

PART No.	POS.	A	B	C	D	E	F	G
20542-004E-01	4	1.50	3.70	2.80	2.50	3.15	2.56	1.80
20542-006E-01	6	2.50	4.70	3.80	3.50	4.15	3.56	2.80
20542-008E-01	8	3.50	5.70	4.80	4.50	5.15	4.56	3.80
20542-010E-01	10	4.50	6.70	5.80	5.50	6.15	5.56	4.80
20542-012E-01	12	5.50	7.70	6.80	6.50	7.15	6.56	5.80
20542-014E-01	14	6.50	8.70	7.80	7.50	8.15	7.56	6.80
20542-016E-01	16	7.50	9.70	8.80	8.50	9.15	8.56	2.80
20542-018E-01	18	8.50	10.70	9.80	9.50	10.15	9.56	3.80
20542-020E-01	20	9.50	11.70	10.80	10.50	11.15	10.56	4.80
20542-022E-01	22	10.50	12.70	11.80	11.50	12.15	11.56	5.80
20542-024E-01	24	11.50	13.70	12.80	12.50	13.15	12.56	6.80
20542-026E-01	26	12.50	14.70	13.80	13.50	14.15	13.56	7.80
20542-028E-01	28	13.50	15.70	14.80	14.50	15.15	14.56	8.80
20542-030E-01	30	14.50	16.70	15.80	15.50	16.15	15.56	9.80



**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)

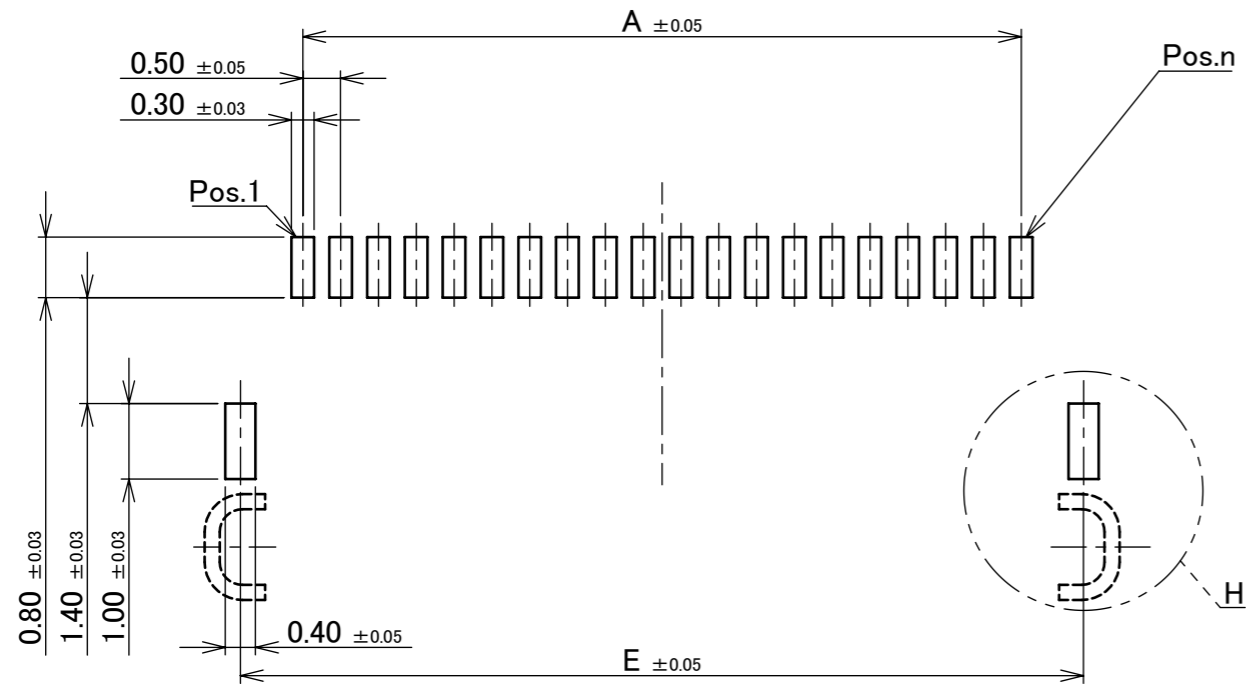
NO.	MATERIAL	DISCRIPTION	FINISH, REMARKS
4	PHOSPHOR BRONZE	HOLD DOWN	Sn 2~6 μm MIN.OVER Ni 1.00 μm MIN.
3	PHOSPHOR BRONZE	CONTACT	CONTACT AREA : Au 0.1 μm MIN. OVER Ni 1.0 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.0 μm MIN.
2	LCP	ACTUATOR	UL94V-0, BEIGE
1	LCP	HOUSING	UL94V-0, BEIGE

REV.	ECN	BY	DATE	APP.	APP.	DATE	DWG. No.	SIZE	SHEET	REV.				
8	Z191264	R.F	Sept./30/'19	H.I	ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION	SERIES No. R5	CUSTOMER COPY			
7	Z181426	K.T	Nov./01/'18	Y.S	6 MAX.	±0.2	30 OVER 120 MAX.	±0.5						
6	Z181192	K.T	Sept./12/'18	Y.S	GENERAL TOLERANCE.			TITLE MINIFLEX® 5-BFN II	SCALE 10:1	UNIT mm	I-PEX			
5	Z160717	H.A	June/24/'16	Y.S	DWG.	K.Inomae	DATE					2012/11/20		
4	Z160163	H.A	Feb./15/'16	Y.S	CHK.	J.Tateishi	DATE							
3	Z13713	K.I	Feb./08/'13	T.H	APP.	T.Harada	DATE							
REVISION RECORD					DWG. No.			20542	SIZE	A3	SHEET	1/5	REV.	8

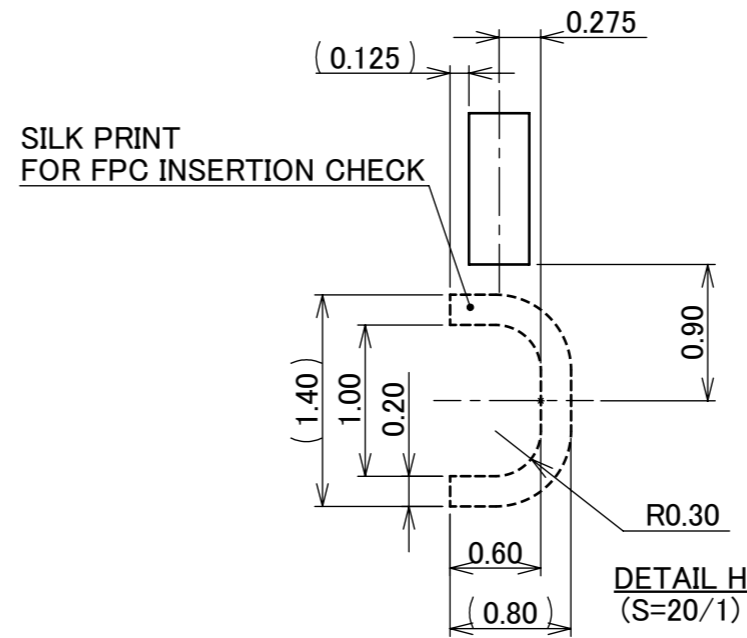
ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER CONTACT)
RATING AMPERAGE	0.5A DC (PER CONTACT) 7.0A DC (PER CONNECTOR)
OPERATING TEMPERATURE	233~398K(-40°C~125°C)
OPERATING HUMIDITY	80% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 40mohm MAX. / AFTER TEST : $\triangleleft$ 20mohm MAX.
INSULATION 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 MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL / 20TH CYCLES : 0.05N(5gf) $\times$ n MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL / AFTER TEST : 0.15N(15gf) $\times$ n MIN.
COPLANARITY	0.08 MAX.
PRODUCT SPECIFICATION	PRS-1619
TEST REPORT	TR-12124
PACKING STANDARD	300-963
INSTRUCTION MANUAL	HIM-12019
APPEARANCE CRITERIA No.	QLS-A***

※ "n" IS THE NUMBER OF PIN

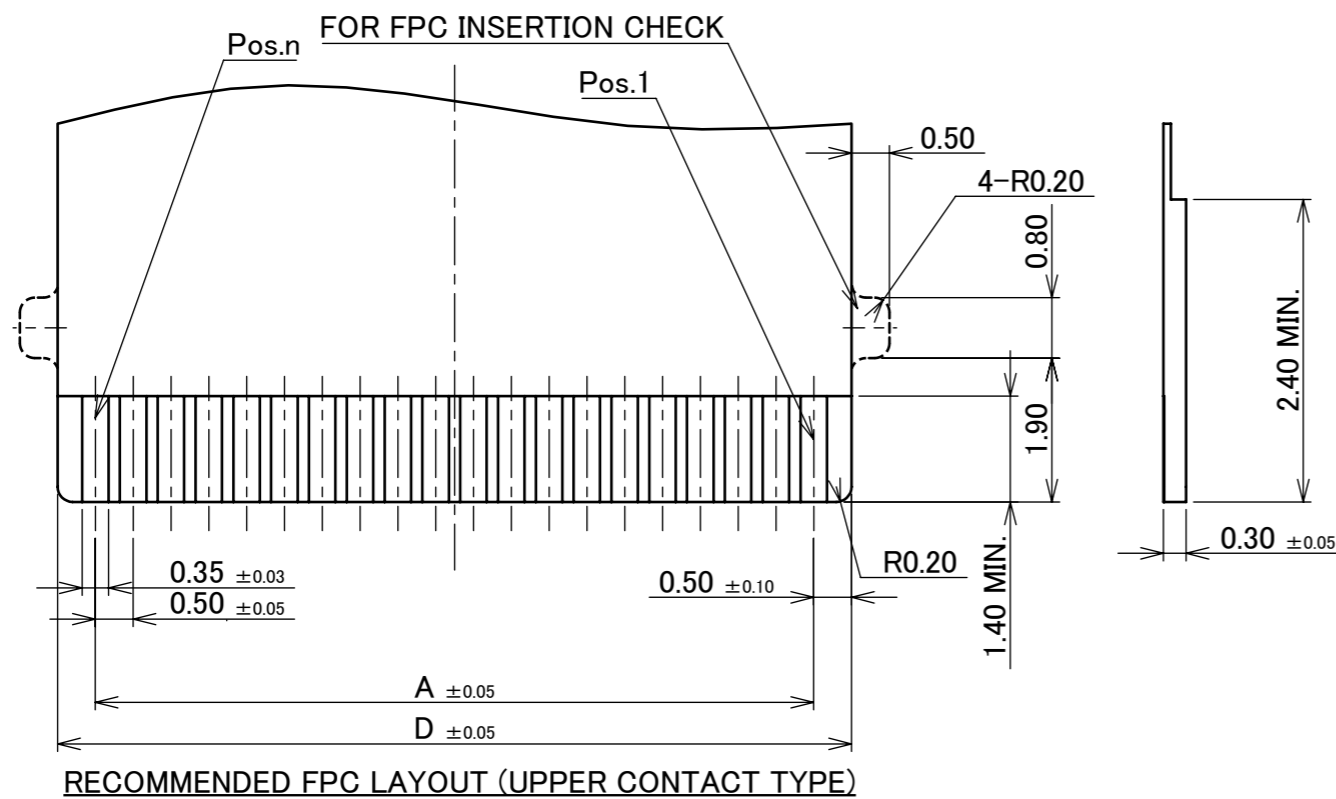
ANGLE	$\pm 2^\circ$	6 OVER 30 MAX.	$\pm 0.3$	PROJECTION 	SERIES No. R5	CUSTOMER COPY		
6 MAX.	$\pm 0.2$	30 OVER 120 MAX.	$\pm 0.5$					
GENERAL TOLERANCE.				TITLE MINIFLEX <sup>®</sup> 5-BFN II	SCALE 5:1	UNIT <b>I-PEX</b>		
DWG.	DATE							
CHK.								
APP.								
				DWG. No.	20542	SIZE A3	SHEET 2/5	REV. 8



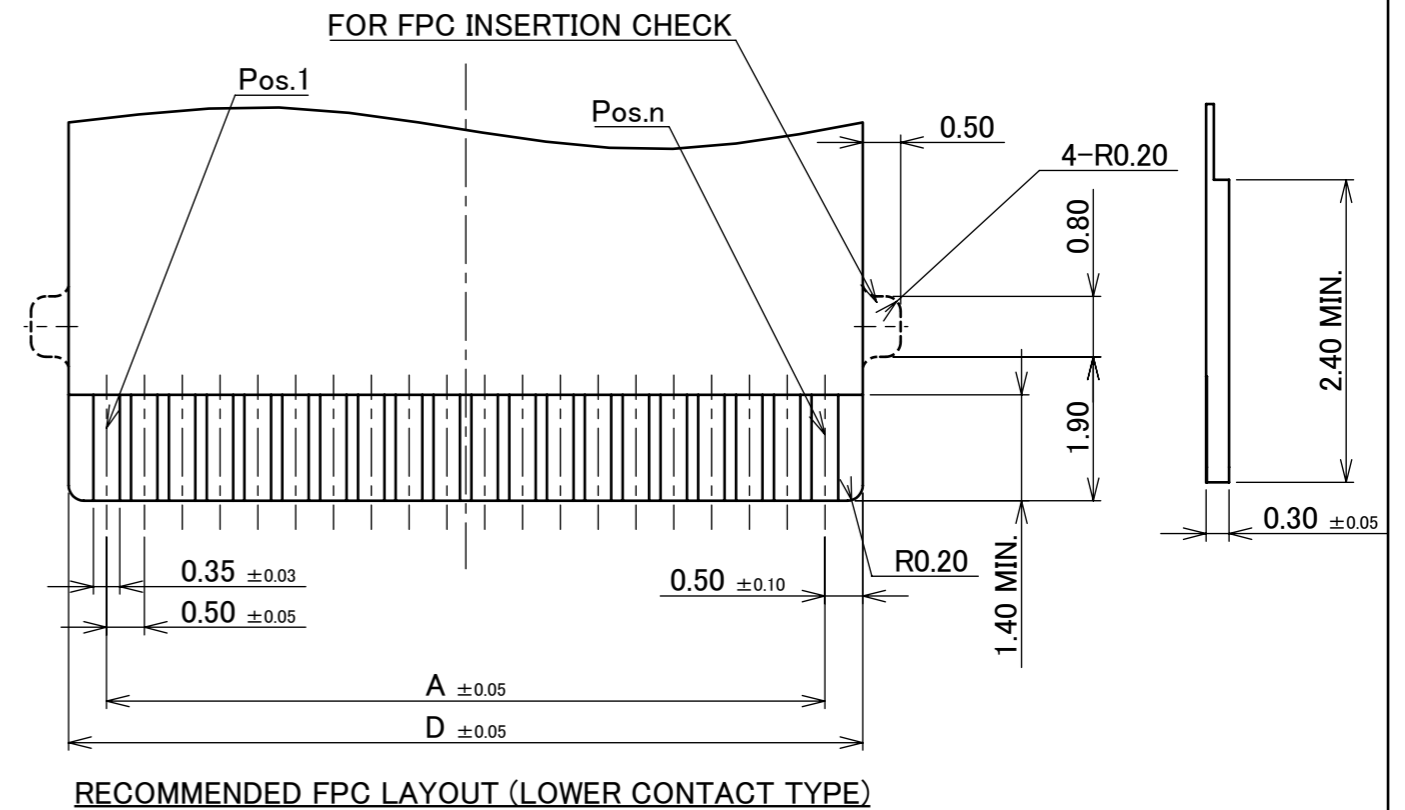
RECOMMENDED PCB LAYOUT & METAL MASK LAYOUT  
METAL MASK THICKNESS : t=0.12mm



PART No.	POS.	A	D	E
20542-004E-01	4	1.50	2.50	3.15
20542-006E-01	6	2.50	3.50	4.15
20542-008E-01	8	3.50	4.50	5.15
20542-010E-01	10	4.50	5.50	6.15
20542-012E-01	12	5.50	6.50	7.15
20542-014E-01	14	6.50	7.50	8.15
20542-016E-01	16	7.50	8.50	9.15
20542-018E-01	18	8.50	9.50	10.15
20542-020E-01	20	9.50	10.50	11.15
20542-022E-01	22	10.50	11.50	12.15
20542-024E-01	24	11.50	12.50	13.15
20542-026E-01	26	12.50	13.50	14.15
20542-028E-01	28	13.50	14.50	15.15
20542-030E-01	30	14.50	15.50	16.15



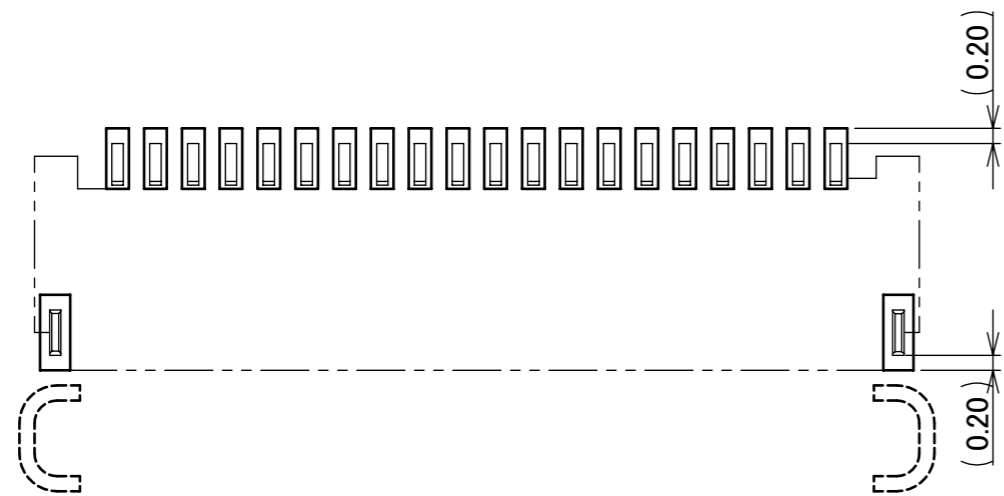
RECOMMENDED FPC LAYOUT (UPPER CONTACT TYPE)



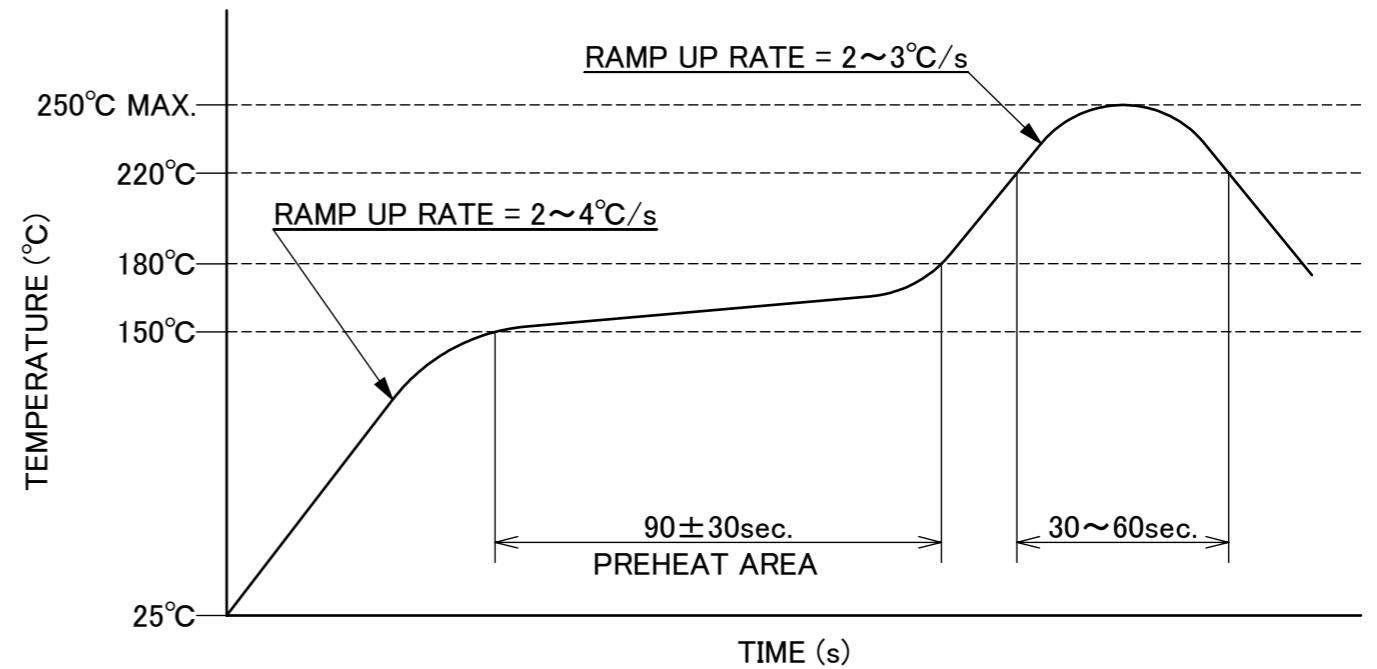
RECOMMENDED FPC LAYOUT (LOWER CONTACT TYPE)

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

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R5	CUSTOMER COPY			
	6 MAX.	±0.2	30 OVER 120 MAX.						±0.5
GENERAL TOLERANCE.				TITLE		SCALE	I-PEX		
DWG.	DATE			MINIFLEX® 5-BFN II		10:1			
CHK.						UNIT			
APP.				DWG. No.		mm	SIZE	SHEET	REV.
				20542		A3	3/5	8	



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. R5	CUSTOMER COPY				
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5							
GENERAL TOLERANCE.				TITLE	SCALE					
DWG.	DATE			MINIFLEX® 5-BFN II	10:1					
CHK.					UNIT				mm	
APP.				DWG. No.	20542				SIZE	SHEET
						A3	4/5	8		

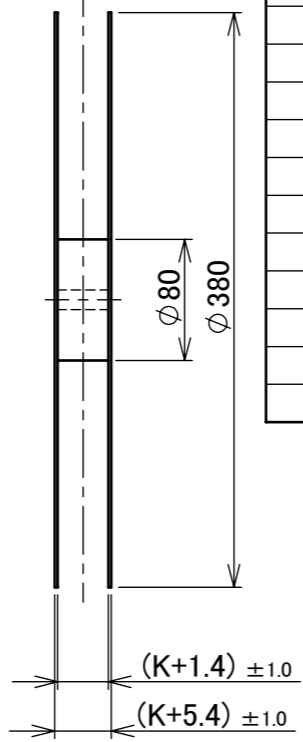
PART No.	K	L	M	N	P	Q	QTY. PER EMBOSS REEL (PIECES / REEL)	QTY. PER PACKING CARTON (REELS / CARTON)
20542-004E-01	12.0	9.5	5.5	4.0	2.5	2.0	5000 PIECES / REEL	8 REELS / CARTON ( 40000 PIECES / CARTON )
20542-006E-01				5.0	3.5	3.0		
20542-008E-01				6.0	4.5	4.0		
20542-010E-01	16.0	13.5	7.5	7.0	5.5	5.0	5000 PIECES / REEL	7 REELS / CARTON ( 35000 PIECES / CARTON )
20542-012E-01				8.0	6.5	6.0		
20542-014E-01				9.0	7.5	7.0		
20542-016E-01	24.0	21.5	11.5	10.0	8.5	8.0	5000 PIECES / REEL	5 REELS / CARTON ( 25000 PIECES / CARTON )
20542-018E-01				11.0	9.5	9.0		
20542-020E-01				12.0	10.5	10.0		
20542-022E-01				13.0	11.5	11.0		
20542-024E-01				14.0	12.5	12.0		
20542-026E-01				15.0	13.5	13.0		
20542-028E-01				16.0	14.5	14.0		
20542-030E-01				17.0	15.5	15.0		

⑧PACKING LABEL

FEED DIRECTION →

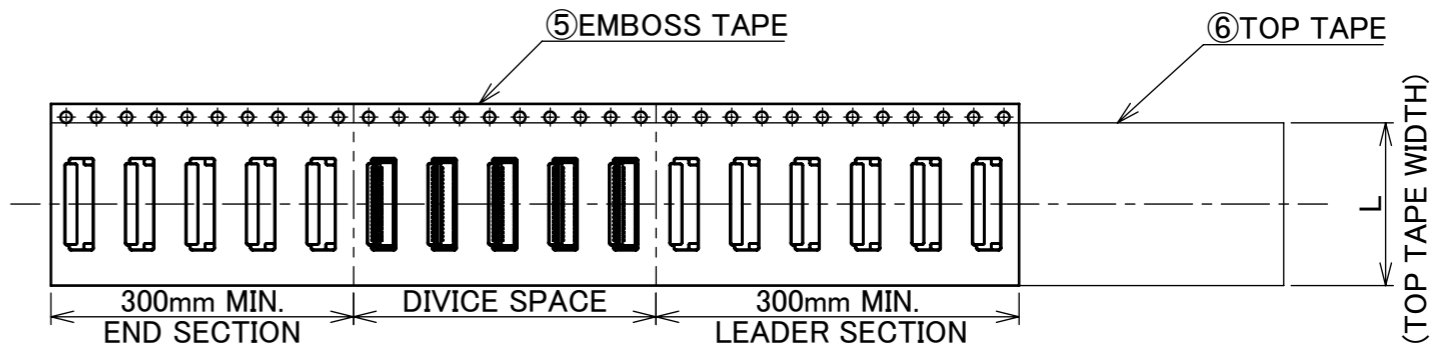
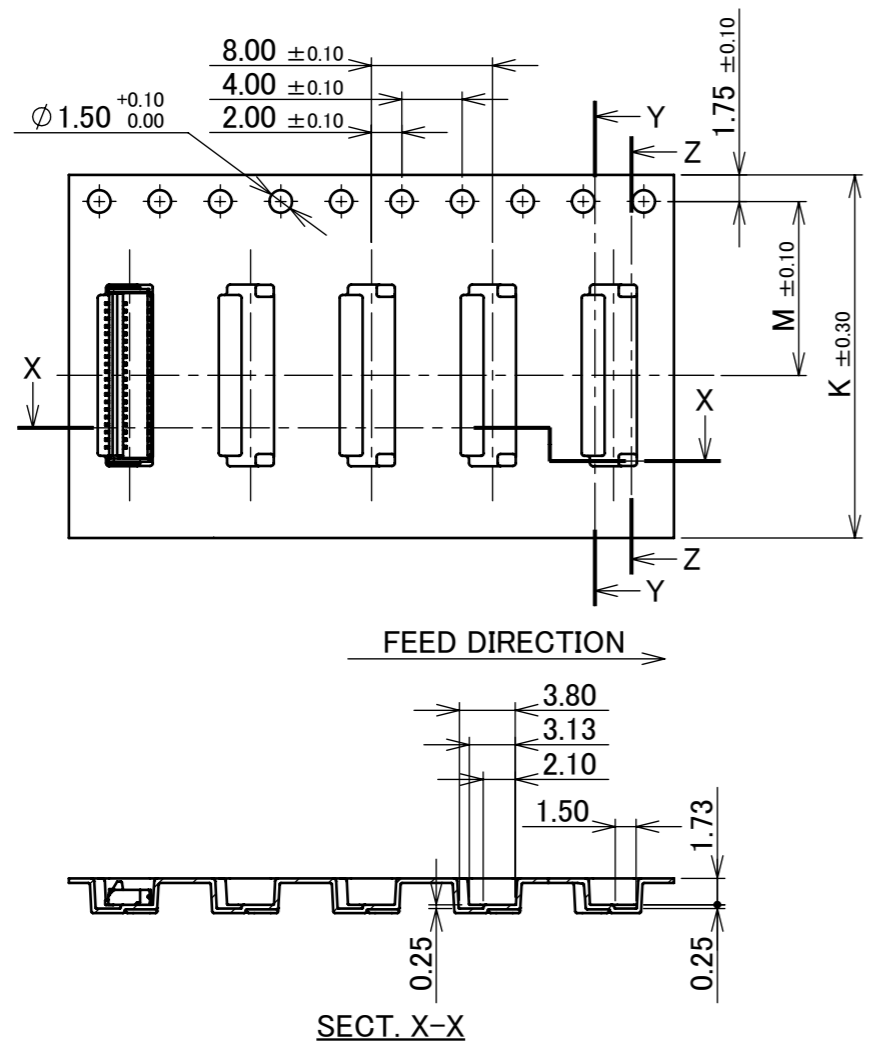
I-PEX LOGOMARK

⑦REEL



NOTES.

- TAPING SPECIFICATION FOLLOWS JIS C 0806 (IEC 60286-3).
- MAKE EMPTY SECTION OF LEADER AND END ON EACH END OF THE TAPE.
- TOP TAPE SHALL NOT STICK OUT FROM EMBOSS TAPE.
- TOP TAPE SHALL NOT COVER FEED HOLE.



NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
8	PACKING LABEL	-	-
7	REEL	PS	BLACK
6	TOP TAPE	PET t=0.062 TRANSPARENCY	ANTI-STATIC TYPE HEAT WELDING TYPE
5	EMBOSS TAPE	PS t=0.3 TRANSPARENCY	ANTI-STATIC TYPE

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R5	CUSTOMER COPY
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5			
GENERAL TOLERANCE.				TITLE	SCALE 1:5	UNIT mm
DWG.	DATE		MINIFLEX® 5-BFN II			
CHK.					SIZE A3	SHEET 5/5
APP.			DWG. No. 20542			

