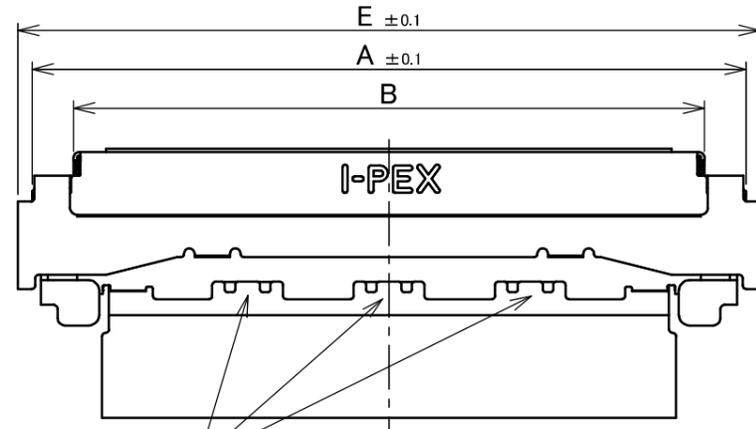


Recommended P/N 21102-0\*\*E-21

PART NO.	Pos.	A	B	C	D	E
21102-040E-21	40	20.20	17.85	17.65	15.60	21.00
21102-070E-21	70	32.20	29.85	29.65	27.60	33.00

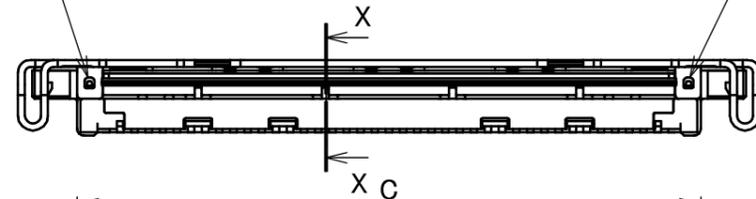
TOP VIEW



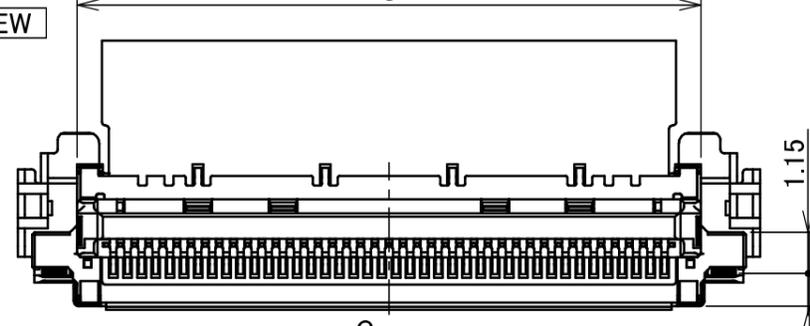
SOLDERING POINT

SOLDERING POINT

SOLDERING POINT



BOTTOM VIEW



C ±0.1

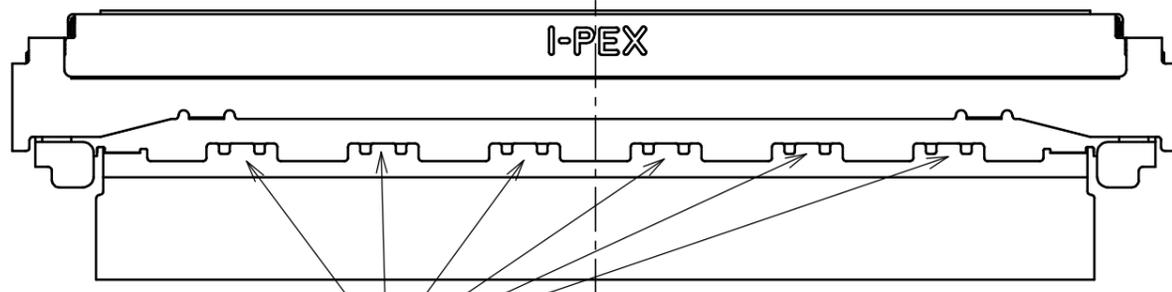
D ±0.15

0.40 ±0.1

1.15  
0.94

SOLDERING POINT

SOLDERING POINT

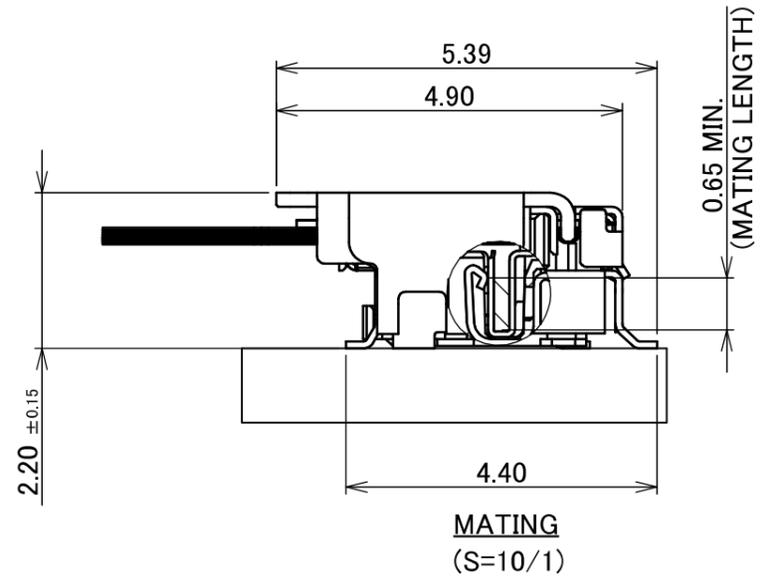
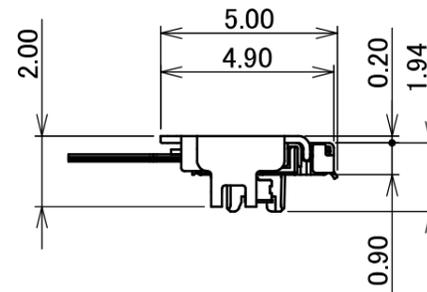
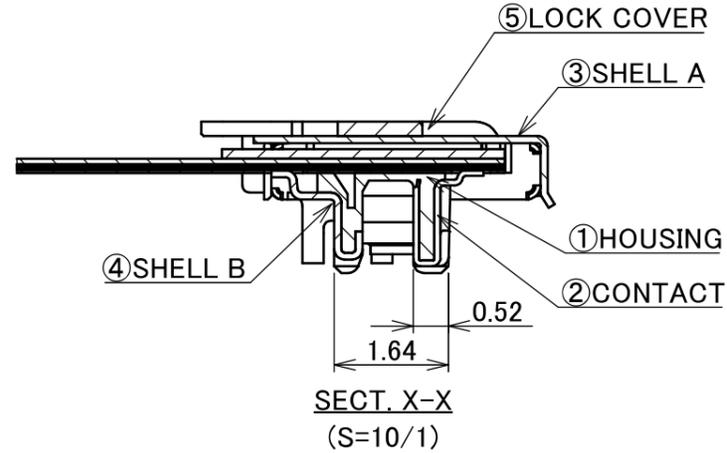


SOLDERING POINT

70P SHAPE

# PATENT PENDING

## With LOCK COVER



Halogen Free



RoHS Compliant

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
5	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.0 μ m MIN.
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μ m MIN. OVER Ni 1.00 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

REV.	ECN	BY	DATE	APP.	ANGLE	6 OVER 30 MAX.	±0.3	PROJECTION	SERIES No.	CUSTOMER COPY
0	ZC00498	T.Ono	2026/02/26	-	±2°	6 OVER 30 MAX.	±0.3	⊕	R0R0R0	CUSTOMER COPY
					6 MAX.	30 OVER 120 MAX.	±0.5	⊖		
					GENERAL TOLERANCE.			TITLE		SCALE
					DWG.	DATE		CABLIN®-UMF		5:1
					T.Ono	2026/02/26		PLUG FPC ASSEMBLY		UNIT
					CHK.					mm
					M.Nakamura					I-PEX
					APP.					SIZE
					H.Ikari					A3
REVISION RECORD								DWG. No.		SHEET
								21102		1/7
										REV.
										0

Recommended P/N 21102-0\*\*E-21

PART NO.	Pos.	A	B	C	D
21102-040E-22	40	20.20	17.85	17.65	15.60
21102-070E-22	70	32.20	29.85	29.65	27.60

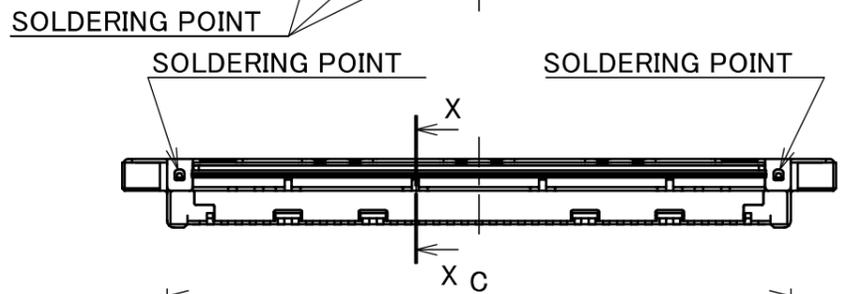
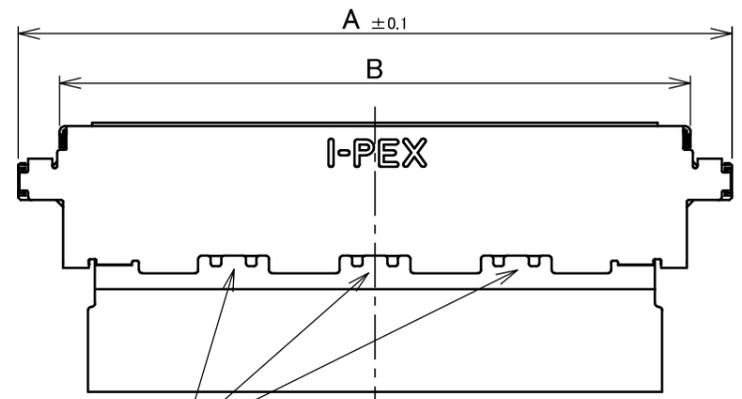


Halogen Free

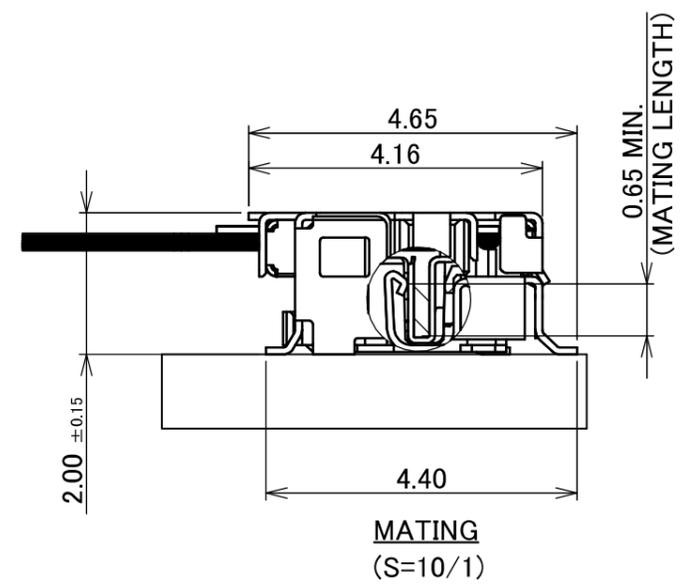
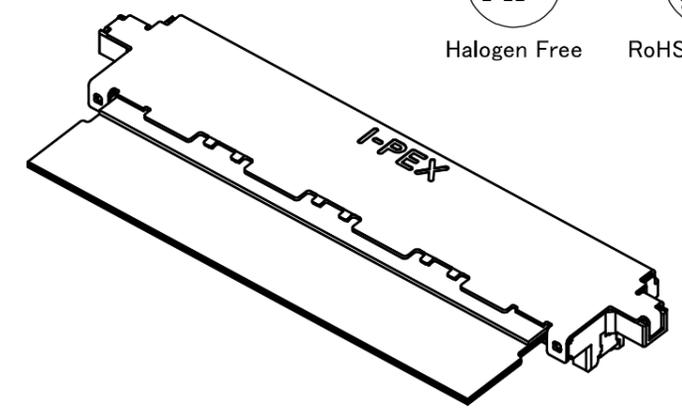
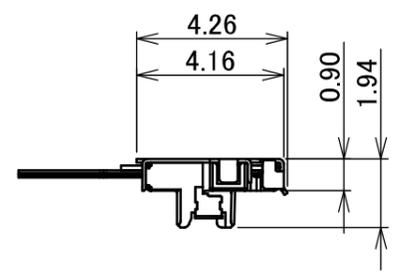
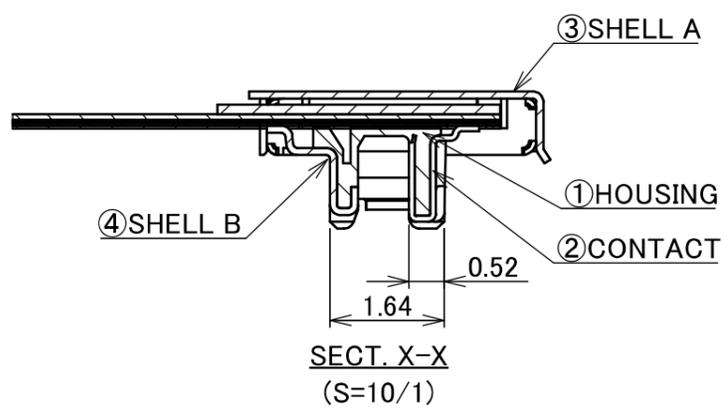
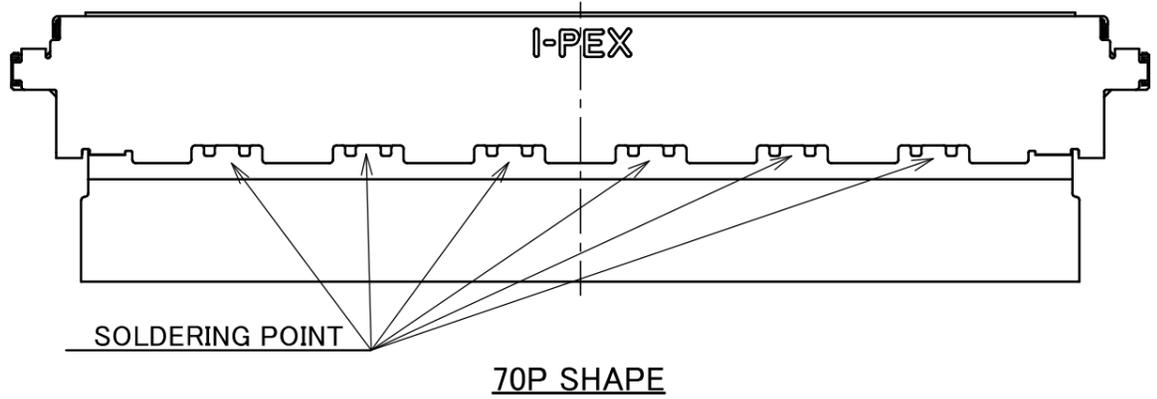
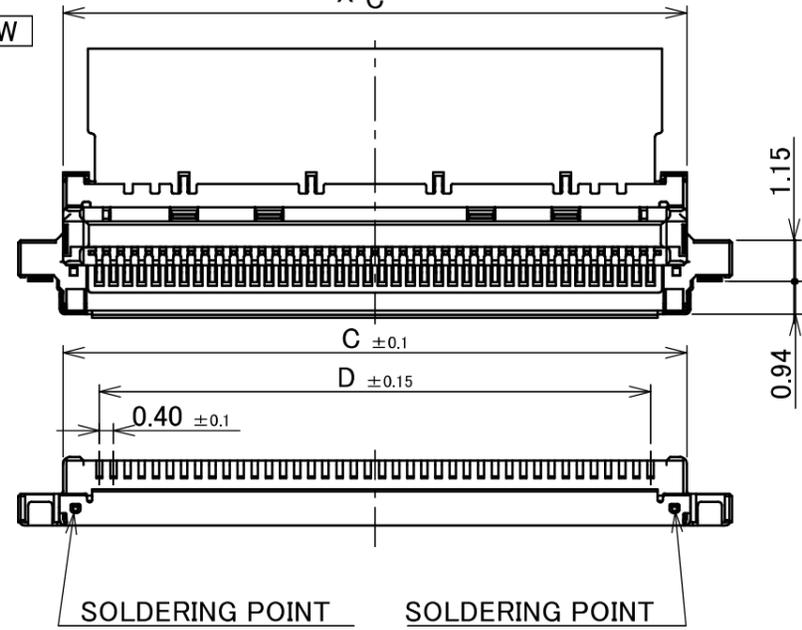


RoHS Compliant

TOP VIEW



BOTTOM VIEW



**PATENT PENDING**  
Without LOCK COVER

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μ m MIN. OVER Ni 1.00 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R0R0R0	CUSTOMER COPY		
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5					
GENERAL TOLERANCE.				TITLE CABLIN®-UMF PLUG FPC ASSEMBLY	SCALE 5:1	UNIT <b>I-PEX</b>		
DWG.	DATE							
CHK.								
APP.								
				DWG. No.	21102	SIZE	SHEET	REV.
						A3	2/7	0

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I-PEX Inc.

QKE-DFE06-02 REV.12

Recommended P/N 21102-0\*\*E-21

PART NO.	Pos.	A	B	C	D	L	M
21102-040E-23	40	20.20	17.85	17.65	15.60	13.00	14.00
21102-070E-23	70	32.20	29.85	29.65	27.60	25.00	26.00

# PATENT PENDING

## With PULL TAPE HOLDER

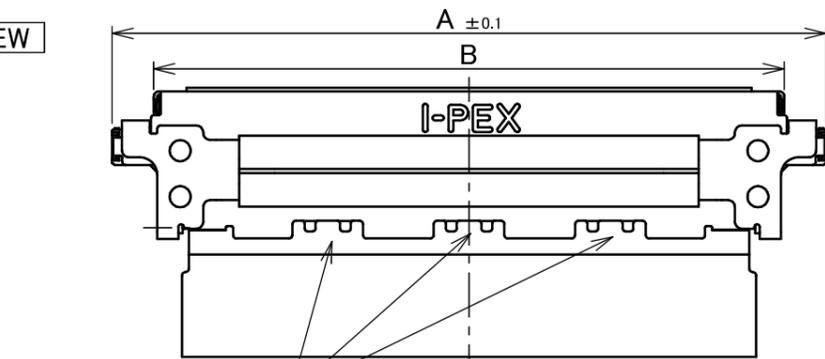


Halogen Free



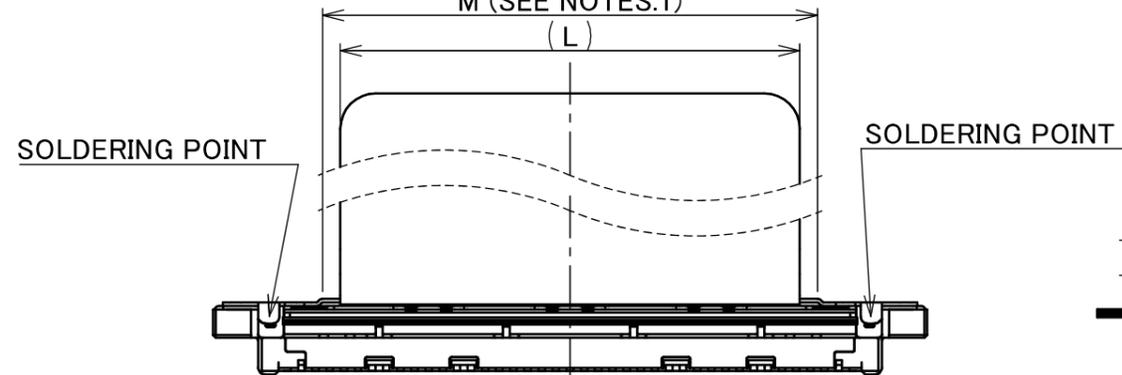
RoHS Compliant

TOP VIEW



SOLDERING POINT

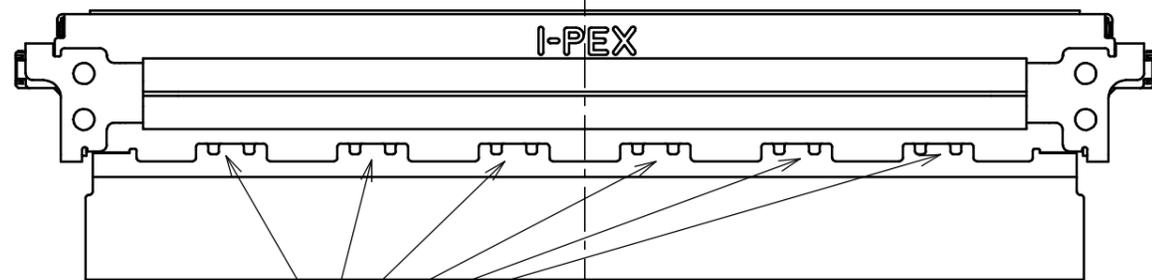
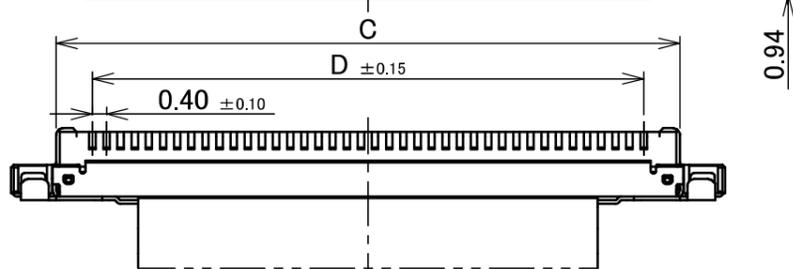
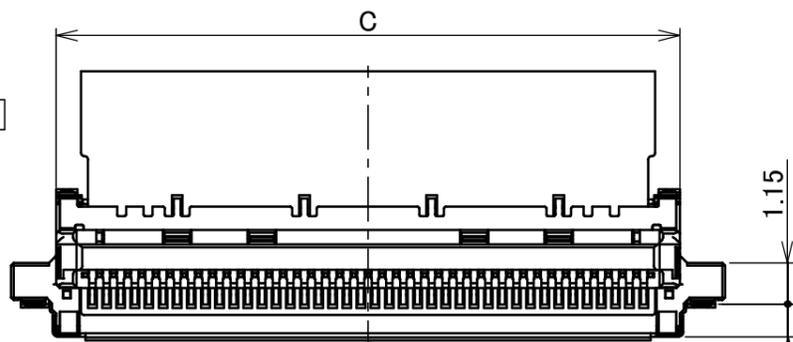
M (SEE NOTES.1)



SOLDERING POINT

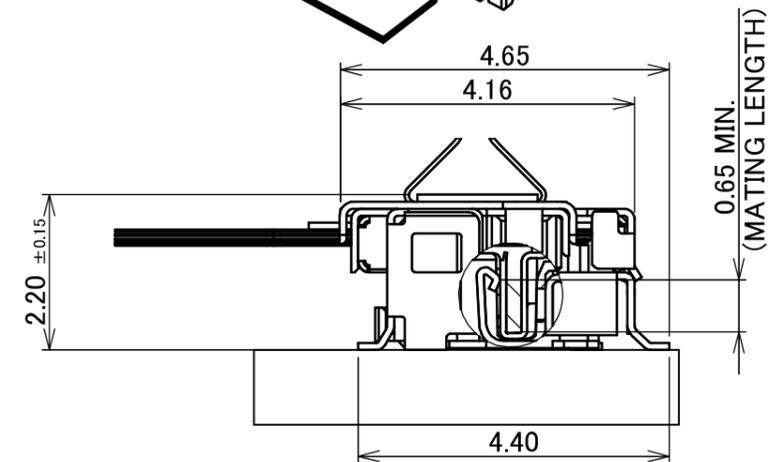
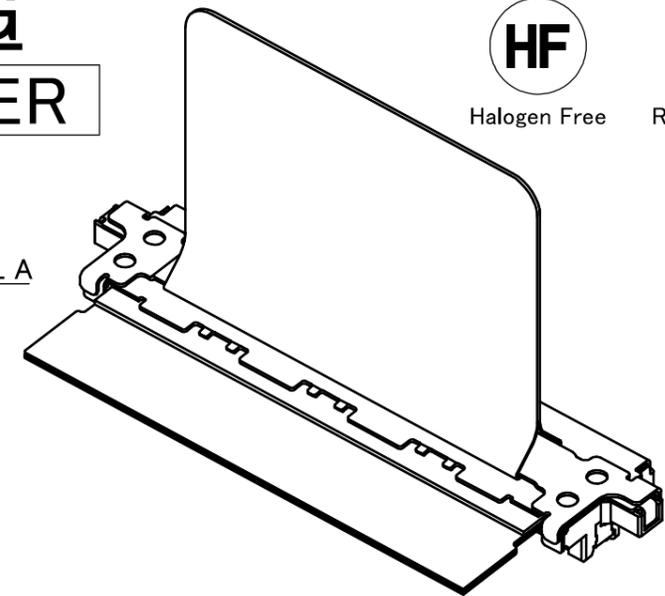
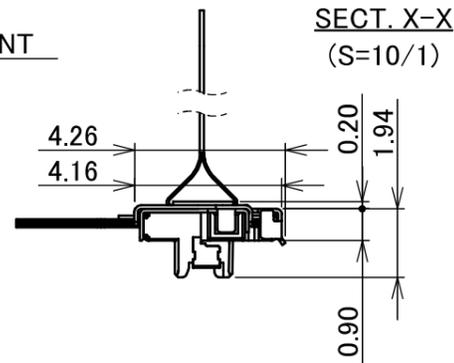
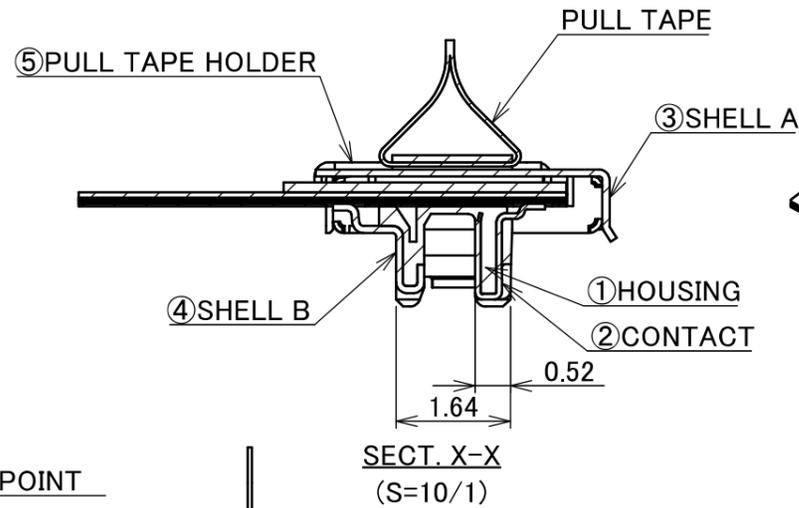
SOLDERING POINT

BOTTOM VIEW



SOLDERING POINT

TOP SHAPE



MATING (S=10/1)

NOTES.

1.RECOMMENDED PULL-TAPE

PULL-TAPE : TERAOKA's INSULATION TAPE No.650S(#50) t=0.08

2.PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRIAIGHT AREA.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
5	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
4	SHELL B	PHOSPHOR BRONZE	ALL Au 0.01 μ m MIN. OVER Ni 1.00 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R0R0R0	CUSTOMER COPY			
	6 MAX.	±0.2	30 OVER 120 MAX.						±0.5
GENERAL TOLERANCE.				TITLE		SCALE	I-PEX		
DWG.	DATE			CABLINER®-UMF PLUG FPC ASSEMBLY		5:1			
CHK.						UNIT			
APP.				DWG. No. 21102		mm			
				SIZE	SHEET	REV.			
				A3	3/7	0			

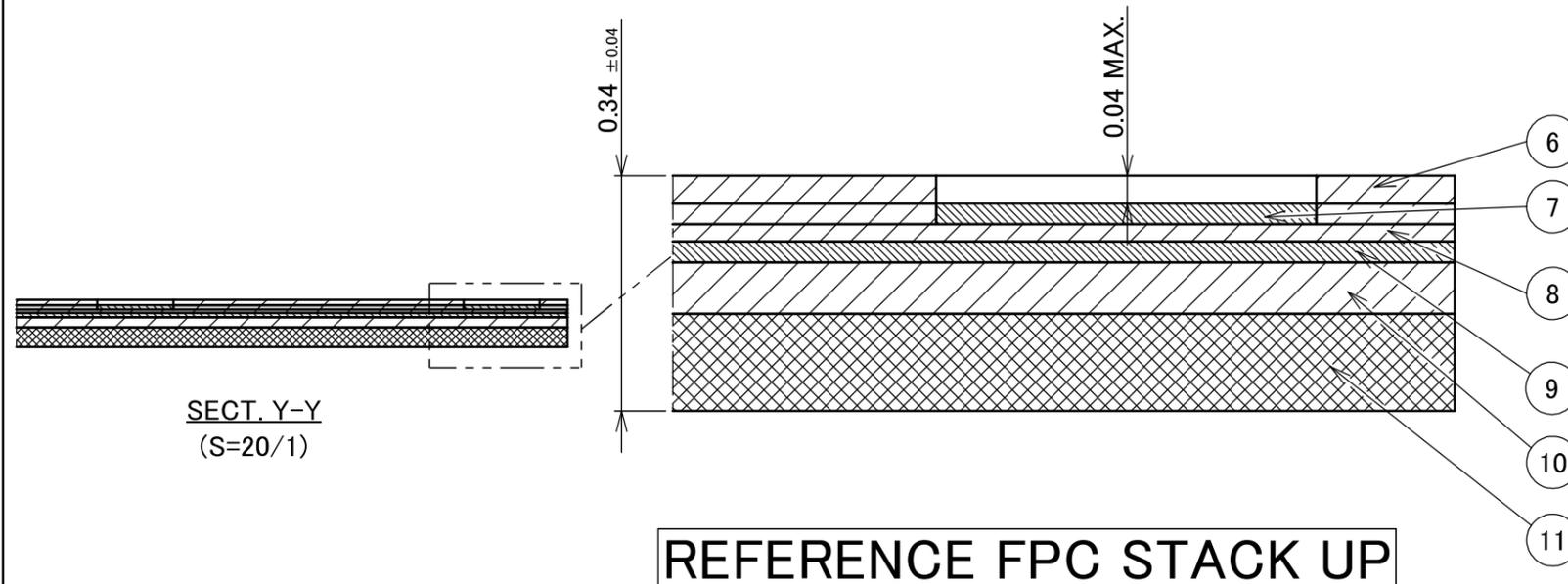
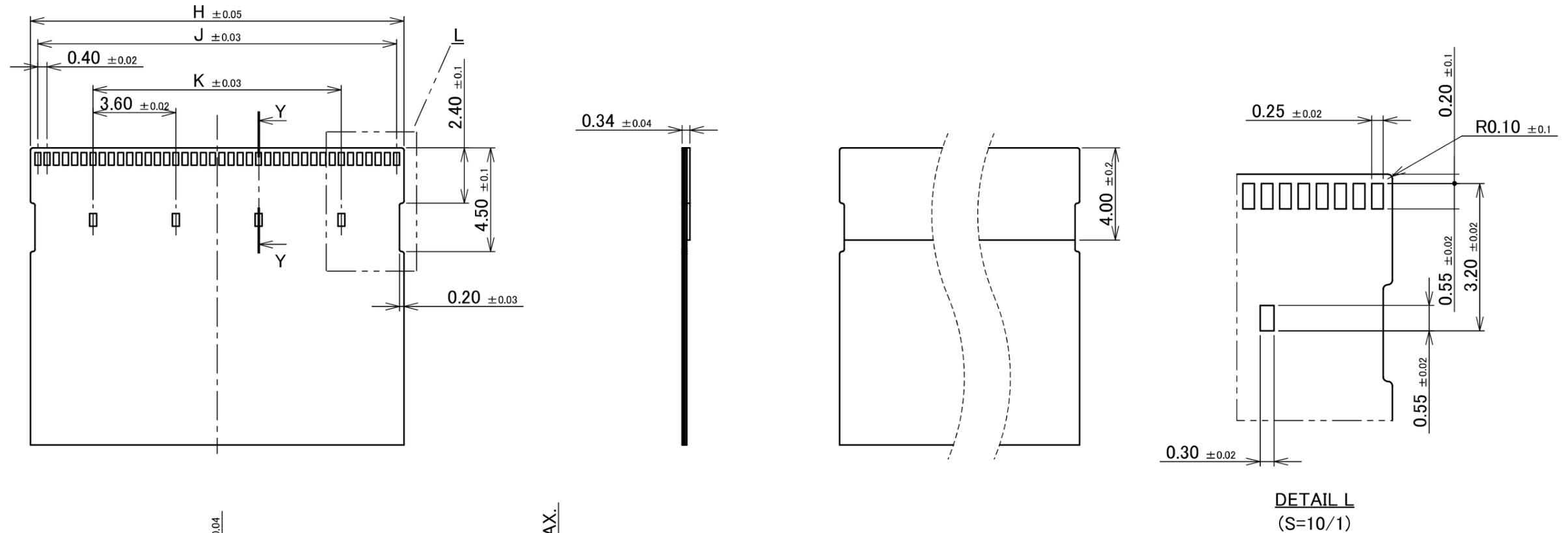
ITEMS	SPECIFICATION
RATING VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR.
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.5A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO 31PIN 0.3A AC/DC (PER CONTACT PIN) ※AVAILABLE UP TO ALL PIN ※TO BE DETERMINED BY PROTOTYPE EVALUATION ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233 TO 378K (-40°C TO +105°C)
OPERATING HUMIDITY	85% MAX.
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 60mohm MAX. / AFTER TEST : $\triangleleft$ 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : $\triangleleft$ 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	40P : 40.0N MAX. / 70P : 58.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	40P : 4.0N MIN. / 70P : 7.0N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2997
TEST REPORT	TR-26009
INSTRUCTION MANUAL	HIM-25007
ASSEMBLY MANUAL	ASM-26001
APPEARANCE CRITERIA No.	QLS-A***

※Only the single-hook pull jig is permitted  
The dual-hook pull jig is not allowed

ANGLE	$\pm 2^\circ$	6 OVER 30 MAX.	$\pm 0.3$	PROJECTION 	SERIES No. R0R0R0	CUSTOMER COPY			
6 MAX.	$\pm 0.2$	30 OVER 120 MAX.	$\pm 0.5$			TITLE CABLIN <sup>®</sup> -UMF PLUG FPC ASSEMBLY	SCALE -	<b>I-PEX</b>	
GENERAL TOLERANCE.				DWG. No.	21102	UNIT mm	SIZE A3		
DWG.	DATE			CHK.	APP.				

PART NO.	Pos.	H	J	K
21103-040E-02	40	16.25	15.60	10.80
21103-070E-02	70	28.25	27.60	25.20

## RECOMMENDED FPC FOOT PATTERN

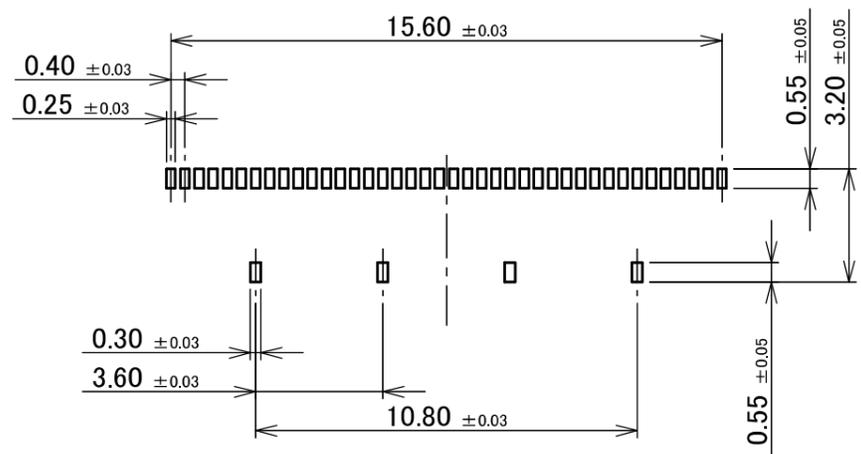


## REFERENCE FPC STACK UP

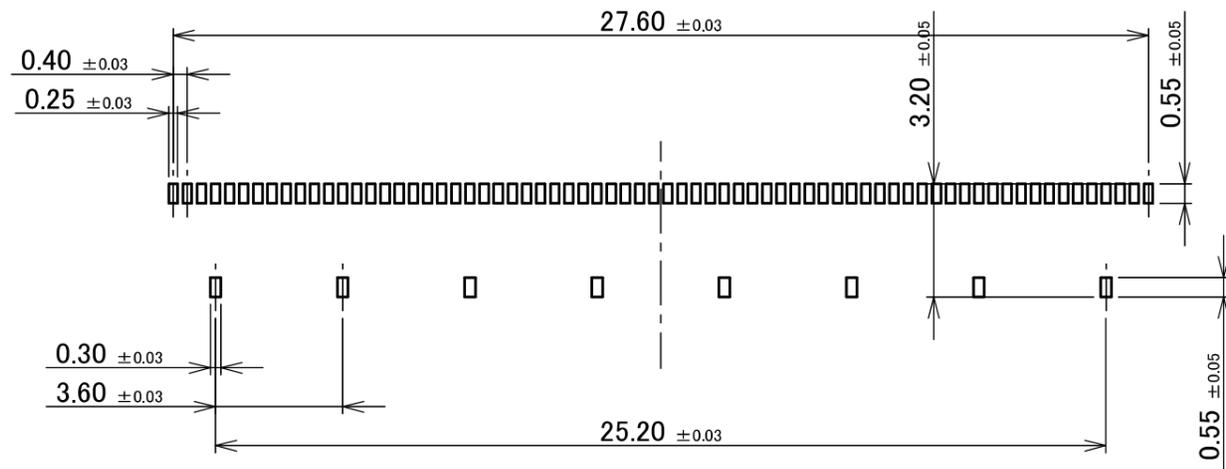
- NOTE.
- NO.7 CONDUCTOR(GROUND) AND NO.9 CONDUCTOR (GROUND) ARE CARRYING OUT THE ELECTRICAL CONNECTION.
  - IT IS RECOMMENDED TO ELECTRICALLY CONNECT NO.9 CONDUCTOR (GROUND) AND NO.11 STIFFENER.

11	STIFFENER	SUS	Ni, Au
10	INSULATOR	-	-
9	CONDUCTOR (GROUND)	Cu	Ni, Au
8	INSULATOR	-	-
7	CONDUCTOR (SIGNAL,GROUND)	Cu	Ni, Au
6	INSULATOR	-	-
No.	DESCRIPTION	MATERIAL	PLATING

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R0R0R0	CUSTOMER COPY		
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5					
GENERAL TOLERANCE.				TITLE CABLIN <sup>®</sup> -UMF PLUG FPC ASSEMBLY	SCALE 5:1	I-PEX		
DWG.	DATE							
CHK.								
APP.								
				DWG. No.	21102	SIZE A3	SHEET 5/7	REV. 0

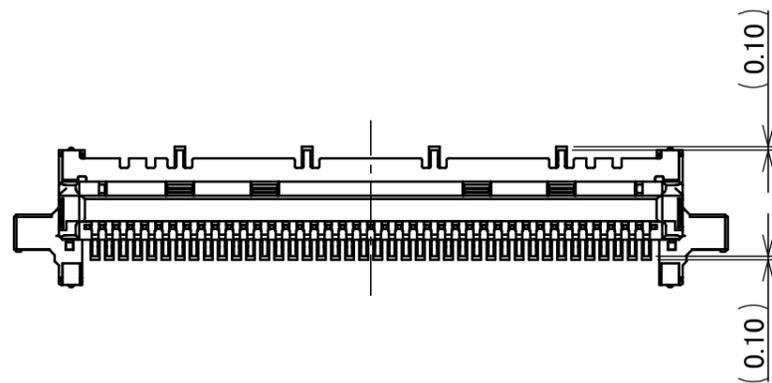


**40P RECOMMENDED METAL MASK LAYOUT (S=5/1)**  
 ※ METAL MASK THICKNESS : t = 0.12

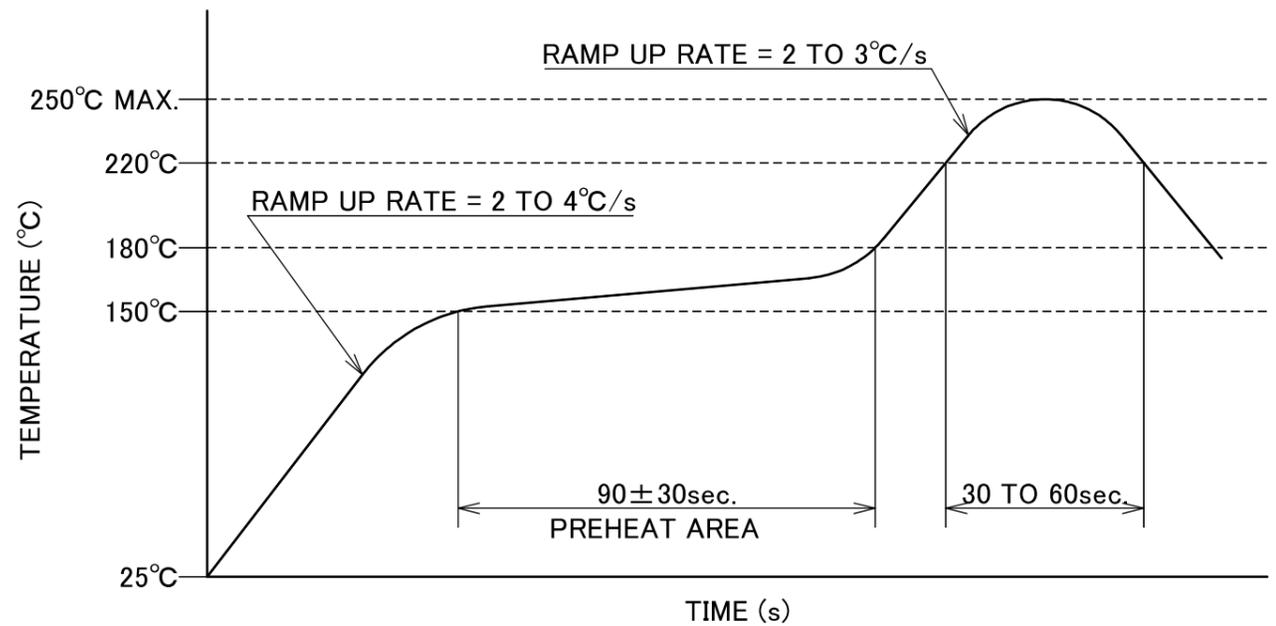


**70P RECOMMENDED METAL MASK LAYOUT (S=5/1)**  
 ※ METAL MASK THICKNESS : t = 0.12

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION 	SERIES No. R0R0R0	CUSTOMER COPY		
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5					
GENERAL TOLERANCE.				TITLE CABLIN <sup>®</sup> -UMF PLUG FPC ASSEMBLY	SCALE 5:1	<b>I-PEX</b>		
DWG.	DATE							
CHK.								
APP.								
				DWG. No.	21102	SIZE A3	SHEET 6/7	REV. 0



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION 	SERIES No. R0R0R0	CUSTOMER COPY		
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5					
GENERAL TOLERANCE.				TITLE CABLIN <sup>®</sup> -UMF PLUG FPC ASSEMBLY	SCALE 5:1	UNIT <b>I-PEX</b>		
DWG.	DATE							
CHK.								
APP.								
				DWG. No.	21102	SIZE	SHEET	REV.
						A3	7/7	0