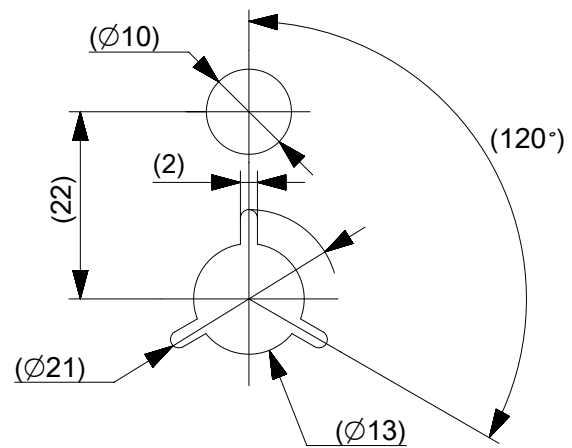
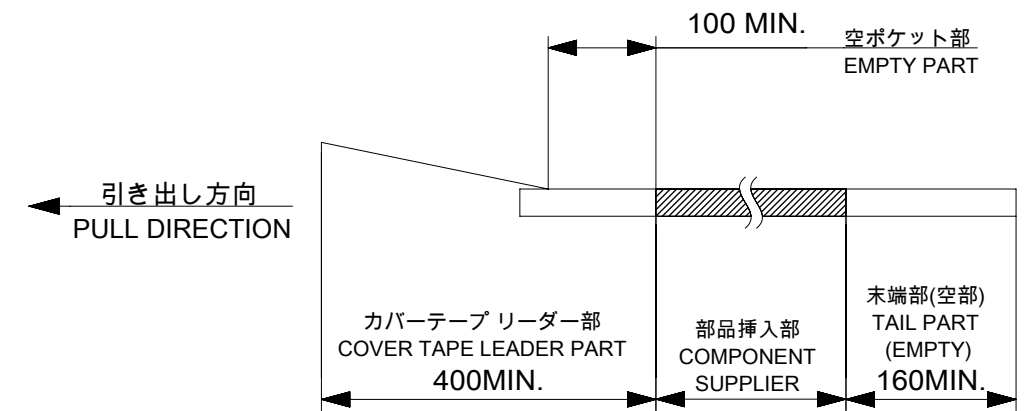


NOTES

- 製品詳細寸法については 5019511005-SDを参照下さい。
FOR DIMENSIONS OF PRODUCT, REFER TO 5019511005-SD.
- 梱包数量 : 2000個/リール
NUMBER OF CONNECTORS : 2000PIECES/REEL
- リードテープ長さ
LEAD TAPE LENGTH



DETAIL K

- カバーテープの剥離強度については、IEC60286-3に準拠。
COVER TAPE PEEL FORCE IS DEFINED BY IEC60286-3.
- 材料 MATERIAL
キャリアテープ : ポリスチレン
CARRIER TAPE : POLYSTYRENE
カバーテープ : ポリエチレンテレフタレート、ポリエチレン
COVER TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE
リール : ポリスチレン<リサイクル材を含む>
REEL : POLYSTYRENE<RECYCLE MATERIAL CONTAINED>

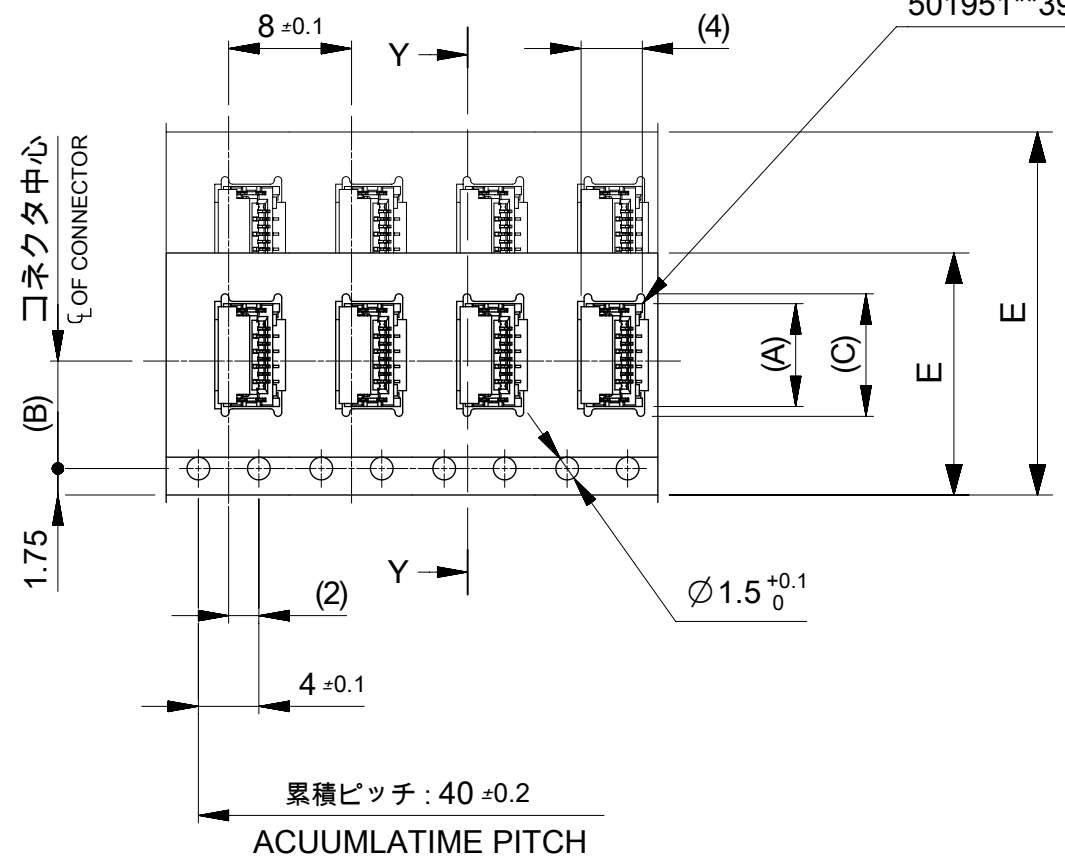
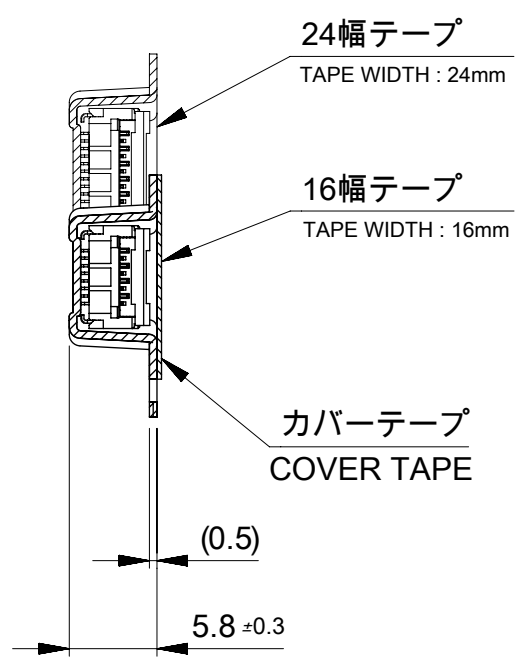
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS mm		SCALE 1:1		CURRENT REV DESC:				molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 611684					
ANGULAR TOL $\pm 1.0^\circ$				DRWN: SKAWAKAMI 2019/02/07				0.5 FPC CONN. EMBSTP PKG	
4 PLACES ± 0.2				CHK'D: TRSUZUKI 2019/02/07				EASY ON VERTICAL (LOW-HALOGEN)	
3 PLACES ± 0.2				APPR: RTAKEUCHI 2019/02/08				PRODUCT CUSTOMER DRAWING	
2 PLACES ± 0.2				INITIAL REVISION:				DOCUMENT NUMBER	
1 PLACE ± 0.25				DRWN: SKAWAKAMI 2019/01/28				5019510005-SD	
0 PLACES ± 0.3				APPR: RTAKEUCHI 2019/02/01				PSD 000 B	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
		A3-SIZE		501951		SEE TABLE		CUSTOMER	
								SHEET NUMBER	
								1 OF 3	

E

E

引き出し方向
PULL DIRECTION

CONNECTOR SERIES No.
501951**39



29.4	25.4	24	11.5	15.1	14.1	5019512230	22
				14.6	13.6	5019512130	21
				14.1	13.1	5019512030	20
				13.6	12.6	5019511930	19
				13.1	12.1	5019511830	18
				12.6	11.6	5019511730	17
				12.1	11.1	5019511630	16
				11.6	10.6	5019511530	15
				11.1	10.1	5019511430	14
				10.6	9.6	5019511330	13
				10.1	9.1	5019511230	12
21.4	17.4	16	7.5	9.6	8.6	5019511130	11
				9.1	8.1	5019511030	10
				8.6	7.6	5019510930	9
				8.1	7.1	5019510830	8
				7.6	6.6	5019510730	7
G	F	E CARRIER TAPE WIDTH	D	7.1	6.1	5019510630	6
				6.6	5.6	5019510530	5
				6.1	5.1	5019510430	4
				(A)	EMBOSSED PACKAGE ORDER NO.		CIRCUITS

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

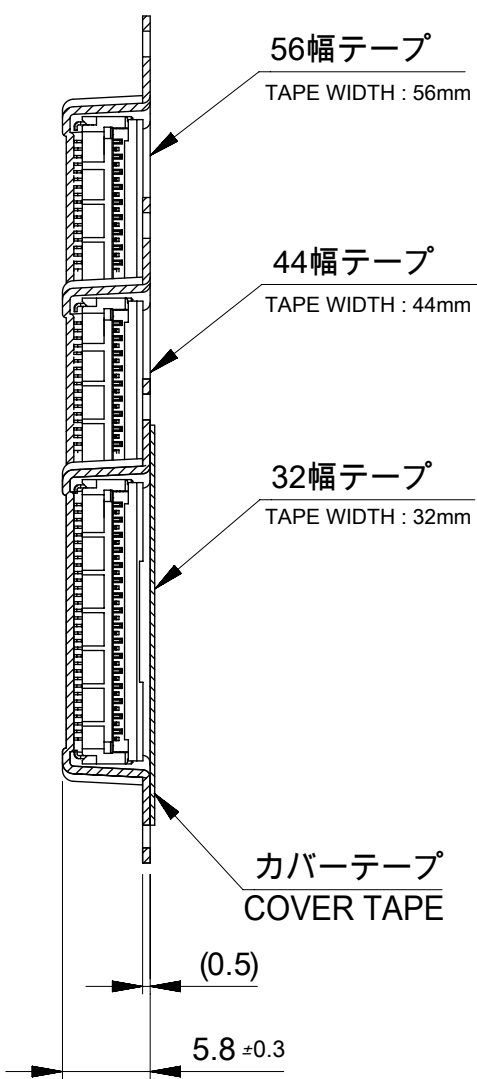
DIMENSION UNITS mm	SCALE 1:1	CURRENT REV DESC:		molex			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684					0.5 FPC CONN. EMBSTP PKG EASY ON VERTICAL (LOW-HALOGEN)
ANGULAR TOL	± 1.0 °	DRWN: SKAWAKAMI 2019/02/07		PRODUCT CUSTOMER DRAWING			
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/02/07		DOCUMENT NUMBER			
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/08		5019510005-SD			
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE	DOC PART	REVISION	
1 PLACE	± 0.25	DRWN: SKAWAKAMI 2019/01/28		PSD	000	B	
0 PLACES	± 0.3	APPR: RTAKEUCHI 2019/02/01		SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
			A3-SIZE	501951	SEE TABLE		2 OF 3

A

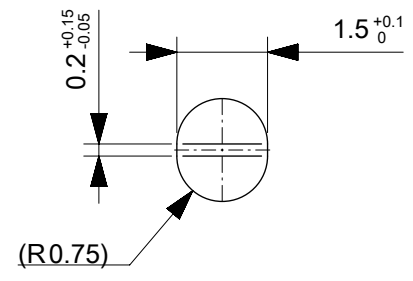
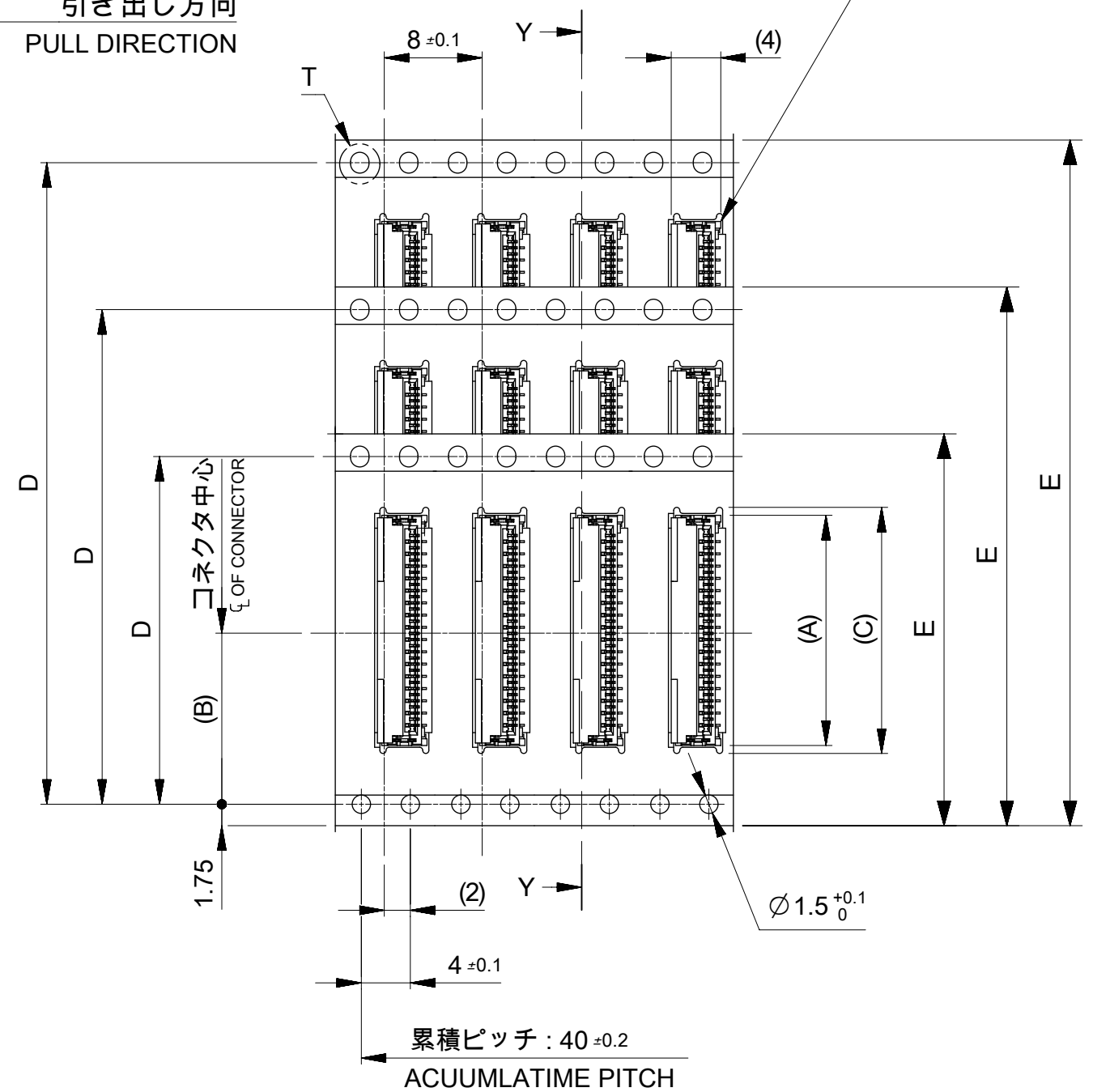
A

CONNECTOR SERIES NO.
501951**39

引き出し方向
PULL DIRECTION



SECTION Y-Y

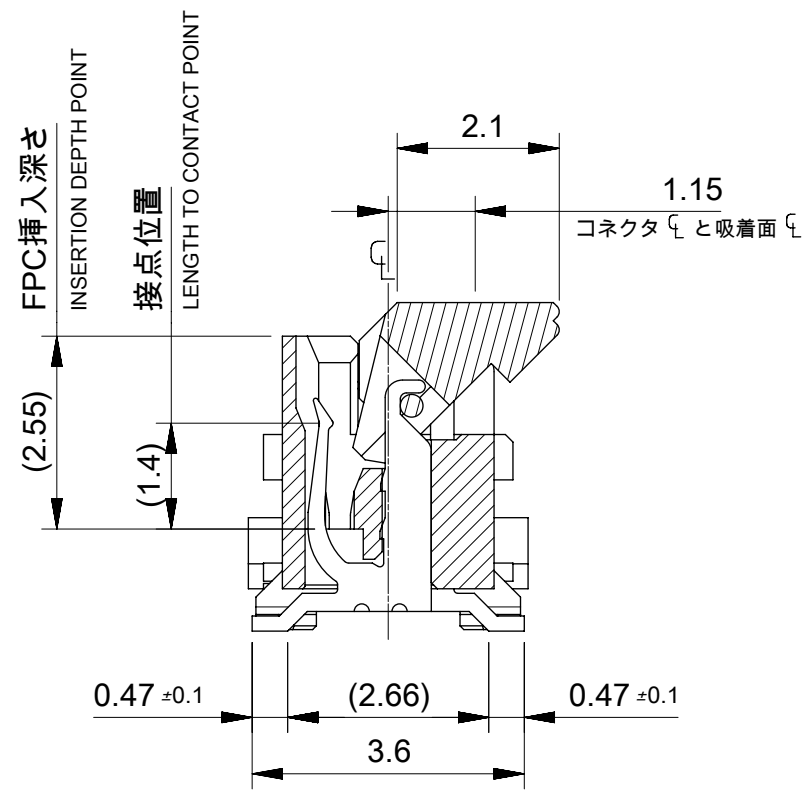
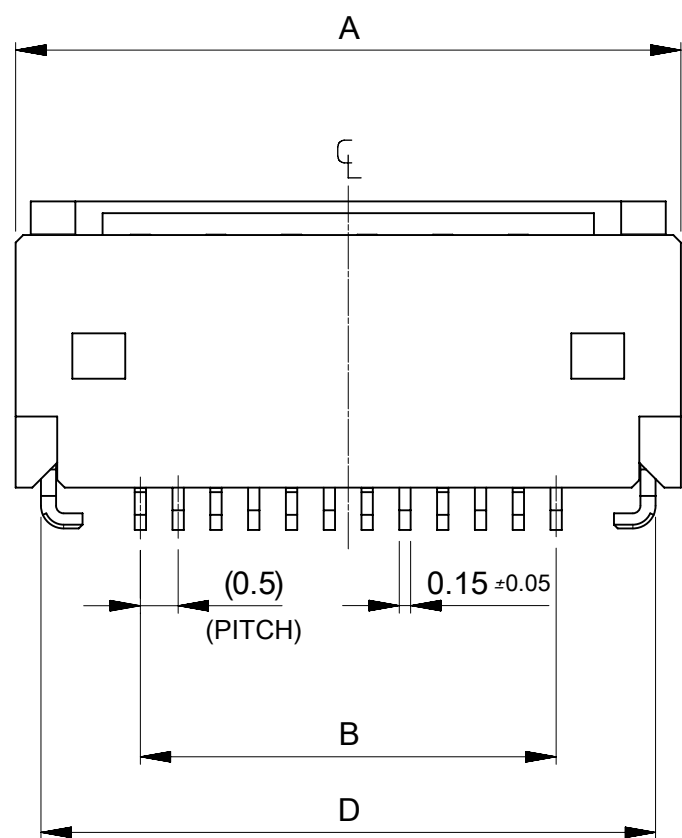
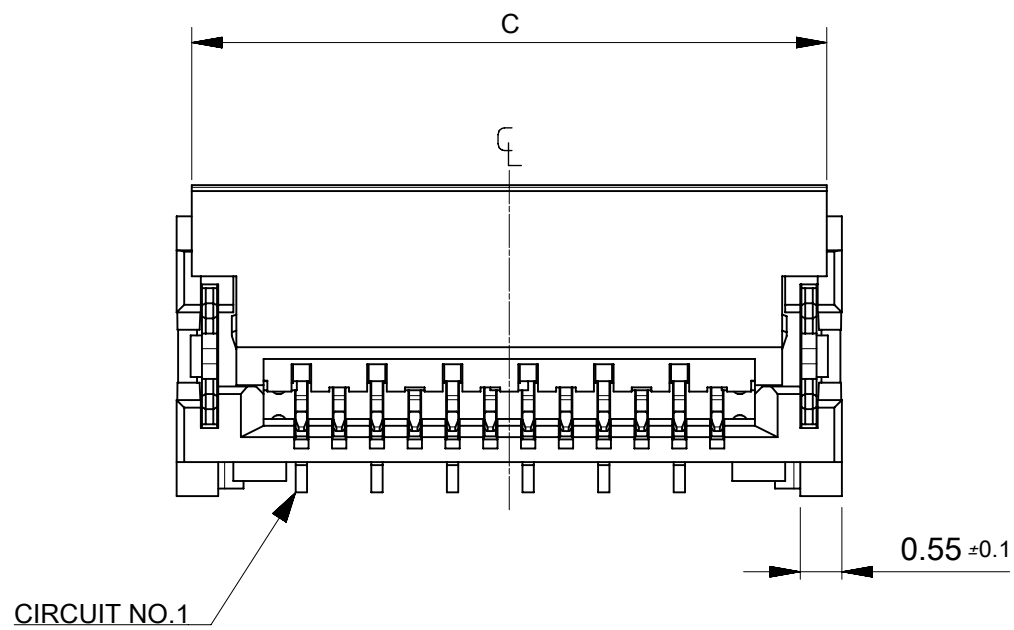


DETAIL T

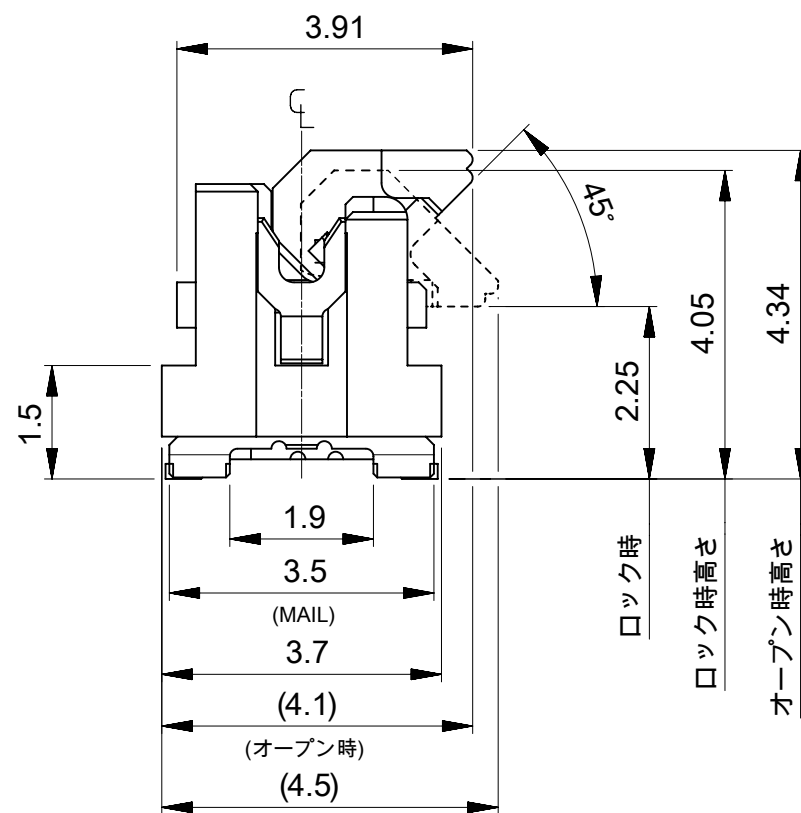
61.4	57.4	56	52.4	39.1	26.2	38.1	5019517030	70				
				34.1		33.1	5019516030	60				
49.4	45.4	44	40.4	33.6	20.2	32.6	5019515930	59				
				33.1		32.1	5019515830	58				
				32.6		31.6	5019515730	57				
				32.1		31.1	5019515630	56				
				31.6		30.6	5019515530	55				
				31.1		30.1	5019515430	54				
				30.6		29.6	5019515330	53				
				30.1		29.1	5019515230	52				
				29.6		28.6	5019515130	51				
				29.1		28.1	5019515030	50				
				28.6		27.6	5019514930	49				
				28.1		27.1	5019514830	48				
				27.6		26.6	5019514730	47				
				27.1		26.1	5019514630	46				
37.4	33.4	32	28.4	26.6	14.2	25.6	5019514530	45				
				26.1		25.1	5019514430	44				
				25.6		24.6	5019514330	43				
				25.1		24.1	5019514230	42				
				24.6		23.6	5019514130	41				
				24.1		23.1	5019514030	40				
				23.6		22.6	5019513930	39				
				23.1		22.1	5019513830	38				
				22.6		21.6	5019513730	37				
				22.1		21.1	5019513630	36				
				21.6		20.6	5019513530	35				
				21.1		20.1	5019513430	34				
				20.6		19.6	5019513330	33				
				G		F	E CARRIER TAPE WIDTH	D	(C)	(B)	(A)	EMBOSSED PACKAGE ORDER NO.
20.1	19.1	5019513230	32									
19.6	18.6	5019513130	31									
19.1	18.1	5019513030	30									
18.6	17.6	5019512930	29									
18.1	17.1	5019512830	28									
17.6	16.6	5019512730	27									
17.1	16.1	5019512630	26									
16.6	15.6	5019512530	25									
16.1	15.1	5019512430	24									
15.6	14.6	5019512330	23									

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DIMENSION UNITS mm	SCALE 1:1	CURRENT REV DESC:		molex		
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684				
ANGULAR TOL	± 1.0 °	DRWN: SKAWAKAMI	2019/02/07	PRODUCT CUSTOMER DRAWING		
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2019/02/07	DOCUMENT NUMBER		
3 PLACES	± 0.2	APPR: RTAKEUCHI	2019/02/08	5019510005-SD		
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE	DOC PART	REVISION
1 PLACE	± 0.25	DRWN: SKAWAKAMI	2019/01/28	PSD	000	B
0 PLACES	± 0.3	APPR: RTAKEUCHI	2019/02/01	SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER
			A3-SIZE	501951	SEE TABLE	3 OF 3



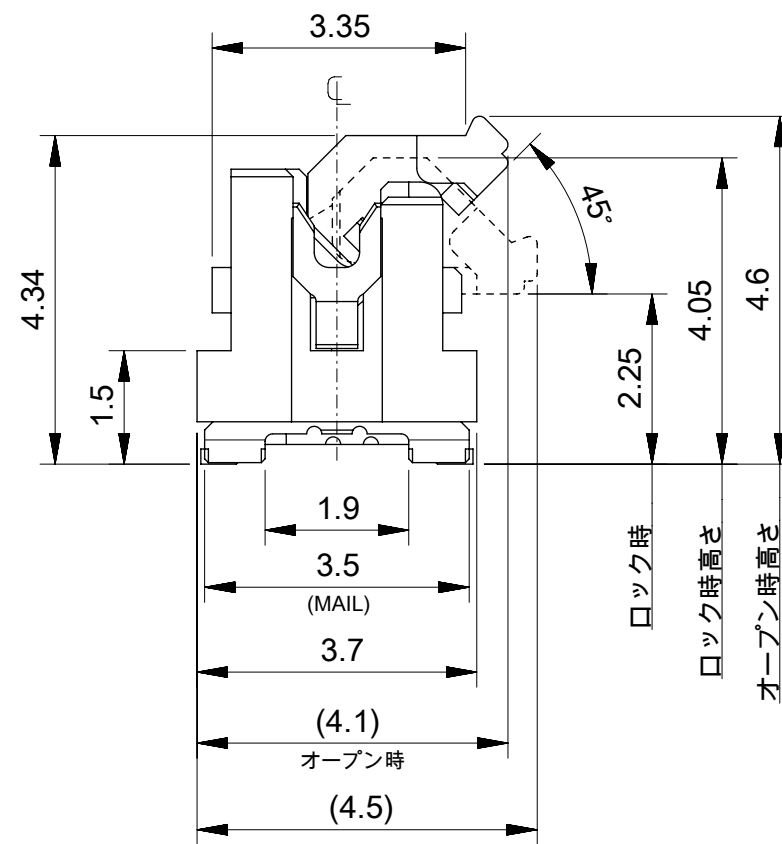
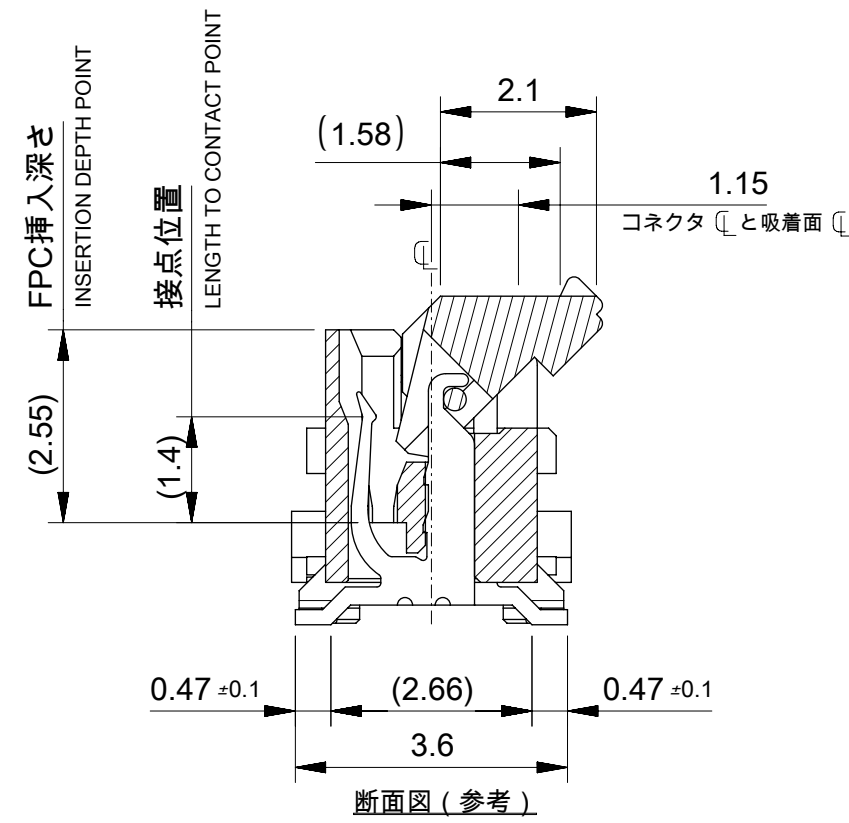
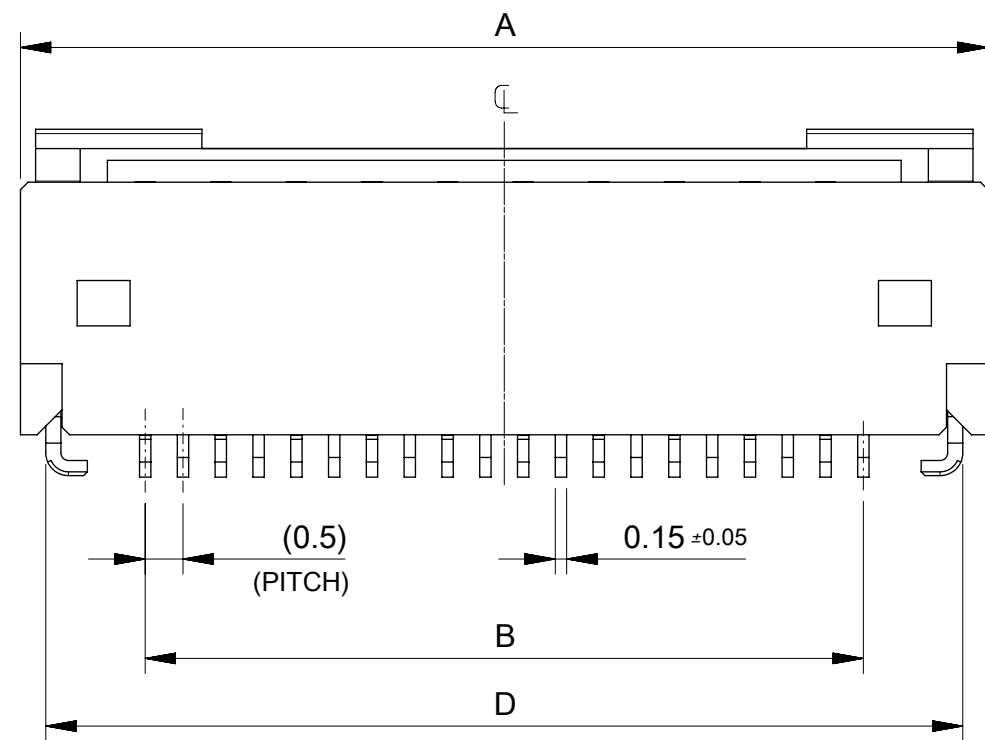
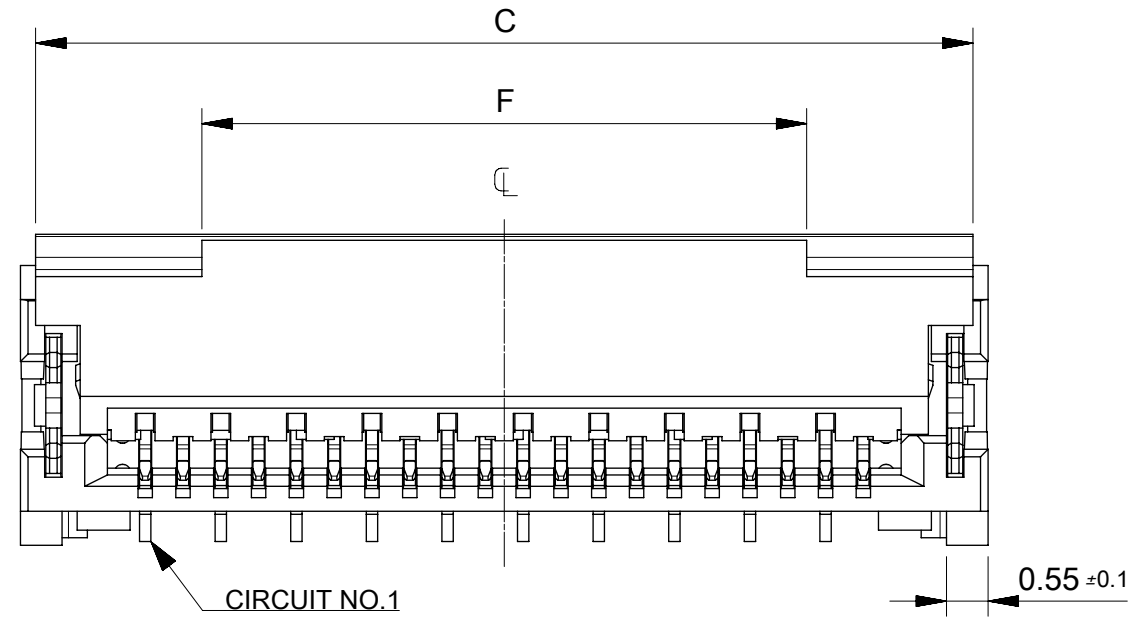
断面図 (参考)



7.7	9.1	9.4	6.5	9.8	5019511430	14
7.2	8.6	8.9	6	9.3	5019511330	13
6.7	8.1	8.4	5.5	8.8	5019511230	12
6.2	7.6	7.9	5	8.3	5019511130	11
5.7	7.1	7.4	4.5	7.8	5019511030	10
5.2	6.6	6.9	4	7.3	5019510930	9
4.7	6.1	6.4	3.5	6.8	5019510830	8
4.2	5.6	5.9	3	6.3	5019510730	7
3.7	5.1	5.4	2.5	5.8	5019510630	6
3.2	4.6	4.9	2	5.3	5019510530	5
2.7	4.1	4.4	1.5	4.8	5019510430	4
E	D	C	B	A	EMBOSSED TAPE ORDER NO.	CIRCUITS

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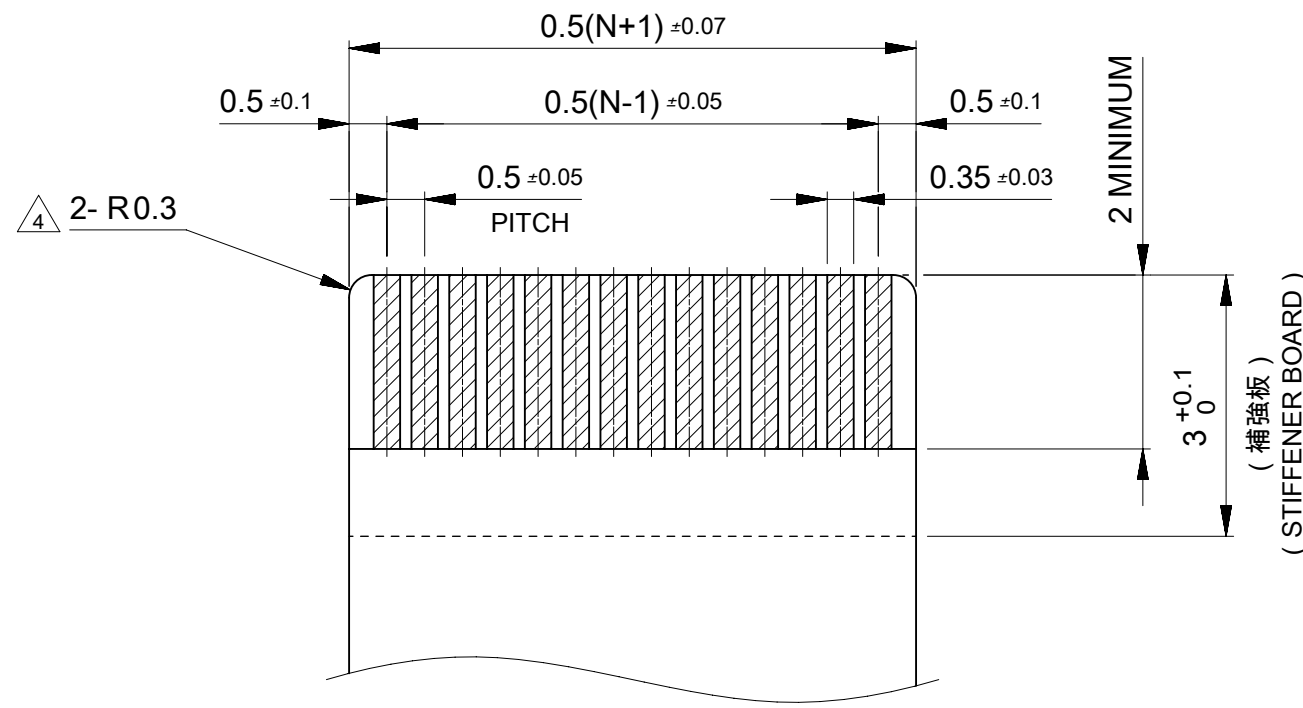
DIMENSION UNITS	SCALE	CURRENT REV DESC:					
mm	10:1						
GENERAL TOLERANCES (UNLESS SPECIFIED)		molex 0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN) PRODUCT CUSTOMER DRAWING					
ANGULAR TOL	± 1.0°						
4 PLACES	± 0.2						
3 PLACES	± 0.2						
2 PLACES	± 0.2						
1 PLACE	± 0.2	INITIAL REVISION:					
0 PLACES	± 0.2	DRWN: SKAWAKAMI 2018/11/26					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
			A3-SIZE	501951	SEE CHART		1 OF 4



35.7	37.1	37.4	34.5	37.8	5019517030	70	
30.7	32.1	32.4	29.5	32.8	5019516030	60	
30.2	31.6	31.9	29	32.3	5019515930	59	
29.7	31.1	31.4	28.5	31.8	5019515830	58	
29.2	30.6	30.9	28	31.3	5019515730	57	
28.7	30.1	30.4	27.5	30.8	5019515630	56	
28.2	29.6	29.9	27	30.3	5019515530	55	
27.7	29.1	29.4	26.5	29.8	5019515430	54	
27.2	28.6	28.9	26	29.3	5019515330	53	
26.7	28.1	28.4	25.5	28.8	5019515230	52	
26.2	27.6	27.9	25	28.3	5019515130	51	
25.7	27.1	27.4	24.5	27.8	5019515030	50	
25.2	26.6	26.9	24	27.3	5019514930	49	
24.7	26.1	26.4	23.5	26.8	5019514830	48	
24.2	25.6	25.9	23	26.3	5019514730	47	
23.7	25.1	25.4	22.5	25.8	5019514630	46	
23.2	24.6	24.9	22	25.3	5019514530	45	
22.7	24.1	24.4	21.5	24.8	5019514430	44	
22.2	23.6	23.9	21	24.3	5019514330	43	
21.7	23.1	23.4	20.5	23.8	5019514230	42	
21.2	22.6	22.9	20	23.3	5019514130	41	
20.7	22.1	22.4	19.5	22.8	5019514030	40	
20.2	21.6	21.9	19	22.3	5019513930	39	
19.7	21.1	21.4	18.5	21.8	5019513830	38	
19.2	20.6	20.9	18	21.3	5019513730	37	
18.7	20.1	20.4	17.5	20.8	5019513630	36	
18.2	19.6	19.9	17	20.3	5019513530	35	
17.7	19.1	19.4	16.5	19.8	5019513430	34	
17.2	18.6	18.9	16	19.3	5019513330	33	
16.7	18.1	18.4	15.5	18.8	5019513230	32	
16.2	17.6	17.9	15	18.3	5019513130	31	
15.7	17.1	17.4	14.5	17.8	5019513030	30	
15.2	16.6	16.9	14	17.3	5019512930	29	
14.7	16.1	16.4	13.5	16.8	5019512830	28	
14.2	15.6	15.9	13	16.3	5019512730	27	
13.7	15.1	15.4	12.5	15.8	5019512630	26	
13.2	14.6	14.9	12	15.3	5019512530	25	
12.7	14.1	14.4	11.5	14.8	5019512430	24	
12.2	13.6	13.9	11	14.3	5019512330	23	
11.7	13.1	13.4	10.5	13.8	5019512230	22	
11.2	12.6	12.9	10	13.3	5019512130	21	
10.7	12.1	12.4	9.5	12.8	5019512030	20	
10.2	11.6	11.9	9	12.3	5019511930	19	
9.7	11.1	11.4	8.5	11.8	5019511830	18	
9.2	10.6	10.9	8	11.3	5019511730	17	
8.7	10.1	10.4	7.5	10.8	5019511630	16	
8.2	9.6	9.9	7	10.3	5019511530	15	
F	E	D	C	B	A	EMBOSSED PACKAGE ORDER NO.	CIRCUITS

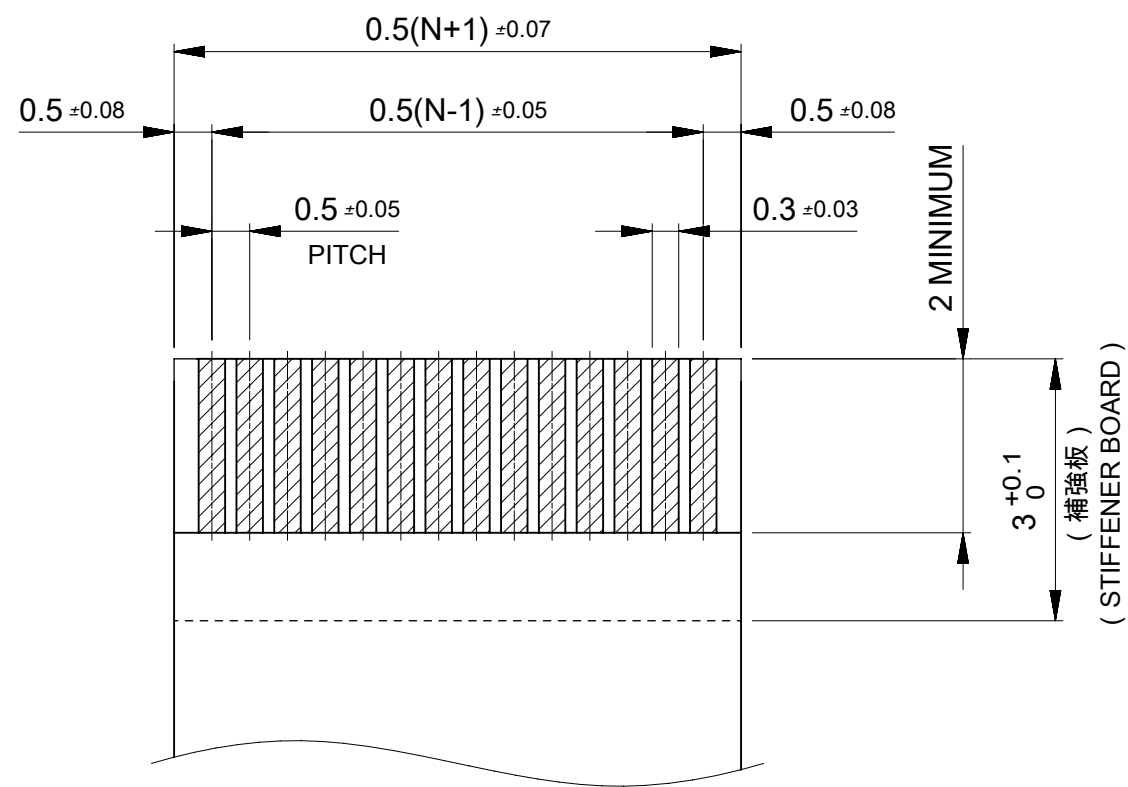
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE	CURRENT REV DESC:		molex
mm	10:1			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI	2019/02/07	
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2019/02/07	PRODUCT CUSTOMER DRAWING
3 PLACES	± 0.2	APPR: RTAKEUCHI	2019/02/08	
2 PLACES	± 0.2	INITIAL REVISION:		DOCUMENT NUMBER
1 PLACE	± 0.2	DRWN: SKAWAKAMI	2018/11/26	5019511005-SD
0 PLACES	± 0.2	APPR: RTAKEUCHI	2019/02/01	DOC TYPE
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	DOC PART
			A3-SIZE	000
		SERIES	MATERIAL NUMBER	REVISION
		501951	SEE CHART	B
		CUSTOMER	SHEET NUMBER	
			2 OF 4	



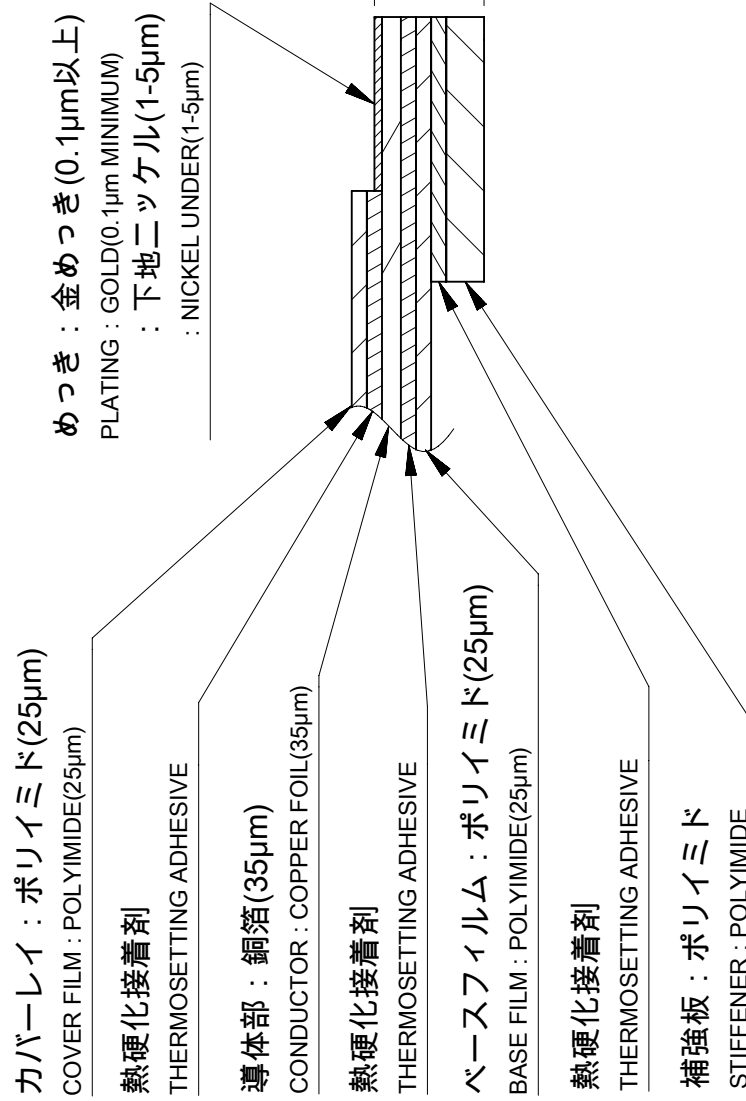
適合FPC推奨寸法
 APPLICABLE FPC
 RECOMMENDED DIMENSION
 (仕上がり厚さ : 0.3±0.05)
 (THICKNESS : 0.3±0.05)

N : 極数
 N : CIRCUITS

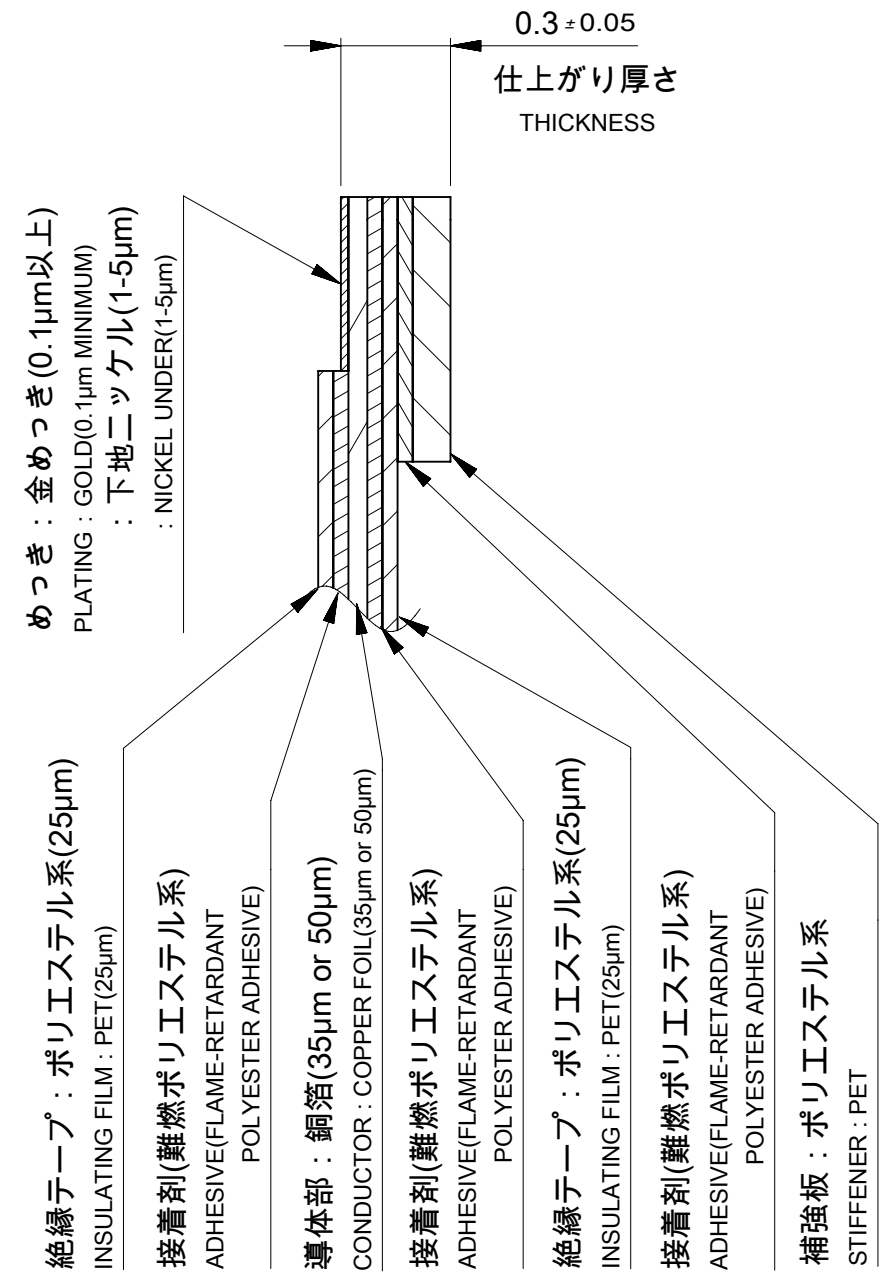


適合FFC推奨寸法
 APPLICABLE FFC
 RECOMMENDED DIMENSION
 (仕上がり厚さ : 0.3±0.05)
 (THICKNESS : 0.3±0.05)

N : 極数
 N : CIRCUITS



FPC構成推奨仕様
 STRUCTURE OF FPC

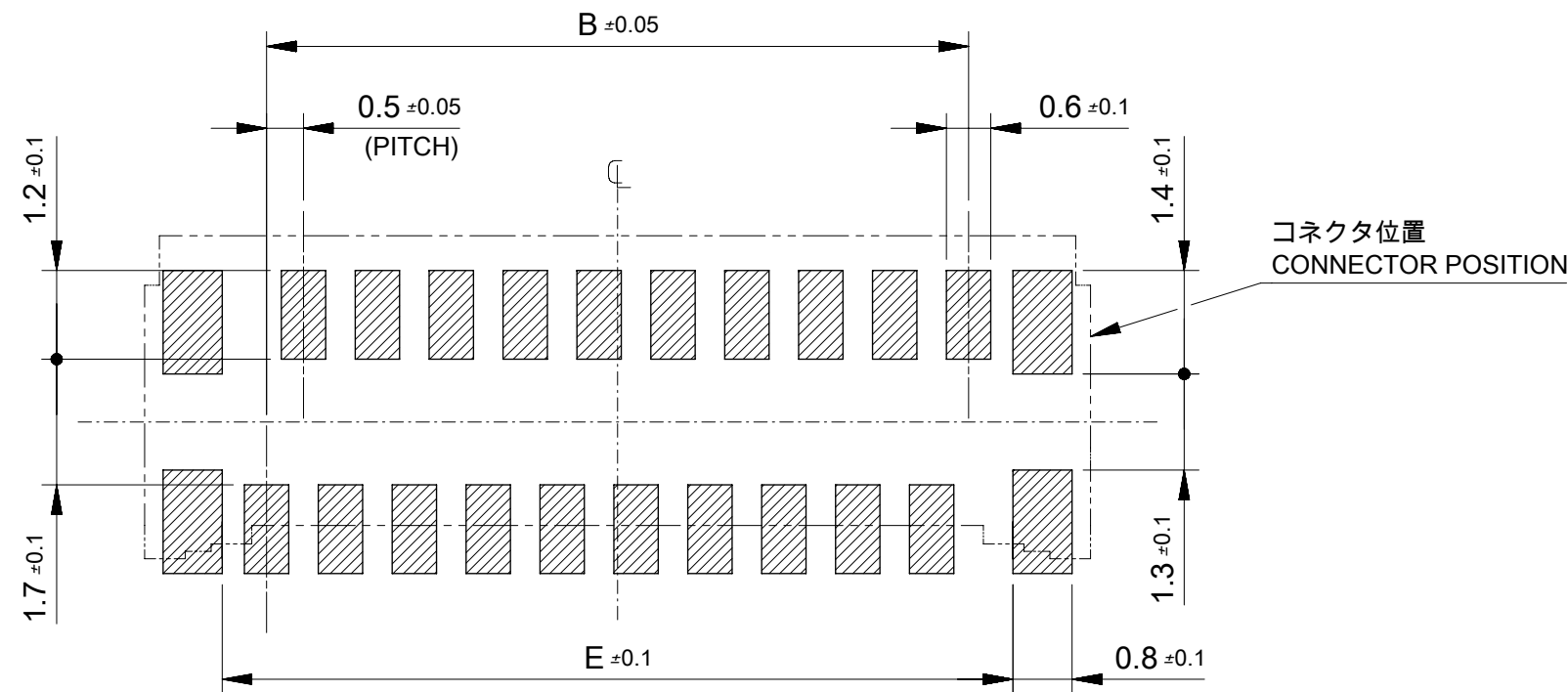


FFC構成推奨仕様
 STRUCTURE OF FFC

めっき : 金めっき (0.1µm以上)
 PLATING : GOLD (0.1µm MINIMUM)
 : 下地ニッケル (1-5µm)
 : NICKEL UNDER (1-5µm)

めっき : 金めっき (0.1µm以上)
 PLATING : GOLD (0.1µm MINIMUM)
 : 下地ニッケル (1-5µm)
 : NICKEL UNDER (1-5µm)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS		SCALE		CURRENT REV DESC:				molex	
mm		10:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL		± 1.0°		EC NO: 611684		2019/02/07		PRODUCT CUSTOMER DRAWING	
4 PLACES		± 0.2		DRWN: SKAWAKAMI		2019/02/07			
3 PLACES		± 0.2		CHK'D: TRSUZUKI		2019/02/07		DOCUMENT NUMBER	
2 PLACES		± 0.2		APPR: RTAKEUCHI		2019/02/08			
1 PLACE		± 0.2		INITIAL REVISION:		2018/11/26		5019511005-SD	
0 PLACES		± 0.2		DRWN: SKAWAKAMI		2019/02/01			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
		A3-SIZE		501951		SEE CHART		CUSTOMER	
								SHEET NUMBER	
								3 OF 4	



参考基板レイアウト
RECOMMENDED P.C.BOARD
PATTERN DIMENSION(REF.)
(マウント面)
(MOUNTING SIDE)

マスク厚 : 100μm
マスク開口率 : 100%
SCREEN THICKNESS : 100μm
SCREEN OPEN RATIO : 100%

注記 NOTES:

1. 使用材料 MATERIAL
ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)
HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)
アクチュエータ : ポリアミド, ガラス充填, UL94V-0(黒)
ACTUATOR : POLYAMIDE, GLASS FILLED, UL94V-0 (BLACK)
ターミナル : りん青銅(t=0.15)
TERMINAL : PHOSPHOR BRONZE
金具 : りん青銅(t=0.2)
FITTING NAIL : PHOSPHOR BRONZE

2. めっき仕様 PLATING
ターミナル TERMINAL
コンタクト部 : 部分金めっき(0.1μm以上)
テール部 : 部分金めっき
下地 : ニッケルめっき(1.0μm以上)
CONTACT AREA : SEPARATED GOLD PLATING (0.1 MICROMETER MINIMUM)
SOLDER TAIL AREA : SEPARATED GOLD PLATING
UNDERPLATE : NICKEL OVERALL
金具 FITTING NAIL
ニッケル下地錫めっき
錫めっき(1.0μm以上)
ニッケルめっき(1.0μm以上)
TIN(Sn) OVER NICKEL(Ni) PLATING.
TIN PLATING (1.0 MICROMETER MINIMUM)
NICKEL PLATING (1.0 MICROMETER MINIMUM)

3. テールと金具を併せた平坦度は 0.1ミリメートル以下(リフロー前)
TAILS AND NAILS COPLANARITY TO BE 0.1 MAX. (BEFORE REFLOW)

4 R0.3は、FPC導体部にかからないこと。
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

FPC/FFCについて ABOUT FPC/FFC

打ち抜き方向は導体側から補強板側を推奨します。
導体部については軟箔銅35μmまたは50μmを推奨します。
FFCに規定された定格温度がFFC単体前提である場合が御座います。
コネクタと組み合わせての実使用において、接着層が劣化するなどの信頼性を満足できないケースを回避するため、実機での評価/確認をお願い致します。
RECOMMENDED PUNCHING DIRECTION: FROM CONDUCTOR SIDE TO STIFFENER SIDE
RECOMMENDED CONDUCTOR SPEC: SOFT COPPER FOIL
RECOMMENDED CONDUCTOR THICKNESS: 35 MICROMETER OR 50 MICROMETER
NOTE: WHEN ACTUALLY USING IT WITH CONNECTOR, PLEASE DO THE EVALUATION AND THE CONFIRMATION WITH AN ACTUAL EQUIPMENT TO EVADE THE CASE WHERE RELIABILITY CANNOT BE FILLED (THE ADHESIVE LINE OF FFC IS DETERIORATED ETC,)

FPCについて ABOUT FPC

補強フィルム材質はポリイミドを推奨します。ベースフィルムは25μmを推奨します。
接着剤は熱硬化接着剤を推奨します。
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様お願い致します。
RECOMMENDED MATERIAL/THICKNESS.
RECOMMENDED STIFFENER MATERIAL: POLYIMIDE
RECOMMENDED BASE FILM THICKNESS: 25 MICROMETER
RECOMMENDED ADHESIVE: THERMOSETTING ADHESIVE
NOTE: PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY. THERE IS A POSSIBILITY THAT THE PRESCRIPT TEMPERATURE OF FFC IS SET TO SINGLE IT.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC:			molex				
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684			0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)				
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI 2019/02/07			PRODUCT CUSTOMER DRAWING				
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/02/07							
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/08			DOCUMENT NUMBER: 5019511005-SD DOC TYPE: PSD DOC PART: 000 REVISION: B				
2 PLACES	± 0.2	INITIAL REVISION:							
1 PLACE	± 0.2	DRWN: SKAWAKAMI 2018/11/26			MATERIAL NUMBER: SEE CHART CUSTOMER: 4 OF 4				
0 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/01							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	SHEET NUMBER		SHEET NUMBER		
			A3-SIZE	501951	4 OF 4		4 OF 4		