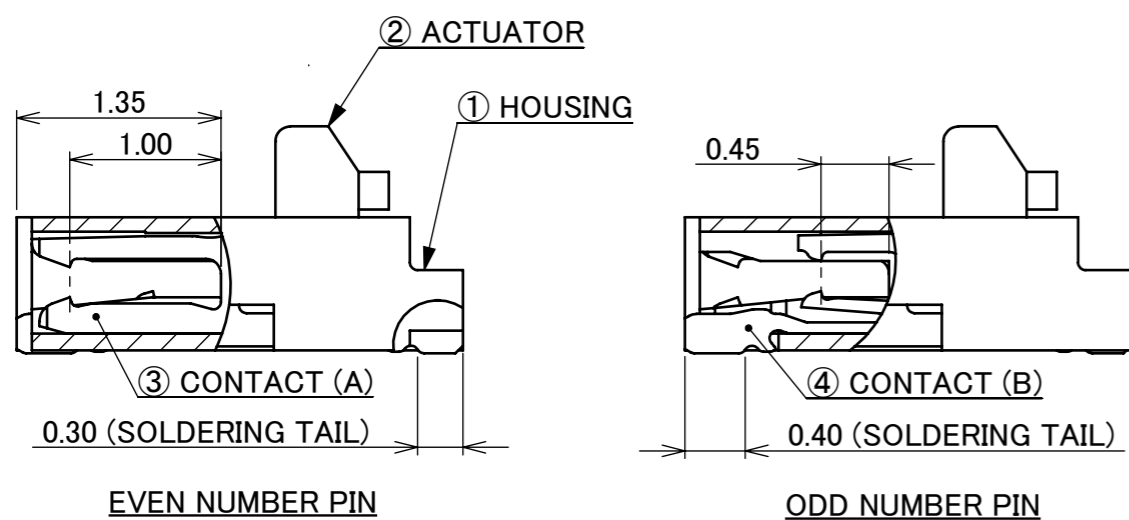


PART No.	Pos.	A	B	C	D	E
20613-007E-02	7P	3.60	1.20	1.80	2.45	2.80
20613-009E-02	9P	4.20	1.80	2.40	3.05	3.40
20613-011E-02	11P	4.80	2.40	3.00	3.65	4.00
◆20613-013E-02	13P	5.40	3.00	3.60	4.25	4.60
◆20613-015E-02	15P	6.00	3.60	4.20	4.85	5.20
◆20613-017E-02	17P	6.60	4.20	4.80	5.45	5.80
◆20613-019E-02	19P	7.20	4.80	5.40	6.05	6.40
20613-021E-02	21P	7.80	5.40	6.00	6.65	7.00
20613-023E-02	23P	8.40	6.00	6.60	7.25	7.60
◆20613-025E-02	25P	9.00	6.60	7.20	7.85	8.20
◆20613-027E-02	27P	9.60	7.20	7.80	8.45	8.80
◆20613-029E-02	29P	10.20	7.80	8.40	9.05	9.40
20613-031E-02	31P	10.80	8.40	9.00	9.65	10.00
◆20613-033E-02	33P	11.40	9.00	9.60	10.25	10.60
20613-035E-02	35P	12.00	9.60	10.20	10.85	11.20
◆20613-037E-02	37P	12.60	10.20	10.80	11.45	11.80
20613-039E-02	39P	13.20	10.80	11.40	12.05	12.40
20613-041E-02	41P	13.80	11.40	12.00	12.65	13.00
◆20613-043E-02	43P	14.40	12.00	12.60	13.25	13.60
20613-045E-02	45P	15.00	12.60	13.20	13.85	14.20
◆20613-047E-02	47P	15.60	13.20	13.80	14.45	14.80
◆20613-049E-02	49P	16.20	13.80	14.40	15.05	15.40
◆20613-051E-02	51P	16.80	14.40	15.00	15.65	16.00
◆20613-053E-02	53P	17.40	15.00	15.60	16.25	16.60
◆20613-055E-02	55P	18.00	15.60	16.20	16.85	17.20
◆20613-057E-02	57P	18.60	16.20	16.80	17.45	17.80
◆20613-059E-02	59P	19.20	16.80	17.40	18.05	18.40
◆20613-061E-02	61P	19.80	17.40	18.00	18.65	19.00
◆20613-071E-02	71P	22.80	20.40	21.00	21.65	22.00

◆MARK MEANS NOT AVAILABLE.

NOTES.
1. CONTACT POINT: TOP AND BOTTOM CONTACT

CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-14004 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.



NO.	DISCRIPTION	MATERIAL	REMARKS
5	ACTUATOR HOLDER	NICKEL SILVER	
4	CONTACT(B)	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.
3	CONTACT(A)	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

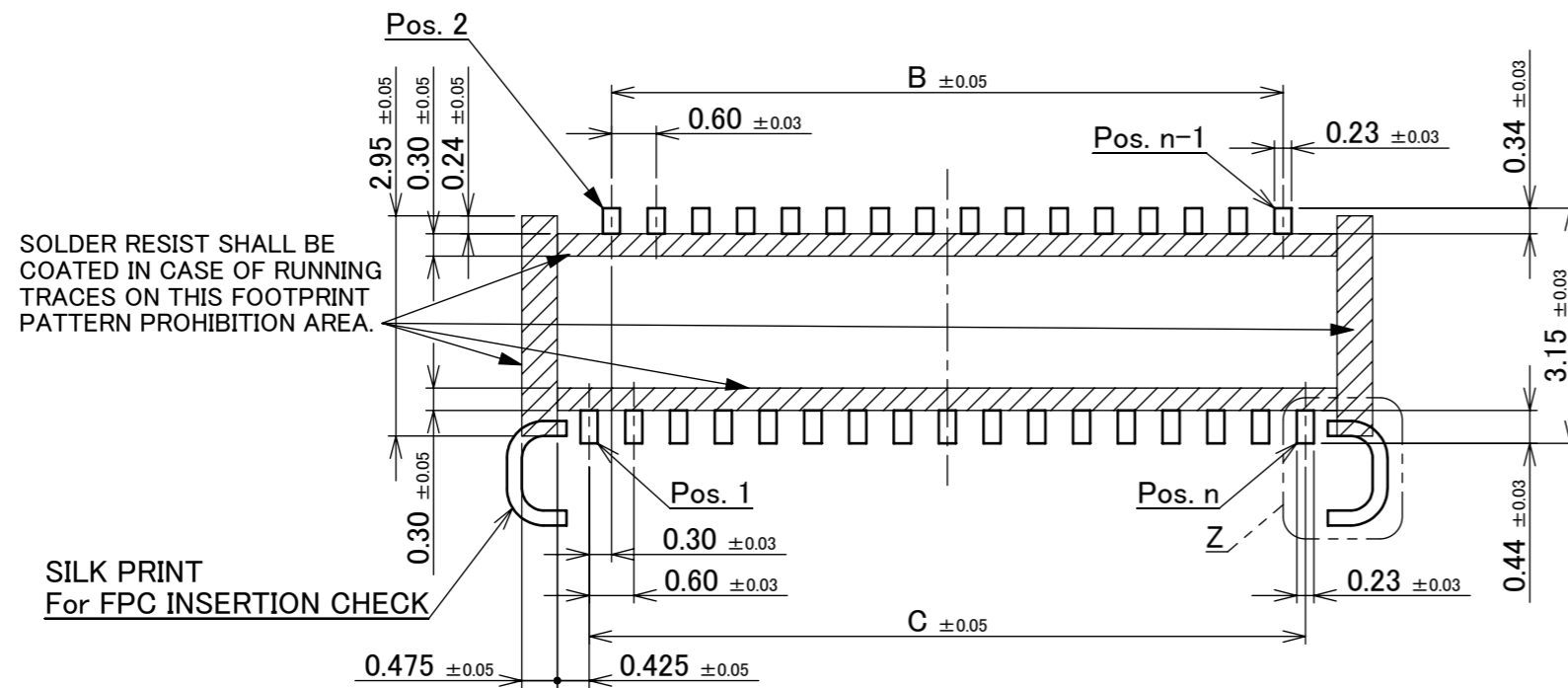
REV.	ECN	BY	DATE	APP.	DESCRIPTION	DATE	APPROVAL	PROJECTION	SERIES No.	TITLE	SCALE	UNIT	SIZE	SHEET	REV.	
12	Z200554	M.M	May./29/'20	Y.S	ANGLE	±2°	6 OVER 30 MAX.	±0.3								
11	Z191249	S.Sh	Sept./18/'19	H.I	6 MAX.	±0.2	30 OVER 120 MAX.	±0.5								
10	Z181441	M.M	Nov./05/'18	Y.S	GENERAL TOLERANCE.											
9	Z180998	M.M	Aug./21/'18	Y.S	DWG.		DATE									
8	Z161218	H.A	Oct./06/'16	Y.S	M.Muro		Nov./19/'13									
7	Z160695	M.M	Jun./21/'16	Y.S	CHK.		DATE									
					J.Tateishi		Nov./19/'13									
					APP.		DATE									
					E.Kawabe		Nov./19/'13									
REVISION RECORD																
										DWG. No.	20613	SCALE	10:1			
												UNIT	mm			
												SIZE	A3			
												SHEET	1/5	REV.	12	



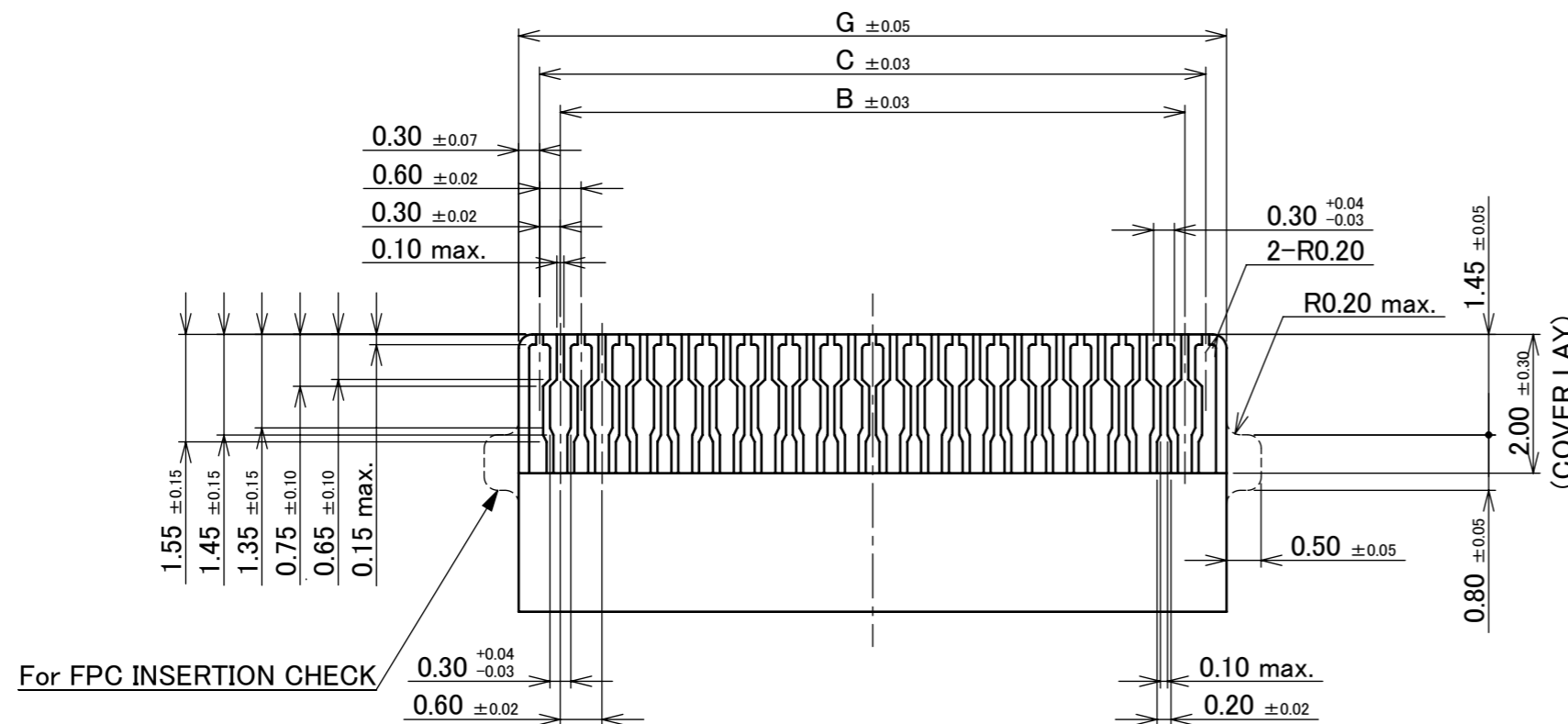
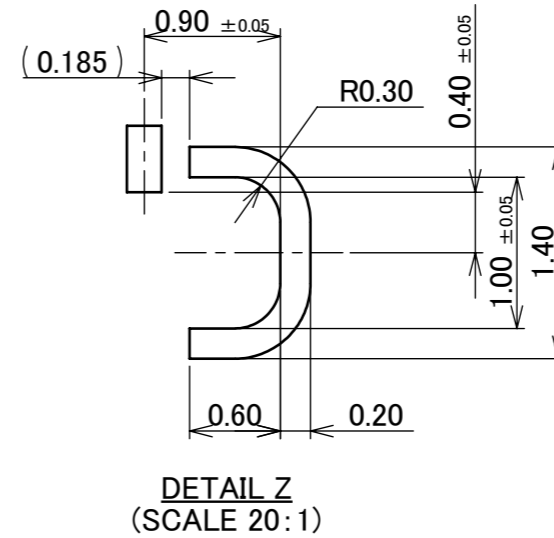
ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC/DC (PER CONTACT)
RATING AMPERAGE	0.3A DC (PER CONTACT)
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 60mohm MAX. / AFTER TEST : \triangleleft 40mohm MAX.
INSULATION RESISTANCE	100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20TH CYCLES
ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL : 0.35N(31gf) \times n MAX. / 20TH CYCLES : 0.35N(31gf) \times n MAX.
ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES)	INITIAL : 0.02N(2gf) \times n MIN. / 20TH CYCLES : 0.02N(2gf) \times n MIN.
FPC RETENTION FORCE (INITIAL / AFTER TEST)	INITIAL : 0.13N(13gf) \times n MIN. / AFTER TEST : 0.10N(10gf) \times n MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1846
TEST REPORT	TR-13104
PACKING STANDARD	PST-13054
INSTRUCTION MANUAL	HIM-14004
APPEARANCE CRITERIA No.	QLS-A***

※ "n" IS THE NUMBER OF PIN

ANGLE	$\pm 2^\circ$	6 OVER 30 MAX.	± 0.3	PROJECTION 	SERIES No. R6	CUSTOMER COPY	
	6 MAX.	± 0.2	30 OVER 120 MAX.				± 0.5
GENERAL TOLERANCE.				TITLE MINIFLEX [®] 3-BFNH	SCALE		
DWG.	DATE						UNIT mm
CHK.	DATE						
APP.	DATE						
				DWG. No.	20613	SIZE A3	
				SHEET 2/5		REV. 12	



RECOMMENDED FOOTPRINT PATTERN & METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm



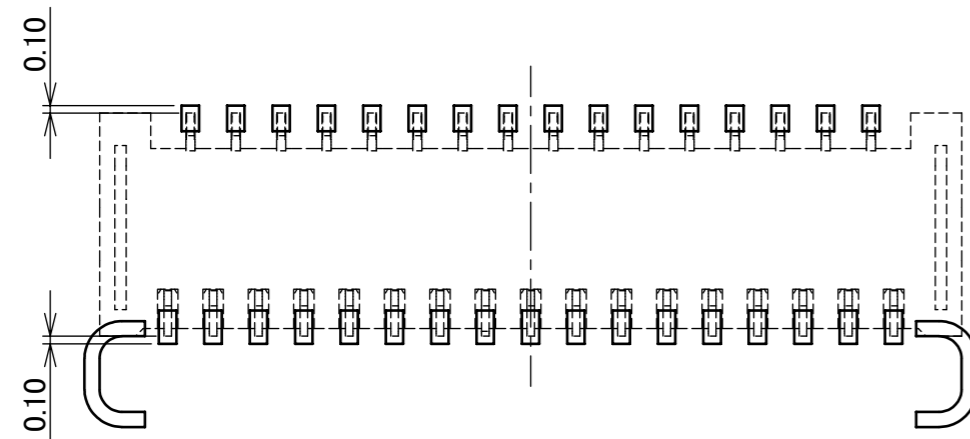
RECOMMENDED FPC LAYOUT

PART No.	Pos.	B	C	G
20613-007E-02	7P	1.20	1.80	2.40
20613-009E-02	9P	1.80	2.40	3.00
20613-011E-02	11P	2.40	3.00	3.60
◆20613-013E-02	13P	3.00	3.60	4.20
◆20613-015E-02	15P	3.60	4.20	4.80
◆20613-017E-02	17P	4.20	4.80	5.40
◆20613-019E-02	19P	4.80	5.40	6.00
20613-021E-02	21P	5.40	6.00	6.60
20613-023E-02	23P	6.00	6.60	7.20
◆20613-025E-02	25P	6.60	7.20	7.80
◆20613-027E-02	27P	7.20	7.80	8.40
◆20613-029E-02	29P	7.80	8.40	9.00
20613-031E-02	31P	8.40	9.00	9.60
◆20613-033E-02	33P	9.00	9.60	10.20
20613-035E-02	35P	9.60	10.20	10.80
◆20613-037E-02	37P	10.20	10.80	11.40
20613-039E-02	39P	10.80	11.40	12.00
20613-041E-02	41P	11.40	12.00	12.60
◆20613-043E-02	43P	12.00	12.60	13.20
20613-045E-02	45P	12.60	13.20	13.80
◆20613-047E-02	47P	13.20	13.80	14.40
◆20613-049E-02	49P	13.80	14.40	15.00
◆20613-051E-02	51P	14.40	15.00	15.60
◆20613-053E-02	53P	15.00	15.60	16.20
◆20613-055E-02	55P	15.60	16.20	16.80
◆20613-057E-02	57P	16.20	16.80	17.40
◆20613-059E-02	59P	16.80	17.40	18.00
◆20613-061E-02	61P	17.40	18.00	18.60
◆20613-071E-02	71P	20.40	21.00	21.60

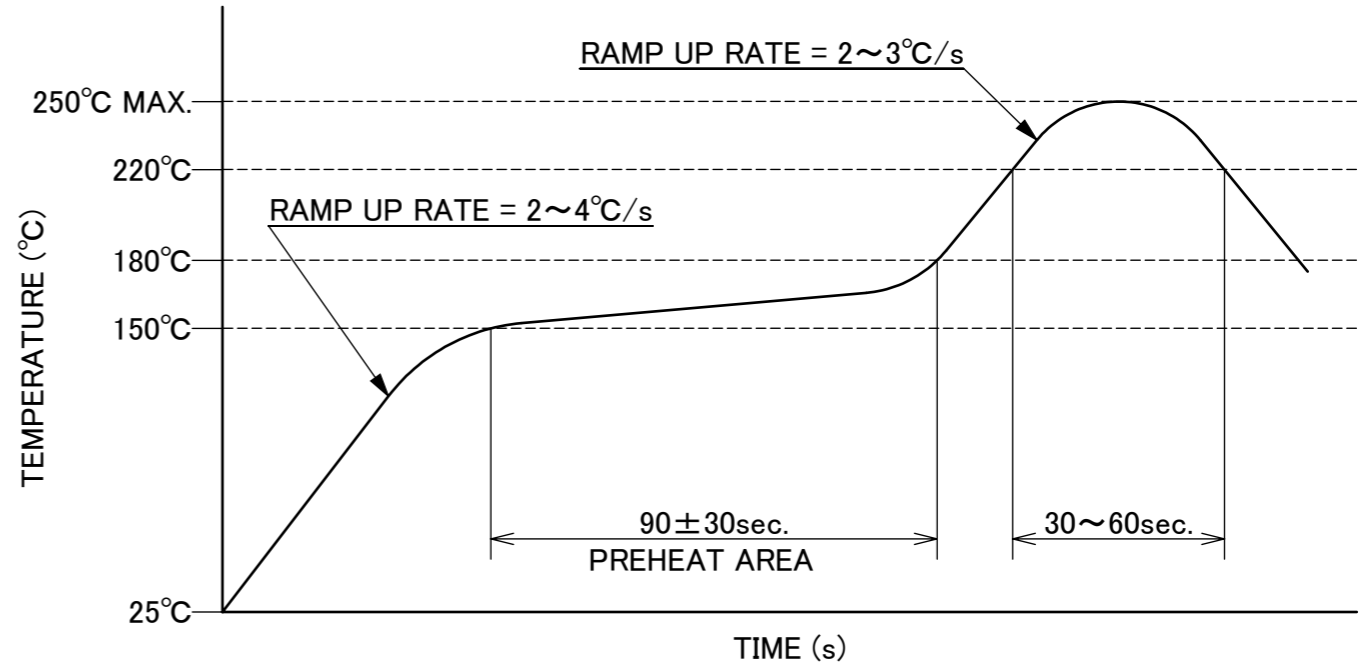
◆ MARK MEANS NOT AVAILABLE.

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION ⊕	SERIES No. R6	CUSTOMER COPY
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5			
GENERAL TOLERANCE.				TITLE MINIFLEX® 3-BFNH	SCALE 10:1	UNIT mm
DWG.	DATE		DWG. No. 20613			
CHK.	DATE					
APP.	DATE					
SIZE A3				SHEET 3/5	REV. 12	





CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

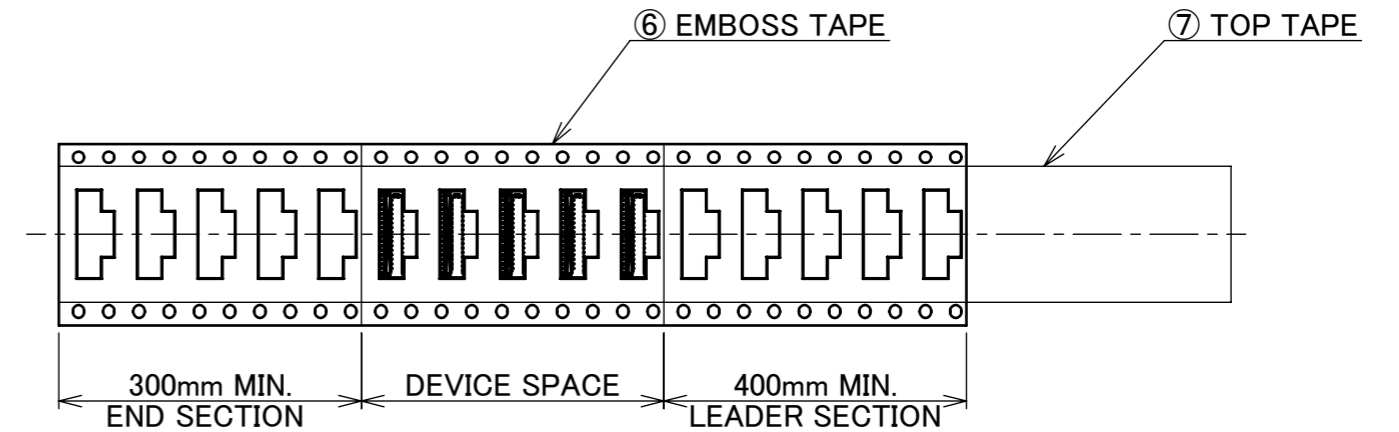
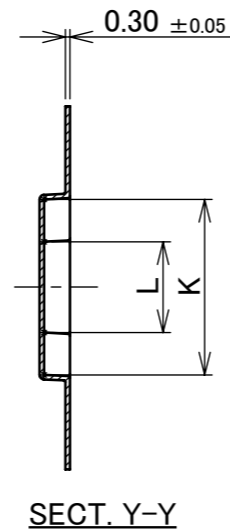
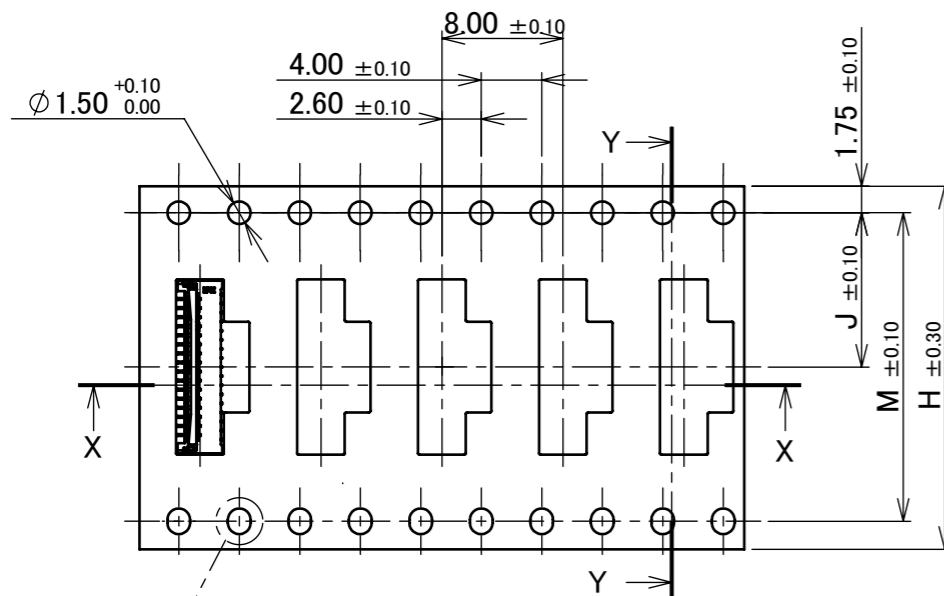
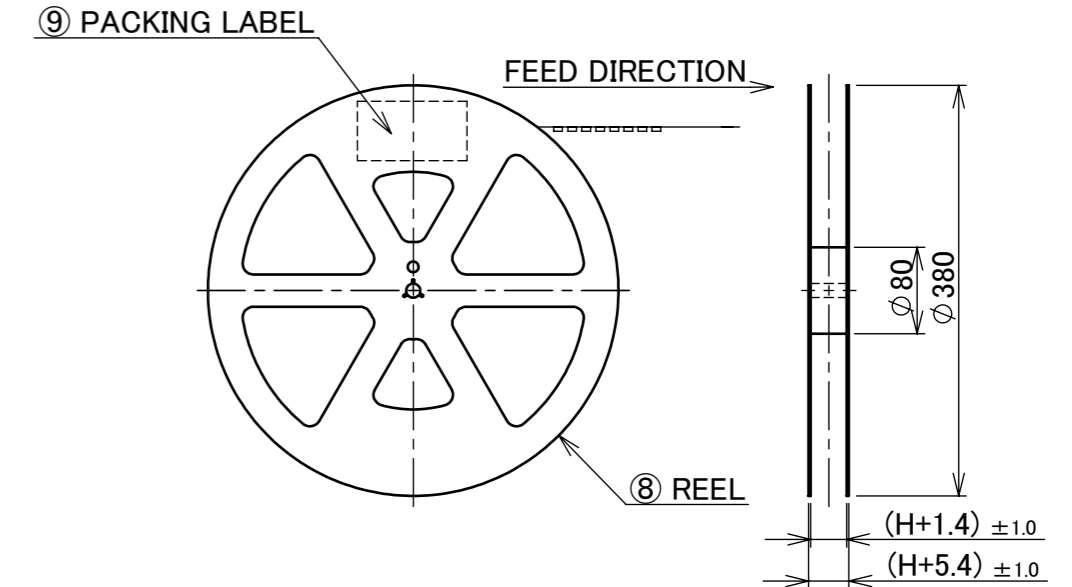
ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION 	SERIES No. R6	CUSTOMER COPY	
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5				
GENERAL TOLERANCE.				TITLE MINIFLEX® 3-BFNH	SCALE 10:1		
DWG.	DATE						UNIT mm
CHK.	DATE						SIZE A3
APP.	DATE						DWG. No. 20613
					SHEET	4/5	REV. 12

PART No.	H	J	K	L	M	QTY. PER EMOSS REEL (PIECES / REEL)	QTY. PER PACKING CARTON (REELS / CARTON)
20613-007E-02	16.00	7.50	3.80	1.50	-	5000 PIECES / REEL	7 REELS / CARTON (35000 PIECES / CARTON)
20613-009E-02			4.40				
20613-011E-02			5.00				
◆20613-013E-02			5.60	3.00			
◆20613-015E-02			6.20				
◆20613-017E-02			6.80				
◆20613-019E-02			7.40				
20613-021E-02	8.00	24.00	11.50	6.00	-	5000 PIECES / REEL	5 REELS / CARTON (25000 PIECES / CARTON)
20613-023E-02	8.60						
◆20613-025E-02	9.20						
◆20613-027E-02	9.80						
◆20613-029E-02	10.40						
20613-031E-02	11.00						
◆20613-033E-02	11.60						
20613-035E-02	12.20	32.00	14.20	8.00	28.40	5000 PIECES / REEL	4 REELS / CARTON (20000 PIECES / CARTON)
◆20613-037E-02	12.80						
20613-039E-02	13.40						
20613-041E-02	14.00						
◆20613-043E-02	14.60						
20613-045E-02	15.20						
◆20613-047E-02	15.80						
◆20613-049E-02	16.40	40.40	23.00	10.00	-	5000 PIECES / REEL	3 REELS / CARTON (15000 PIECES / CARTON)
◆20613-051E-02	17.00						
◆20613-053E-02	17.60						
◆20613-055E-02	18.20						
◆20613-057E-02	18.80						
◆20613-059E-02	19.40						
◆20613-061E-02	20.00						

◆MARK MEANS NOT AVAILABLE.

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 EMOSS TAPE.
- TOP TAPE SHALL NOT COVER FEED HOLE.



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

ANGLE	±2°	6 OVER 30 MAX.	±0.3	PROJECTION	SERIES No.	CUSTOMER COPY
6 MAX.	±0.2	30 OVER 120 MAX.	±0.5		R6	
GENERAL TOLERANCE.				TITLE	SCALE	 SHEET 5/5 REV. 12
DWG.	DATE			MINIFLEX® 3-BFNH	UNIT	
CHK.	DATE				mm	
APP.	DATE			DWG. No.	SIZE	
					20613	A3