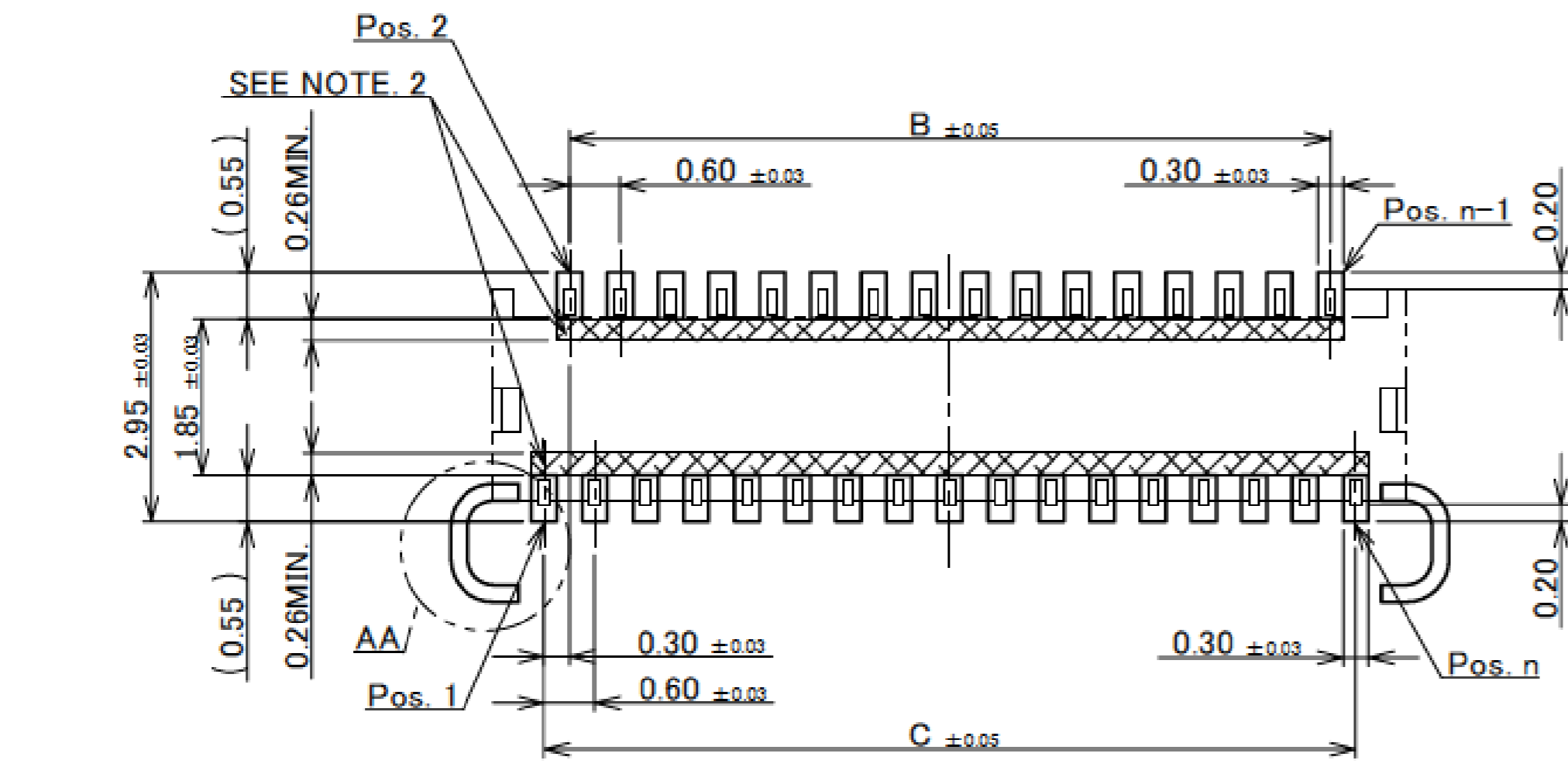
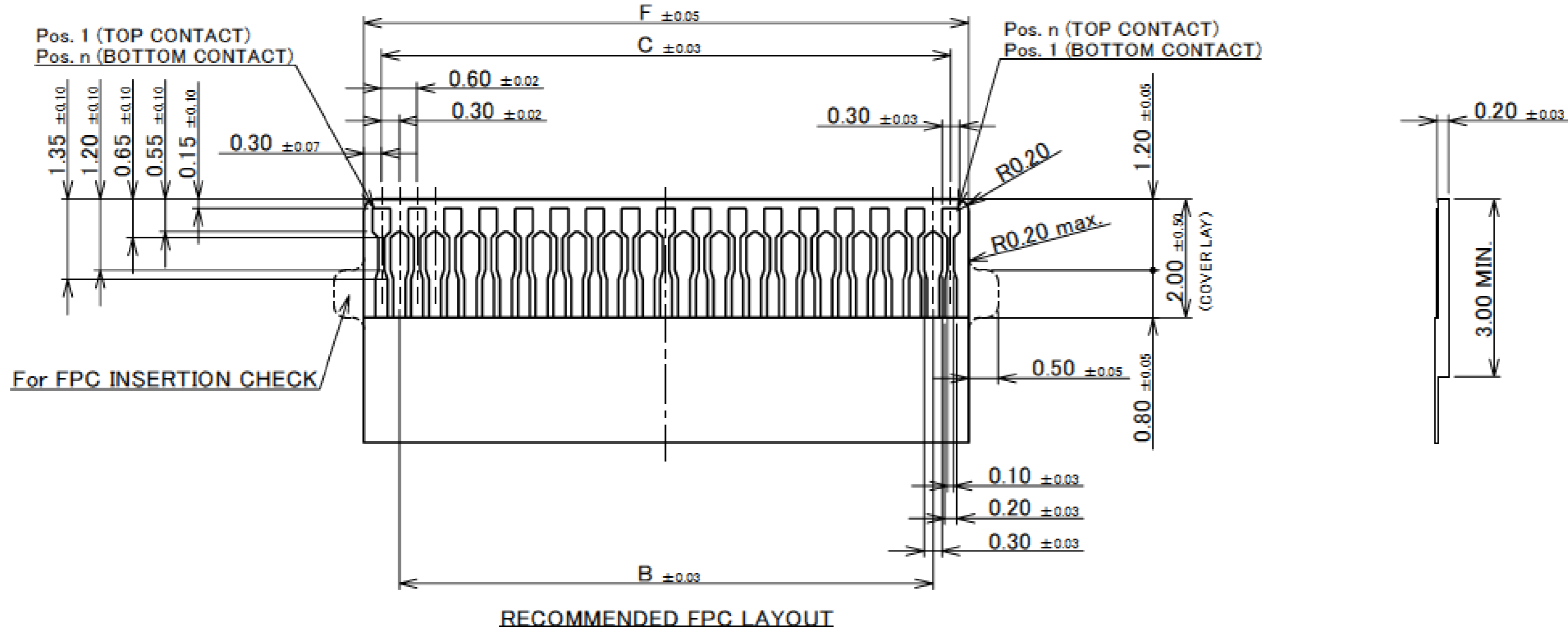
CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-12007 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

TABLE 1

PART NO.	FINISH
20527-0**E-01	CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
20527-0**E-02	CONTACT AREA : Au 0.254 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.

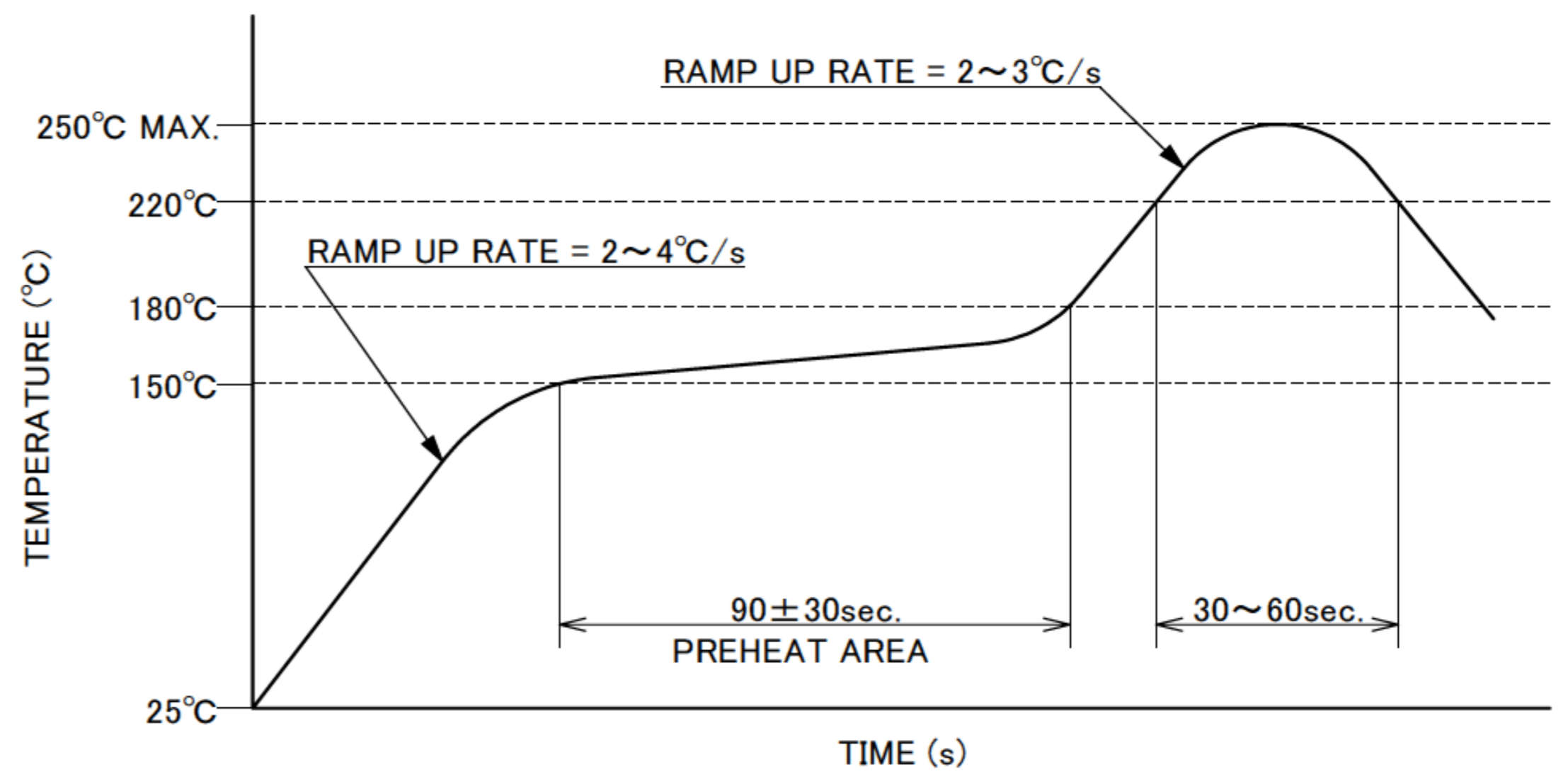
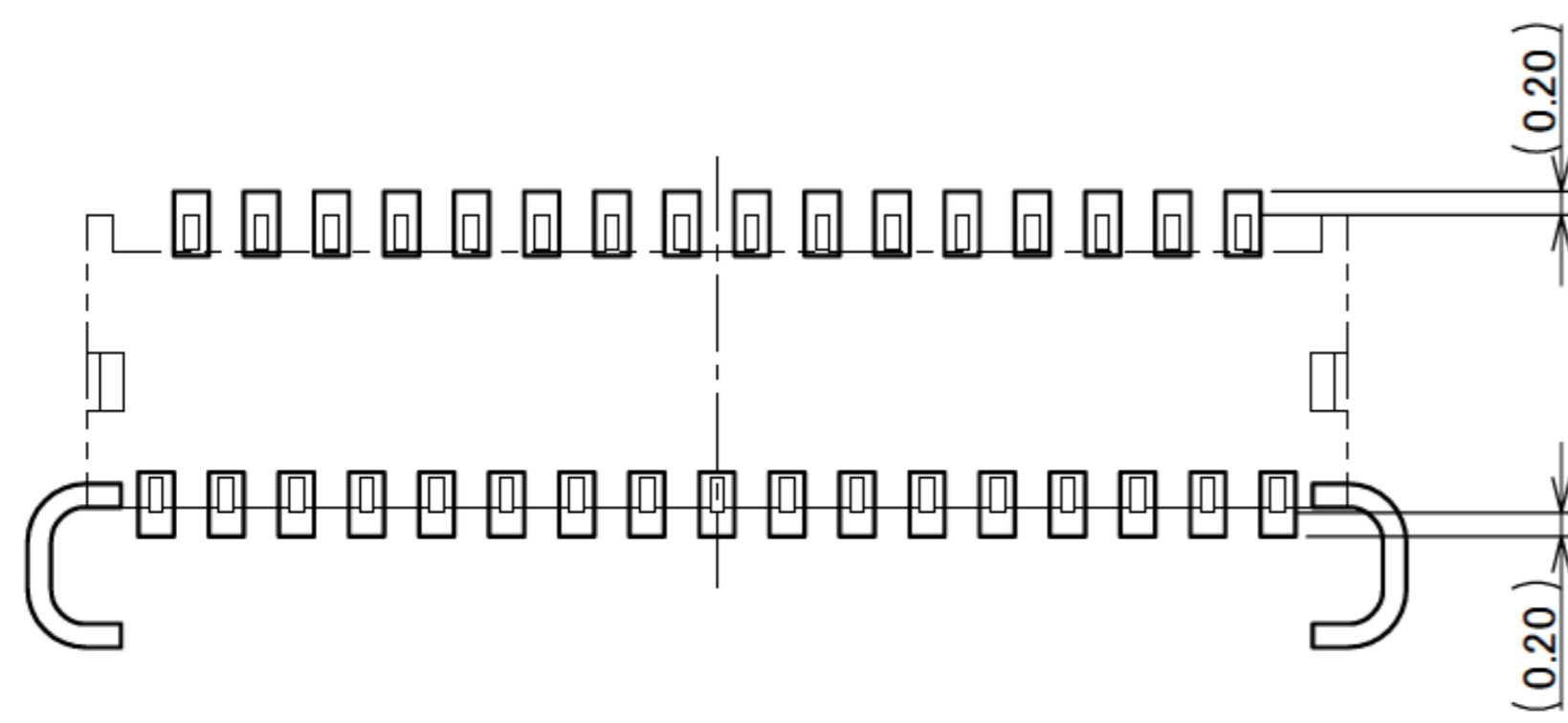
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	CONTACT (B)	PHOSPHOR BRONZE	SEE TABLE 1, WITH Ni STRIPE
3	CONTACT (A)	PHOSPHOR BRONZE	SEE TABLE 1
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE

Connector Assembly



PART NO.	Pos.	B	C	F
20527-013E-0#	13P	3.00	3.60	4.20
20527-015E-0#	15P	3.60	4.20	4.80
20527-017E-0#	17P	4.20	4.80	5.40
20527-019E-0#	19P	4.80	5.40	6.00
20527-021E-0#	21P	5.40	6.00	6.60
20527-023E-0#	23P	6.00	6.60	7.20
20527-025E-0#	25P	6.60	7.20	7.80
20527-027E-0#	27P	7.20	7.80	8.40
20527-029E-0#	29P	7.80	8.40	9.00
20527-031E-0#	31P	8.40	9.00	9.60
20527-033E-0#	33P	9.00	9.60	10.20
20527-035E-0#	35P	9.60	10.20	10.80
20527-037E-0#	37P	10.20	10.80	11.40
20527-039E-0#	39P	10.80	11.40	12.00
20527-041E-0#	41P	11.40	12.00	12.60

NOTES.
2. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.



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

Rev.20

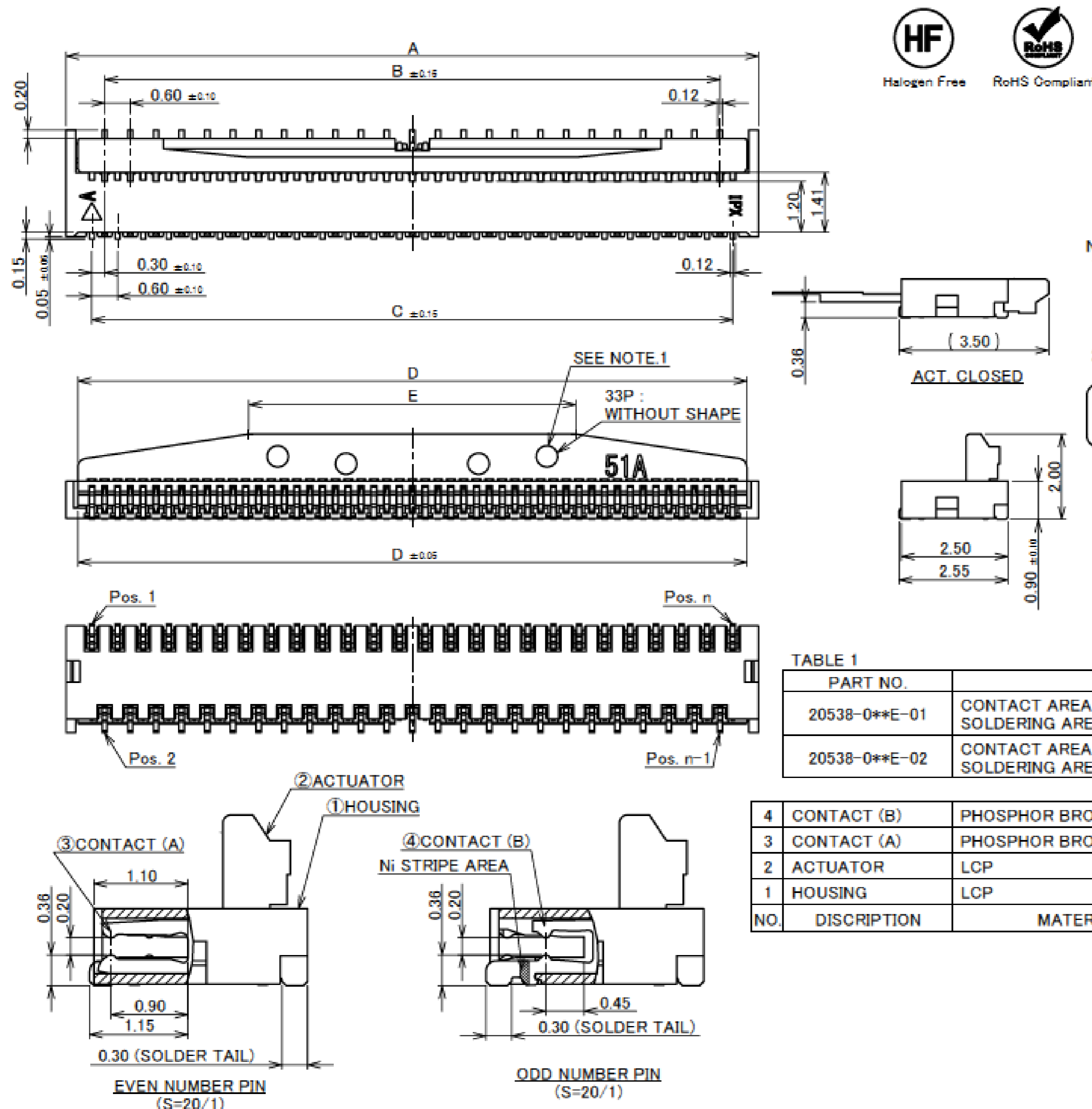
Connector Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT)
RATING AMPERAGE	0.3A DC (PER CONTACT)
OPERATING TEMPERATURE	233~358K (-40°C~+85°C)
OPERATING HUMIDITY	20~80%RH (NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \triangleleft 40mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
ACTUATOR LOCKING FORCE (INITIAL / 20 CYCLES)	INITIAL / 20 CYCLES 0.31N (31gf) \times n MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20 CYCLES)	INITIAL / 20 CYCLES 0.02N (2gf) \times n MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL: 0.13N (13gf) \times n MIN. / AFTER TEST: 0.10N (10gf) \times n MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1512
TEST REPORT	TR-10011
PACKING STANDARD	300-826
INSTRUCTION MANUAL	HIM-12007
APPEARANCE CRITERIA No.	QLS-A***

※ "n" IS THE NUMBER OF PIN

Rev.20

Recommended P/N 20538-0**E-01



PART NO.	Pos.	A	B	C	D	E
20538-033E-0#	33P	10.80	9.00	9.60	10.25	6.25
20538-035E-0#	35P	11.40	9.60	10.20	10.85	6.85
20538-039E-0#	39P	12.60	10.80	11.40	12.05	8.05
20538-041E-0#	41P	13.20	11.40	12.00	12.65	4.65
20538-045E-0#	45P	14.40	12.60	13.20	13.85	5.85
20538-049E-0#	49P	15.60	13.80	14.40	15.05	7.05
20538-051E-0#	51P	16.20	14.40	15.00	15.65	7.65
20538-055E-0#	55P	17.40	15.60	16.20	16.85	8.85
20538-057E-0#	57P	18.00	16.20	16.80	17.45	9.45
20538-061E-0#	61P	19.20	17.40	18.00	18.65	10.65
20538-065E-0#	65P	20.40	18.60	19.20	19.85	11.85

- NOTES.
- THIS DENT SHAPE IS PURPOSED FOR GOOD INJECTION QUALITY. THIS DENT SHAPE WILL NOT AFFECT CONNECTR FUNCTION. DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE. DENT SHAPE AND QUANTITY MIGHT CHABGE FROM DIFFERENT PIN COUNT AND DIFFERENT TOOLING.
 - CONTACT POINT : TOP AND BOTTOM CONTACT

CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-12007 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

PART NO.	FINISH
20538-0**E-01	CONTACT AREA : Au 0.10 μ m MIN. OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
20538-0**E-02	CONTACT AREA : Au 0.254 μ m MIN. OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.

NO.	DISCRPTION	MATERIAL	FINISH , REMARKS
4	CONTACT (B)	PHOSPHOR BRONZE	SEE TABLE 1, WITH Ni STRIPE
3	CONTACT (A)	PHOSPHOR BRONZE	SEE TABLE 1
2	ACTUATOR	LCP	UL94V-0, BEIGE
1	HOUSING	LCP	UL94V-0, BEIGE

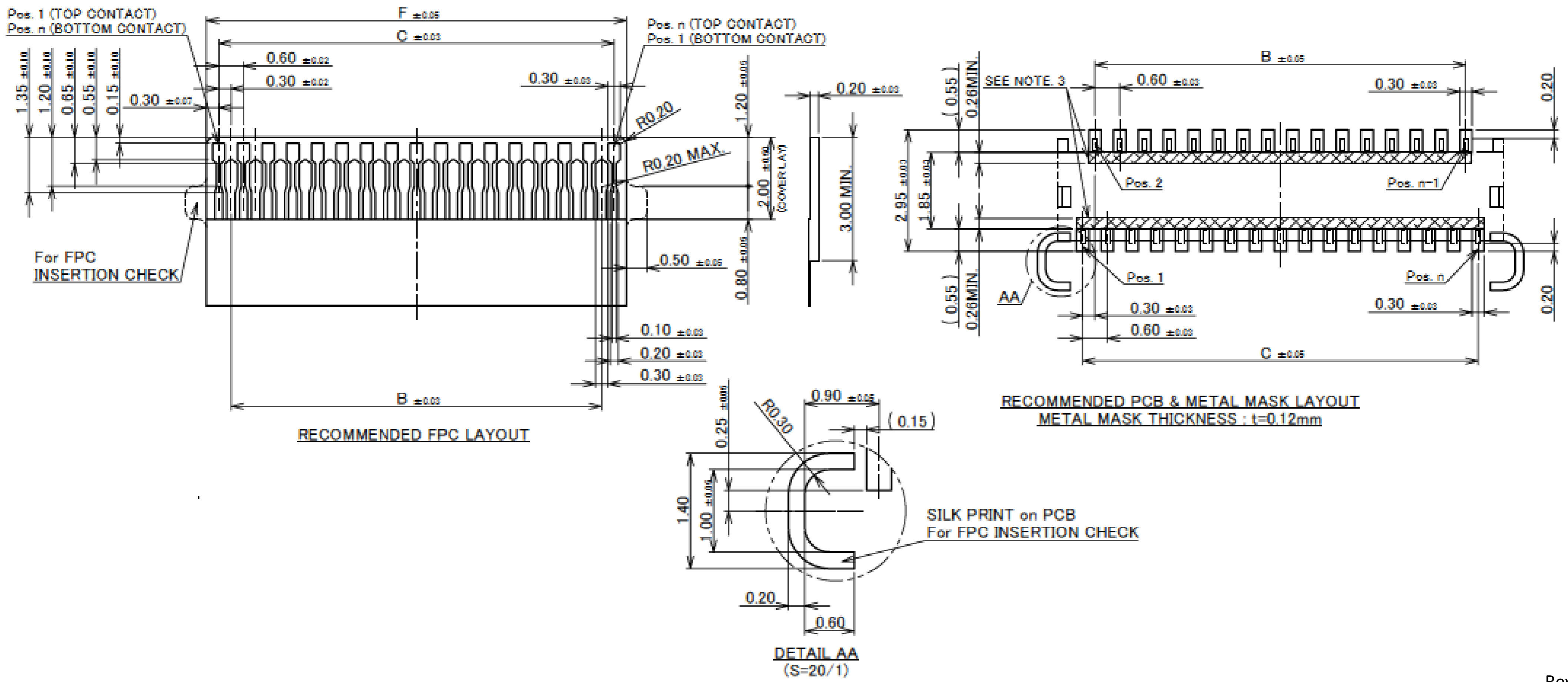
Rev.18

Connector Assembly

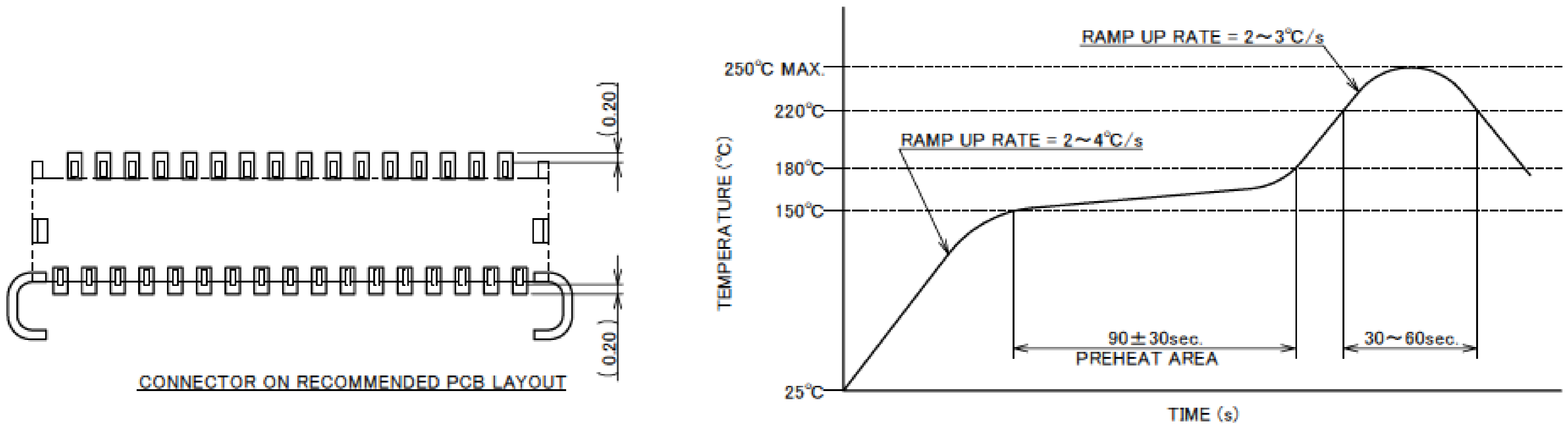
PART NO.	Pos.	B	C	F
20538-033E-0#	33P	9.00	9.60	10.20
20538-035E-0#	35P	9.60	10.20	10.80
20538-039E-0#	39P	10.80	11.40	12.00
20538-041E-0#	41P	11.40	12.00	12.60
20538-045E-0#	45P	12.60	13.20	13.80
20538-049E-0#	49P	13.80	14.40	15.00
20538-051E-0#	51P	14.40	15.00	15.60
20538-055E-0#	55P	15.60	16.20	16.80
20538-057E-0#	57P	16.20	16.80	17.40
20538-061E-0#	61P	17.40	18.00	18.60
20538-065E-0#	65P	18.60	19.20	19.80

NOTES.

3. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.



Rev.18



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

Rev.18

Connector Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT)
RATING AMPERAGE	0.3A DC (PER CONTACT)
OPERATING TEMPERATURE	233~358K (-40°C~+85°C)
OPERATING HUMIDITY	20~80%RH
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \triangle 40mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
ACTUATOR LOCKING FORCE (INITIAL / 20 CYCLES)	INITIAL / 20 CYCLES 0.21N (21gf) \times n MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20 CYCLES)	INITIAL / 20 CYCLES 0.014N (1.4gf) \times n MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL: 0.13N (13gf) \times n MIN. / AFTER TEST: 0.10N (10gf) \times n MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1579
TEST REPORT	TR-12040
PACKING STANDARD	300-920
INSTRUCTION MANUAL	HIM-12007
APPEARANCE CRITERIA No.	QLS-A***

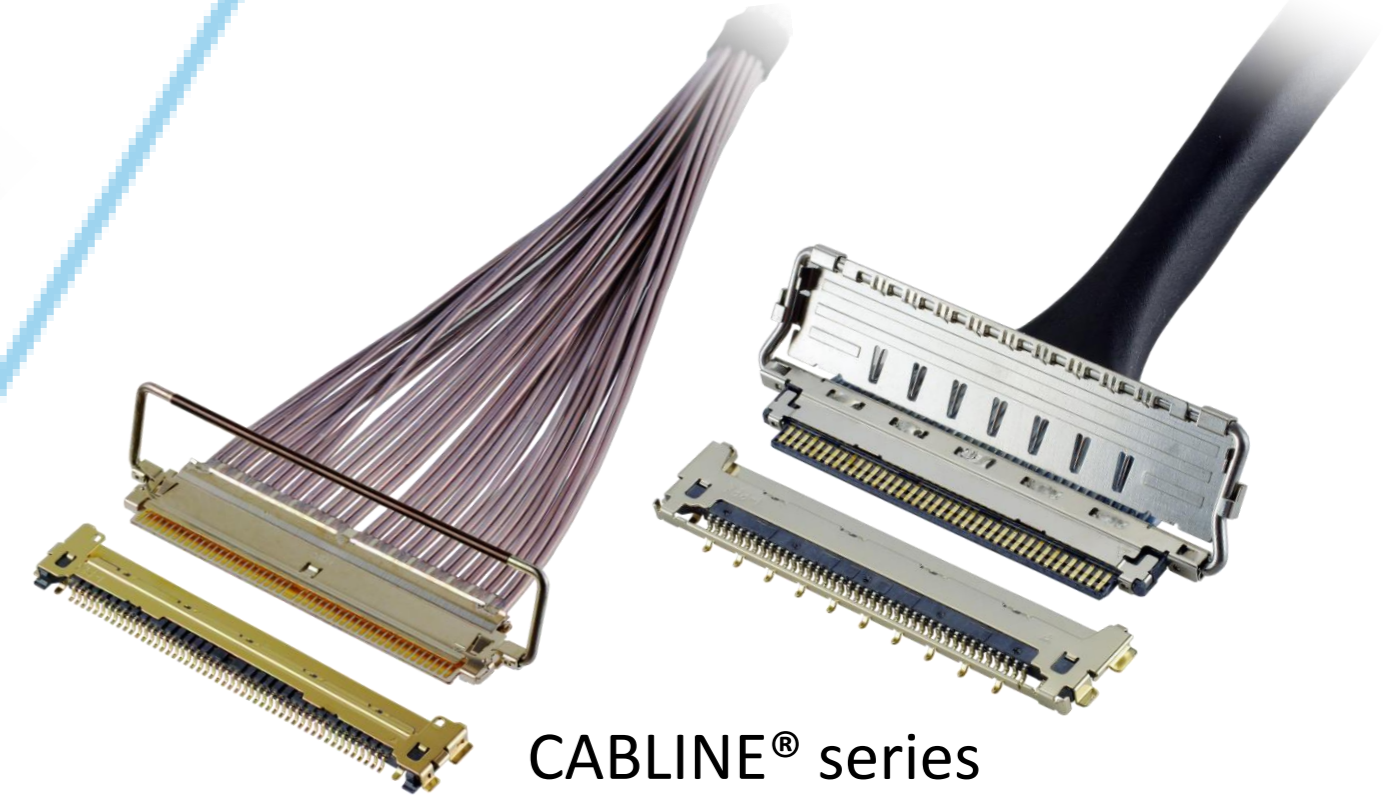
※ "n" IS THE NUMBER OF PIN

Rev.18

Custom Connectors Available

 RF Connectors

MHF® series



CABLIN® series

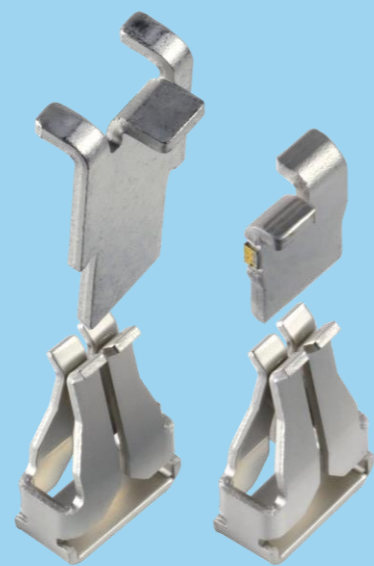


Micro-coaxial/Twinax Connectors

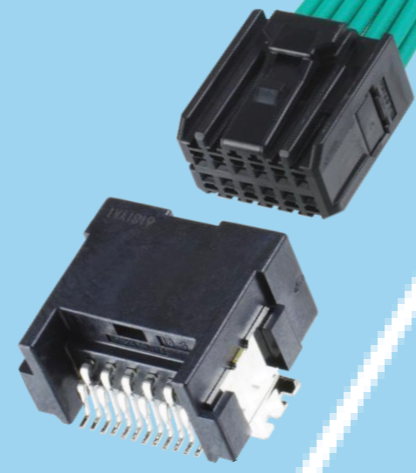


Wire-to-Board Connectors/Terminals

AP series



ISH® series



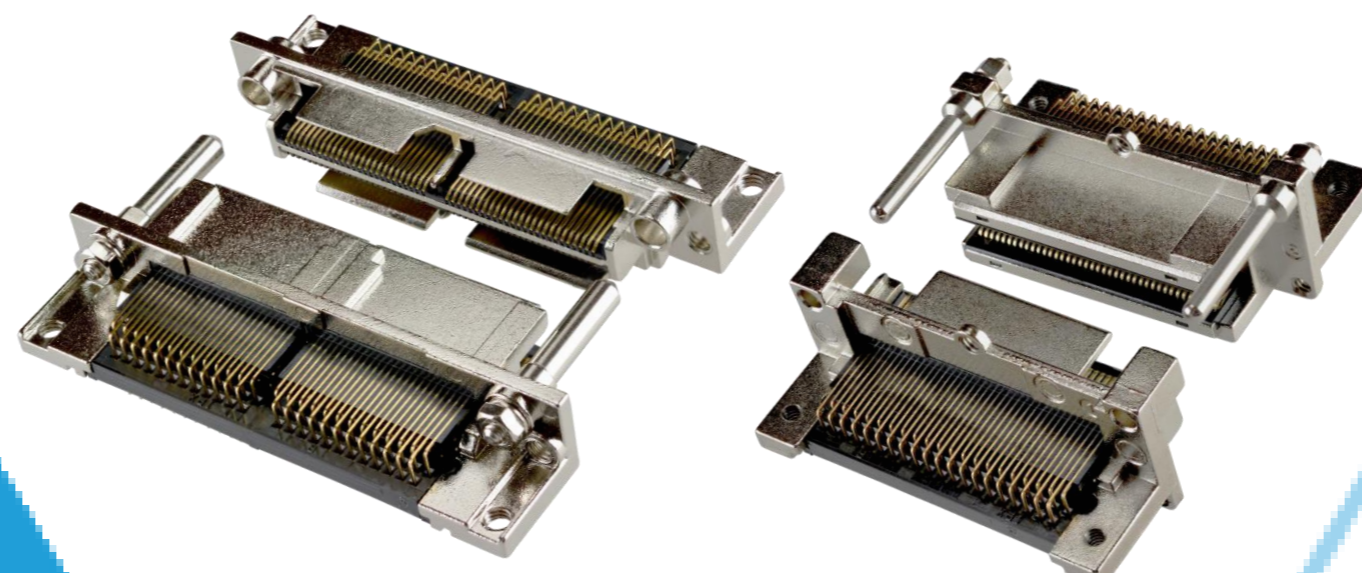
NOVASTACK® series



Board-to-Board Connectors



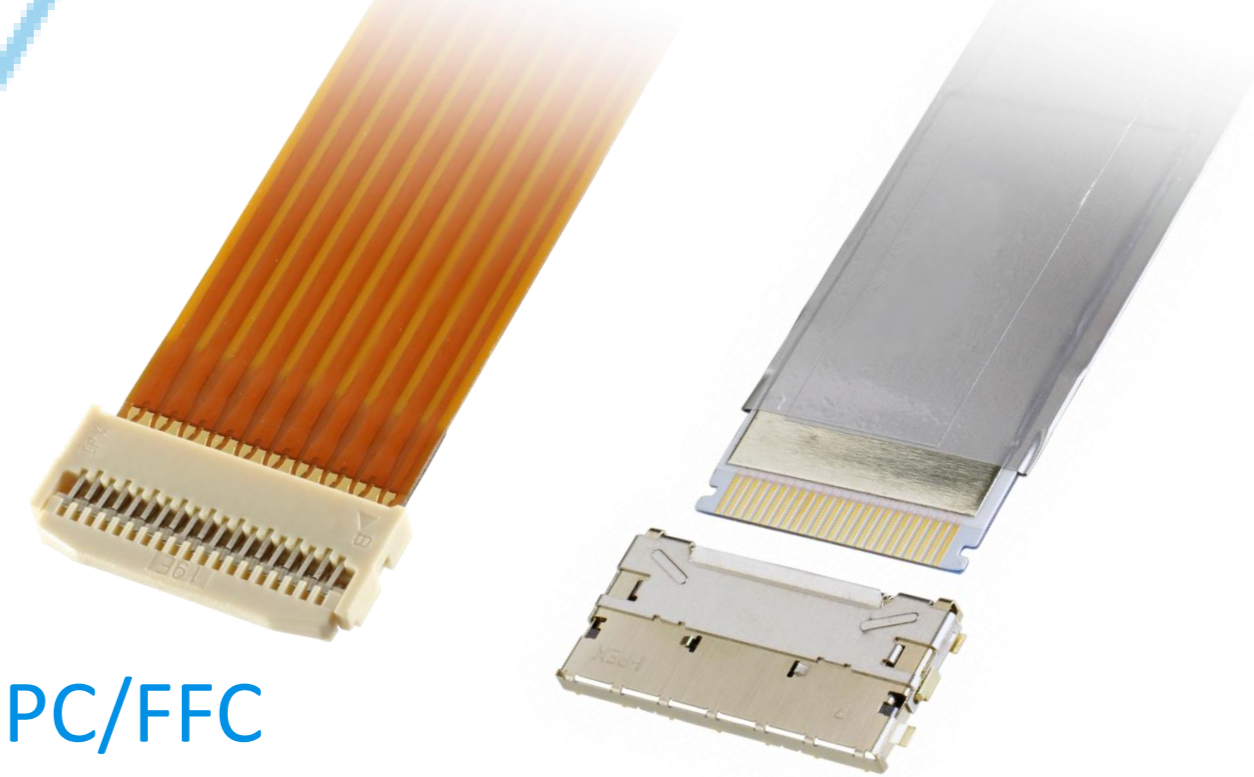
I/O Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC Connectors



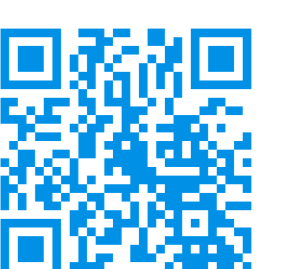
Inquiry



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Contact your sales representative or more detailed information.

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