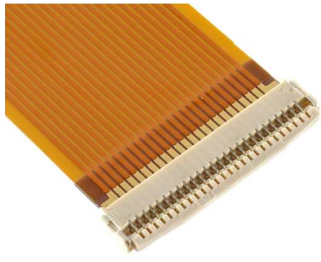


MINIFLEX[®] 5-BFN II LK

Mechanical lock, robust design with hold-down feature, low profile (height = 1.0 mm), 0.5 mm pitch, horizontal, backflip



- ✓ High FPC retention force with additional mechanical lock
- ✓ Unique actuator holder design prevents actuator drop-off
- ✓ Usability for closing actuator without FPC

Pin counts:

Range	Up to 28
Available	4, 6, 8, 10, 12, 14, 16, 18, 20, 24

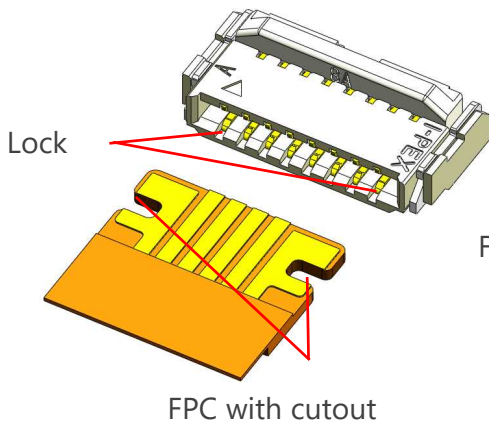
*Please inquire for pin counts not listed or outside of the pin count range.

Type	LK	
Part Number	20600	
Contact Pitch (mm)	0.5	
Board Pitch (mm)	0.5	
Height (mm)	1.0 +/-0.1	
Width Formula (mm)	2.7+(0.5*p)	
Depth (mm)	Actuator Open	3.00
	Actuator Close	3.50
Wiping length (mm)	Contact A	1.00
FPC Insertion Depth (mm)	1.30	
FPC Thickness (mm)	0.30+/-0.05	
Current Rating	0.5A /pin (7A/conn.)	
Contact Point	Top and Bottom	
Compatibility	Original	

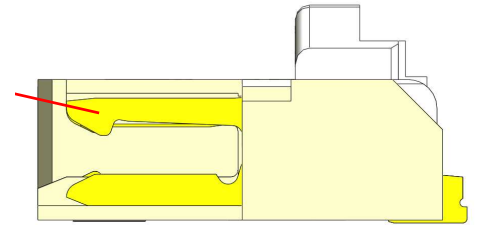
High FPC retention force with additional mechanical lock

FPC retention force comparison (6 p)

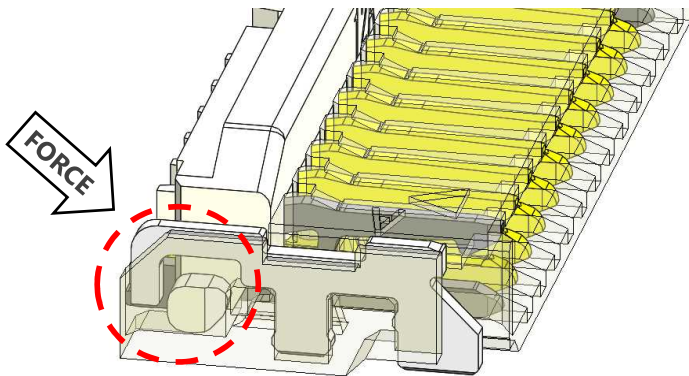
MF5-BFN II LK	MF5-BFN II
10.59 N	4.17 N



FPC LOCK mechanism maintains high FPC retention force



Unique actuator holder design prevents actuator drop-off



Actuator will not fall-off even at 100 N force

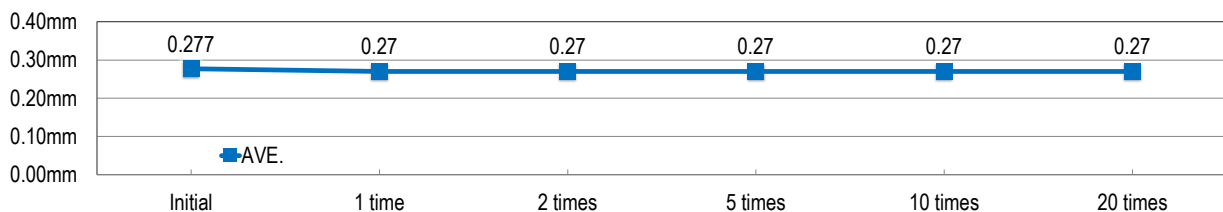
*Housing destruction occurs first

*Force applied from 30 degrees backwards

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 22 pins before and after operating actuator without FPC inserted)



- Insertion force of connector goes up

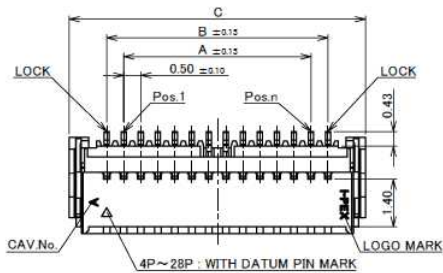
- Retention force of connector does not change significantly

MINIFLEX® 5-BFN II LK

Component Parts Detail

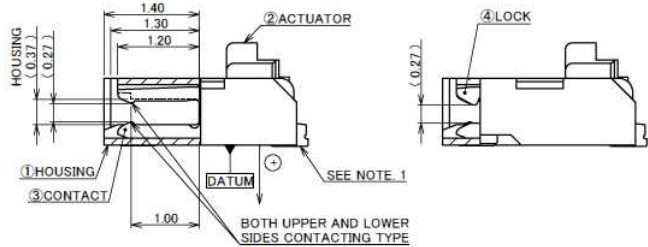
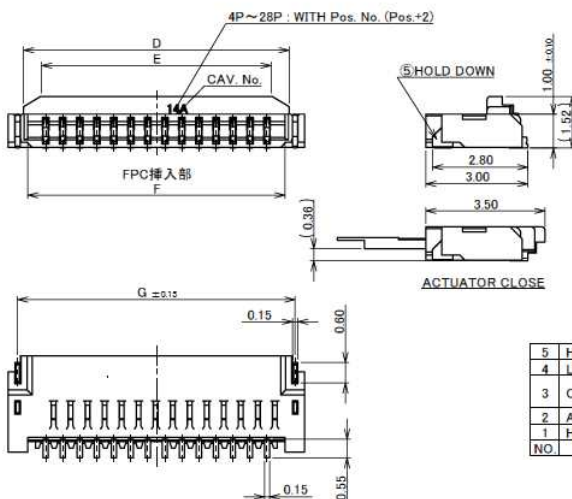
Connector Assembly :

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



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
20600-008E-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.



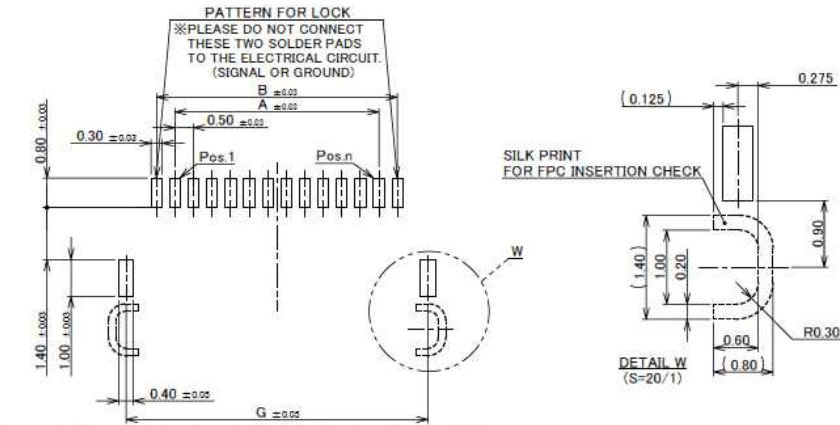
NO.	DISCRIPTION	MATERIAL	FINISH	REMARKS
5	HOLD DOWN	PHOSPHOR BRONZE	Sn 2~6 μm MIN OVER Ni 1.0 μm MIN.	
4	LOCK	PHOSPHOR BRONZE	Au 0.03 μm MIN. OVER Ni 1.0 μm MIN.	
3	CONTACT	PHOSPHOR BRONZE	CONTACT AREA : Au 0.1 μm MIN. OVER Ni 1.0 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.0 μm MIN.	
2	ACTUATOR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

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

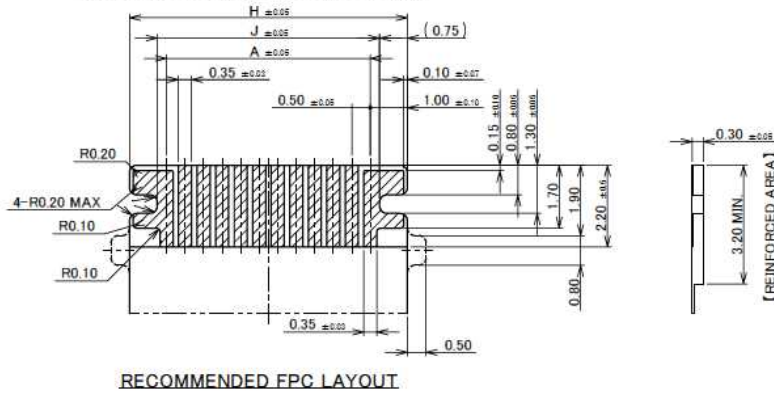
NOTES
1. CONTACT TAIL IS PROJECTION FROM HOUSING IN THE + DIRECTION. (0~0.06)

Rev.9

Connector Assembly :



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



RECOMMENDED FPC LAYOUT

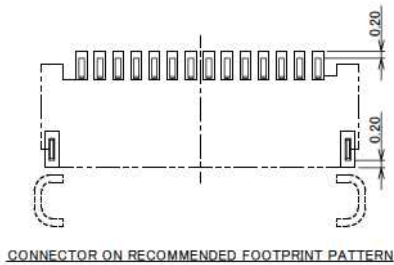
PART No.	POS	A	B	G	H	J
20600-004E-01	4	1.50	2.50	4.15	3.50	2.00
20600-006E-01	6	2.50	3.50	5.15	4.50	3.00
20600-008E-01	8	3.50	4.50	6.15	5.50	4.00
20600-010E-01	10	4.50	5.50	7.15	6.50	5.00
20600-012E-01	12	5.50	6.50	8.15	7.50	6.00
20600-014E-01	14	6.50	7.50	9.15	8.50	7.00
20600-016E-01	16	7.50	8.50	10.15	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.

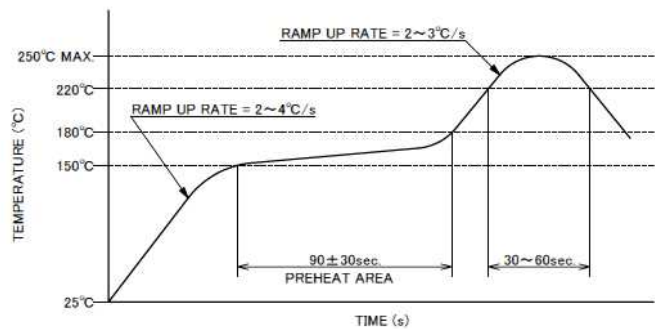
- NOTES
2.MATERIAL
COVER FILM : PI
CONDUCTOR : COPPER(RARE)
BASE FILM : PI
STIFFENER : PI
ADHESIVE : THERMOSETTING ADHESIVE
3.FINISH
Au OVER Ni PLATING.

Rev.9

Connector Assembly :



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.9

Connector Assembly :

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT)
RATING AMPERAGE	0.5A DC (PER CONTACT) 7.0A DC (PER CONNECTOR)
OPERATING TEMPERATURE	233~398K(-40°C~125°C)
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

Rev.9



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

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