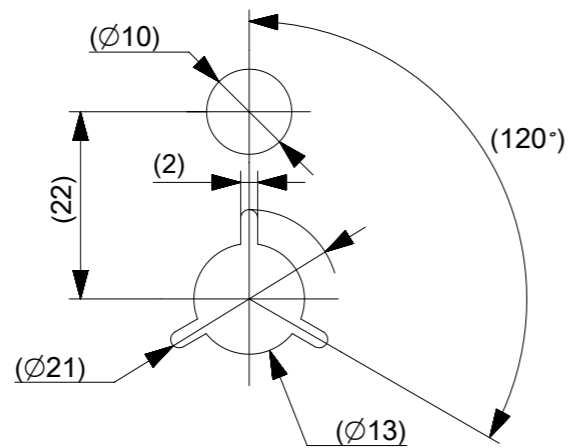
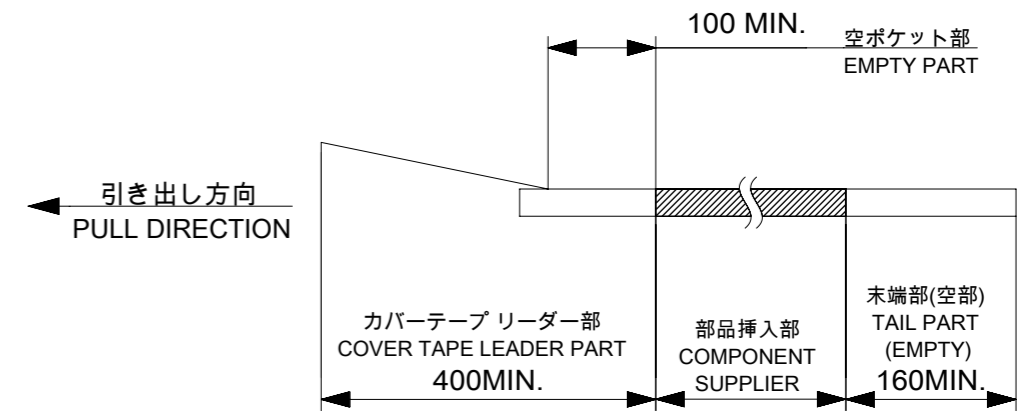


NOTES

- 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>

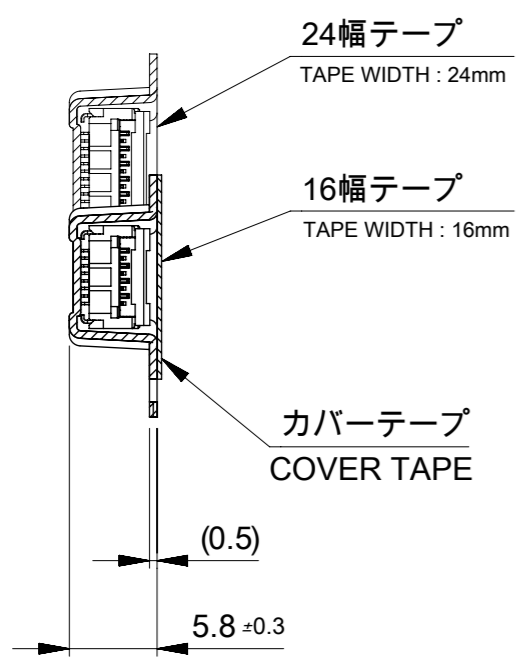
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS mm		SCALE 1:1		CURRENT REV DESC:				molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 611684					
ANGULAR TOL $\pm 1.0^\circ$			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

E

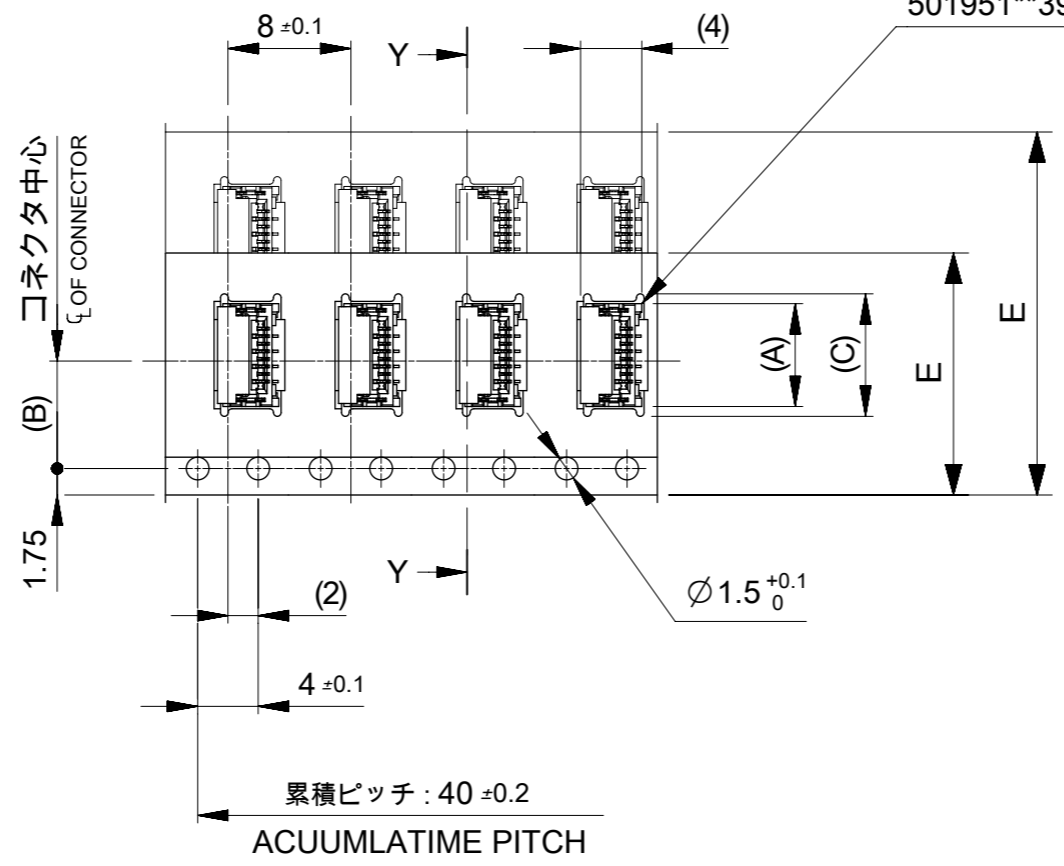
E

引き出し方向
PULL DIRECTION

CONNECTOR SERIES No.
501951**39



SECTION Y-Y



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	
				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					
7.1	6.1	5019510630	6					
21.4	17.4	16	7.5	6.6	5.6	5019510530	5	
				6.1	5.1	5019510430	4	
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

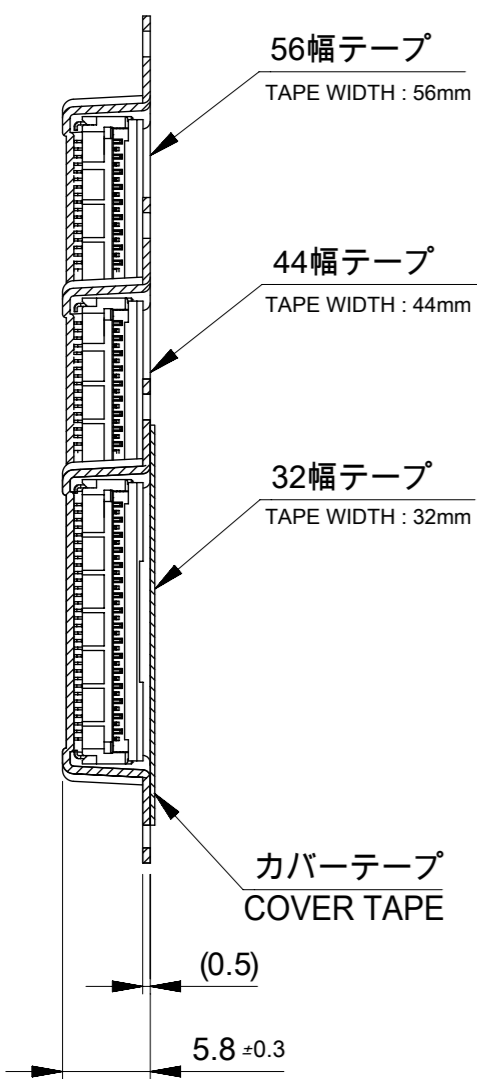
DIMENSION UNITS mm	SCALE 1:1	CURRENT REV DESC:		molex			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684					
ANGULAR TOL	± 1.0 °	DRWN: SKAWAKAMI 2019/02/07		PRODUCT CUSTOMER DRAWING			
4 PLACES	± 0.2	CHK'D: TRSUZUKI 2019/02/07		DOCUMENT NUMBER			
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/08		5019510005-SD			
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE			
1 PLACE	± 0.25	DRWN: SKAWAKAMI 2019/01/28		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		2 OF 3

A

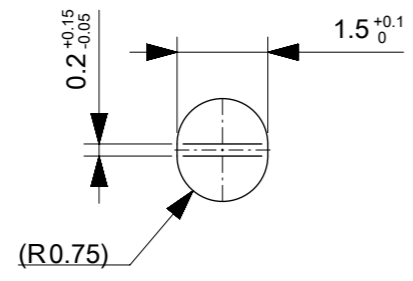
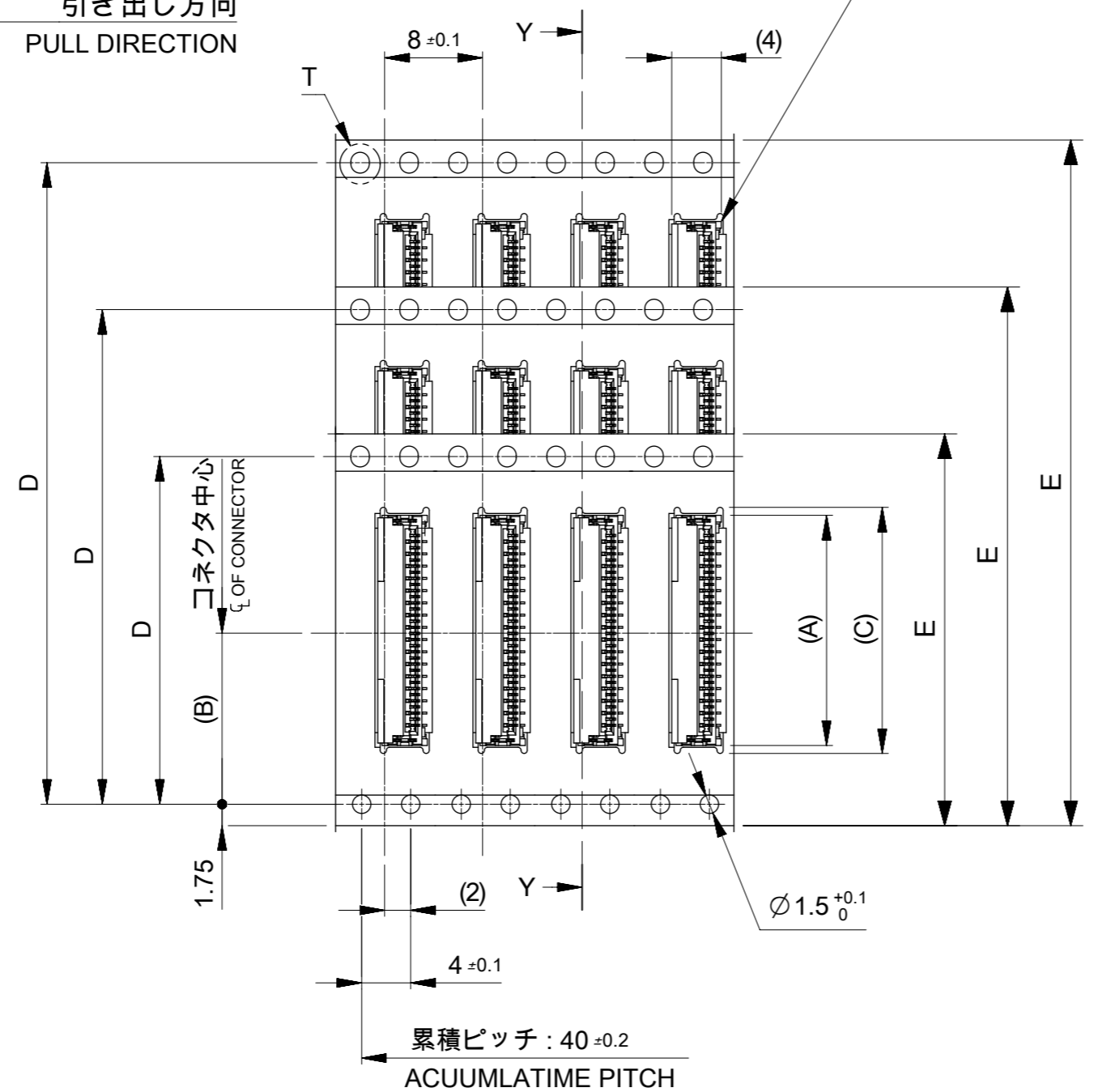
A

CONNECTOR SERIES NO.
501951**39

引き出し方向
PULL DIRECTION



SECTION Y-Y

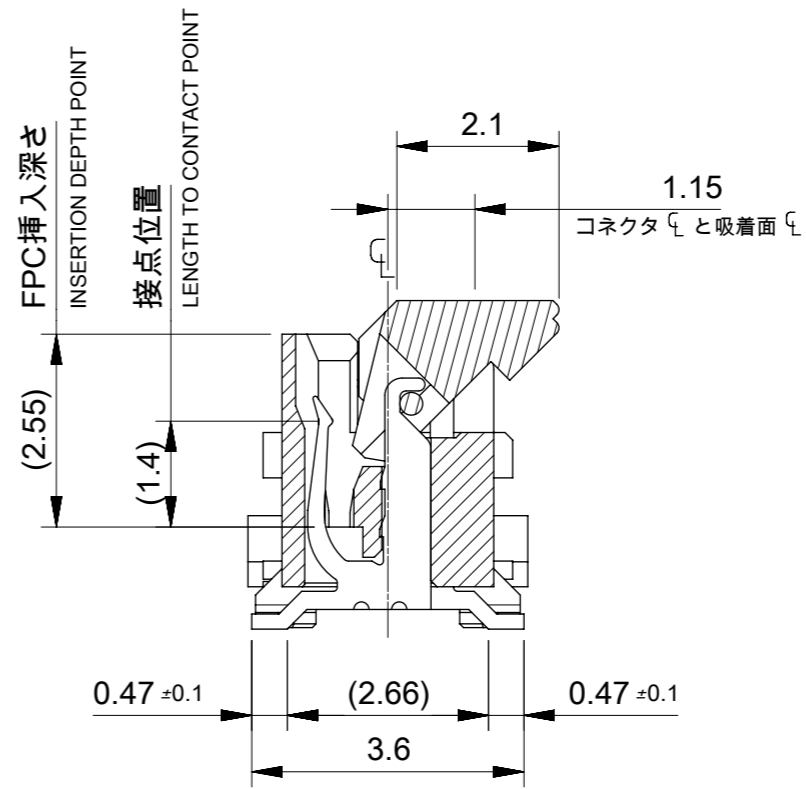
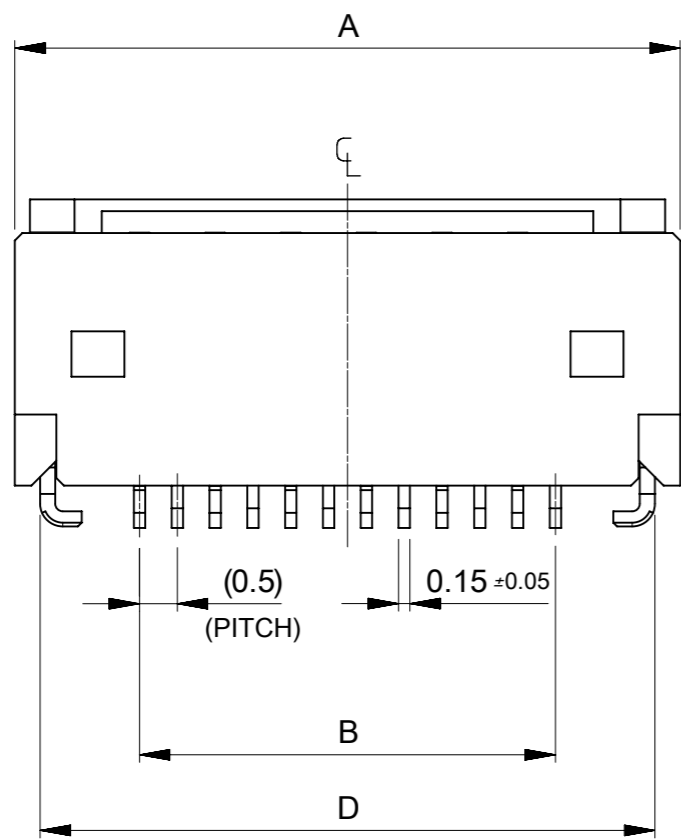
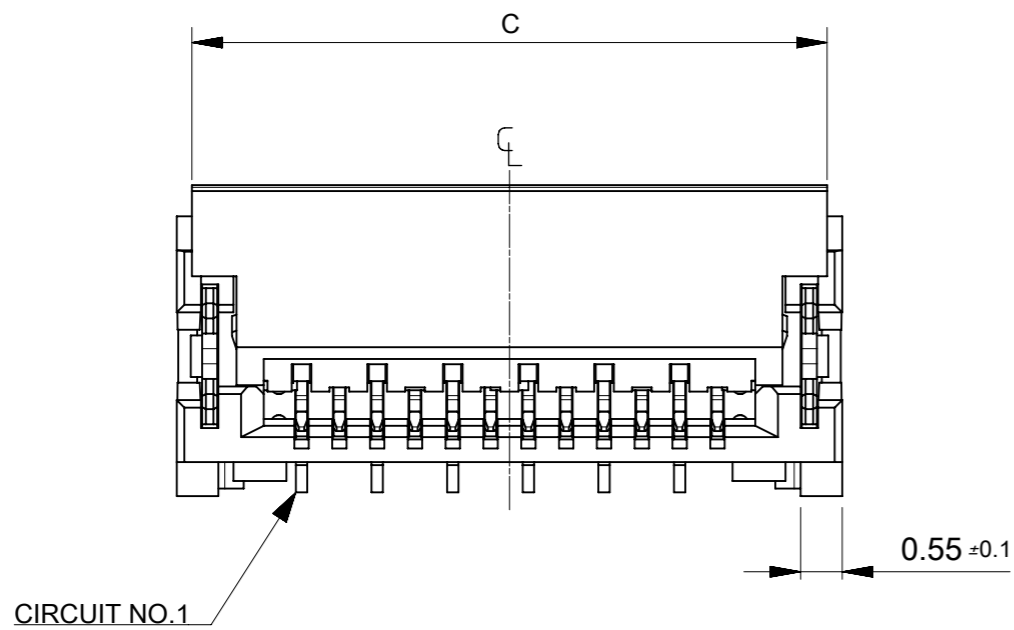


DETAIL T

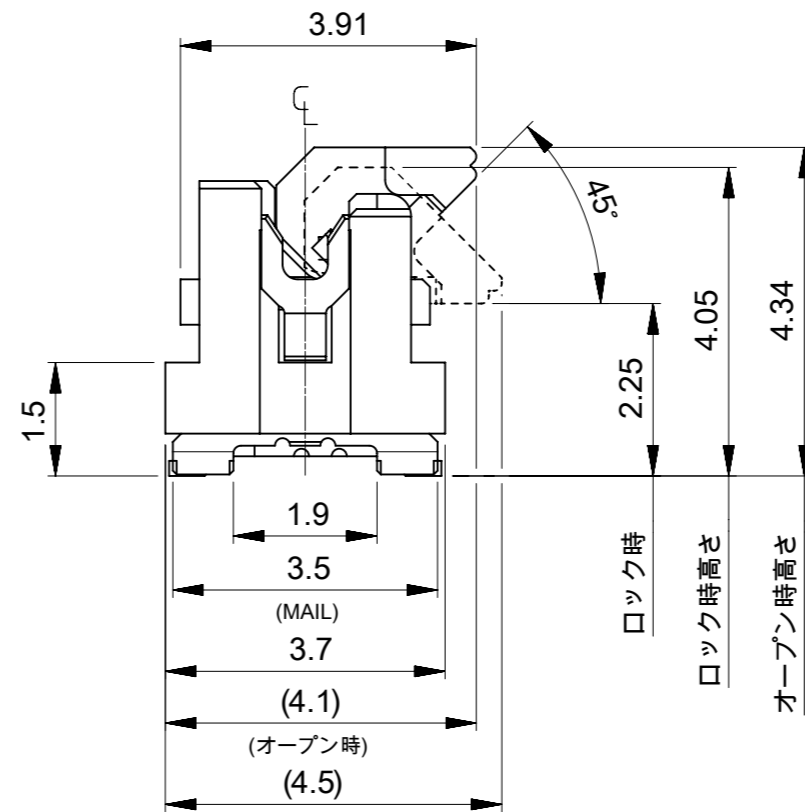
61.4	57.4	56	52.4	26.2	39.1	38.1	5019517030	70
					34.1	33.1	5019516030	60
49.4	45.4	44	40.4	20.2	33.6	32.6	5019515930	59
					33.1	32.1	5019515830	58
					32.6	31.6	5019515730	57
					32.1	31.1	5019515630	56
					31.6	30.6	5019515530	55
					31.1	30.1	5019515430	54
					30.6	29.6	5019515330	53
					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
					26.6	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					
37.4	33.4	32	28.4	14.2	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
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: 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	



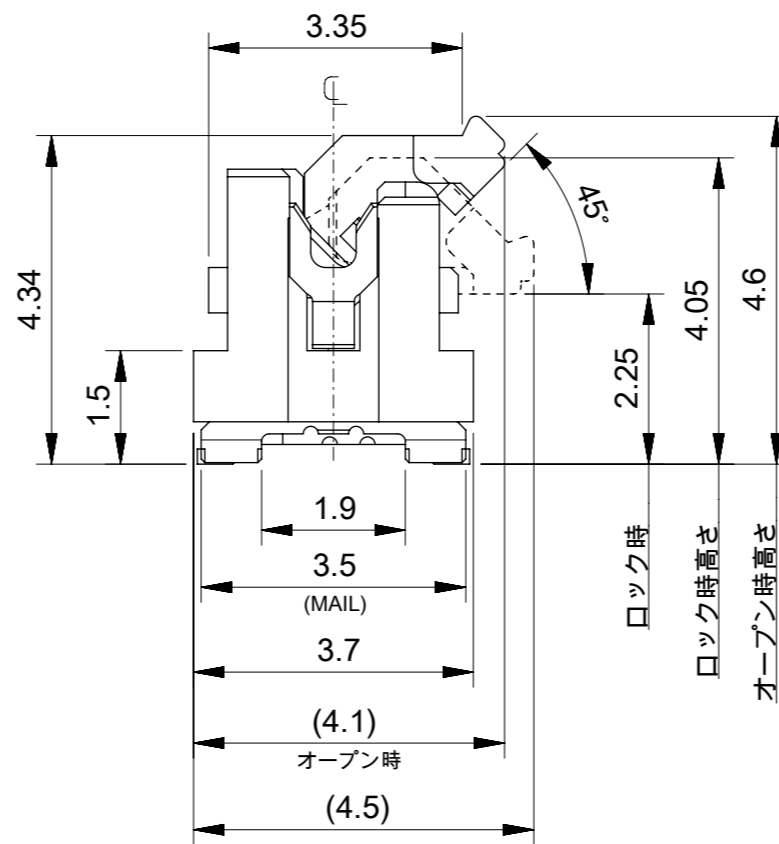
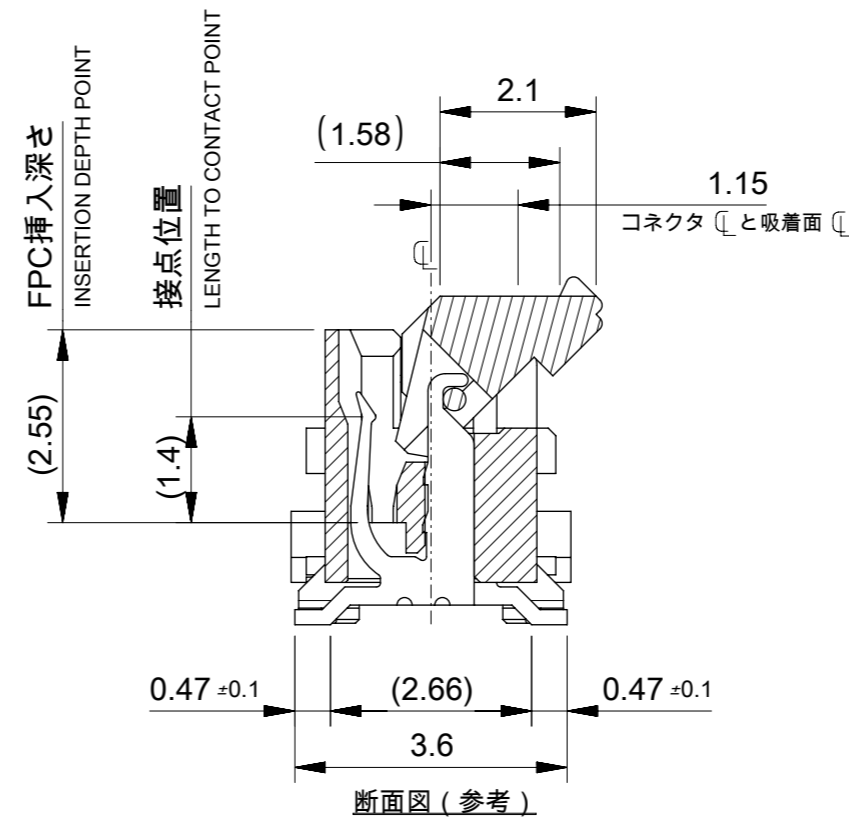
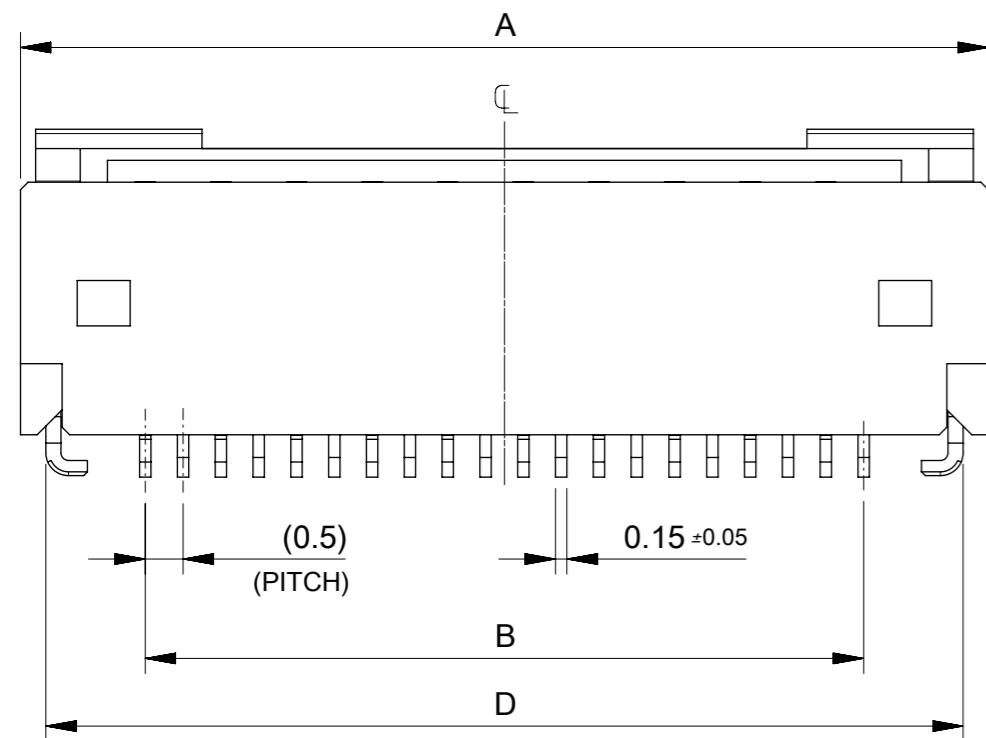
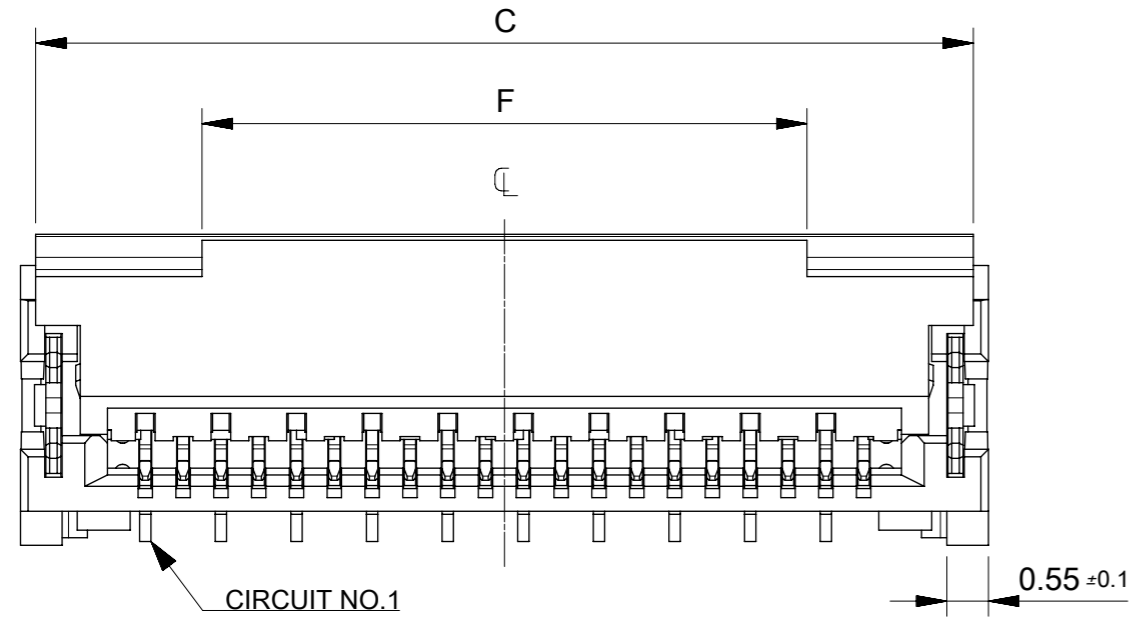
断面図 (参考)



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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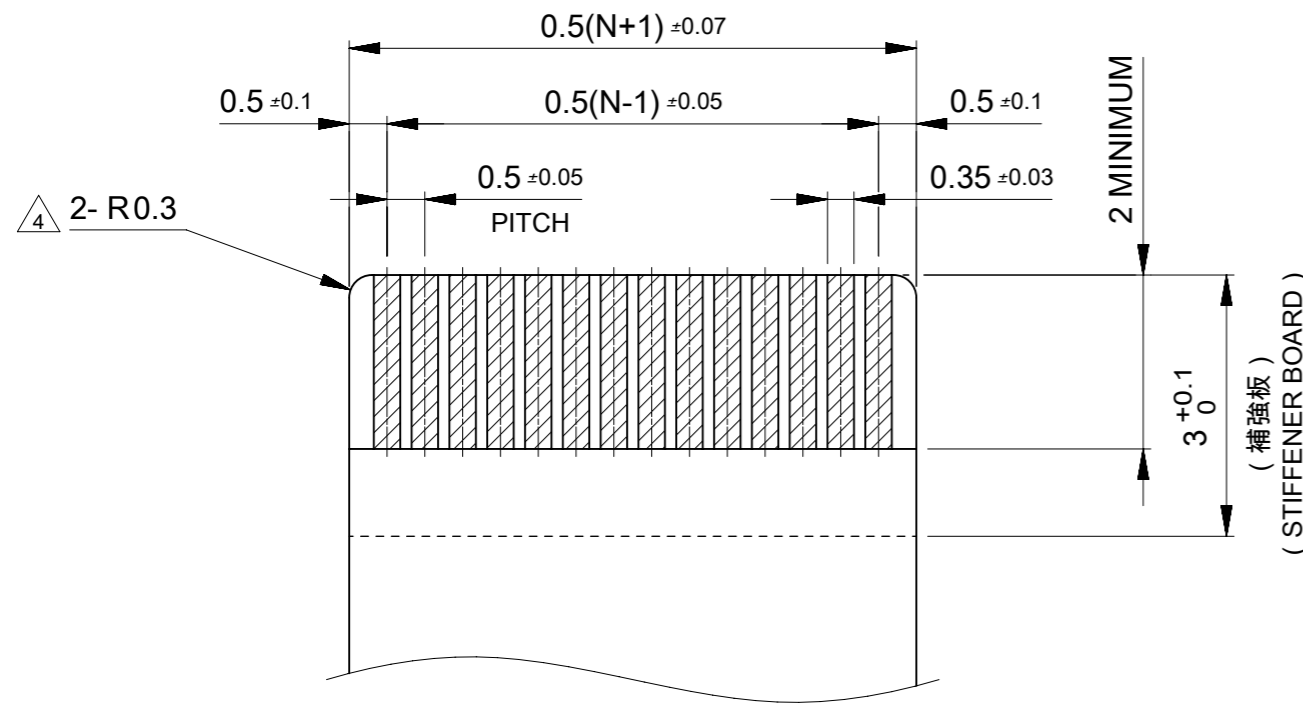
DIMENSION UNITS	SCALE	CURRENT REV DESC:		molex		
mm	10:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 611684		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)		
ANGULAR TOL	± 1.0°	DRWN: SKAWAKAMI	2019/02/07	PRODUCT CUSTOMER DRAWING		
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2019/02/07	DOCUMENT NUMBER		
3 PLACES	± 0.2	APPR: RTAKEUCHI	2019/02/08	5019511005-SD		
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE	DOC PART	REVISION
1 PLACE	± 0.2	DRWN: SKAWAKAMI	2018/11/26	PSD	000	B
0 PLACES	± 0.2	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 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

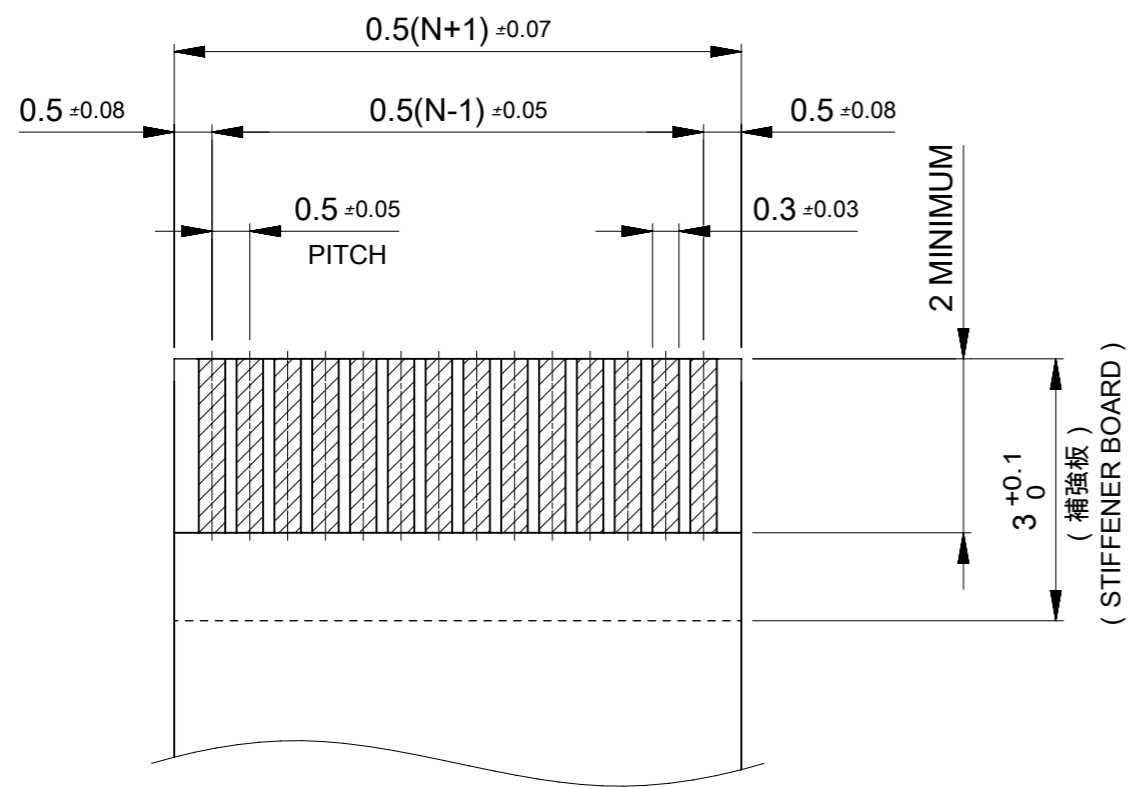
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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				
0 PLACES ± 0.2		APPR: RTAKEUCHI 2019/02/01		DOC TYPE DOC PART REVISION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION				
		DRAWING		SHEET NUMBER		
		SERIES				
		MATERIAL NUMBER		A3-SIZE 501951		
		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

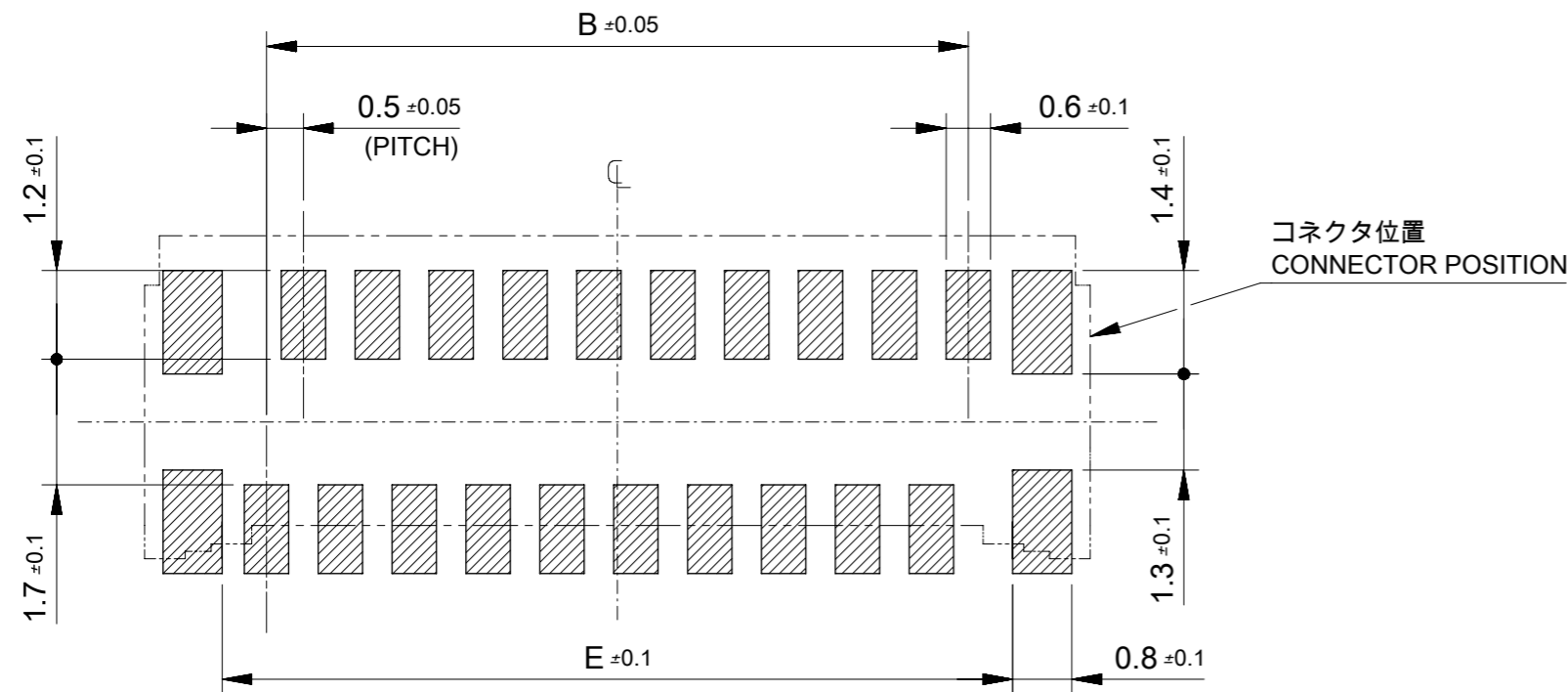
FPC構成推奨仕様
STRUCTURE OF FPC

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: 611684								
ANGULAR TOL ± 1.0°				4 PLACES ± 0.2		DRWN: SKAWAKAMI 2019/02/07		0.5 FPC CONN. HSG ASSY EASY ON VERTICAL (LOW-HALOGEN)				
3 PLACES ± 0.2				2 PLACES ± 0.2		CHK'D: TRSUZUKI 2019/02/07		PRODUCT CUSTOMER DRAWING				
2 PLACES ± 0.2				1 PLACE ± 0.2		APPR: RTAKEUCHI 2019/02/08		DOCUMENT NUMBER				
1 PLACE ± 0.2				0 PLACES ± 0.2		INITIAL REVISION:		5019511005-SD		DOC TYPE	DOC PART	REVISION
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER
				A3-SIZE		501951		SEE CHART		PSD	000	B
												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 : 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.

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			DOCUMENT NUMBER					
3 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/08			5019511005-SD			DOC TYPE	DOC PART	REVISION
2 PLACES	± 0.2	INITIAL REVISION:			PSD 000 B					
1 PLACE	± 0.2	DRWN: SKAWAKAMI 2018/11/26			MATERIAL NUMBER					
0 PLACES	± 0.2	APPR: RTAKEUCHI 2019/02/01			CUSTOMER					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	SHEET NUMBER		SHEET NUMBER			
			A3-SIZE	501951	SEE CHART		4 OF 4			