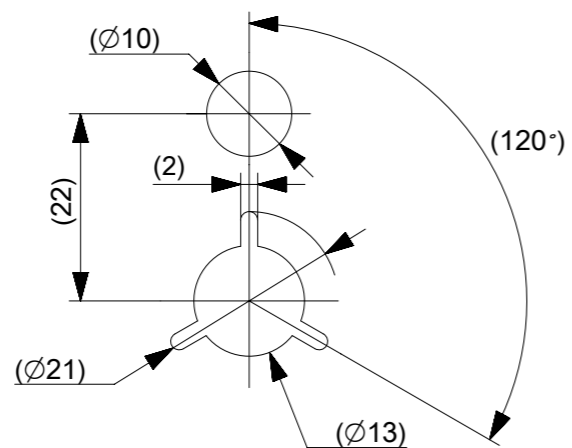
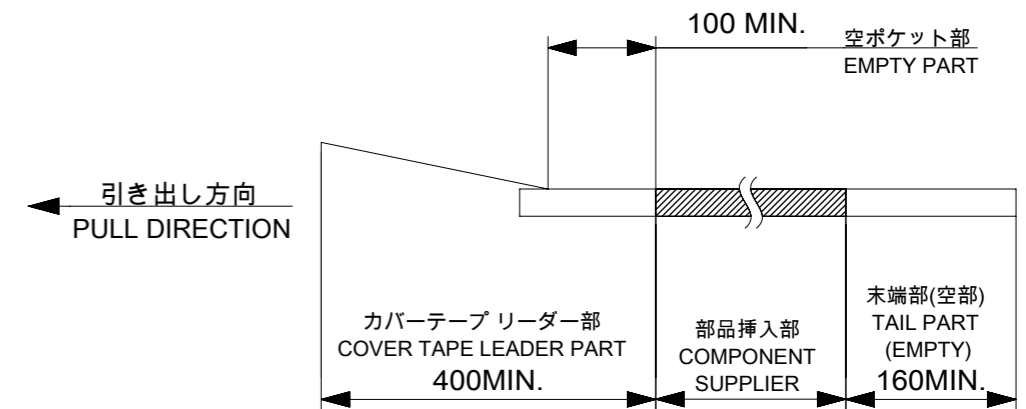


NOTES

- 製品詳細寸法については 5019511008-SDを参照下さい。
FOR DIMENSIONS OF PRODUCT, REFER TO 5019511008-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>

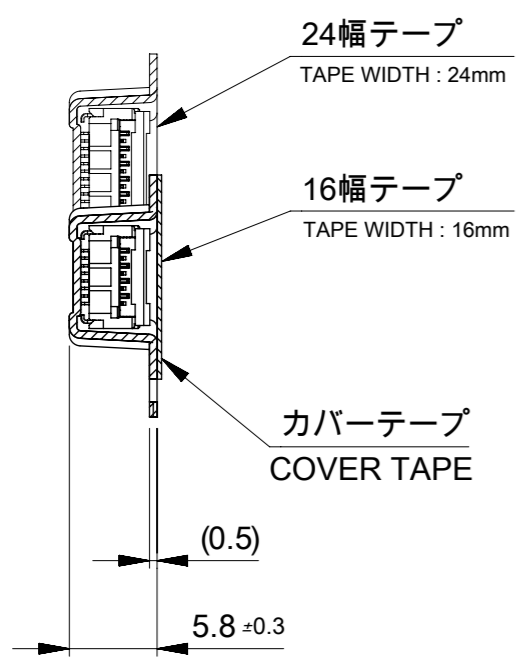
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS mm		SCALE 1:1		CURRENT REV DESC:				molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 613264					
ANGULAR TOL $\pm 1.0^\circ$				DRWN: SKAWAKAMI 2019/03/06				0.5 FPC CONN. EMBSTP PKG	
4 PLACES ± 0.2				CHK'D: TRSUZUKI 2019/03/06				EASY ON VERTICAL (LOW-HALOGEN)	
3 PLACES ± 0.2				APPR: RTAKEUCHI 2019/03/06				PRODUCT CUSTOMER DRAWING	
2 PLACES ± 0.2				INITIAL REVISION:				DOCUMENT NUMBER	
1 PLACE ± 0.25				DRWN: SKAWAKAMI 2019/01/30				5019510008-SD	
0 PLACES ± 0.3				APPR: RTAKEUCHI 2019/02/01				PSD 000 C	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
				A3-SIZE		501951		SEE TABLE	
CUSTOMER		SHEET NUMBER		DATE		TIME		USER	
		1 OF 3		2019/03/06 09:44:53					

E

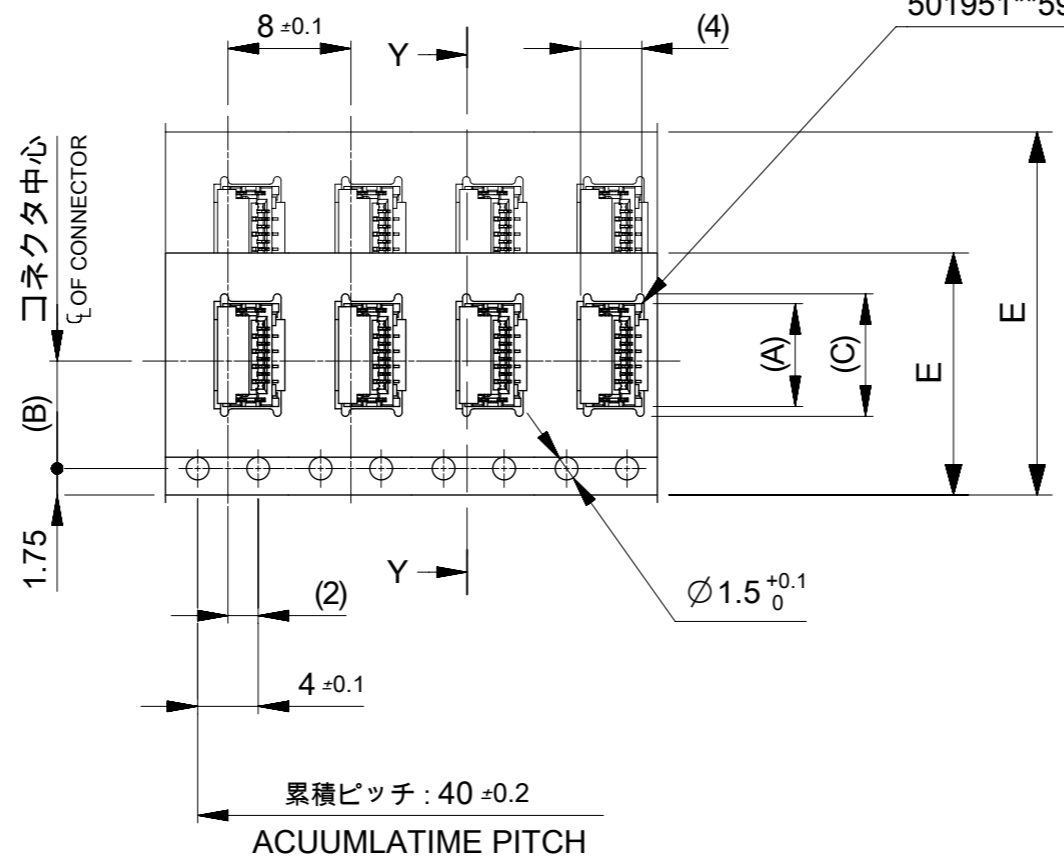
E

引き出し方向
PULL DIRECTION

CONNECTOR SERIES No.
501951**59



SECTION Y-Y



29.4	25.4	24	11.5	15.1	14.1	5019512250	22		
				14.6	13.6	5019512150	21		
				14.1	13.1	5019512050	20		
				13.6	12.6	5019511950	19		
				13.1	12.1	5019511850	18		
				12.6	11.6	5019511750	17		
				12.1	11.1	5019511650	16		
				11.6	10.6	5019511550	15		
				11.1	10.1	5019511450	14		
				10.6	9.6	5019511350	13		
				10.1	9.1	5019511250	12		
21.4	17.4	16	7.5	9.6	8.6	5019511150	11		
				9.1	8.1	5019511050	10		
				8.6	7.6	5019510950	9		
				8.1	7.1	5019510850	8		
				7.6	6.6	5019510750	7		
G	F	E CARRIER TAPE WIDTH	D	7.1	6.1	5019510650	6		
				6.6	5.6	5019510550	5		
				6.1	5.1	5019510450	4		
				(A)	(B)	(C)	D	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

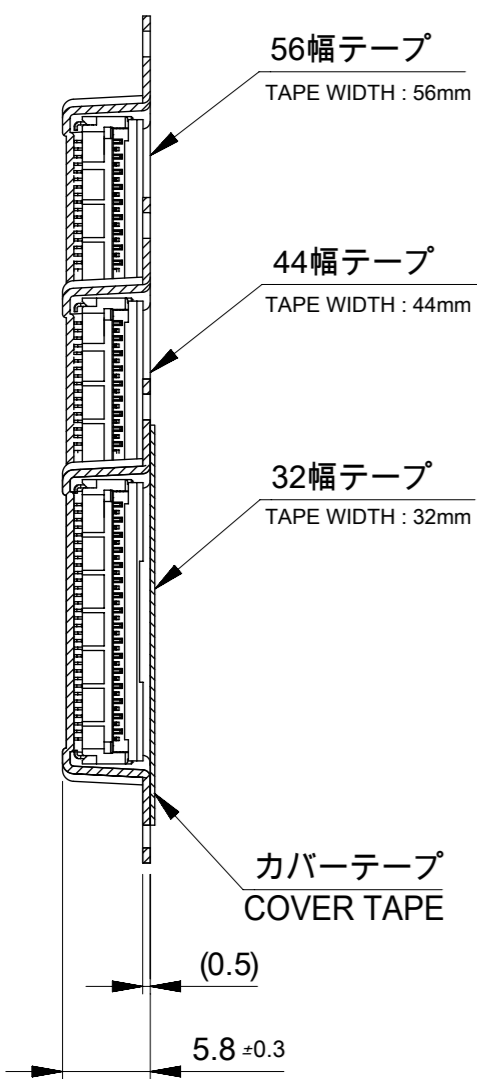
DIMENSION UNITS mm	SCALE 1:1	CURRENT REV DESC:		molex			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 613264					
ANGULAR TOL	± 1.0 °	DRWN: SKAWAKAMI 2019/03/06		PRODUCT CUSTOMER DRAWING			
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/03/06		DOCUMENT NUMBER			
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/03/06		5019510008-SD			
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE	DOC PART	REVISION	
1 PLACE	± 0.25	DRWN: SKAWAKAMI 2019/01/30		PSD	000	C	
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		2 OF 3

A

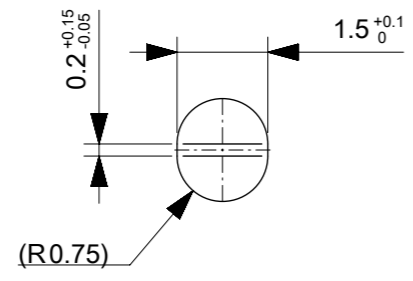
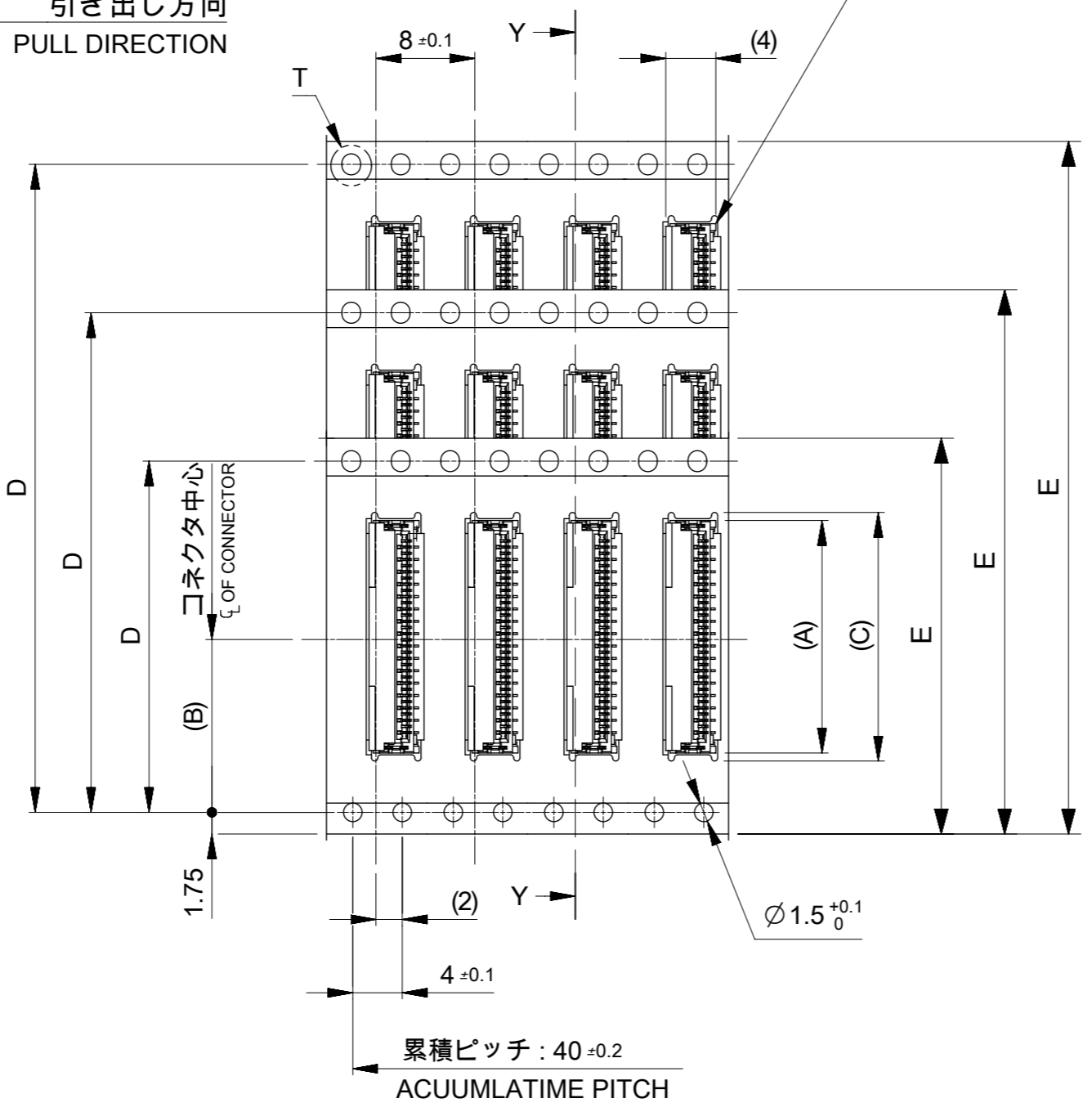
A

CONNECTOR SERIES NO.
501951**59

引き出し方向
PULL DIRECTION



SECTION Y-Y

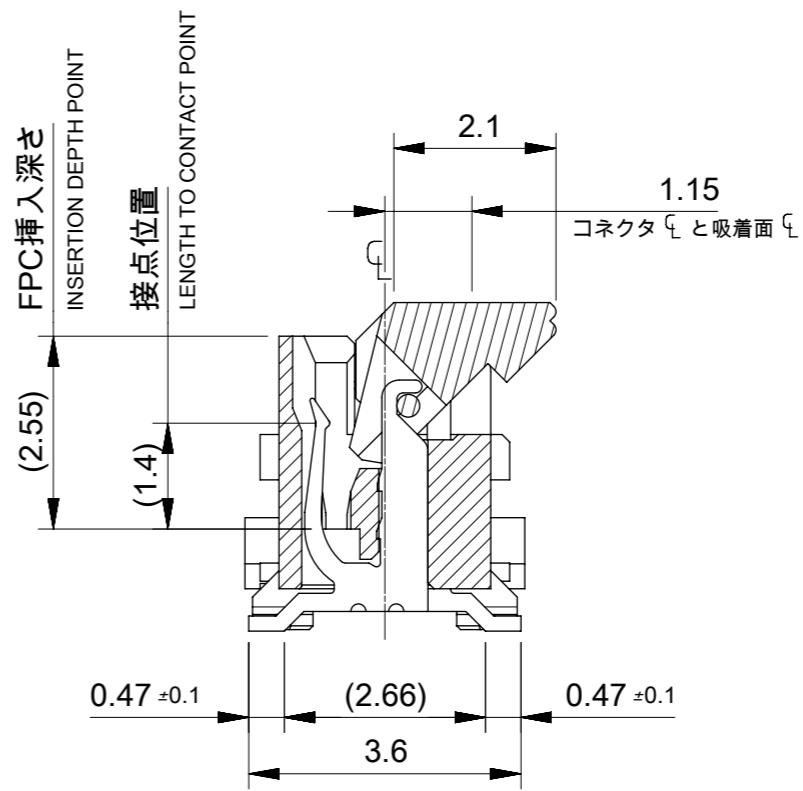
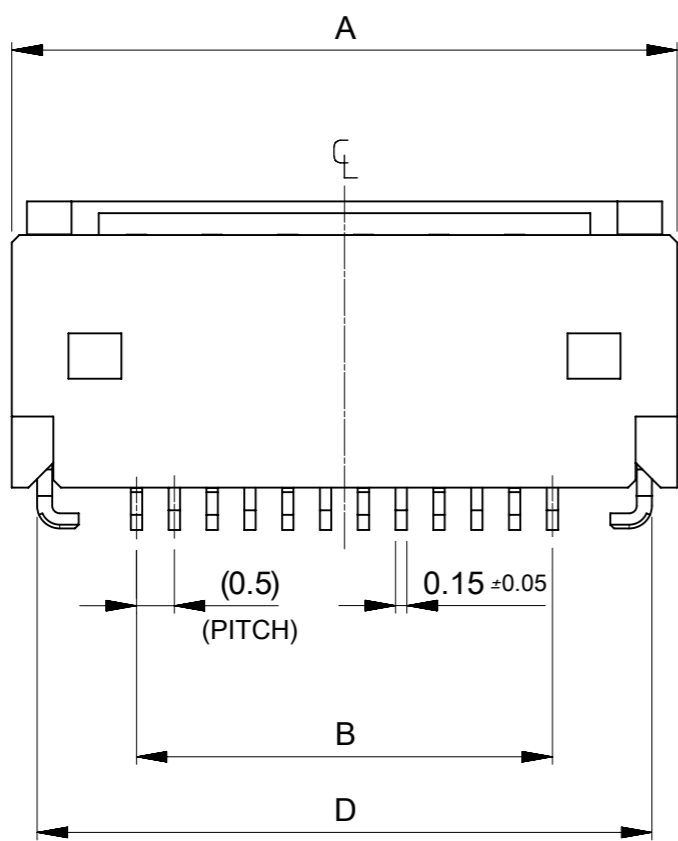
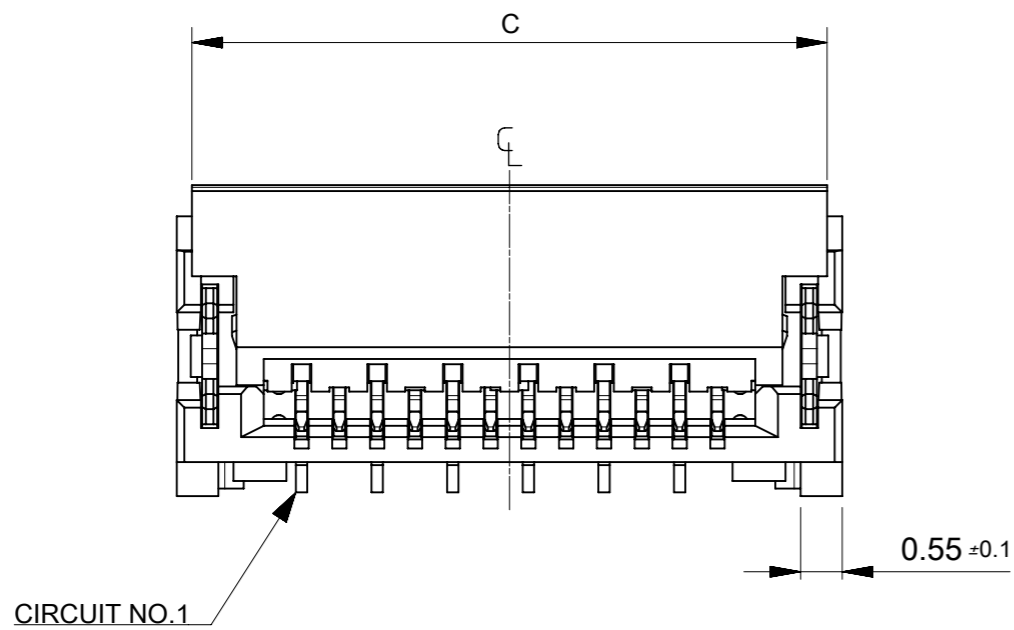


DETAIL T

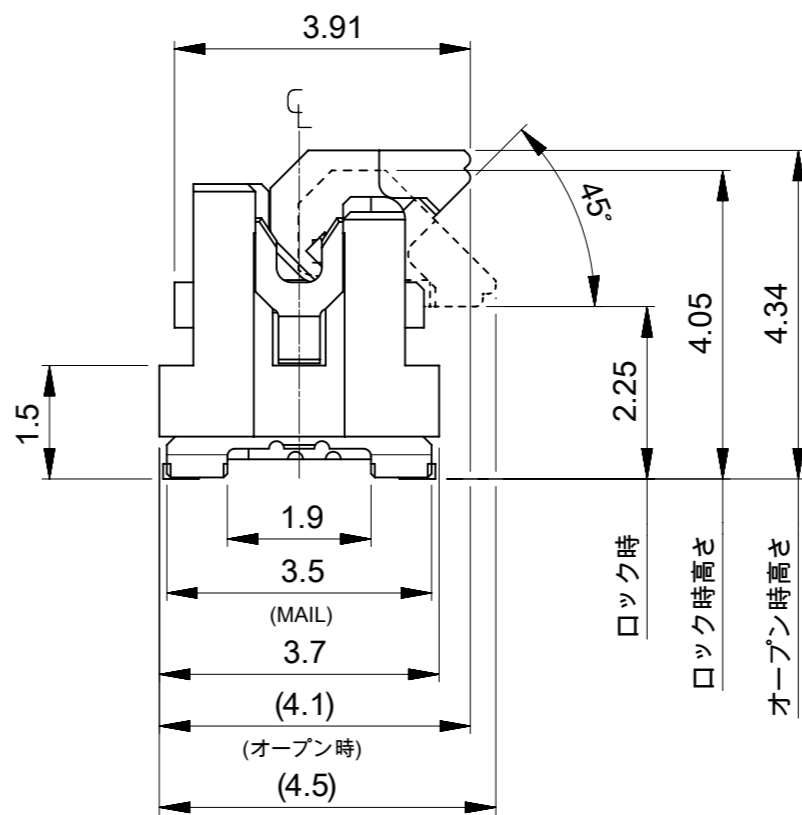
61.4	57.4	56	52.4	26.2	39.1	38.1	5019517050	70
					34.1	33.1	5019516050	60
					33.6	32.6	5019515950	59
					33.1	32.1	5019515850	58
49.4	45.4	44	40.4	20.2	32.6	31.6	5019515750	57
					32.1	31.1	5019515650	56
					31.6	30.6	5019515550	55
					31.1	30.1	5019515450	54
					30.6	29.6	5019515350	53
					30.1	29.1	5019515250	52
					29.6	28.6	5019515150	51
					29.1	28.1	5019515050	50
					28.6	27.6	5019514950	49
					28.1	27.1	5019514850	48
					27.6	26.6	5019514750	47
					27.1	26.1	5019514650	46
					26.6	25.6	5019514550	45
					26.1	25.1	5019514450	44
					25.6	24.6	5019514350	43
					25.1	24.1	5019514250	42
24.6	23.6	5019514150	41					
24.1	23.1	5019514050	40					
23.6	22.6	5019513950	39					
23.1	22.1	5019513850	38					
22.6	21.6	5019513750	37					
22.1	21.1	5019513650	36					
21.6	20.6	5019513550	35					
21.1	20.1	5019513450	34					
20.6	19.6	5019513350	33					
37.4	33.4	32	28.4	14.2	20.1	19.1	5019513250	32
					19.6	18.6	5019513150	31
					19.1	18.1	5019513050	30
					18.6	17.6	5019512950	29
					18.1	17.1	5019512850	28
					17.6	16.6	5019512750	27
					17.1	16.1	5019512650	26
					16.6	15.6	5019512550	25
					16.1	15.1	5019512450	24
					15.6	14.6	5019512350	23
G	F	E CARRIER TAPE WIDTH	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 mm	SCALE 1:1	CURRENT REV DESC:		molex			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 613264					
ANGULAR TOL	± 1.0 °	DRWN: SKAWAKAMI 2019/03/06		PRODUCT CUSTOMER DRAWING			
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/03/06		DOCUMENT NUMBER			
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/03/06		5019510008-SD			
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE			
1 PLACE	± 0.25	DRWN: SKAWAKAMI 2019/01/30		PSD			
0 PLACES	± 0.3	APPR: RTAKEUCHI 2019/02/01		DOC PART			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
			A3-SIZE	501951	SEE TABLE		3 OF 3



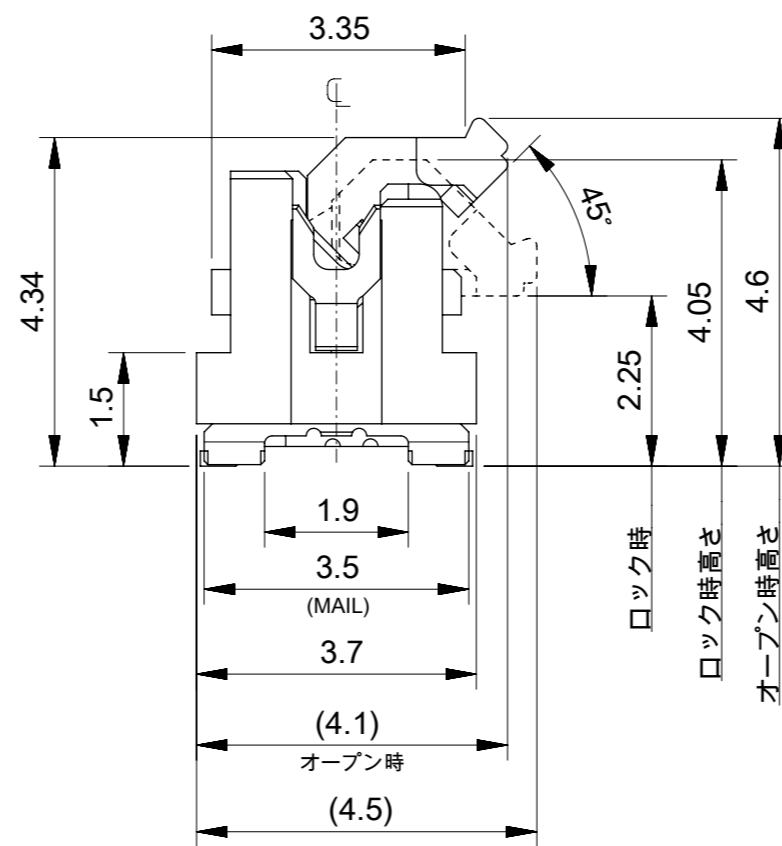
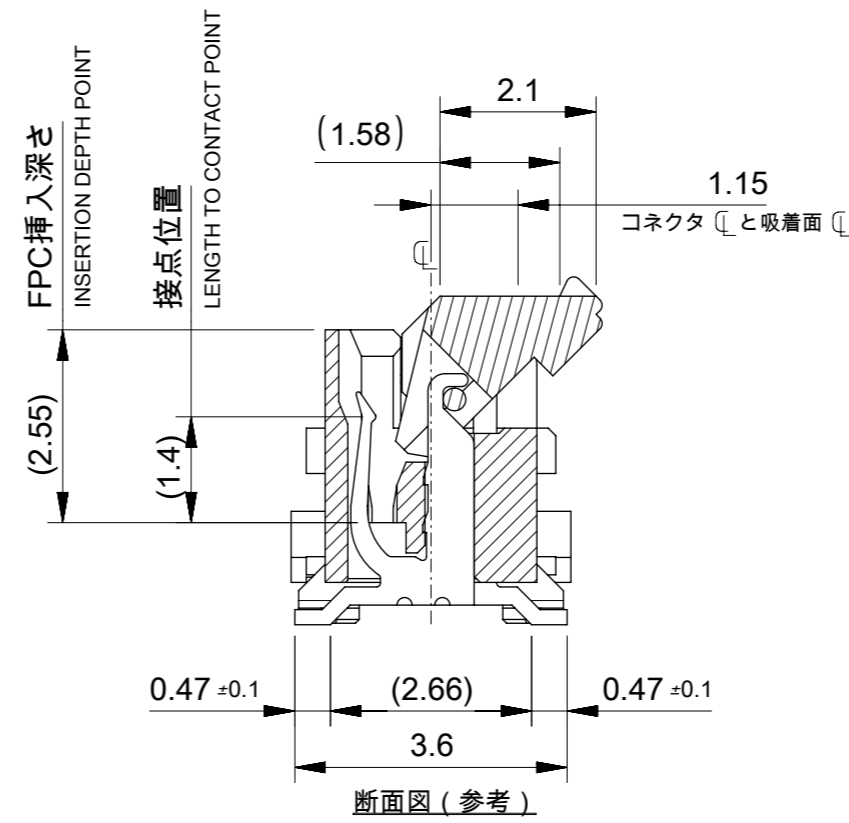
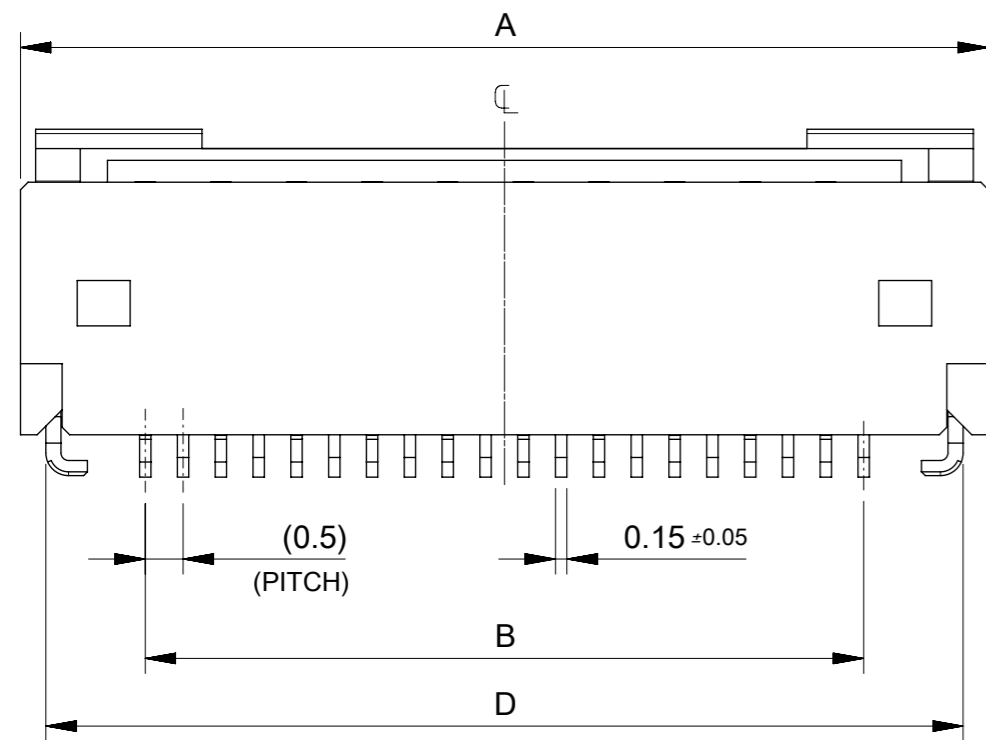
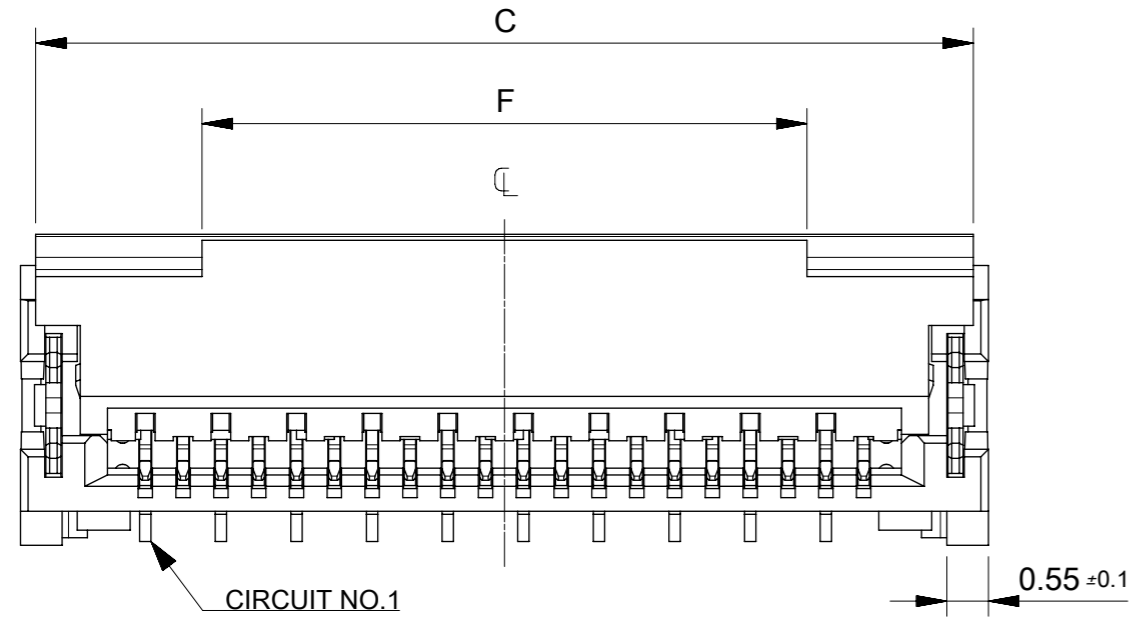
断面図 (参考)



7.7	9.1	9.4	6.5	9.8	5019511450	14
7.2	8.6	8.9	6	9.3	5019511350	13
6.7	8.1	8.4	5.5	8.8	5019511250	12
6.2	7.6	7.9	5	8.3	5019511150	11
5.7	7.1	7.4	4.5	7.8	5019511050	10
5.2	6.6	6.9	4	7.3	5019510950	9
4.7	6.1	6.4	3.5	6.8	5019510850	8
4.2	5.6	5.9	3	6.3	5019510750	7
3.7	5.1	5.4	2.5	5.8	5019510650	6
3.2	4.6	4.9	2	5.3	5019510550	5
2.7	4.1	4.4	1.5	4.8	5019510450	4
E	D	C	B	A	EMBOSSED TAPE ORDER NO.	CIRCUITS

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

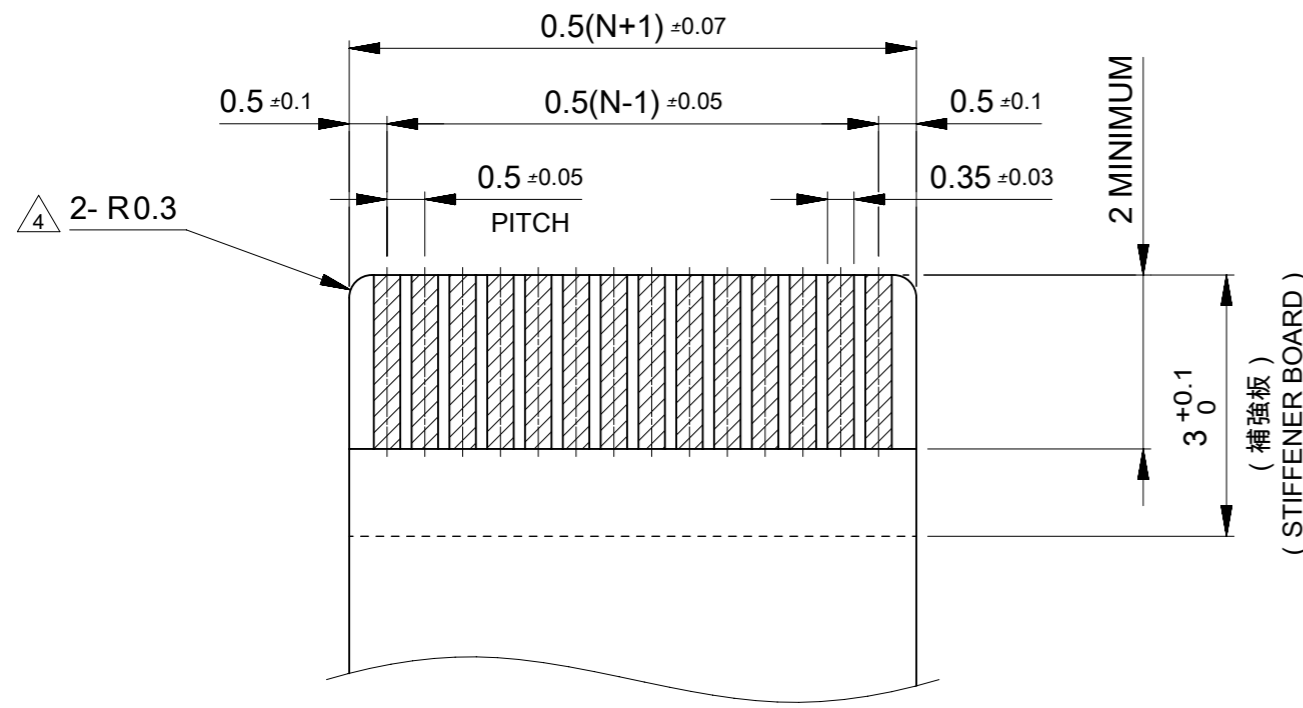
DIMENSION UNITS	SCALE	CURRENT REV DESC:		molex		
mm	10:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 613264		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)		
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI	2019/03/06	PRODUCT CUSTOMER DRAWING		
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2019/03/06	DOCUMENT NUMBER		
3 PLACES	± 0.2	APPR: RTAKEUCHI	2019/03/06	5019511008-SD		
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE	DOC PART	REVISION
1 PLACE	± 0.2	DRWN: SKAWAKAMI		PSD	000	C
0 PLACES	± 0.2	APPR: RTAKEUCHI		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER
			A3-SIZE	501951	SEE CHART	1 OF 4



35.7	37.1	37.4	34.5	37.8	5019517050	70	
30.7	32.1	32.4	29.5	32.8	5019516050	60	
30.2	31.6	31.9	29	32.3	5019515950	59	
29.7	31.1	31.4	28.5	31.8	5019515850	58	
29.2	30.6	30.9	28	31.3	5019515750	57	
28.7	30.1	30.4	27.5	30.8	5019515650	56	
28.2	29.6	29.9	27	30.3	5019515550	55	
27.7	29.1	29.4	26.5	29.8	5019515450	54	
27.2	28.6	28.9	26	29.3	5019515350	53	
26.7	28.1	28.4	25.5	28.8	5019515250	52	
26.2	27.6	27.9	25	28.3	5019515150	51	
25.7	27.1	27.4	24.5	27.8	5019515050	50	
25.2	26.6	26.9	24	27.3	5019514950	49	
24.7	26.1	26.4	23.5	26.8	5019514850	48	
24.2	25.6	25.9	23	26.3	5019514750	47	
23.7	25.1	25.4	22.5	25.8	5019514650	46	
23.2	24.6	24.9	22	25.3	5019514550	45	
22.7	24.1	24.4	21.5	24.8	5019514450	44	
22.2	23.6	23.9	21	24.3	5019514350	43	
21.7	23.1	23.4	20.5	23.8	5019514250	42	
21.2	22.6	22.9	20	23.3	5019514150	41	
20.7	22.1	22.4	19.5	22.8	5019514050	40	
20.2	21.6	21.9	19	22.3	5019513950	39	
19.7	21.1	21.4	18.5	21.8	5019513850	38	
19.2	20.6	20.9	18	21.3	5019513750	37	
18.7	20.1	20.4	17.5	20.8	5019513650	36	
18.2	19.6	19.9	17	20.3	5019513550	35	
17.7	19.1	19.4	16.5	19.8	5019513450	34	
17.2	18.6	18.9	16	19.3	5019513350	33	
16.7	18.1	18.4	15.5	18.8	5019513250	32	
16.2	17.6	17.9	15	18.3	5019513150	31	
15.7	17.1	17.4	14.5	17.8	5019513050	30	
15.2	16.6	16.9	14	17.3	5019512950	29	
14.7	16.1	16.4	13.5	16.8	5019512850	28	
14.2	15.6	15.9	13	16.3	5019512750	27	
13.7	15.1	15.4	12.5	15.8	5019512650	26	
13.2	14.6	14.9	12	15.3	5019512550	25	
12.7	14.1	14.4	11.5	14.8	5019512450	24	
12.2	13.6	13.9	11	14.3	5019512350	23	
11.7	13.1	13.4	10.5	13.8	5019512250	22	
11.2	12.6	12.9	10	13.3	5019512150	21	
10.7	12.1	12.4	9.5	12.8	5019512050	20	
10.2	11.6	11.9	9	12.3	5019511950	19	
9.7	11.1	11.4	8.5	11.8	5019511850	18	
9.2	10.6	10.9	8	11.3	5019511750	17	
8.7	10.1	10.4	7.5	10.8	5019511650	16	
8.2	9.6	9.9	7	10.3	5019511550	15	
F	E	D	C	B	A	EMBOSSED PACKAGE ORDER NO.	CIRCUITS

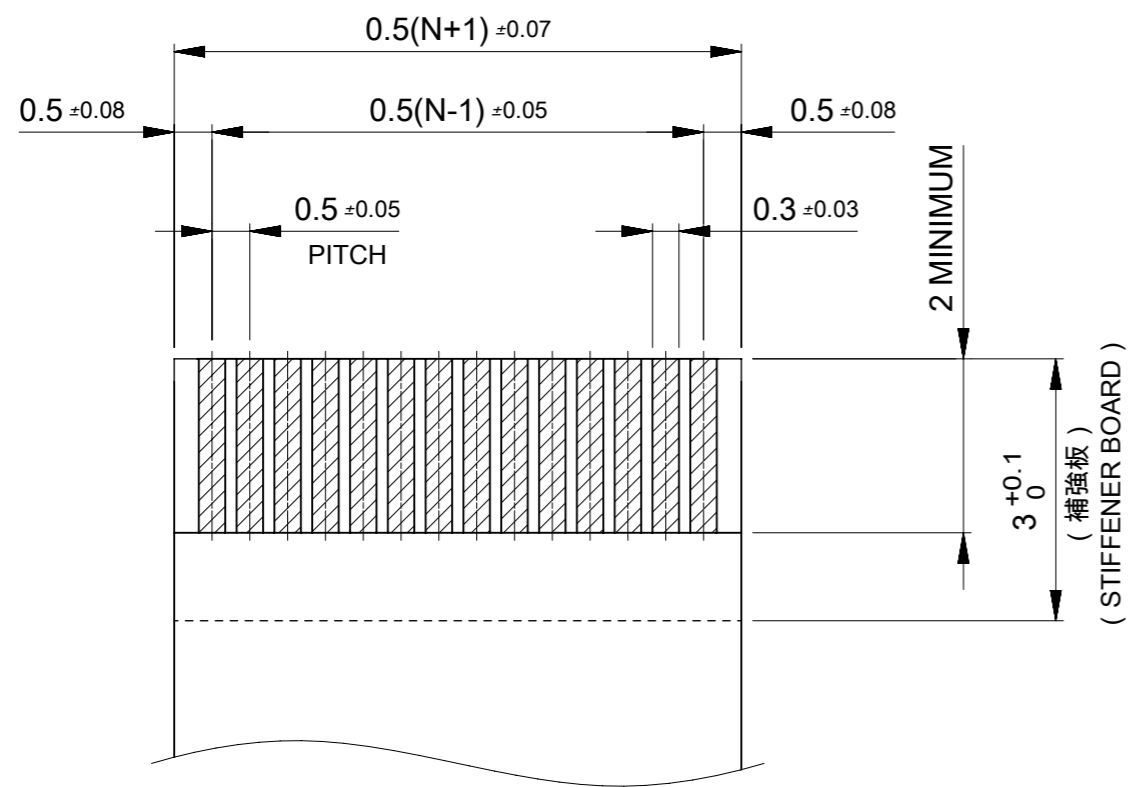
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE	CURRENT REV DESC:		molex
mm	10:1			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 613264		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI	2019/03/06	
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2019/03/06	PRODUCT CUSTOMER DRAWING
3 PLACES	± 0.2	APPR: RTAKEUCHI	2019/03/06	
2 PLACES	± 0.2	INITIAL REVISION:		DOCUMENT NUMBER
1 PLACE	± 0.2	DRWN: SKAWAKAMI	2019/01/30	5019511008-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	C
		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

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)

カバーレイ : ポリイミド (25µm)
COVER FILM : POLYIMIDE (25µm)
熱硬化接着剤
THERMOSETTING ADHESIVE
導体部 : 銅箔 (35µm)
CONDUCTOR : COPPER FOIL (35µm)
熱硬化接着剤
THERMOSETTING ADHESIVE
ベースフィルム : ポリイミド (25µm)
BASE FILM : POLYIMIDE (25µm)
熱硬化接着剤
THERMOSETTING ADHESIVE
補強板 : ポリイミド
STIFFENER : POLYIMIDE

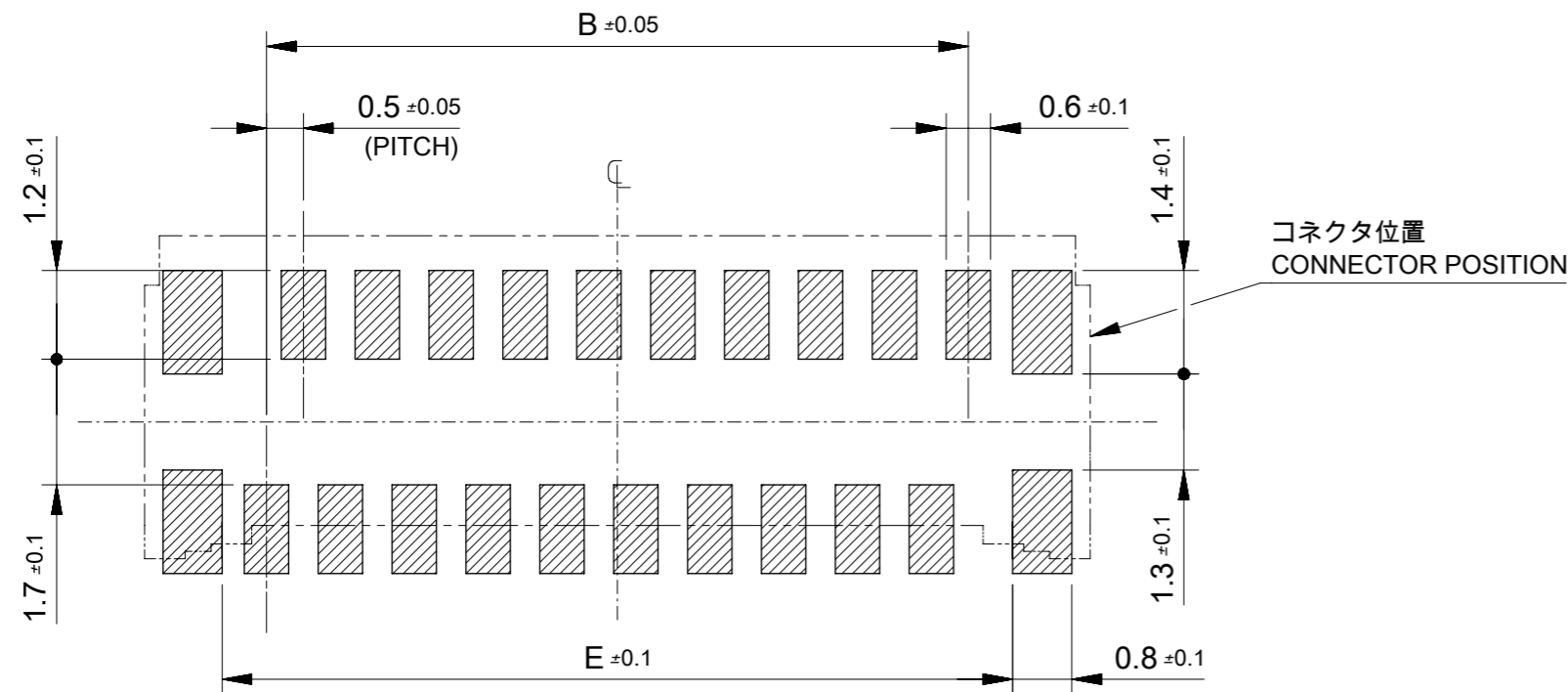
FPC構成推奨仕様
STRUCTURE OF FPC

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)

絶縁テープ : ポリエステル系 (25µm)
INSULATING FILM : PET (25µm)
接着剤 (難燃ポリエステル系)
ADHESIVE (FLAME-RETARDANT POLYESTER ADHESIVE)
導体部 : 銅箔 (35µm or 50µm)
CONDUCTOR : COPPER FOIL (35µm or 50µm)
接着剤 (難燃ポリエステル系)
ADHESIVE (FLAME-RETARDANT POLYESTER ADHESIVE)
絶縁テープ : ポリエステル系 (25µm)
INSULATING FILM : PET (25µm)
接着剤 (難燃ポリエステル系)
ADHESIVE (FLAME-RETARDANT POLYESTER ADHESIVE)
補強板 : ポリエステル系
STIFFENER : PET

FFC構成推奨仕様
STRUCTURE OF FFC

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS mm		SCALE 10:1		CURRENT REV DESC:						molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 613264							
ANGULAR TOL ± 1.0°				4 PLACES ± 0.2		DRWN: SKAWAKAMI 2019/03/06		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)			
3 PLACES ± 0.2				2 PLACES ± 0.2		CHK'D: TRSUZUKI 2019/03/06		PRODUCT CUSTOMER DRAWING			
1 PLACE ± 0.2				0 PLACES ± 0.2		APPR: RTAKEUCHI 2019/03/06		DOCUMENT NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
P1		RELEASE DATE		2019/03/06 09:44:57		A3-SIZE		501951		SEE CHART	
5019511008-SD				PSD		000		C		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%

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.

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 : 銅合金(t=0.15)
TERMINAL : COPPER ALLOY
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.

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: 613264			0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)				
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI 2019/03/06			PRODUCT CUSTOMER DRAWING				
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/03/06			DOCUMENT NUMBER				
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/03/06			5019511008-SD				
2 PLACES	± 0.2	INITIAL REVISION:			DOC TYPE				
1 PLACE	± 0.2	DRWN: SKAWAKAMI 2019/01/30			PSD				
0 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/01			DOC PART				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	REVISION		
			A3-SIZE	501951	SEE CHART		000	C	4 OF 4