

# MINIFLEX® 175-ST

Super low profile (height = 0.52 mm), 0.175 mm pitch, horizontal mate, backflip

Product Specifications:

Board Pitch (mm)		0.175
Wiping Length (mm)	Contact A: 0.85	
	Contact B: 0.40	
Size (mm)	Height	0.52+/-0.05
	Width	Formula: Even number pos. : 2.09 +(0.175*?p) Odd number pos. : 1.915 +(0.175*?p)
	Depth	Open: 2.65 Close: 3.0
Pin counts	Range	7-31 (odd)
	Available	16, 19

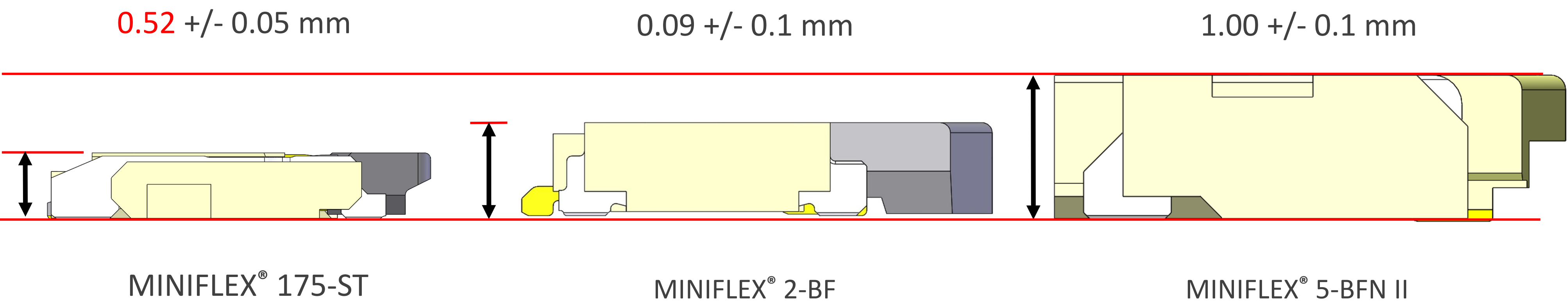
Applicable FPC/FFC:

FPC/FFC Contact Pitch	0.175
FPC/FFC Contact Point	Top
FPC/FFC Thickness (mm)	0.12 +/- 0.03

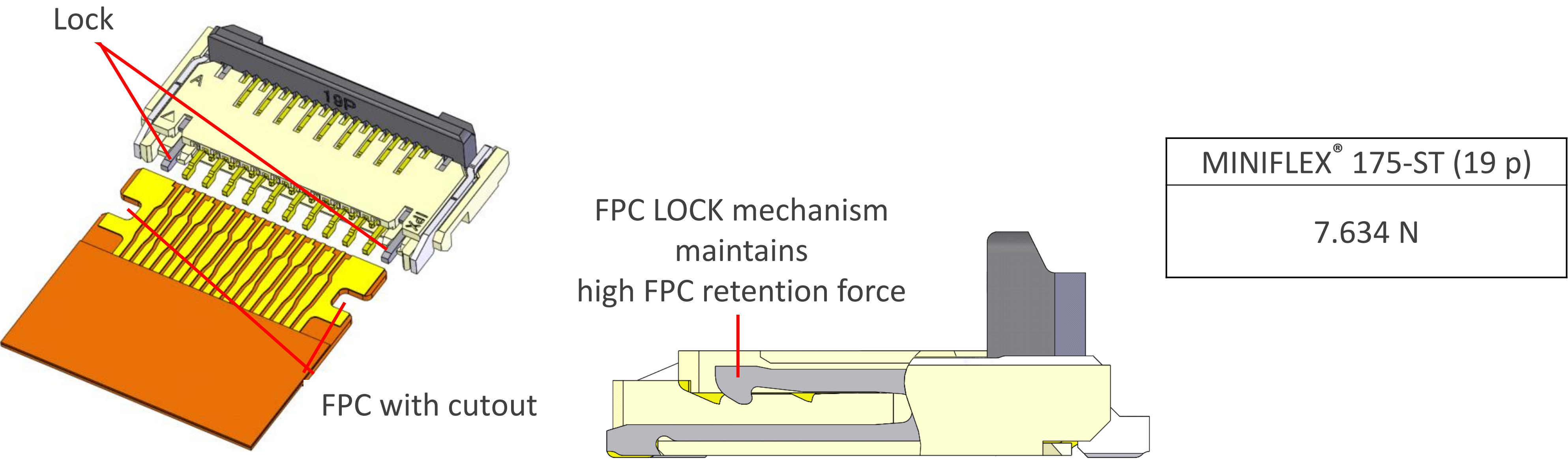


\* Please inquire for pin counts not listed or outside of the pin count range.

## ▶ Super low height 0.52 mm



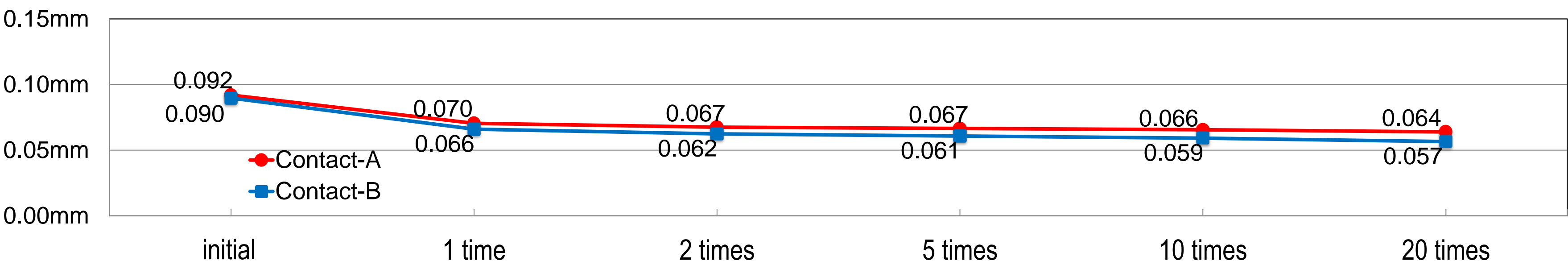
## ▶ High FPC retention force with additional mechanical lock



## ▶ 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 19 pins before and after operating actuator without FPC inserted)



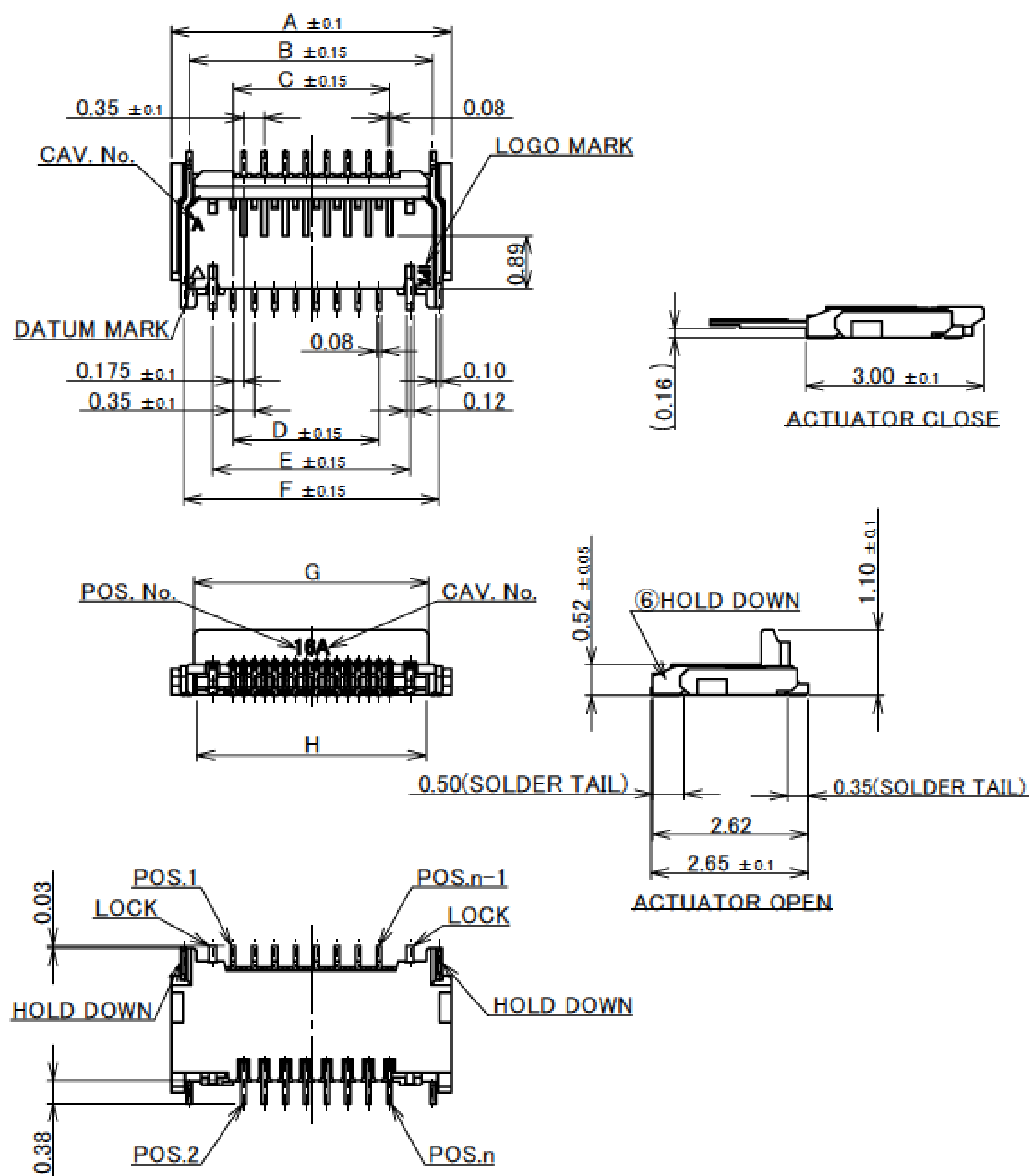
- Insertion force of connector goes up
- Retention force of connector does not change significantly

# Component Parts Details

## Connector Assembly

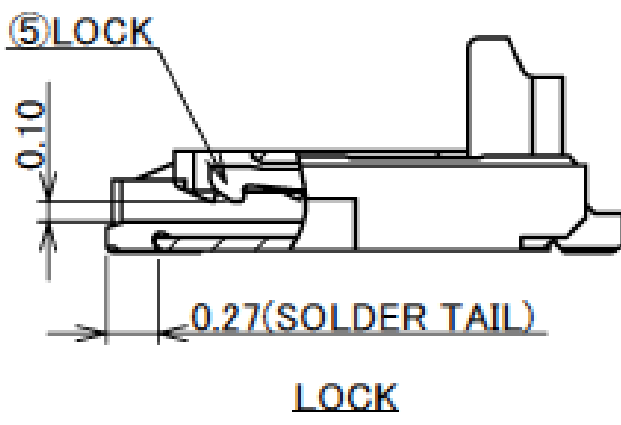
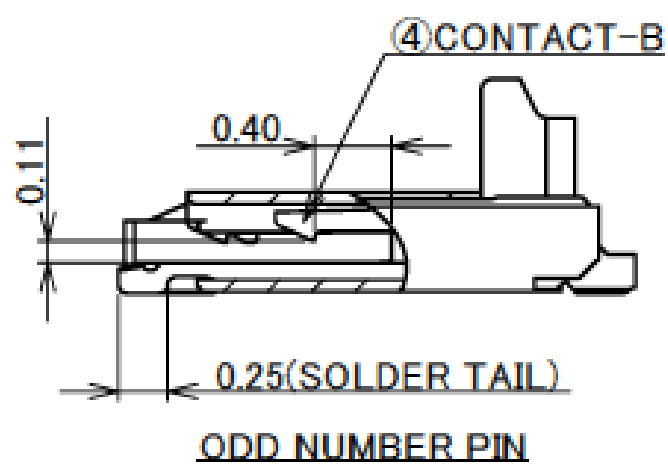
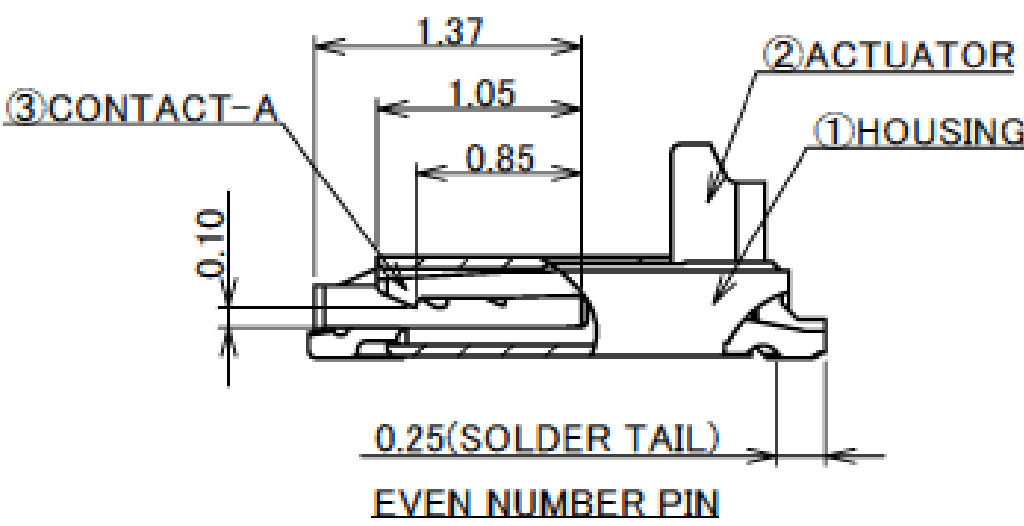
Recommended P/N		20622-0**E-02							
PART NO.	Pos.	A	B	C	D	E	F	G	H
◆20622-008E-0#	8	3.315	2.700	1.225	1.050	1.925	2.900	2.540	2.480
◆20622-010E-0#	10	3.665	3.050	1.575	1.400	2.275	3.250	2.890	2.810
◆20622-012E-0#	12	4.015	3.400	1.925	1.750	2.625	3.600	3.240	3.160
◆20622-014E-0#	14	4.365	3.750	2.275	2.100	2.975	3.950	3.590	3.510
◆20622-016E-0#	16	4.715	4.100	2.625	2.450	3.325	4.300	3.940	3.860
◆20622-018E-0#	18	5.065	4.450	2.975	2.800	3.675	4.650	4.290	4.210
◆20622-020E-0#	20	5.415	4.800	3.325	3.150	4.025	5.000	4.640	4.560
◆20622-022E-0#	22	5.765	5.150	3.675	3.500	4.375	5.350	4.990	4.910
◆20622-024E-0#	24	6.115	5.500	4.025	3.850	4.725	5.700	5.340	5.260
◆20622-026E-0#	26	6.465	5.850	4.375	4.200	5.075	6.050	5.690	5.610
◆20622-028E-0#	28	6.815	6.200	4.725	4.550	5.425	6.400	6.040	5.960
◆20622-030E-0#	30	7.165	6.550	5.075	4.900	5.775	6.750	6.390	6.310

◆ MARK MEANS NOT AVAILABLE



P/N : 20622- 0 \*\* E- 0 #

1 : HOUSING COLOR : BLACK  
2 : HOUSING COLOR : BEIGE  
POS.



NOTES.  
1. CONTACT POINT: ONLY TOP CONTACT

### EVEN NUMBER POSITION

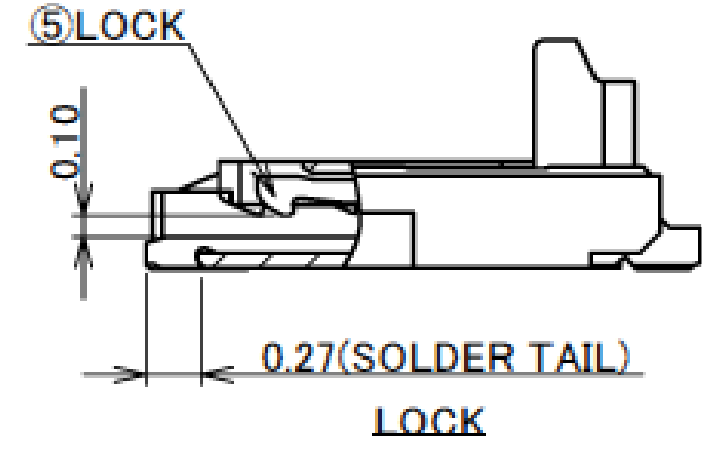
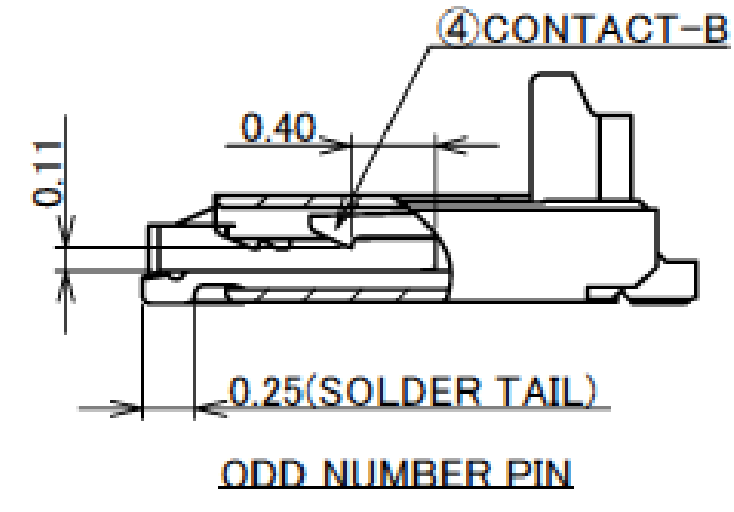
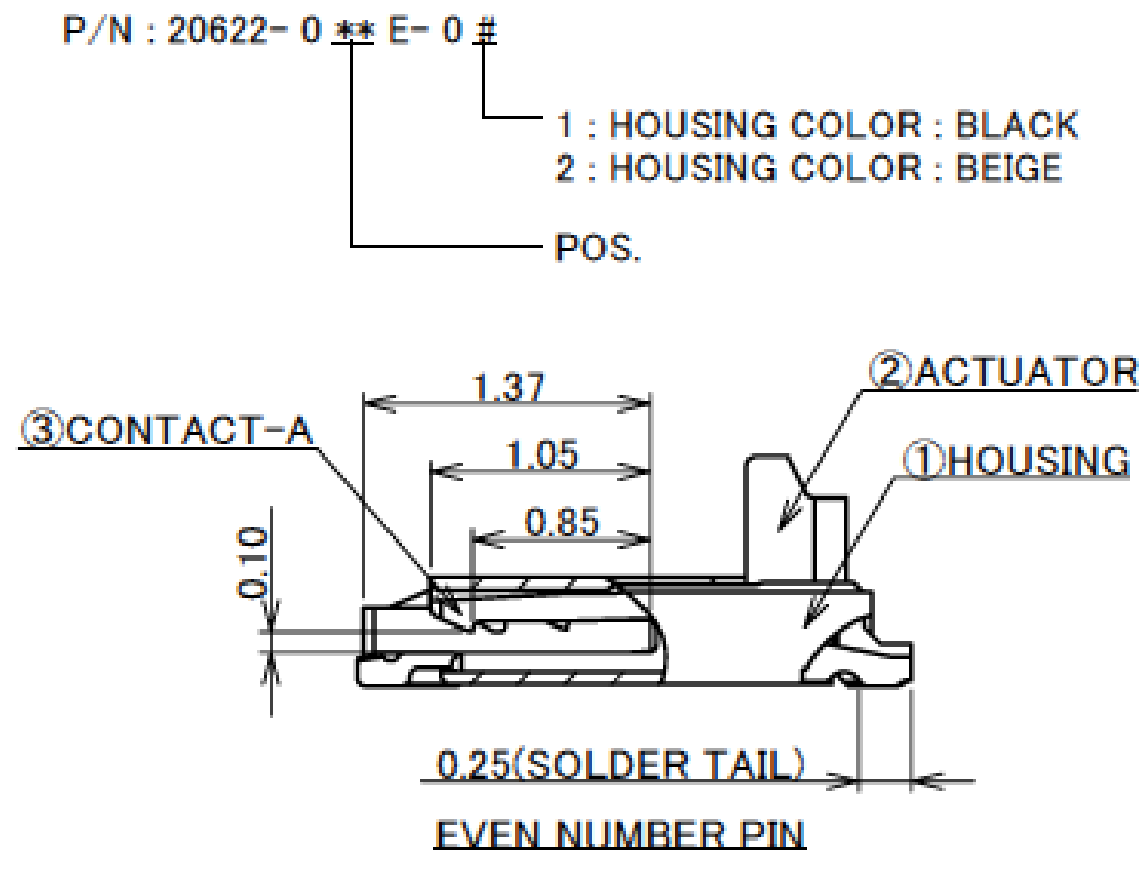
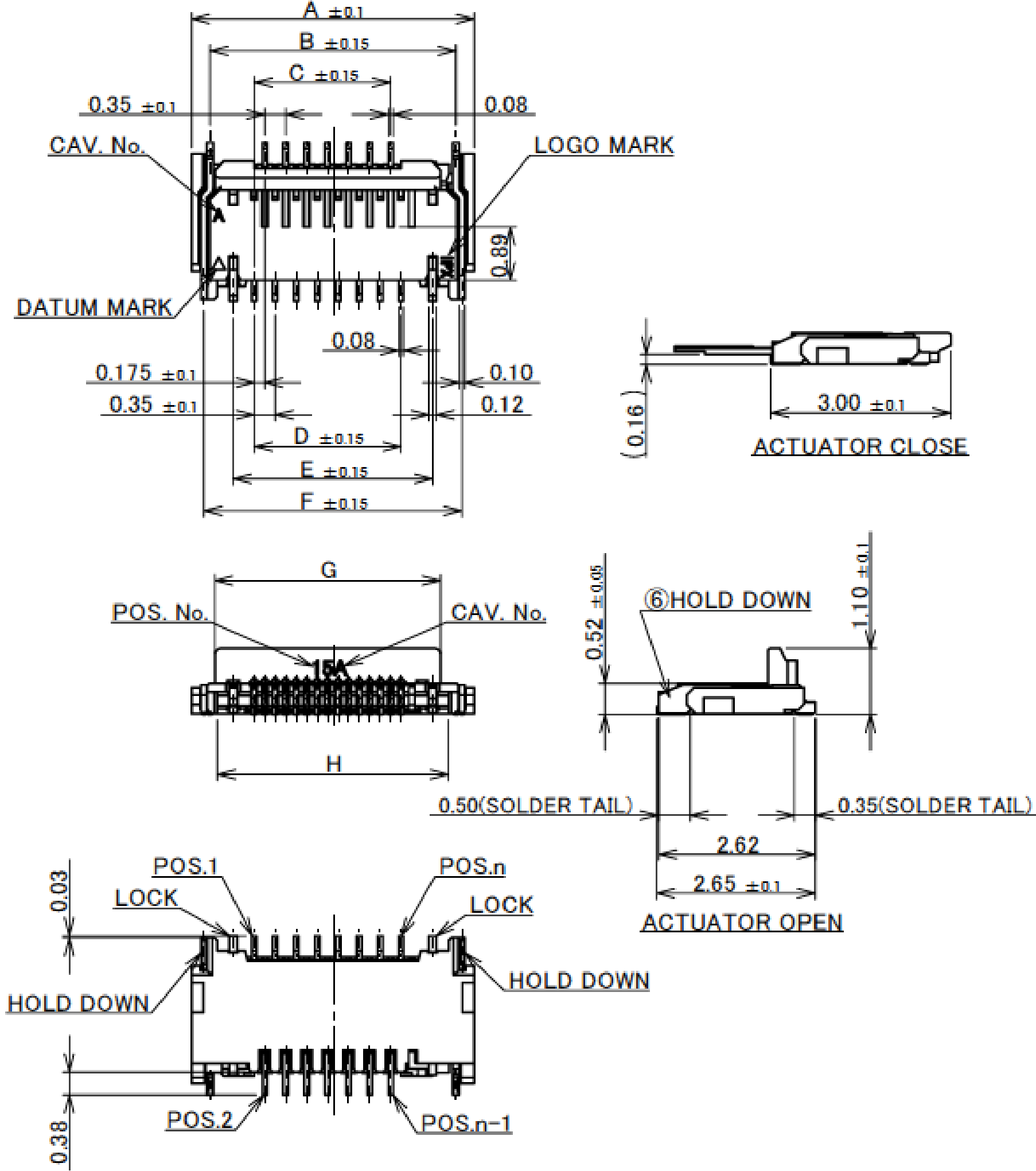
6	HOLD DOWN	PHOSPHOR BRONZE	SOLDERING AREA : Au 0.02 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
5	LOCK	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. SOLDERING AREA : Au 0.03 $\mu$ m MIN.
4	CONTACT-B	PHOSPHOR BRONZE	CONTACT AREA : Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. SOLDERING AREA : Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
3	CONTACT-A	PHOSPHOR BRONZE	CONTACT AREA : Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. SOLDERING AREA : Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
2	ACTUATOR	LCP	UL94V-0, BLACK
1	HOUSING	LCP	UL94V-0, BLACK or BEIGE
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS



## Connector Assembly

P/N	Pos	A	B	C	D	E	F	G	H
◆20622-007E-0#	7	3.140	2.525	0.875	1.050	1.750	2.725	2.365	2.285
◆20622-009E-0#	9	3.490	2.875	1.225	1.400	2.100	3.075	2.715	2.635
◆20622-011E-0#	11	3.840	3.225	1.575	1.750	2.450	3.425	3.065	2.985
◆20622-013E-0#	13	4.190	3.575	1.925	2.100	2.800	3.775	3.415	3.335
◆20622-015E-0#	15	4.540	3.925	2.275	2.450	3.150	4.125	3.765	3.685
◆20622-017E-0#	17	4.890	4.275	2.625	2.800	3.500	4.475	4.115	4.035
◆20622-019E-0#	19	5.240	4.625	2.975	3.150	3.850	4.825	4.465	4.385
◆20622-021E-0#	21	5.590	4.975	3.325	3.500	4.200	5.175	4.815	4.735
◆20622-023E-0#	23	5.940	5.325	3.675	3.850	4.550	5.525	5.165	5.085
◆20622-025E-0#	25	6.290	5.675	4.025	4.200	4.900	5.875	5.515	5.435
◆20622-027E-0#	27	6.640	6.025	4.375	4.550	5.250	6.225	5.865	5.785
◆20622-029E-0#	29	6.990	6.375	4.725	4.900	5.600	6.575	6.215	6.135
◆20622-031E-0#	31	7.340	6.725	5.075	5.250	5.950	6.925	6.565	6.485

◆ MARK MEANS NOT AVAILABLE



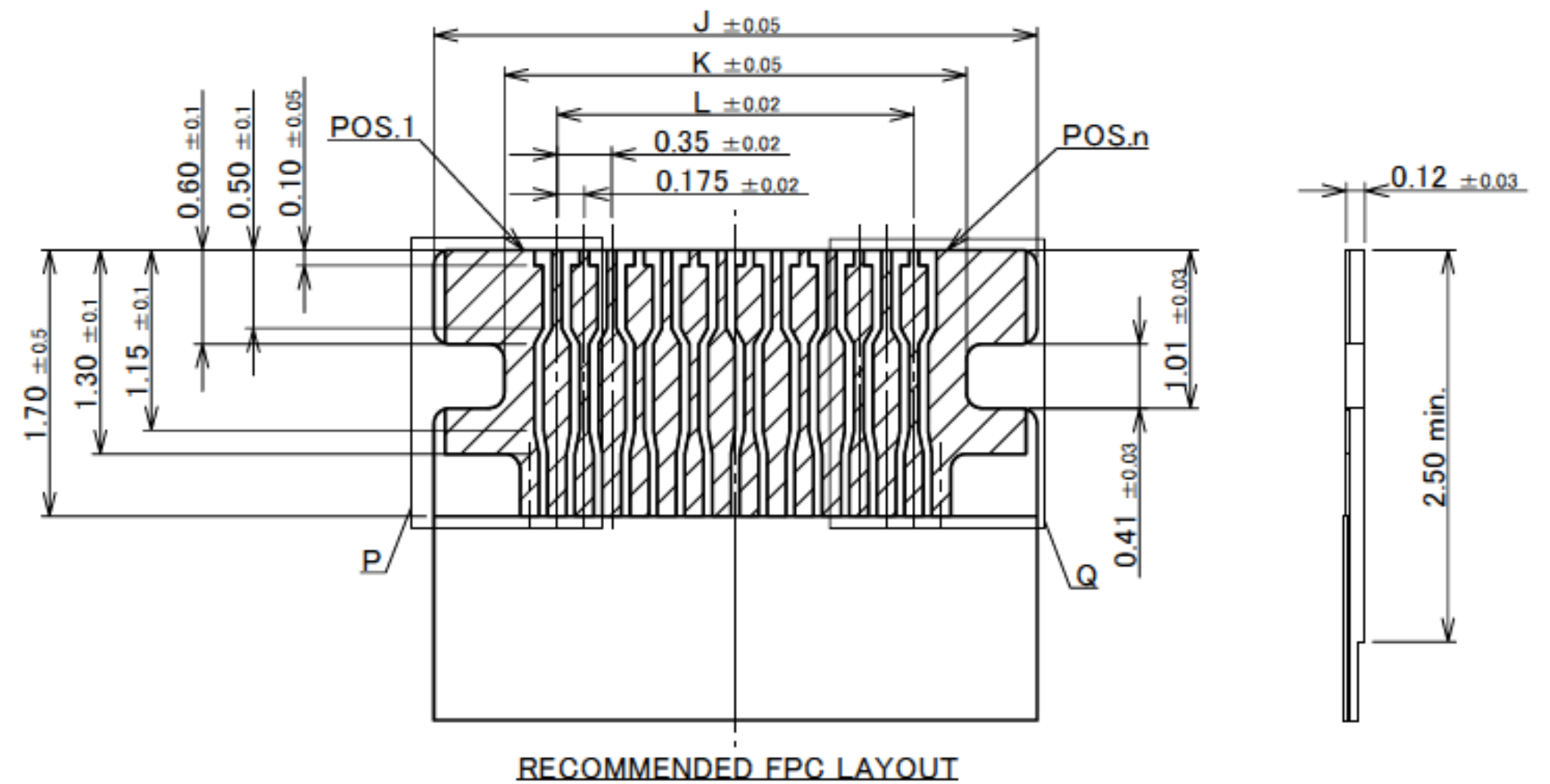
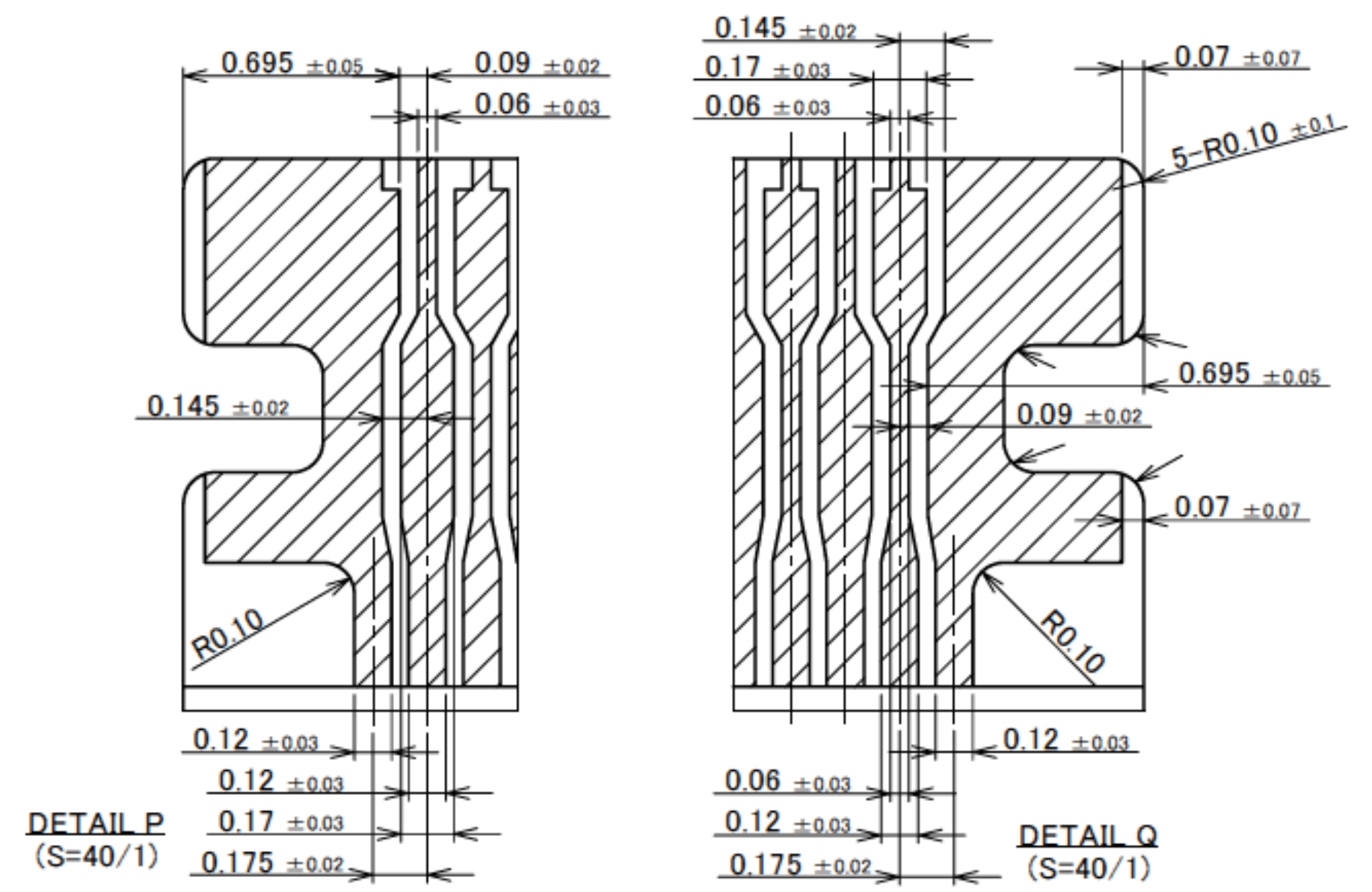
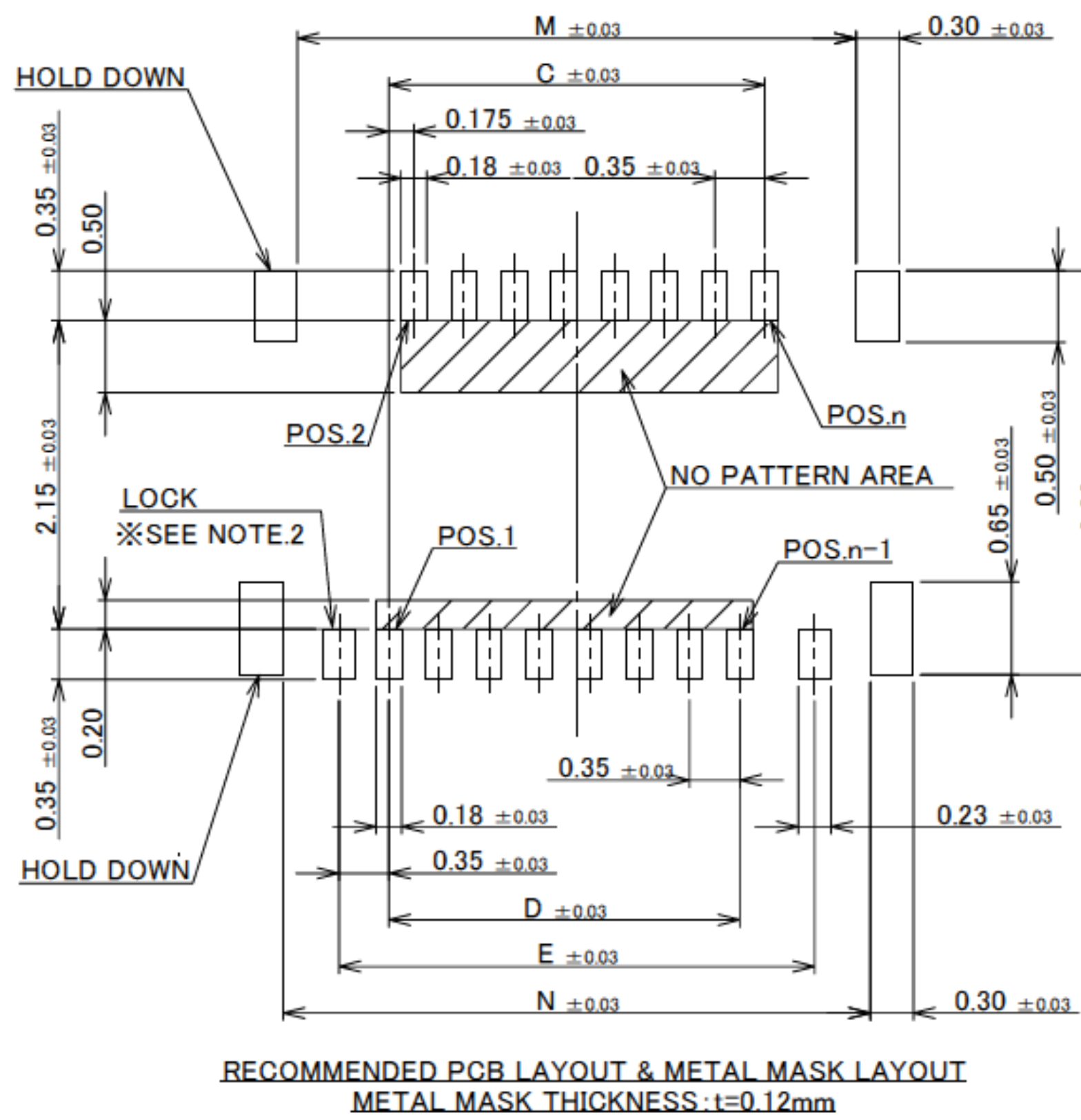
NOTES.  
1. CONTACT POINT: ONLY TOP CONTACT

## ODD NUMBER POSITION

6	HOLD DOWN	PHOSPHOR BRONZE	<u>SOLDERING AREA</u> : Au 0.02 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
5	LOCK	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. <u>SOLDERING AREA</u> : Au 0.03 $\mu$ m MIN.
4	CONTACT-B	PHOSPHOR BRONZE	<u>CONTACT AREA</u> : Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. <u>SOLDERING AREA</u> : Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
3	CONTACT-A	PHOSPHOR BRONZE	<u>CONTACT AREA</u> : Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. <u>SOLDERING AREA</u> : Au 0.03 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
2	ACTUATOR	LCP	UL94V-0, BLACK
1	HOUSING	LCP	UL94V-0, BLACK or BEIGE
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

PART NO.	Pos.	C	D	E	J	K	L	M	N
◆20622-008E-0#	8	1.225	1.050	1.925	2.445	1.545	0.875	2.500	2.700
◆20622-010E-0#	10	1.575	1.400	2.275	2.795	1.895	1.225	2.850	3.050
◆20622-012E-0#	12	1.925	1.750	2.625	3.145	2.245	1.575	3.200	3.400
◆20622-014E-0#	14	2.275	2.100	2.975	3.495	2.595	1.925	3.550	3.750
◆20622-016E-0#	16	2.625	2.450	3.325	3.845	2.945	2.275	3.900	4.100
◆20622-018E-0#	18	2.975	2.800	3.675	4.195	3.295	2.625	4.250	4.450
◆20622-020E-0#	20	3.325	3.150	4.025	4.545	3.645	2.975	4.600	4.800
◆20622-022E-0#	22	3.675	3.500	4.375	4.895	3.995	3.325	4.950	5.150
◆20622-024E-0#	24	4.025	3.850	4.725	5.245	4.345	3.675	5.300	5.500
◆20622-026E-0#	26	4.375	4.200	5.075	5.595	4.695	4.025	5.650	5.850
◆20622-028E-0#	28	4.725	4.550	5.425	5.945	5.045	4.375	6.000	6.200
◆20622-030E-0#	30	5.075	4.900	5.775	6.295	5.395	4.725	6.350	6.550

◆ MARK MEANS NOT AVAILABLE



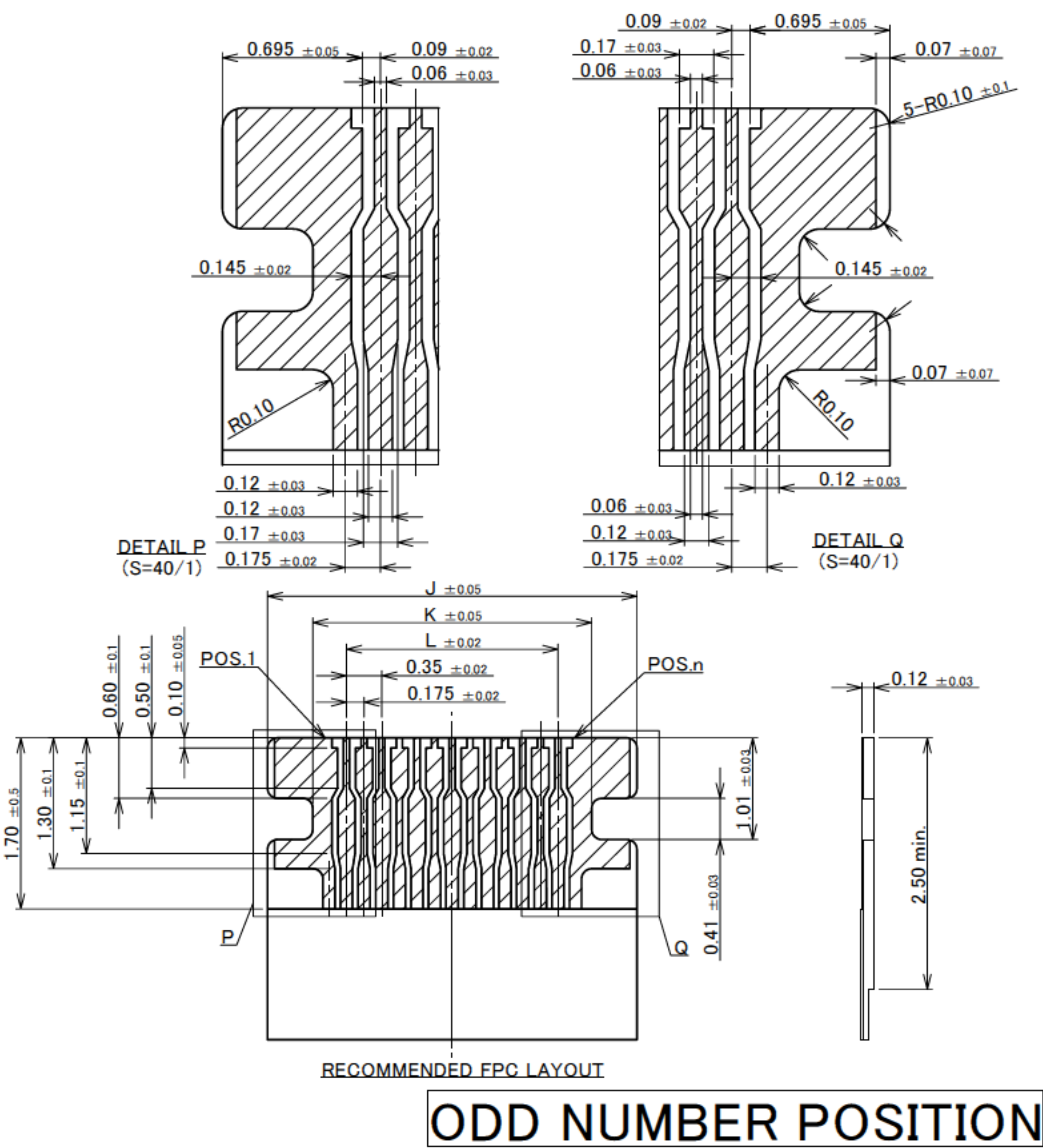
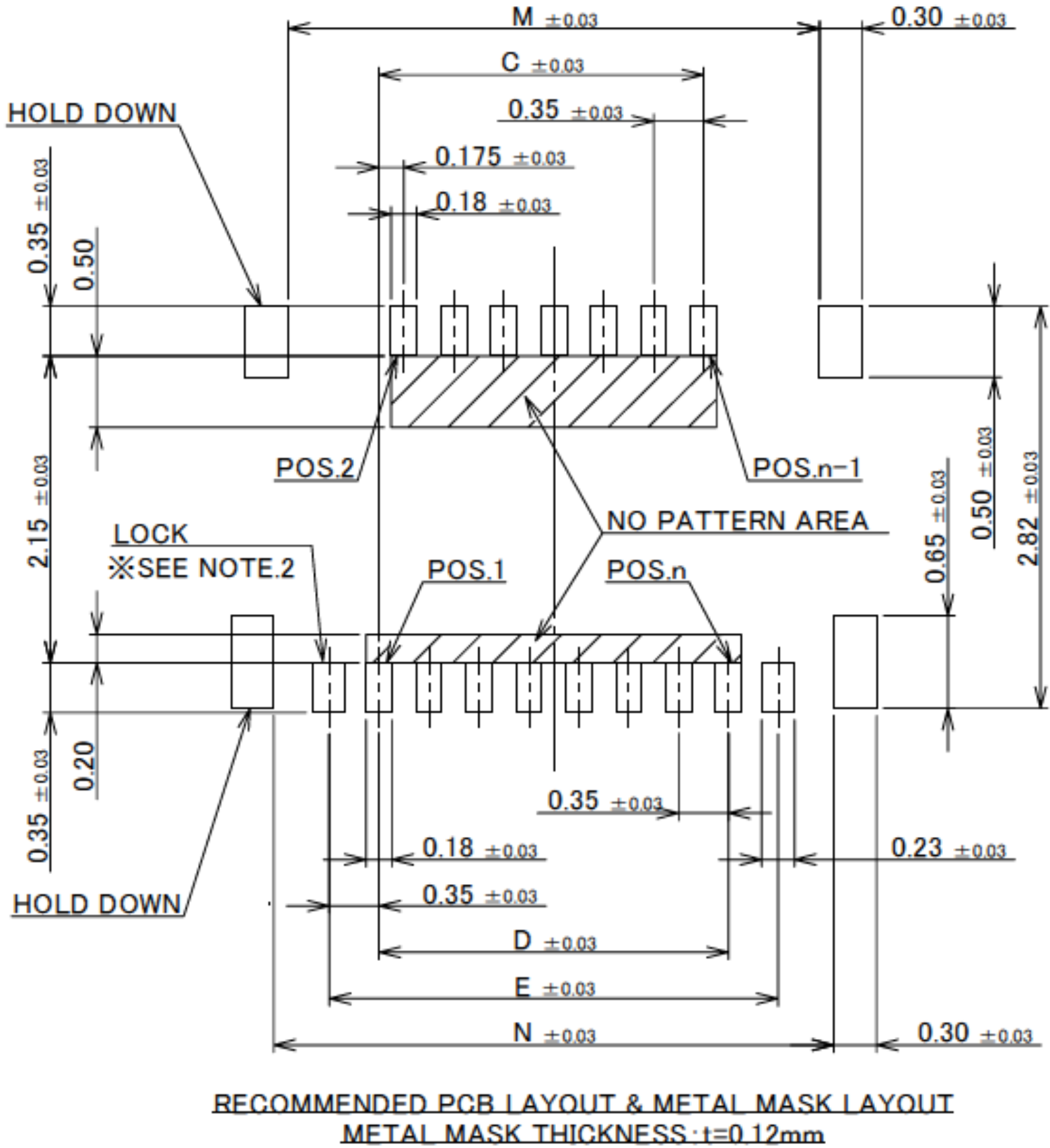
## EVEN NUMBER POSITION



Connector Assembly

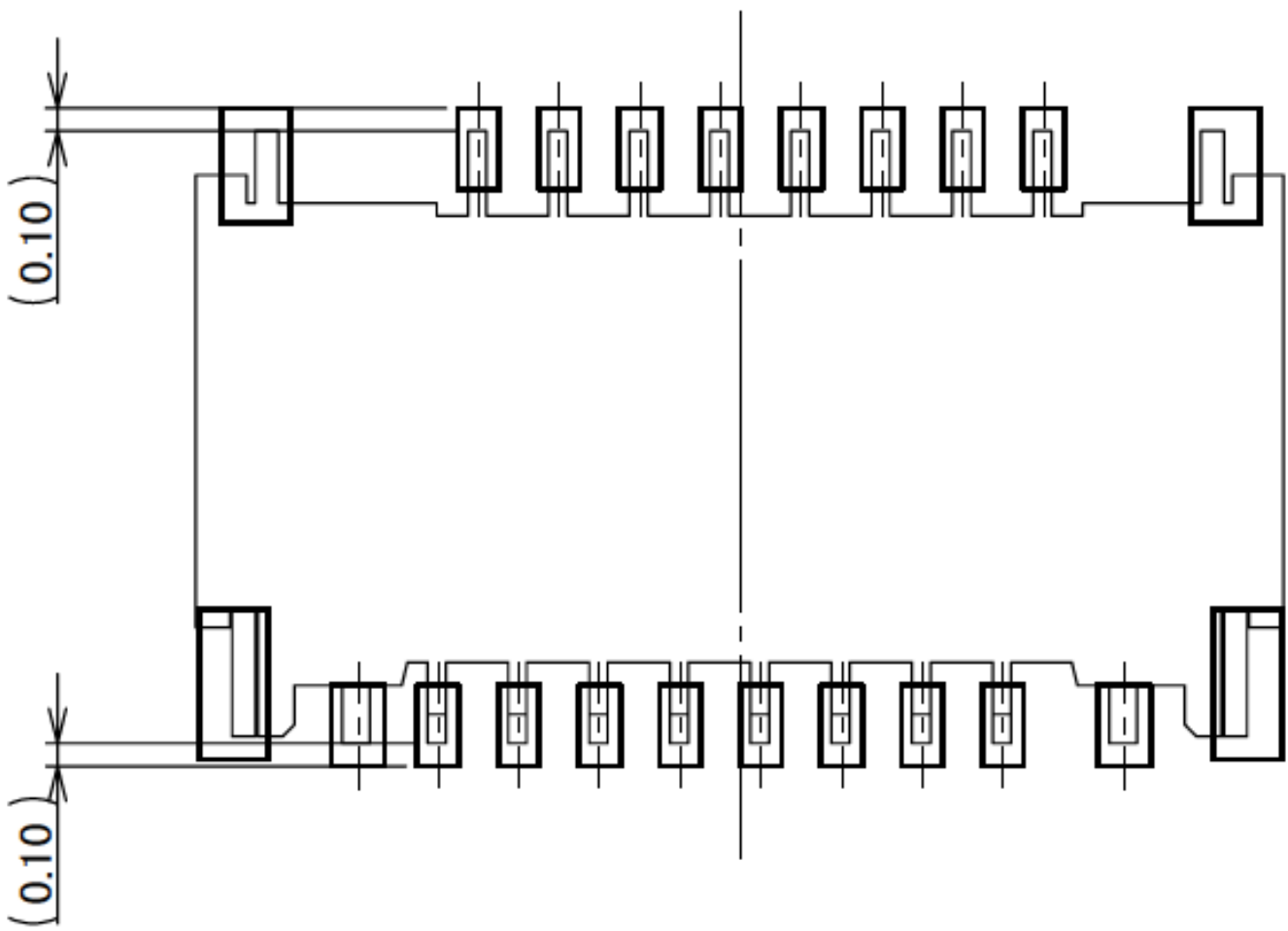
PART NO.	Pos.	C	D	E	J	K	L	M	N
◆20622-007E-0#	7	0.875	1.050	1.750	2.270	1.370	0.700	2.325	2.525
◆20622-009E-0#	9	1.225	1.400	2.100	2.620	1.720	1.050	2.675	2.875
◆20622-011E-0#	11	1.575	1.750	2.450	2.970	2.070	1.400	3.025	3.225
◆20622-013E-0#	13	1.925	2.100	2.800	3.320	2.420	1.750	3.375	3.575
◆20622-015E-0#	15	2.275	2.450	3.150	3.670	2.770	2.100	3.725	3.925
◆20622-017E-0#	17	2.625	2.800	3.500	4.020	3.120	2.450	4.075	4.275
◆20622-019E-0#	19	2.975	3.150	3.850	4.370	3.470	2.800	4.425	4.625
◆20622-021E-0#	21	3.325	3.500	4.200	4.720	3.820	3.150	4.775	4.975
◆20622-023E-0#	23	3.675	3.850	4.550	5.070	4.170	3.500	5.125	5.325
◆20622-025E-0#	25	4.025	4.200	4.900	5.420	4.520	3.850	5.475	5.675
◆20622-027E-0#	27	4.375	4.550	5.250	5.770	4.870	4.200	5.825	6.025
◆20622-029E-0#	29	4.725	4.900	5.600	6.120	5.220	4.550	6.175	6.375
◆20622-031E-0#	31	5.075	5.250	5.950	6.470	5.570	4.900	6.525	6.725

◆MARK MEANS NOT AVAILABLE

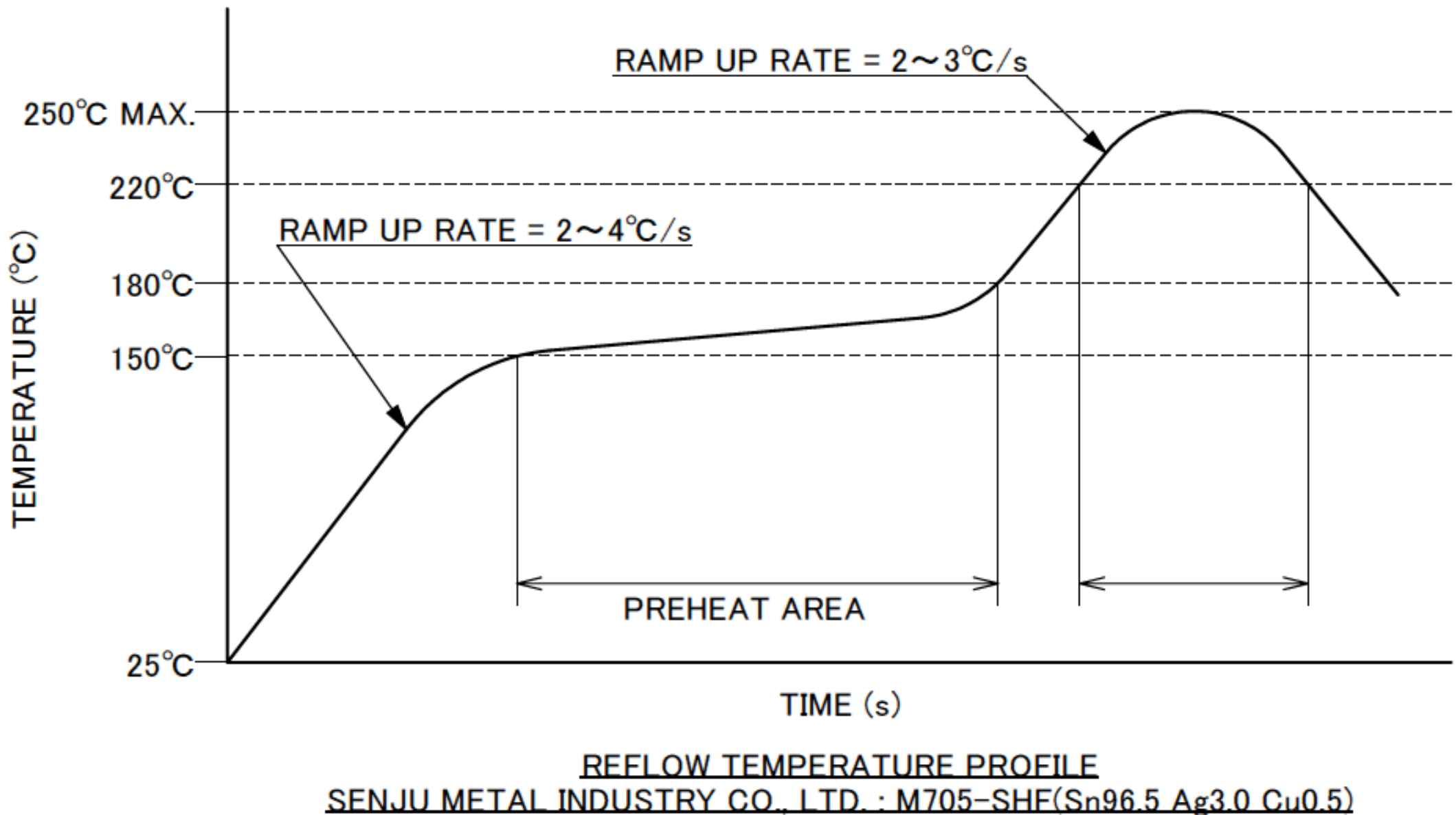


Rev.5

Plug Housing Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.5



# Connector Assembly

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A DC (PER CONTACT) , 6.0A DC (PER CONNECTOR)
OPERATING TEMPERATURE	233~358K (-40°C~+85°C)
OPERATING HUMIDITY	20~80%RH (NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 80mohm MAX. / AFTER TEST : $\triangle$ 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 100Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	20 CYCLES
ACTUATOR LOCKING FORCE (INITIAL / AFTER 20CYCLES)	16P : 5.40N MAX. 19P : 6.30N MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / AFTER 20CYCLES)	16P : 0.18N MIN. 19P : 0.21N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2024
TEST REPORT	TR-15076
PACKING STANDARD	PST-15073
INSTRUCTION MANUAL	HIM-16036
APPEARANCE CRITERIA No.	QLS-A***



# Custom Connectors Available

 RF  
Connectors

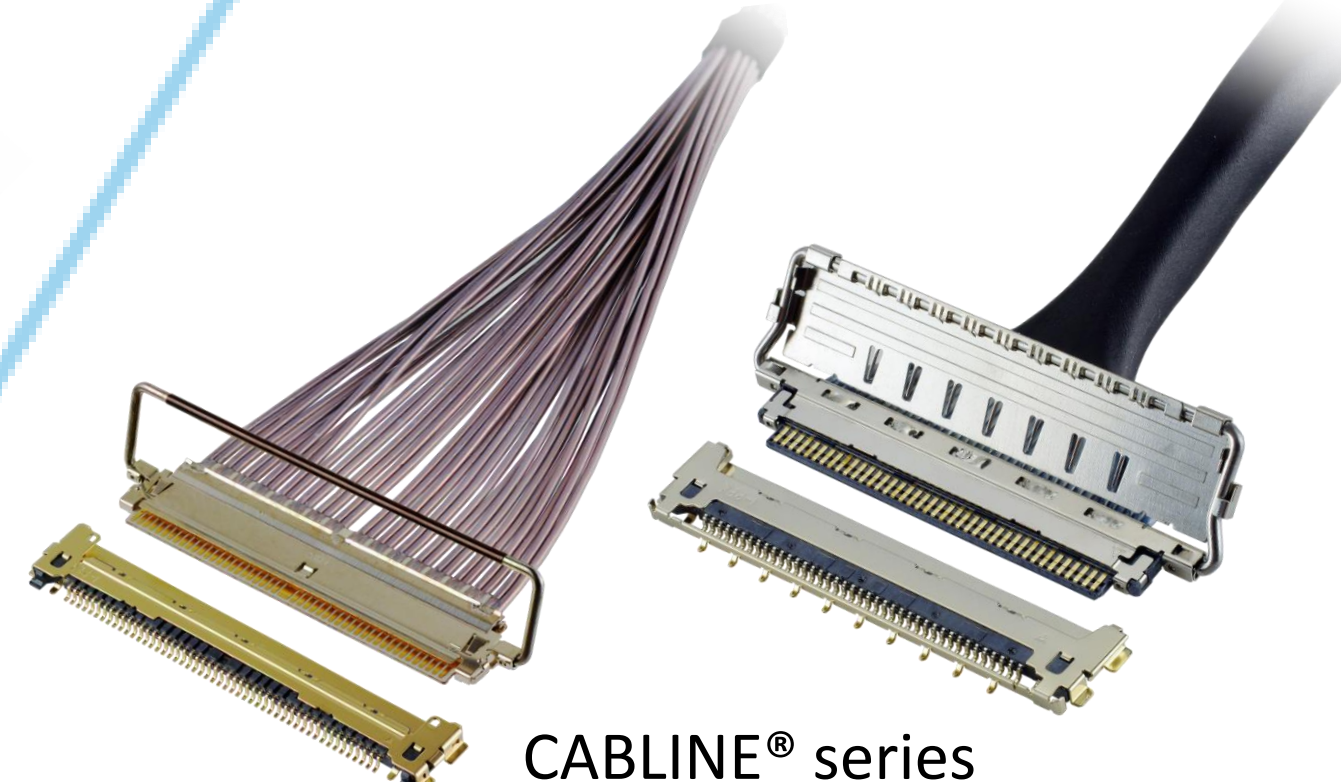
MHF® series



CABLINE® series



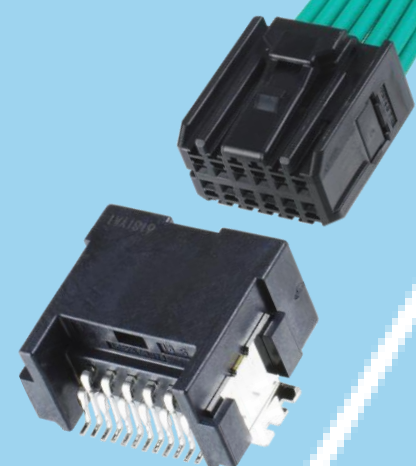
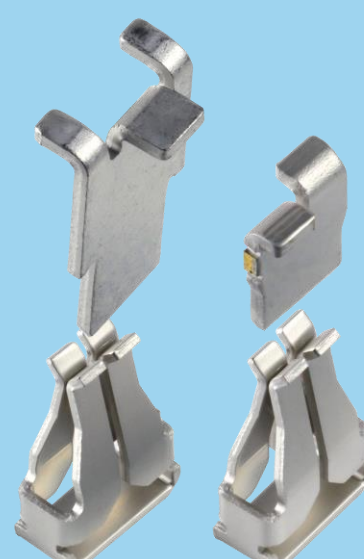
Micro-coaxial/Twinax  
Connectors



Wire-to-Board  
Connectors/  
Terminals

AP series

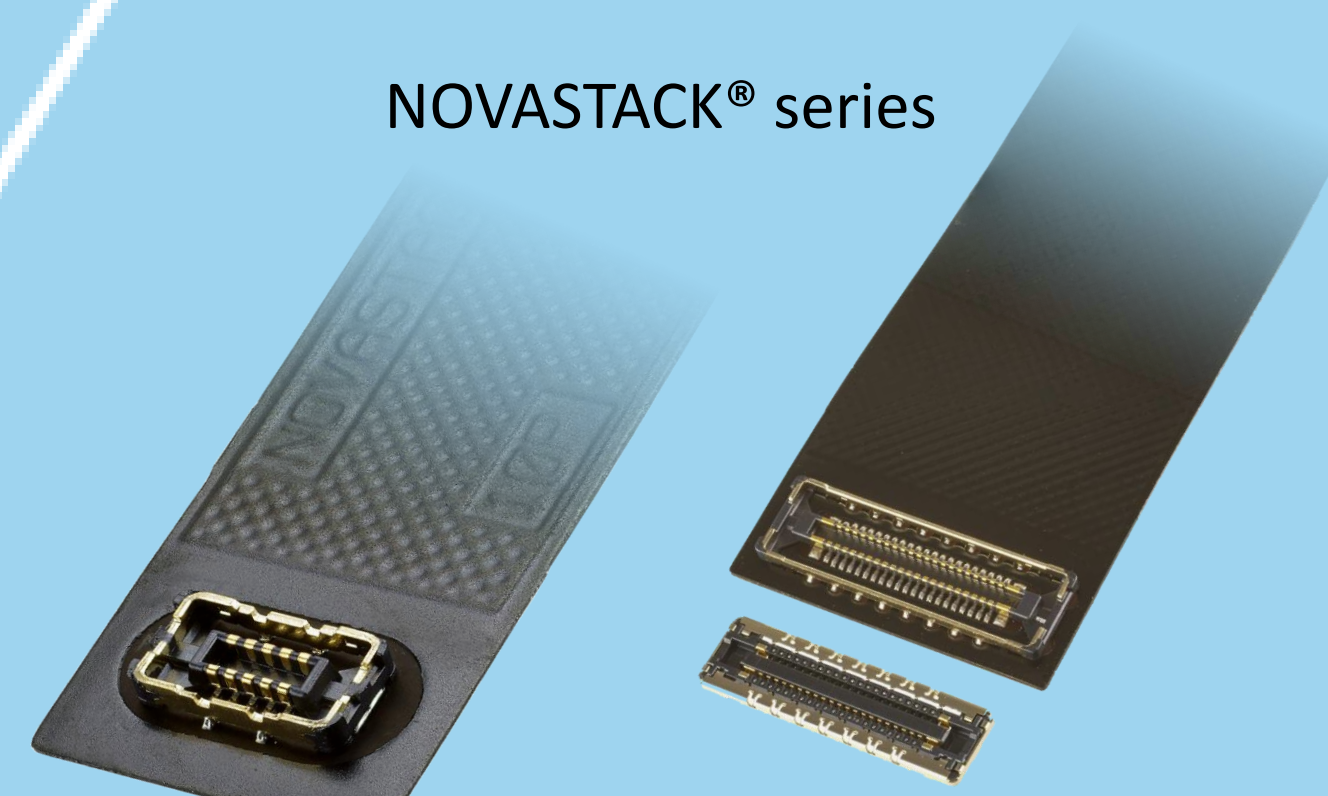
ISH® series



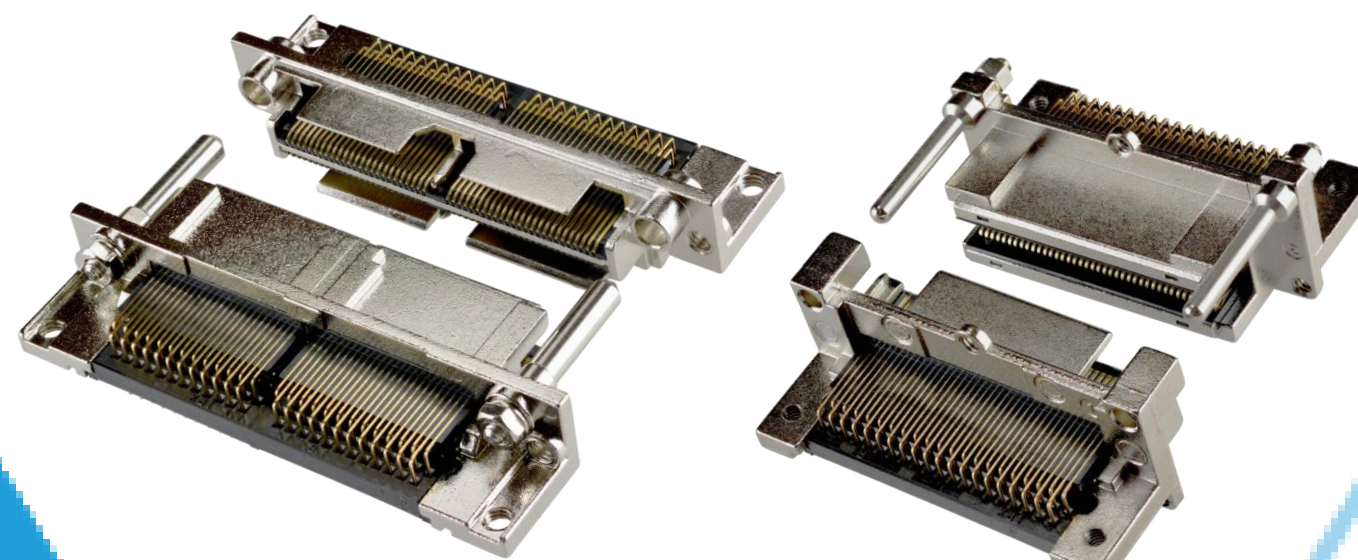
NOVASTACK® series



Board-to-Board  
Connectors



I/O  
Connectors



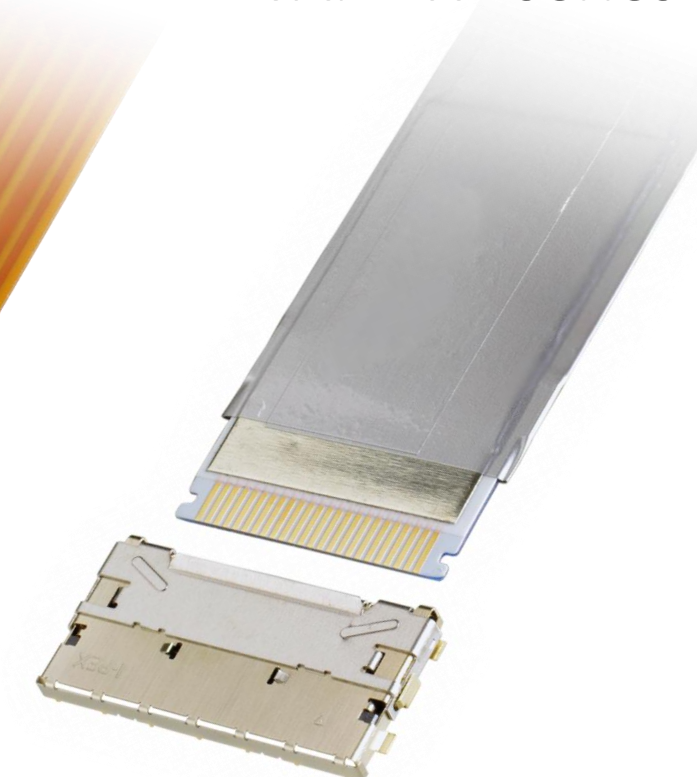
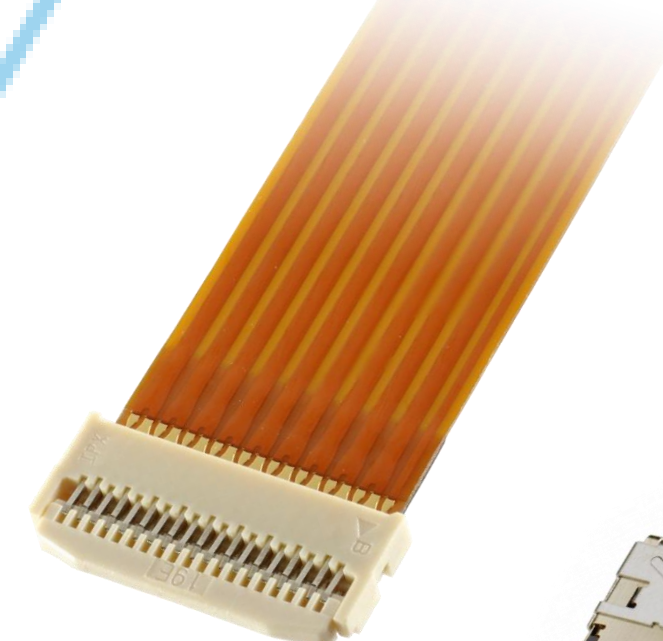
MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC  
Connectors



Inquiry



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Contact your sales representative  
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