

MINIFLEX® 3-BFN LK

0.3 mm ピッチ、高さ 0.9 mm、メカニカルロック付き、水平嵌合、バックフリップ FPC コネクタ

Product Specifications:		Short Actuator	Long Actuator
Contact Pitch		0.3 mm	
Board Pitch		0.6 mm	
Contact Mating Length		Contact A: 0.9 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: 2.55 mm Close: 3.0 mm Close: 3.5 mm	
Available Pin Count *		9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37	51, 53, 57, 61, 71

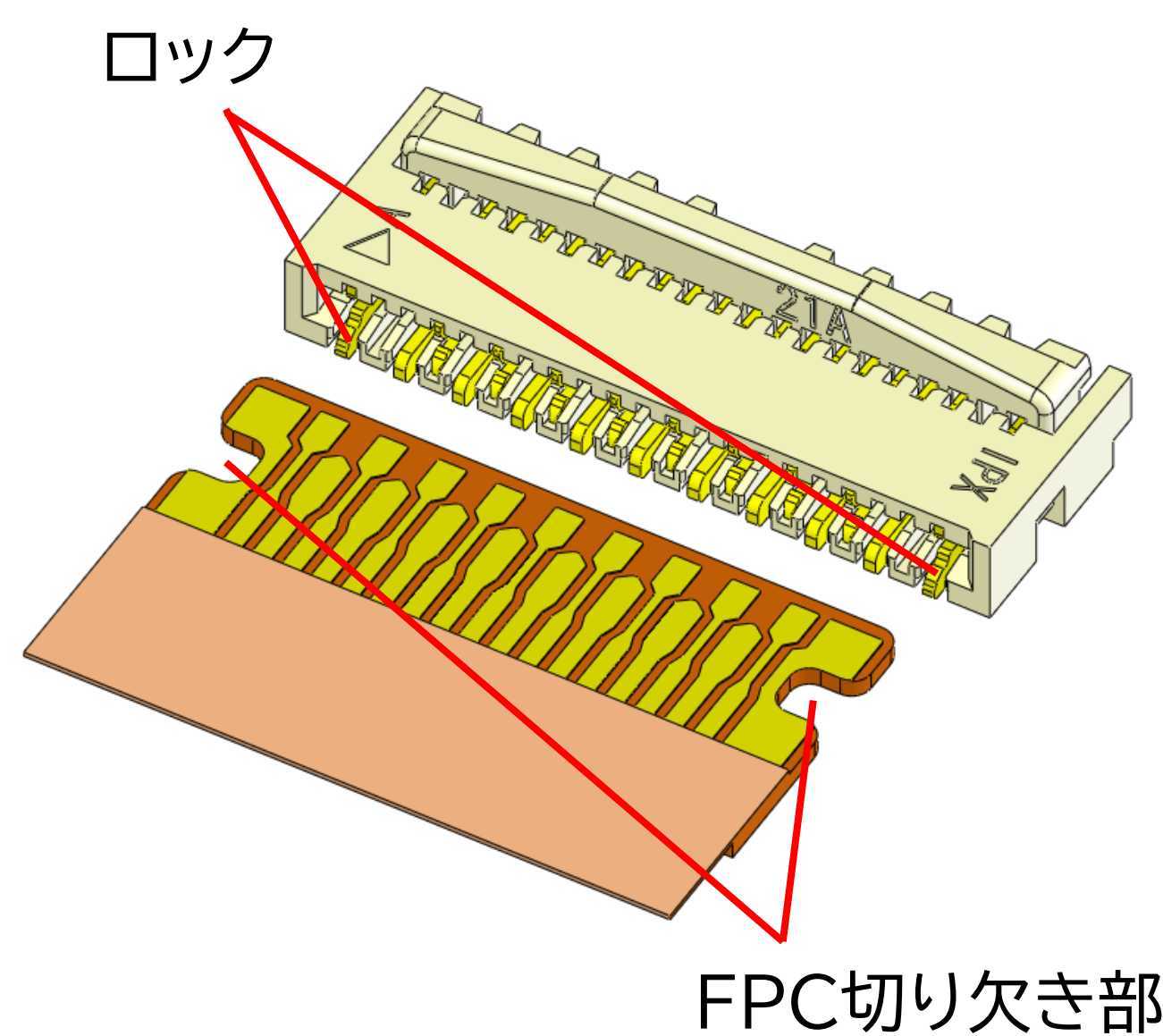
*上記に記載のない芯数をご希望の場合は、お問い合わせください。

Applicable FPC/FFC:

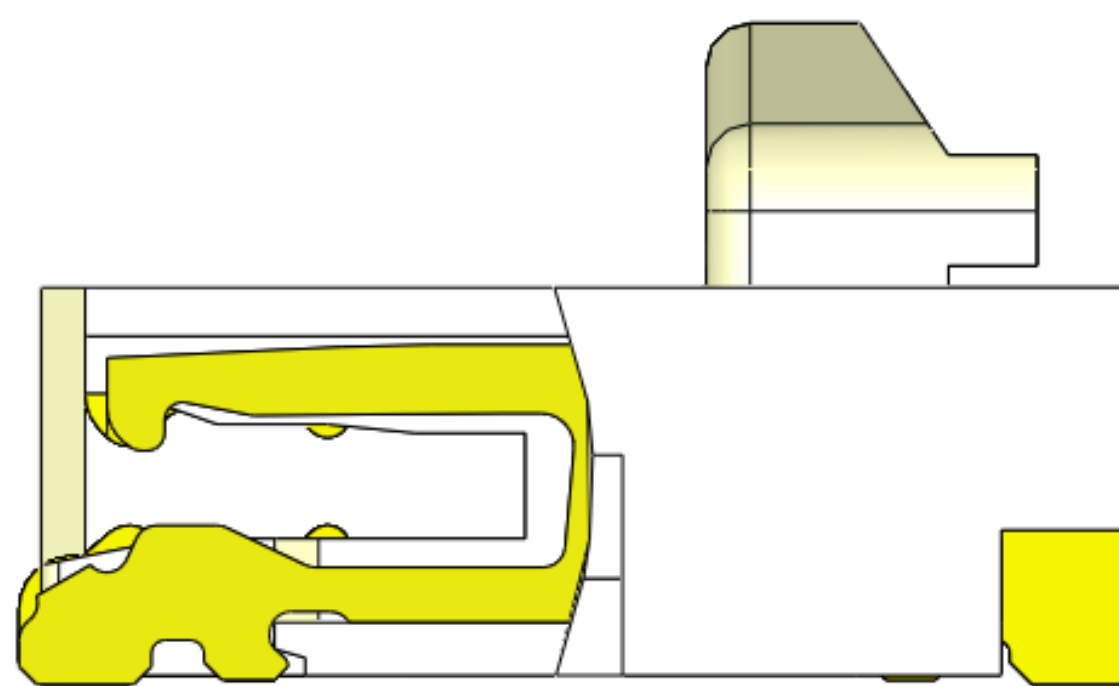
FPC / FFC Contact Pitch	0.3 mm
FPC / FFC Contact Point	Top and Bottom
FPC / FFC Thickness	0.2 +/- 0.03 mm



▶ メカニカルロックによる高FPC保持力



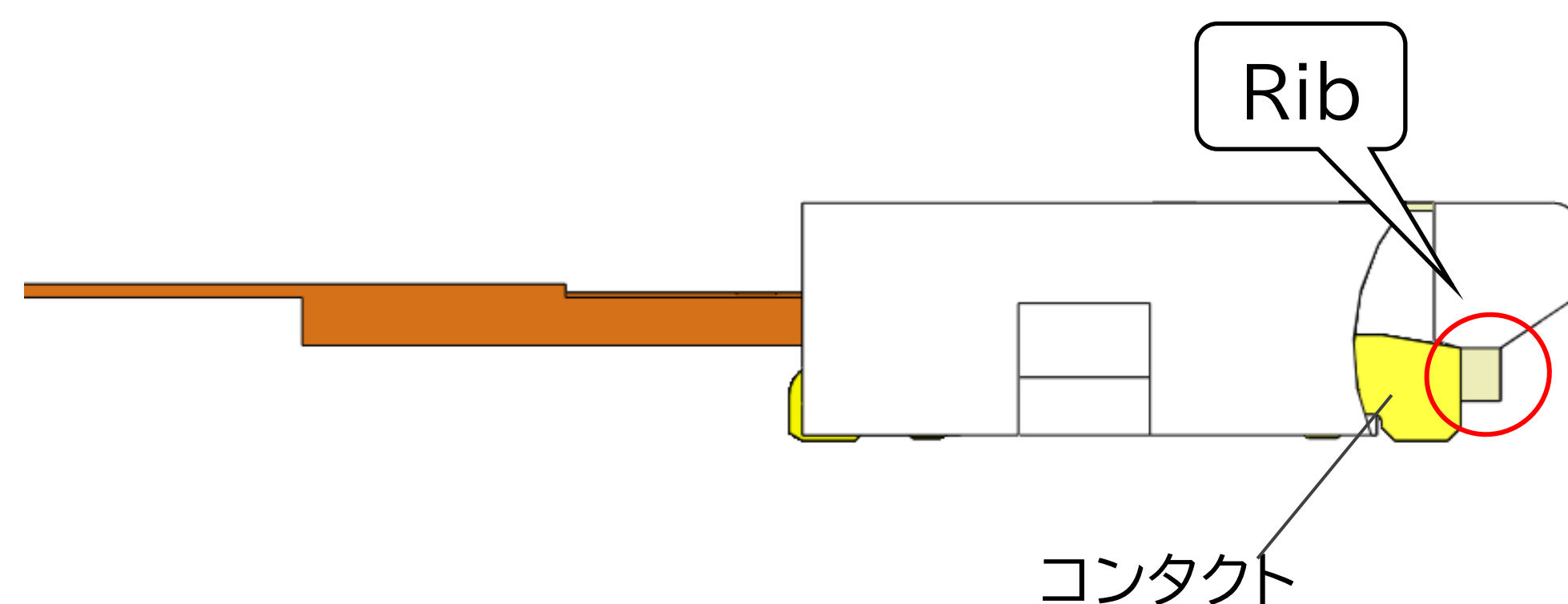
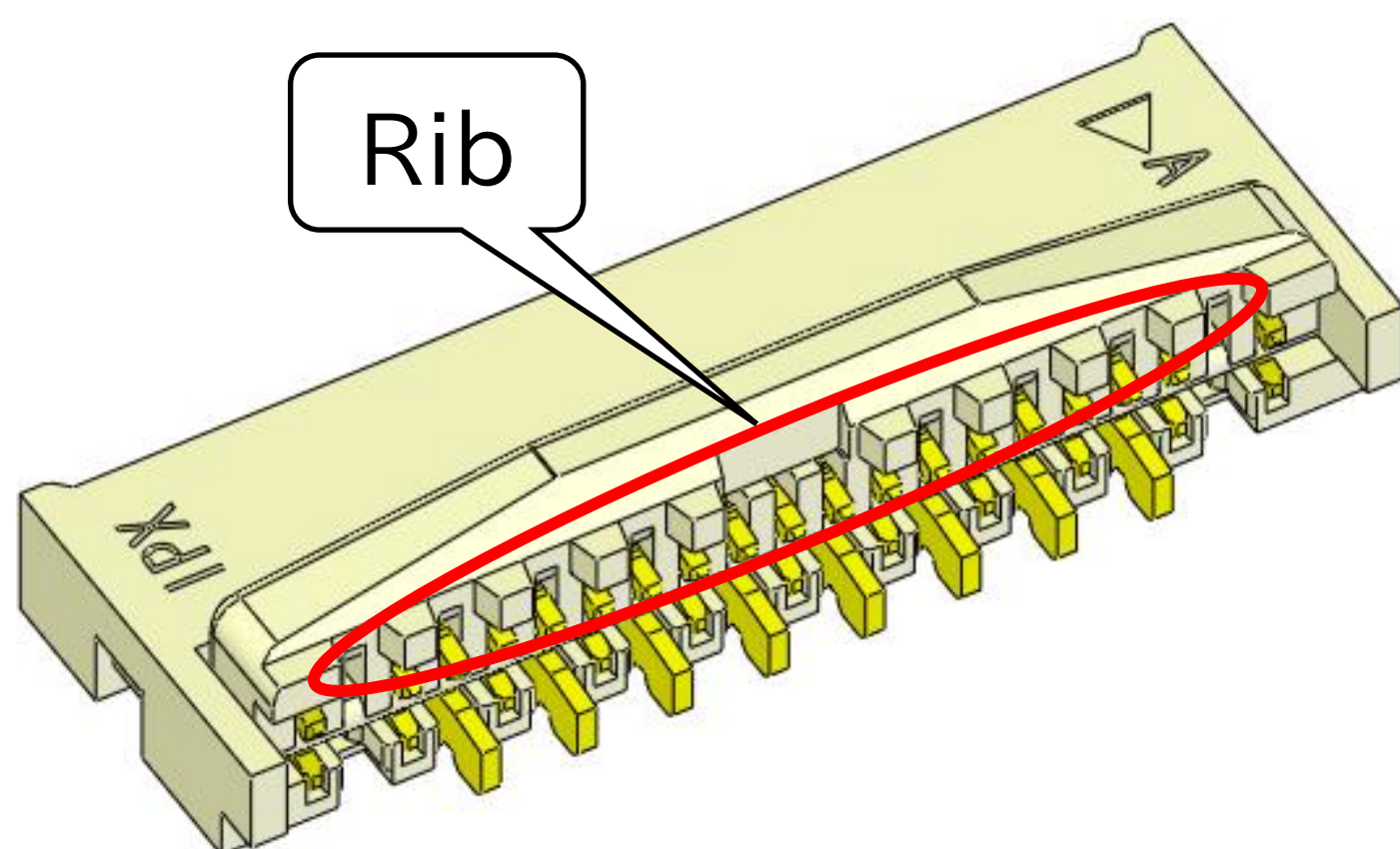
FPCロックメカニズムによる
高FPC保持力



FPC 保持力比較 (19 pin)

MINIFLEX® 3-BFN LK	MINIFLEX® 3-BFN
11.34 N	6.7 N

▶ コンタクト変形防止設計

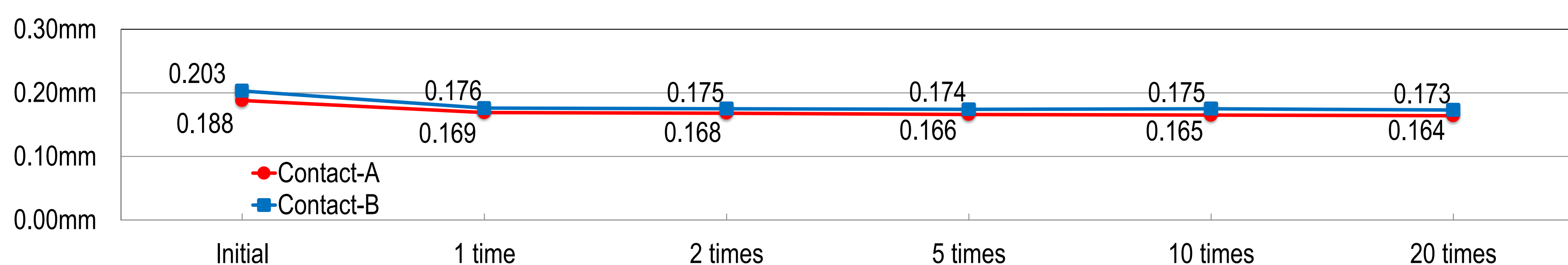


アクチュエータ操作時に引っ掛かりなどからコンタクトを保護するRibs構造

▶ FPC未挿入状態でのアクチュエータ空閉じ操作

SMTプロセス後に、もしもFPC未挿入状態でアクチュエータを操作してしまった場合でも十分にコネクタとして機能します

- FPC未挿入状態でのアクチュエータ空閉じ操作前後のコンタクト接点間寸法（表図 MINIFLEX® 3-BFN LK 35 pins）



- FPC挿入力は上昇します
- FPC保持力に大きな変化はありません

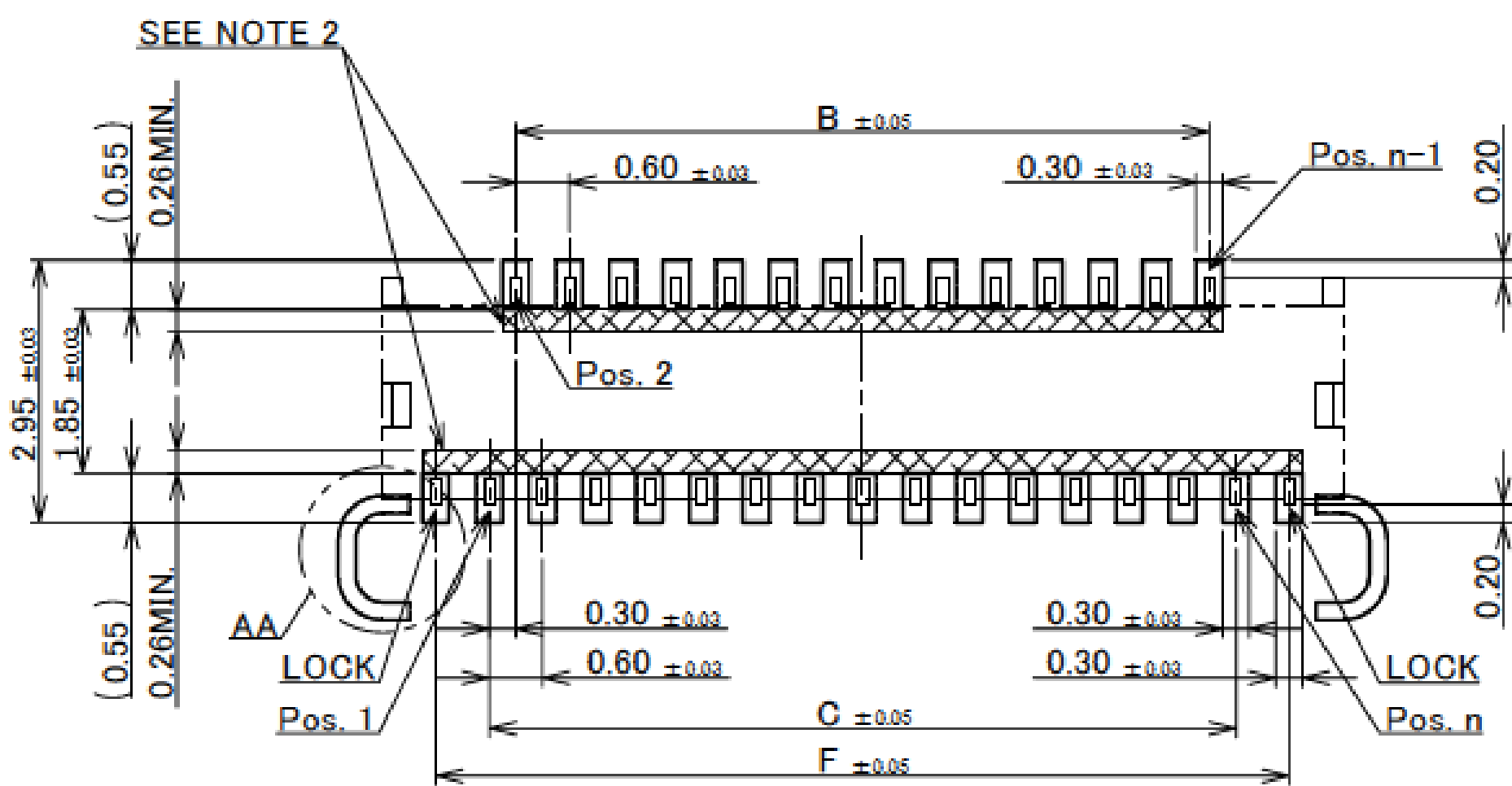
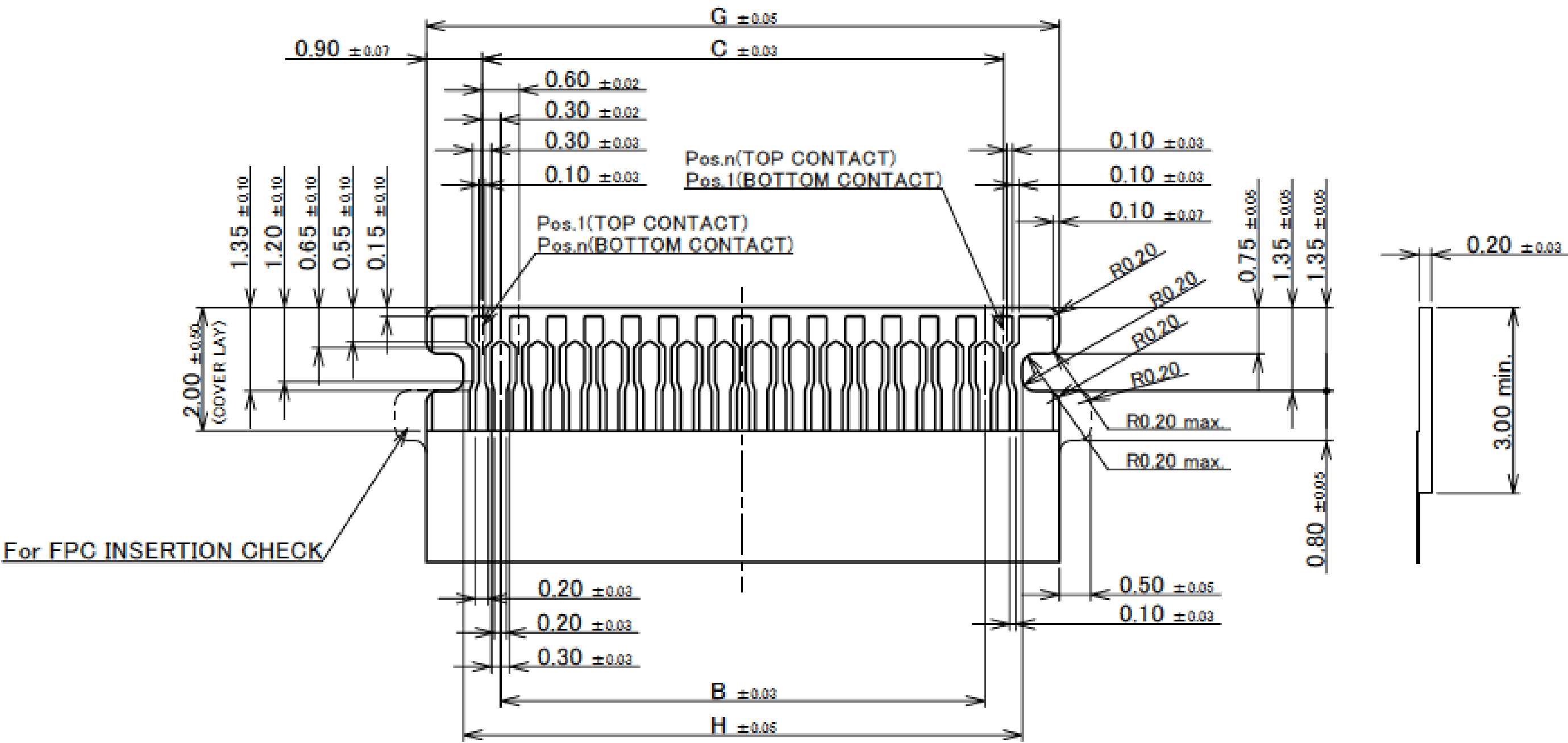
Connector Assembly

5	LOCK	PHOSPHOR BRONZE	SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN.
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
NO	DISCRIPTION	MATERIAL	FINISH, REMARKS

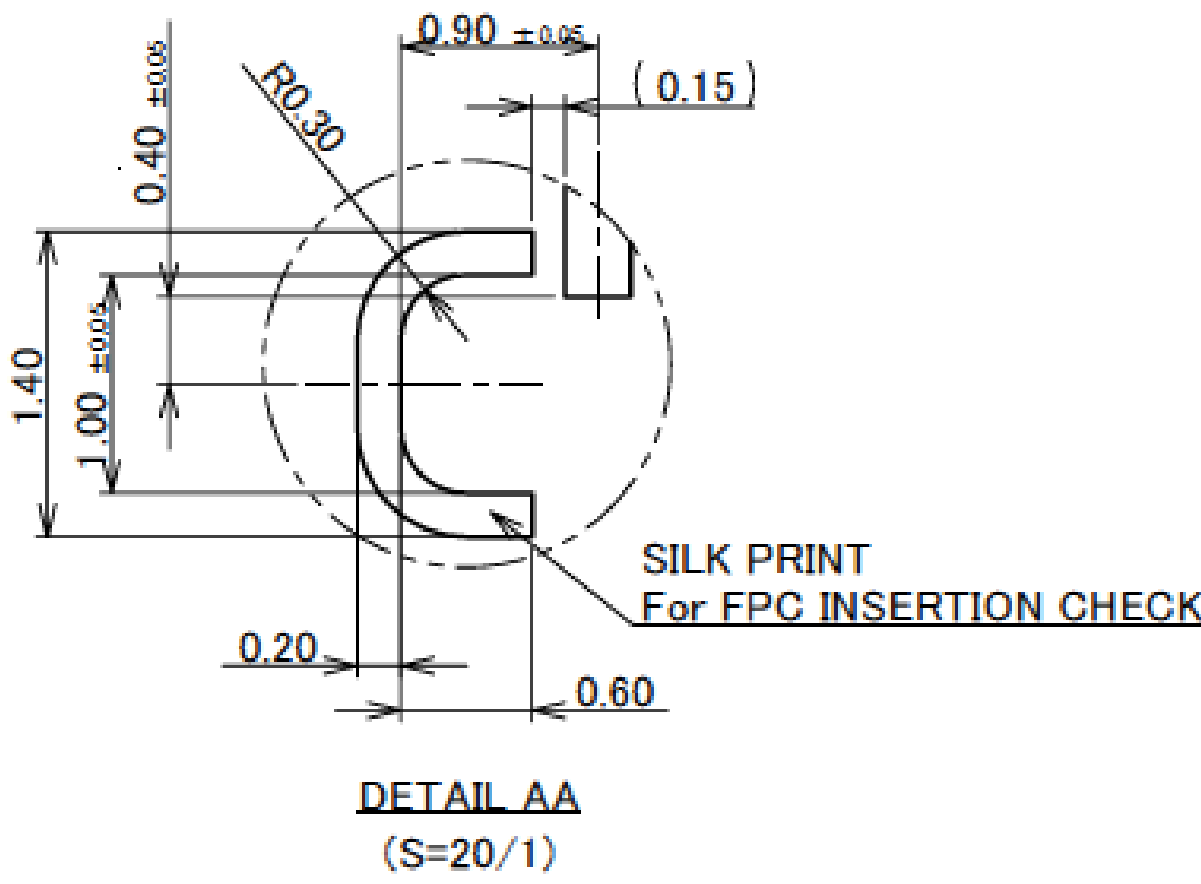
Connector Assembly

PART NO.	Pos.	B	C	F	G	H
20599-009E-01	9P	1.80	2.40	3.60	4.20	3.00
20599-011E-01	11P	2.40	3.00	4.20	4.80	3.60
20599-013E-01	13P	3.00	3.60	4.80	5.40	4.20
20599-015E-01	15P	3.60	4.20	5.40	6.00	4.80
20599-017E-01	17P	4.20	4.80	6.00	6.60	5.40
20599-019E-01	19P	4.80	5.40	6.60	7.20	6.00
20599-021E-01	21P	5.40	6.00	7.20	7.80	6.60
20599-023E-01	23P	6.00	6.60	7.80	8.40	7.20
20599-025E-01	25P	6.60	7.20	8.40	9.00	7.80
20599-027E-01	27P	7.20	7.80	9.00	9.60	8.40
20599-029E-01	29P	7.80	8.40	9.60	10.20	9.00
20599-031E-01	31P	8.40	9.00	10.20	10.80	9.60
20599-033E-01	33P	9.00	9.60	10.80	11.40	10.20
20599-035E-01	35P	9.60	10.20	11.40	12.00	10.80
20599-037E-01	37P	10.20	10.80	12.00	12.60	11.40

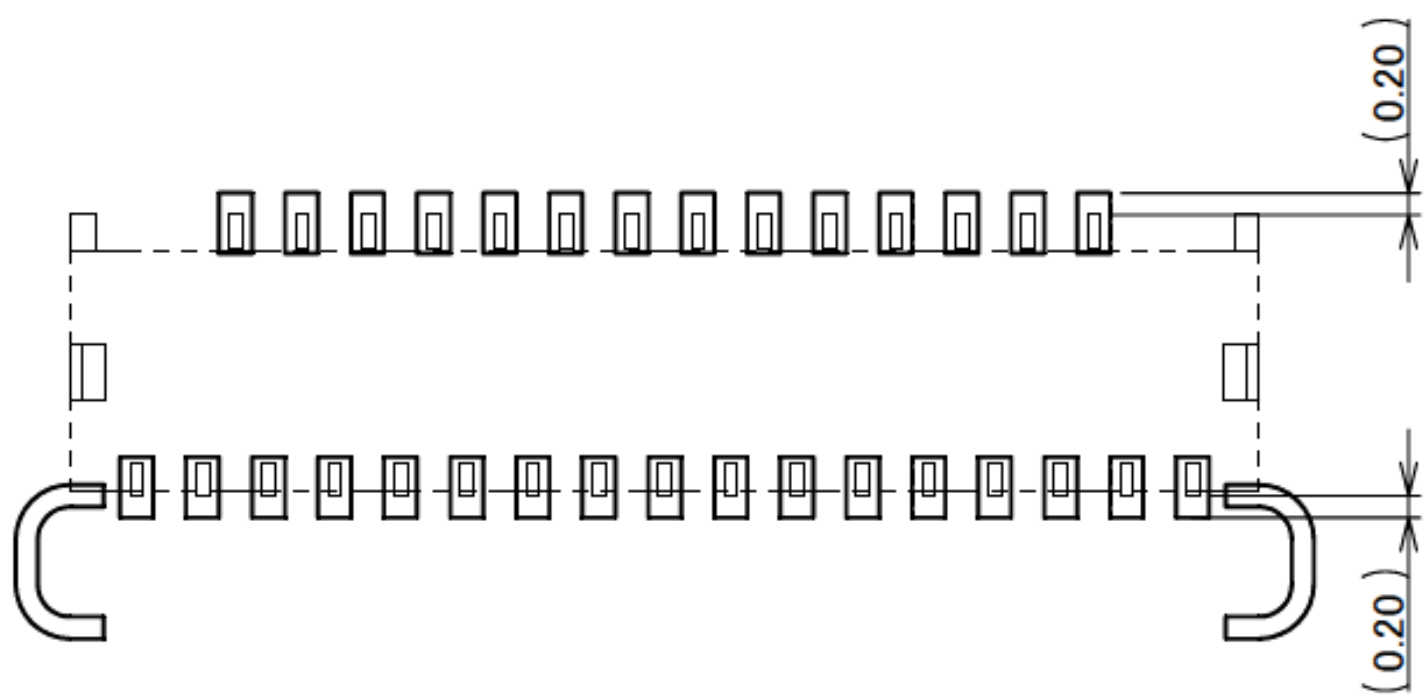
NOTES
2. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.



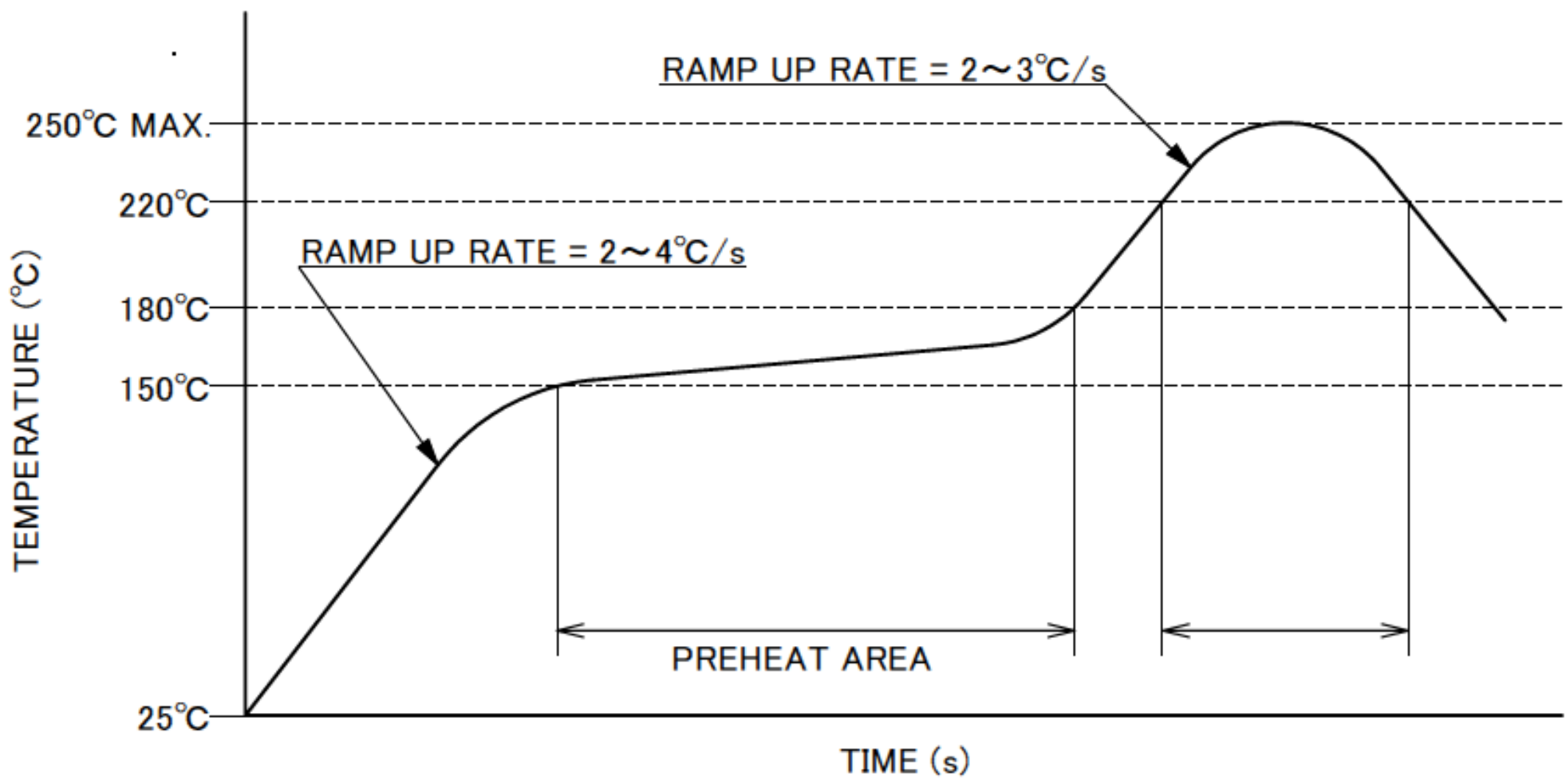
RECOMMENDED PCB LAYOUT & METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm



Rev.13



CONNECTOR ON RECOMMENDED PCB LAYOUT



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

Rev.13

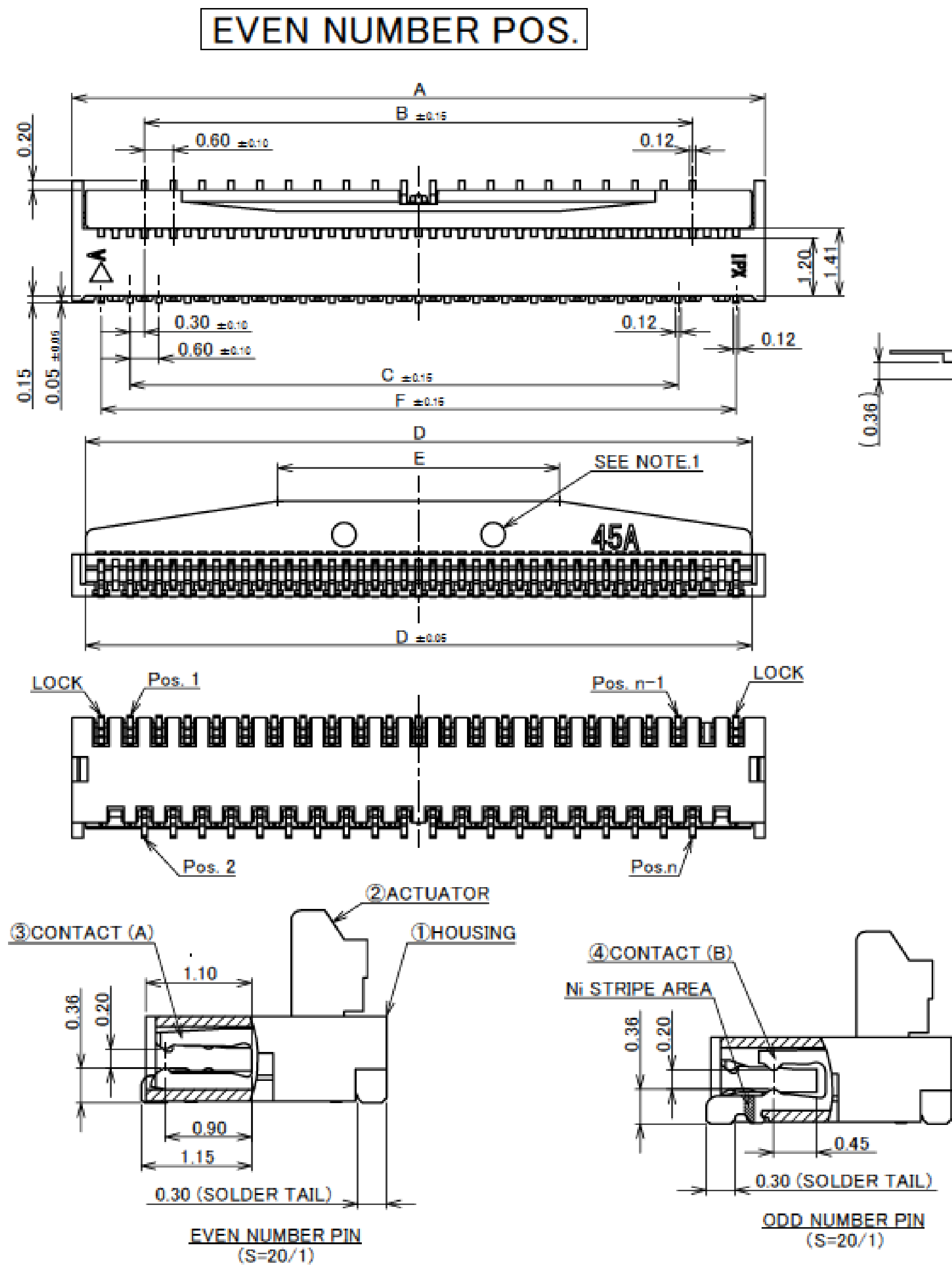
Connector Assembly

※ "n" IS THE NUMBER OF PIN

Rev.13

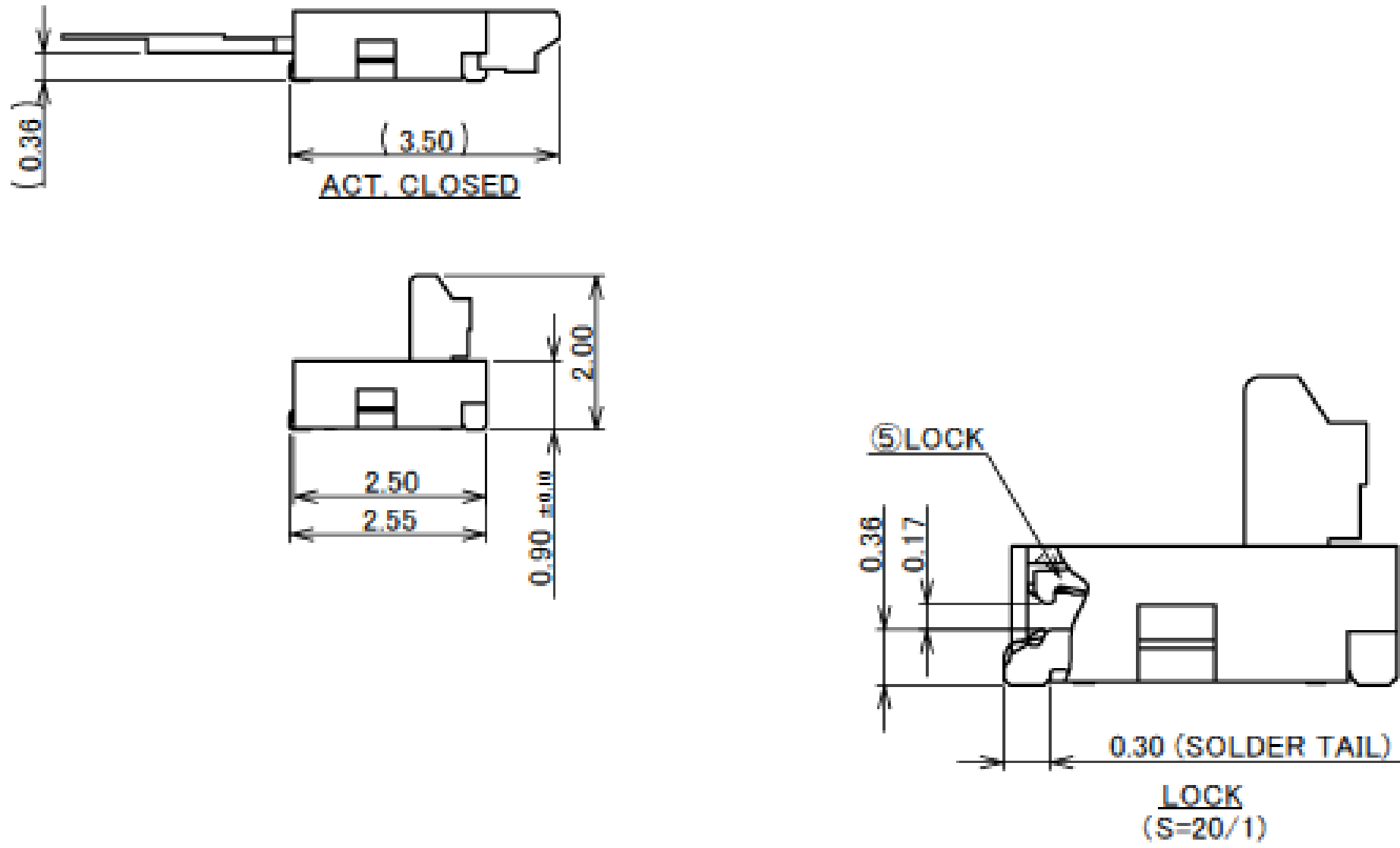
Contact your sales representative for more detailed information. www.i-pex.com

Connector Assembly

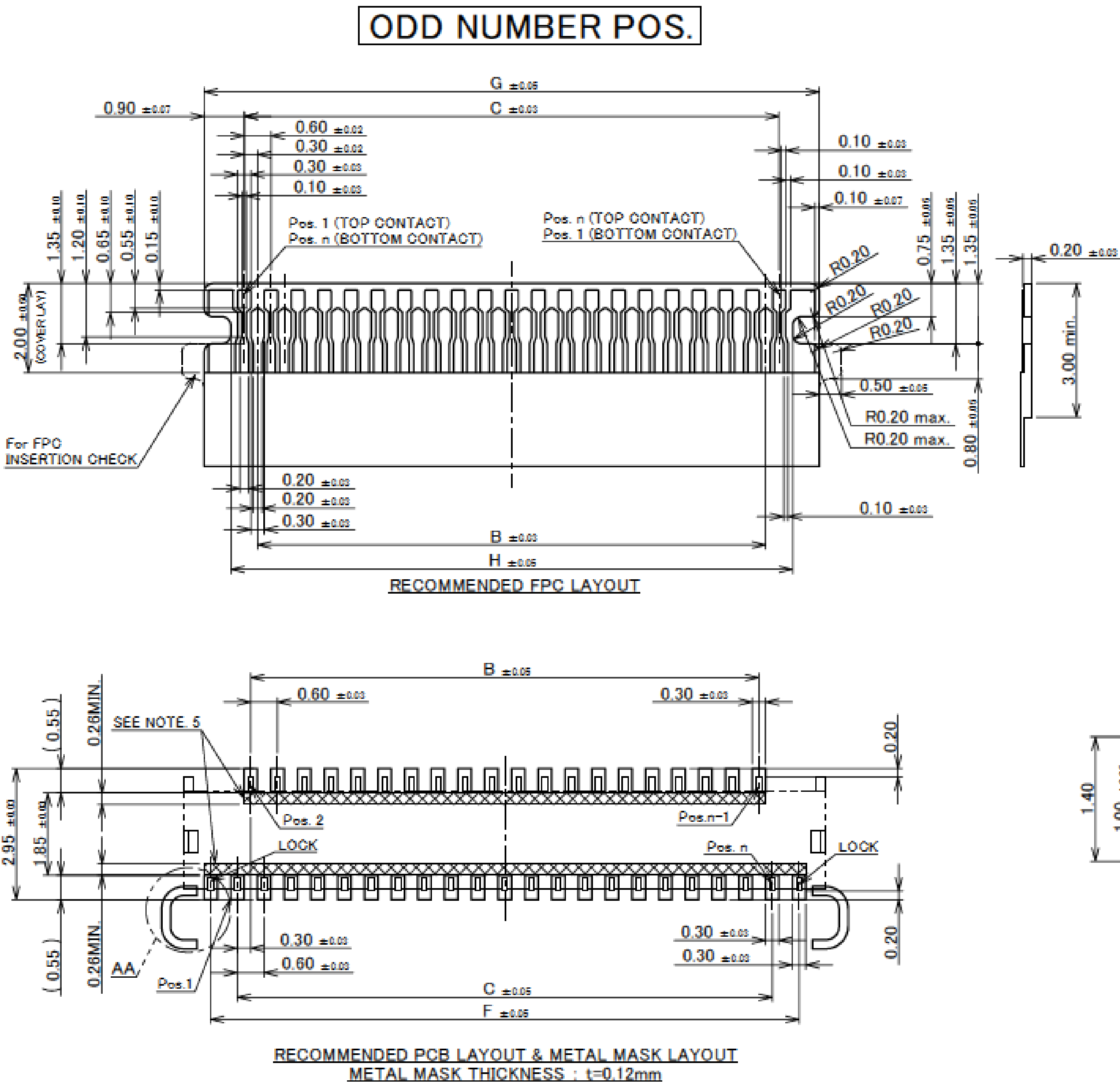


PART NO.	Pos.	A	B	C	D	E	F
◆ 20584-030E-01	30P	11.40	8.40	8.40	10.85	6.85	10.20
◆ 20584-034E-01	34P	12.60	9.60	9.60	12.05	8.05	11.40
◆ 20584-038E-01	38P	13.80	10.80	10.80	13.25	9.25	12.60
◆ 20584-040E-01	40P	14.40	11.40	11.40	13.85	9.85	13.20
◆ 20584-050E-01	50P	17.40	14.40	14.40	16.85	11.85	16.20
◆ 20584-056E-01	56P	19.20	16.20	16.20	18.65	13.65	18.00

◆ MARK MEANS NOT AVAILABLE.



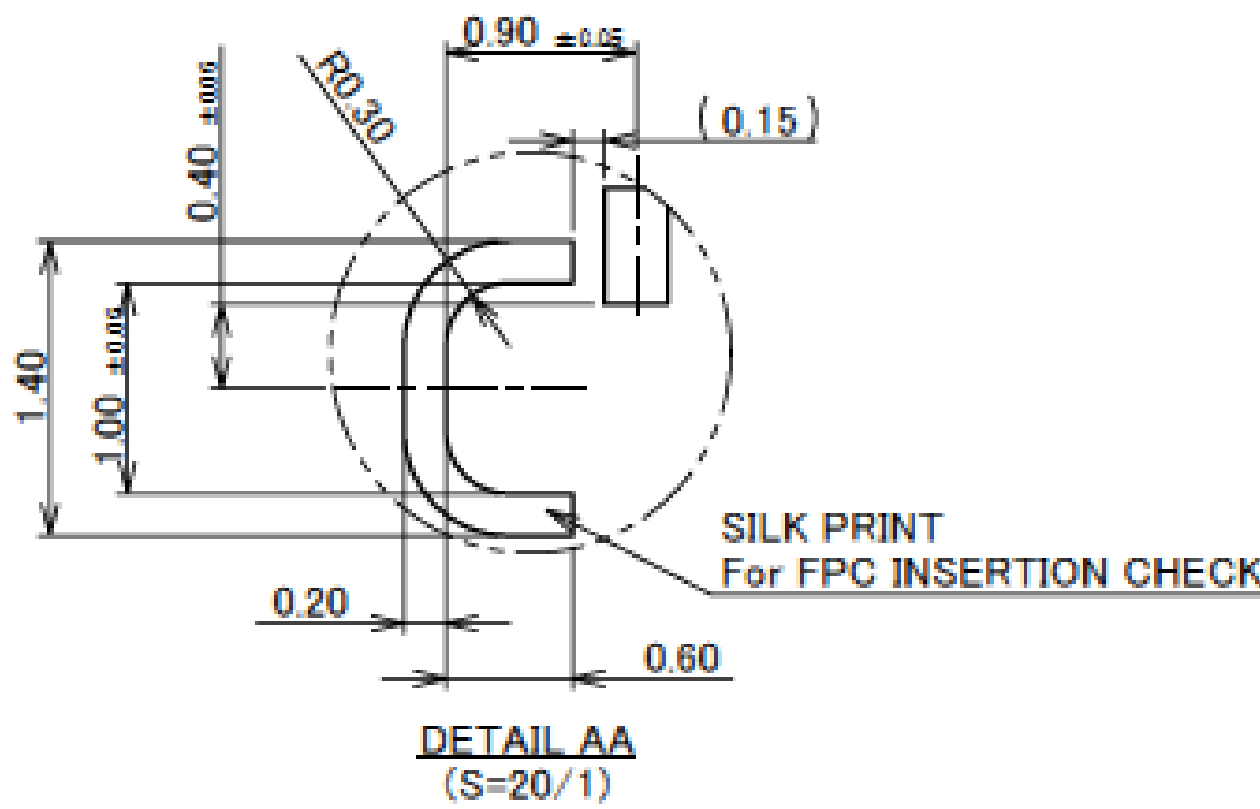
Rev.18



PART NO.	Pos.	B	C	F	G	H
◆ 20584-029E-01	29P	7.80	8.40	9.60	10.20	9.00
◆ 20584-031E-01	31P	8.40	9.00	10.20	10.80	9.60
◆ 20584-035E-01	35P	9.60	10.20	11.40	12.00	10.80
◆ 20584-037E-01	37P	10.20	10.80	12.00	12.60	11.40
◆ 20584-039E-01	39P	10.80	11.40	12.60	13.20	12.00
◆ 20584-041E-01	41P	11.40	12.00	13.20	13.80	12.60
◆ 20584-045E-01	45P	12.60	13.20	14.40	15.00	13.80
◆ 20584-047E-01	47P	13.20	13.80	15.00	15.60	14.40
20584-051E-01	51P	14.40	15.00	16.20	16.80	15.60
20584-053E-01	53P	15.00	15.60	16.80	17.40	16.20
20584-057E-01	57P	16.20	16.80	18.00	18.60	17.40
20584-061E-01	61P	17.40	18.00	19.20	19.80	18.60
◆ 20584-063E-01	63P	18.00	18.60	19.80	20.40	19.20
20584-071E-01	71P	20.40	21.00	22.20	22.80	21.60

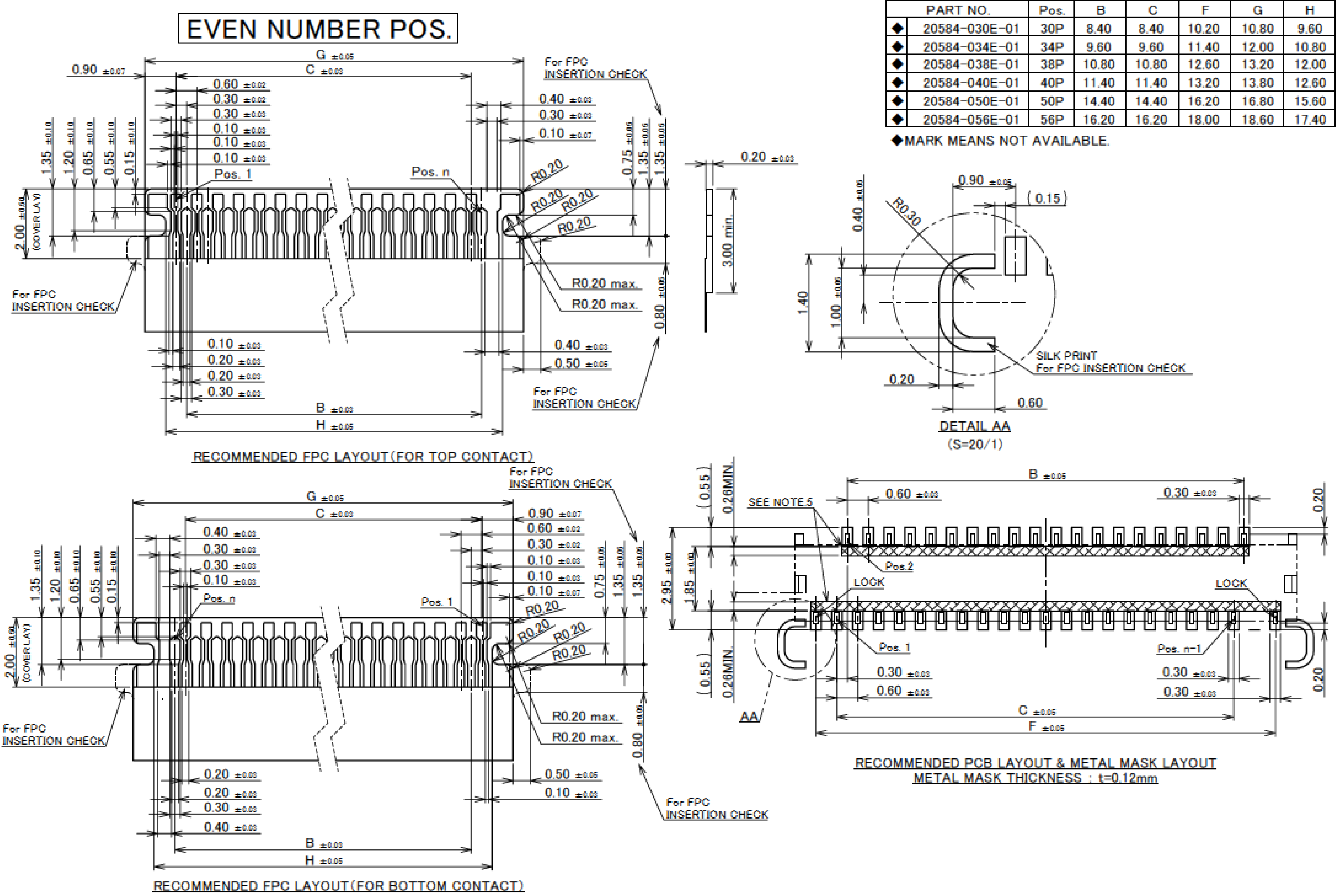
◆ MARK MEANS NOT AVAILABLE.

- NOTES
3. MATERIAL
COVER FILM : PI
CONDUCTOR : COPPER(RARE)
BASE FILM : PI
STIFFENER : PI
ADHESIVE : THERMOSETTING ADHESIVE
4. FINISH
Au OVER Ni UNDER PLATING.
5. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.

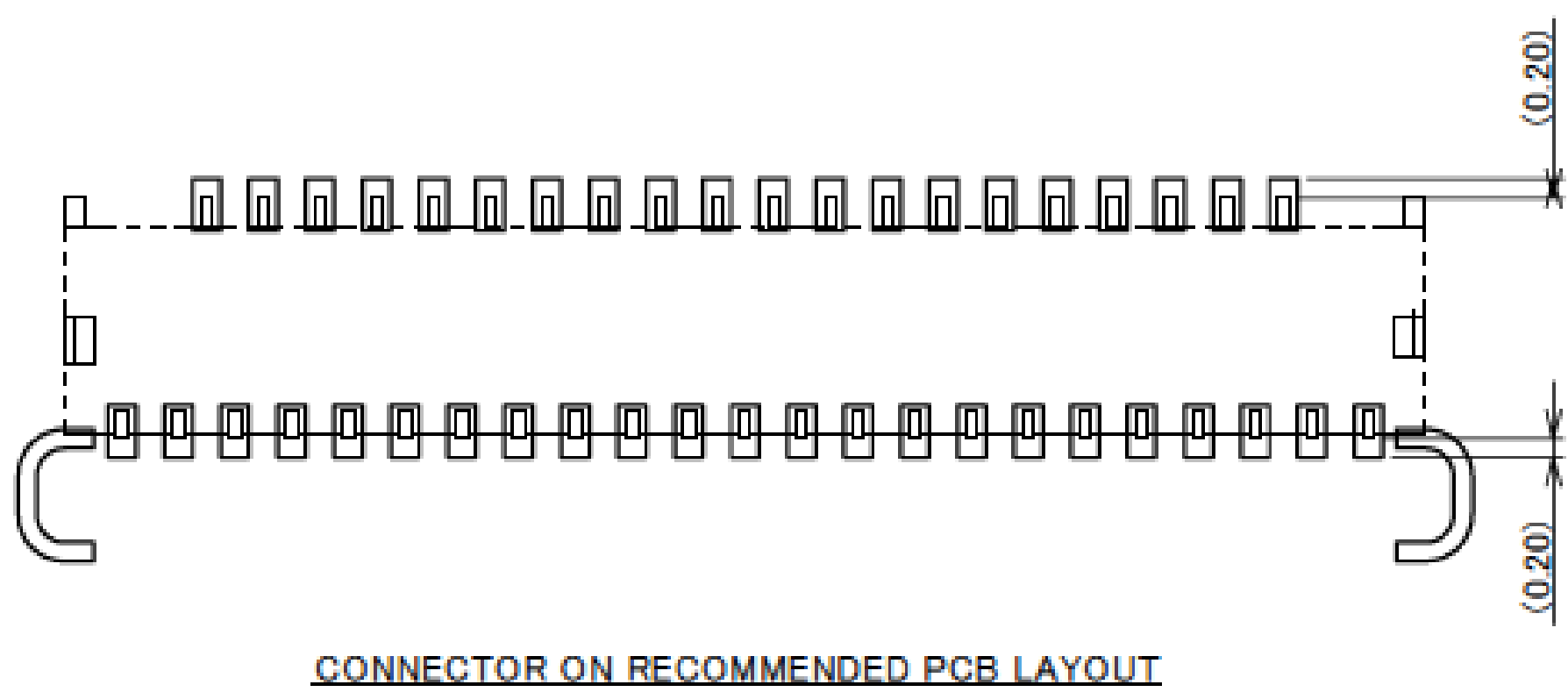


Rev.18

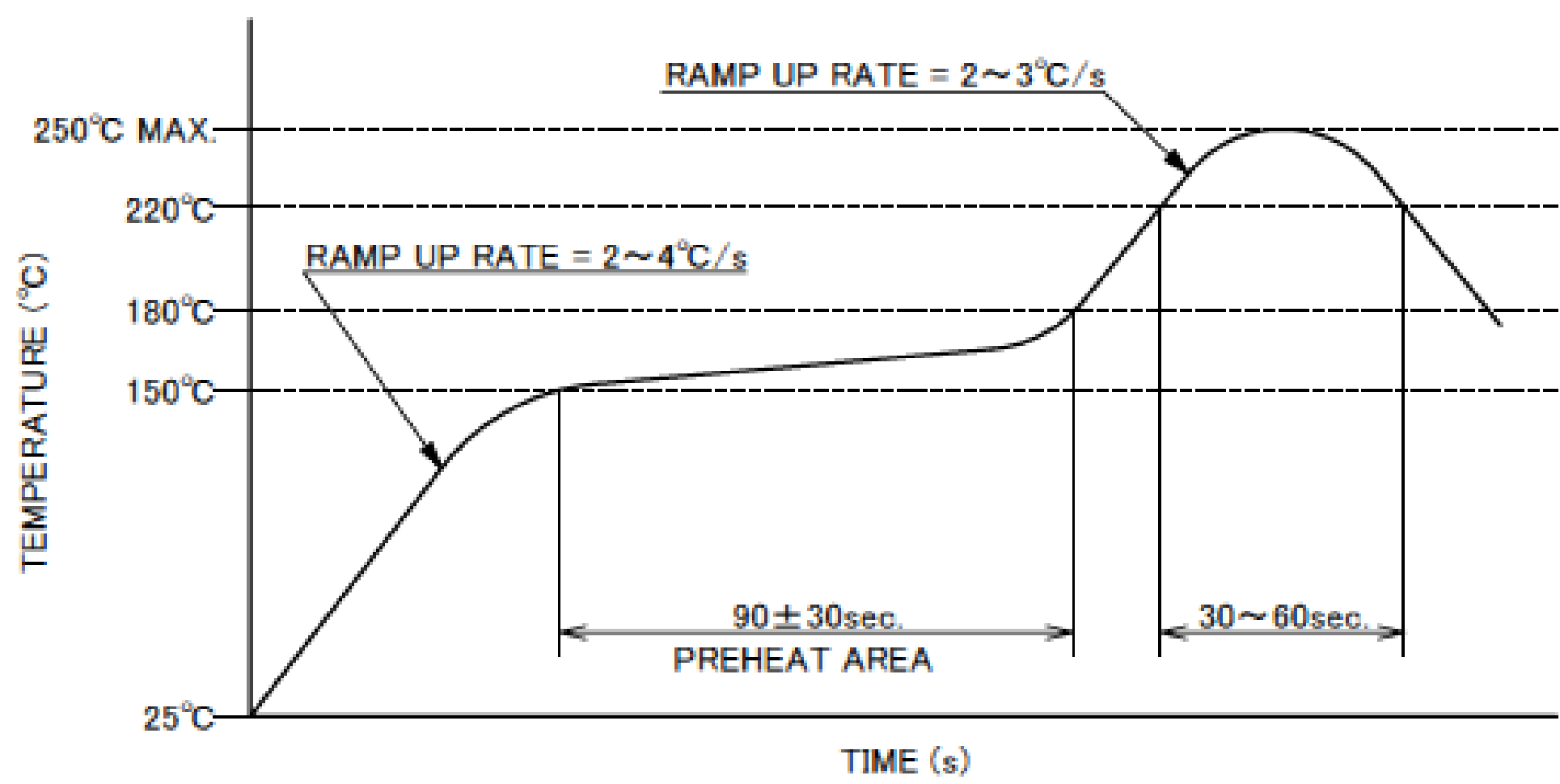
Connector Assembly



Rev.18



CONNECTOR ON RECOMMENDED PCB LAYOUT



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℃~+85℃)
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) × (n + 2) MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20 CYCLES)	INITIAL / 20 CYCLES 0.014N (1.4gf) × (n + 2) MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL: 0.13N (13gf) × n + 1.0N MIN. / AFTER TEST: 0.10N (10gf) × n + 1.0N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1789
TEST REPORT	TR-13022
PACKING STANDARD	PST-13013
INSTRUCTION MANUAL	HIM-12007
APPEARANCE CRITERIA No.	QLS-A***

※ “n” IS THE NUMBER OF PIN

Custom Connectors Available

RF Connectors

MHF® series



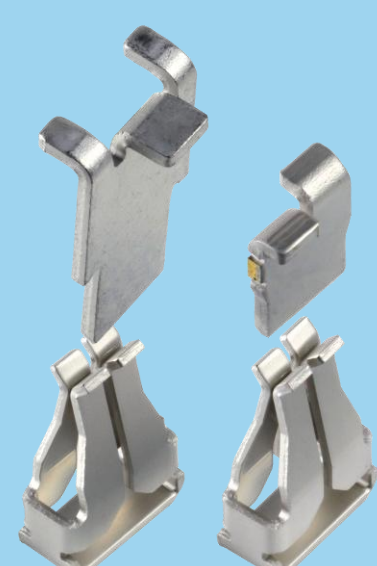
CABLINE® series

Micro-Coaxial/Twinaxial Connectors

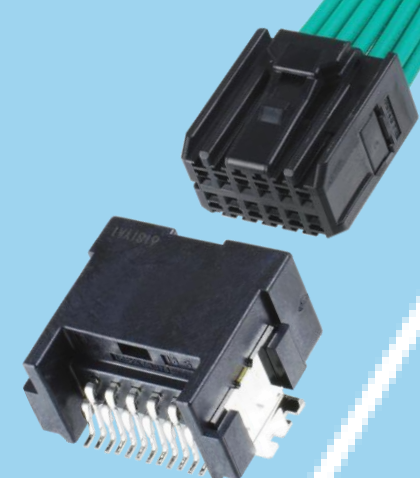


Wire-to-Board Connectors/ Terminals

AP series



ISH® series



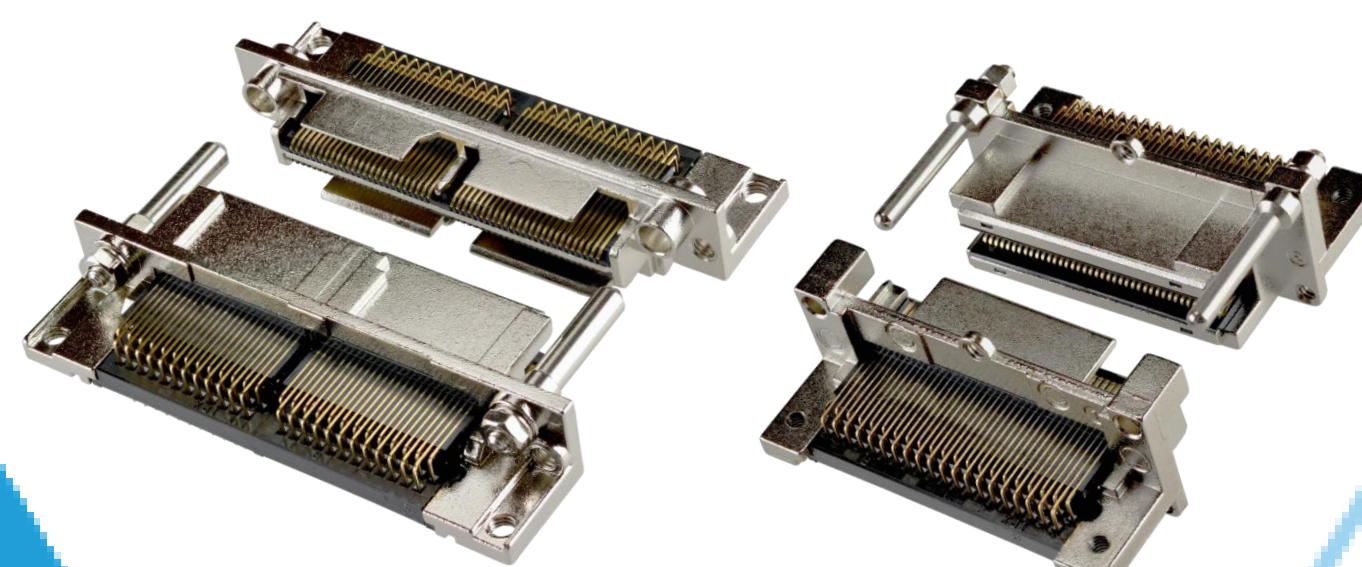
NOVASTACK® series



Board-to-Board Connectors

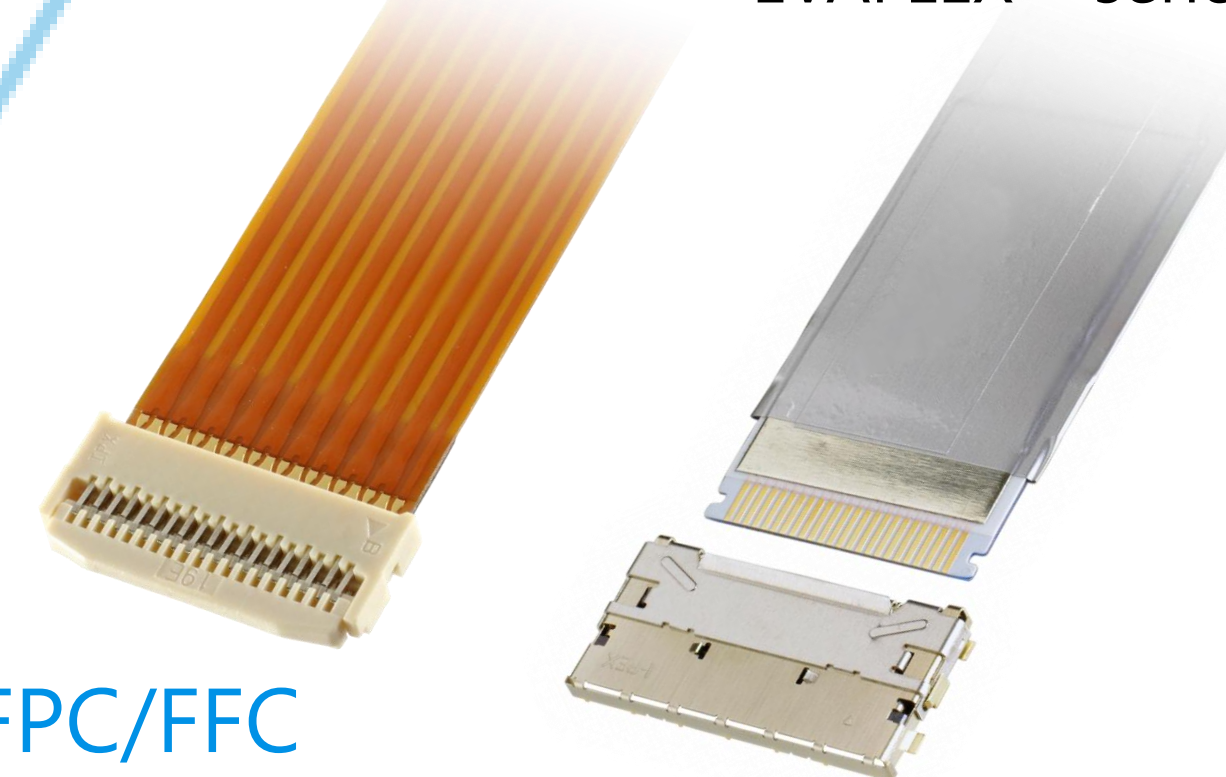


I/O Connectors



MINIDOCK™ series

MINIFLEX® series EVAFLEX® series



FPC/FFC Connectors



Inquiry



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