

引き出し方向  
PULL DIRECTION



U



DETAIL U

NOTES

- 梱包数量 : 3000個 / リール  
NUMBER OF CONNECTORS : 3000 PCS/REEL.
- リードテープ長さ  
LEAD TAPE LENGTH



- 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 IEC 60286-3.
- 製品詳細寸法については、図面 5051101008-SD を参照下さい。  
DIMENSIONS OF PRODUCT, REFER TO 5051101008-SD.
- 材料 MATERIAL  
 キャリアテープ : ポリスチレン  
 トップテープ : ポリエチレンテレフタレート、ポリエチレン  
 リール : ポリスチレン<リサイクル材を含む>  
 CARRIER TAPE : POLYSTYRENE  
 TOP TAPE : POLYETHYLENE TEREPHTHALATE, POLYETHYLENE  
 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		CURRENT REV DESC:		<b>molex</b>	
DIMENSION UNITS	SCALE				
mm	2:1			0.5 FPC ZIF 2 CONT EMBT PKG	
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 605617		PRODUCT CUSTOMER DRAWING	
ANGULAR TOL	± 3.0 °	DRWN: JASANUMA	2018/10/05	DOCUMENT NUMBER	
4 PLACES	± 0.2	CHK'D: TRSUZUKI	2018/10/10	5051100008-SD	
3 PLACES	± 0.2	APPR: RTAKEUCHI	2018/10/10	DOC TYPE	DOC PART
2 PLACES	± 0.2	INITIAL REVISION:		PSD	000
1 PLACE	± 0.25	DRWN: JASANUMA	2018/10/05	REVISION	
0 PLACES	± 0.3	APPR: RTAKEUCHI	2018/10/10	A	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER
			A3-SIZE	505110	SEE CHART
				CUSTOMER	SHEET NUMBER
					1 OF 3



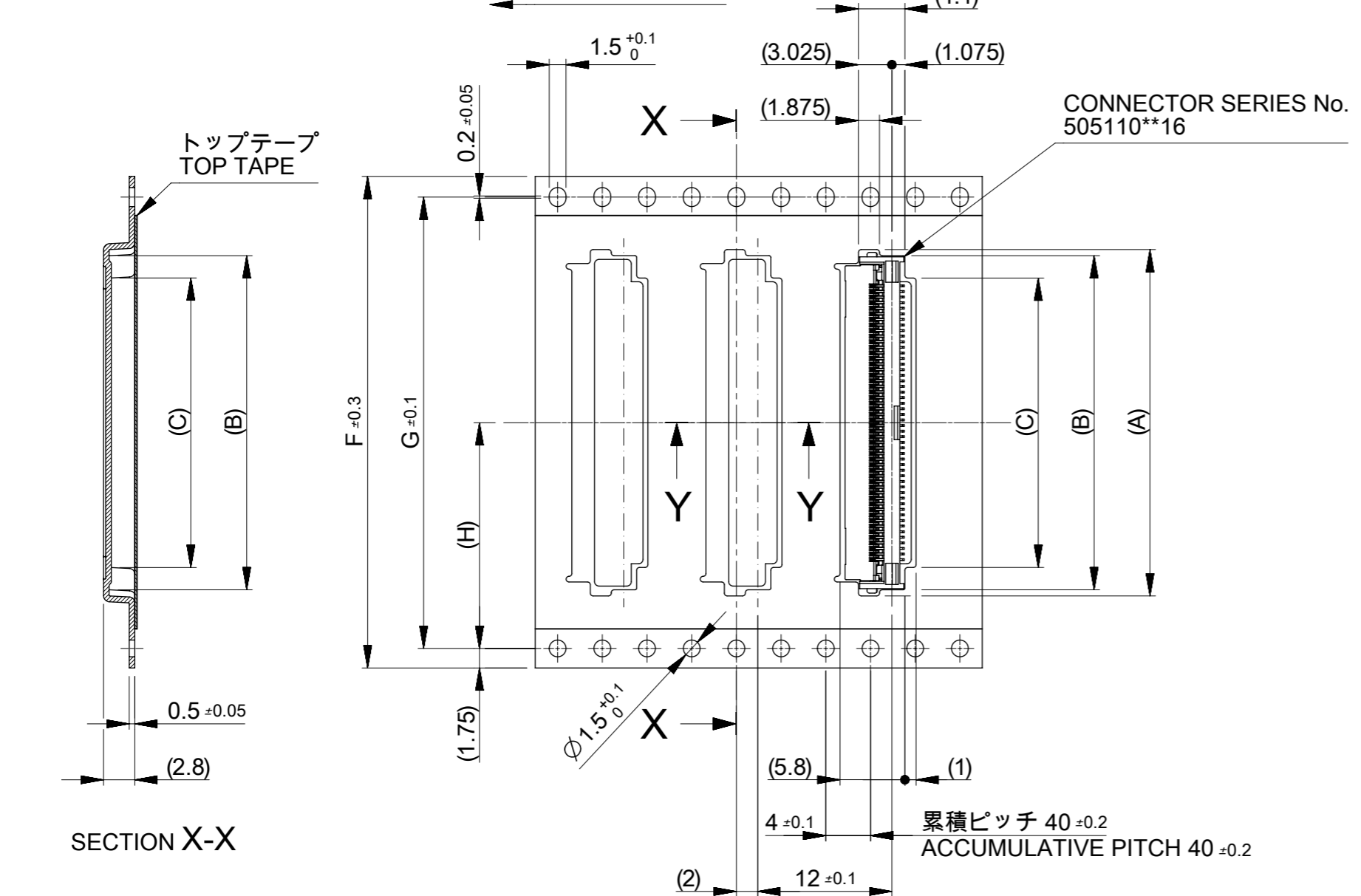
CONNECTOR SERIES No.  
505110\*\*16 (505110\*\*96)  
505110\*\*17 (505110\*\*97)

11.5	----	24	29.4	25.4	10.9	14.9	16	5051102096	20
					10.4	14.4	15.5	5051101997	19
					9.9	13.9	15	5051101897	18
					9.4	13.4	14.5	5051101797	17
					8.9	12.9	14	5051101697	16
					8.4	12.4	13.5	5051101597	15
					7.9	11.9	13	5051101497	14
					7.4	11.4	12.5	5051101397	13
					6.9	10.9	12	5051101297	12
					6.4	10.4	11.5	5051101197	11
					5.9	9.9	11	5051101097	10
					5.4	9.4	10.5	5051100997	9
					4.9	8.9	10	5051100897	8
4.4	8.4	9.5	5051100797	7					
3.9	7.9	9	5051100697	6					
3.4	7.4	8.5	5051100597	5					
7.5	----	16	21.4	17.4	2.9	6.9	8	5051100497	4
H	G	F	E	D	C	B	A	EMBOSSED PACKAGE	Ckt
オーダー番号 ORDER No.									

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DIMENSION UNITS	SCALE	CURRENT REV DESC:		<b>molex</b>			
mm	2:1						
GENERAL TOLERANCES (UNLESS SPECIFIED)				0.5 FPC ZIF 2 CONT EMBT PKG			
ANGULAR TOL	± 3.0 °	EC NO: 605617		PRODUCT CUSTOMER DRAWING			
4 PLACES	± 0.2	DRWN: JASANUMA 2018/10/05		DOCUMENT NUMBER			
3 PLACES	± 0.2	CHK'D: TRSUZUKI 2018/10/10		5051100008-SD			
2 PLACES	± 0.2	APPR: RTAKEUCHI 2018/10/10		DOC TYPE DOC PART REVISION			
1 PLACE	± 0.25	INITIAL REVISION:		PSD 000 A			
0 PLACES	± 0.3	DRWN: JASANUMA 2018/10/05		MATERIAL NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: RTAKEUCHI 2018/10/10		CUSTOMER			
THIRD ANGLE PROJECTION		DRAWING		SERIES		SHEET NUMBER	
A3-SIZE		505110		SEE CHART		2 OF 3	

引き出し方向  
PULL DIRECTION



SECTION X-X

SECTION Y-Y  
SCALE 4:1

					40.9	44.9	46	5051108096	80
					35.9	39.9	41	5051107096	70
					34.9	38.9	40	5051106896	68
					32.9	36.9	38	5051106496	64
					31.4	35.4	36.5	5051106196	61
					30.9	34.9	36	5051106096	60
					30.4	34.4	35.5	5051105996	59
					29.9	33.9	35	5051105896	58
					29.4	33.4	34.5	5051105796	57
					28.9	32.9	34	5051105696	56
					EMBOSSED PACKAGE				Ckt
					オーダー番号 ORDER No.				

26.2	52.4	56	61.4	57.4	28.4	32.4	33.5	5051105596	55					
					27.9	31.9	33	5051105496	54					
					27.4	31.4	32.5	5051105396	53					
					26.9	30.9	32	5051105296	52					
					26.4	30.4	31.5	5051105196	51					
					20.2	40.4	44	49.4	45.4	25.9	29.9	31	5051105096	50
										25.4	29.4	30.5	5051104996	49
										24.9	28.9	30	5051104896	48
										24.4	28.4	29.5	5051104796	47
										23.9	27.9	29	5051104696	46
23.4	27.4	28.5	5051104596	45										
22.9	26.9	28	5051104496	44										
22.4	26.4	27.5	5051104396	43										
21.9	25.9	27	5051104296	42										
21.4	25.4	26.5	5051104196	41										
14.2	28.4	32	37.4	33.4	20.9	24.9	26	5051104096	40					
					20.4	24.4	25.5	5051103996	39					
					19.9	23.9	25	5051103896	38					
					19.4	23.4	24.5	5051103796	37					
					18.9	22.9	24	5051103696	36					
					18.4	22.4	23.5	5051103596	35					
					17.9	21.9	23	5051103496	34					
					17.4	21.4	22.5	5051103396	33					
					16.9	20.9	22	5051103296	32					
					16.4	20.4	21.5	5051103196	31					
H	G	F	E	D	C	B	A	EMBOSSED PACKAGE						
								オーダー番号 ORDER No.						
								15.9	19.9	21	5051103096	30		
								15.4	19.4	20.5	5051102996	29		
								14.9	18.9	20	5051102896	28		
								14.4	18.4	19.5	5051102796	27		
								13.9	17.9	19	5051102696	26		
								13.4	17.4	18.5	5051102596	25		
12.9	16.9	18	5051102496	24										
12.4	16.4	17.5	5051102396	23										
11.9	15.9	17	5051102296	22										
11.4	15.4	16.5	5051102196	21										

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DIMENSION UNITS	SCALE	CURRENT REV DESC:	
mm	2:1		
GENERAL TOLERANCES (UNLESS SPECIFIED)			
ANGULAR TOL	± 3.0°	EC NO: 605617	
4 PLACES	± 0.2	DRWN: JASANUMA	2018/10/05
3 PLACES	± 0.2	CHK'D: TRSUZUKI	2018/10/10
2 PLACES	± 0.2	APPR: RTAKEUCHI	2018/10/10
1 PLACE	± 0.25	INITIAL REVISION:	
0 PLACES	± 0.3	DRWN: JASANUMA	2018/10/05
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: RTAKEUCHI	2018/10/10
THIRD ANGLE PROJECTION		DRAWING	SERIES
		A3-SIZE	505110
MATERIAL NUMBER		CUSTOMER	
SEE CHART			
DOCUMENT NUMBER		DOC TYPE	DOC PART
5051100008-SD		PSD	000
REVISION		A	
SHEET NUMBER		3 OF 3	



: PICK UP AREA



10.07	12.6	9	14.2	5051101997	19
9.57	12.1	8.5	13.7	5051101897	18
9.07	11.6	8	13.2	5051101797	17
8.57	11.1	7.5	12.7	5051101697	16
8.07	10.6	7	12.2	5051101597	15
7.57	10.1	6.5	11.7	5051101497	14
7.07	9.6	6	11.2	5051101397	13
6.57	9.1	5.5	10.7	5051101297	12
6.07	8.6	5	10.2	5051101197	11
5.57	8.1	4.5	9.7	5051101097	10
5.07	7.6	4	9.2	5051100997	9
4.57	7.1	3.5	8.7	5051100897	8
4.07	6.6	3	8.2	5051100797	7
3.57	6.1	2.5	7.7	5051100697	6
3.07	5.6	2	7.2	5051100597	5
2.57	5.1	1.5	6.7	5051100497	4
D	C	B	A	EMBOSSED PACKAGE	Ckt
				オーダー番号 ORDER No.	

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DIMENSION UNITS <b>mm</b>	SCALE <b>8:1</b>	CURRENT REV DESC:		<b>molex</b>		
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 720907				
ANGULAR TOL	± 3.0 °	DRWN: RAJMOK		PRODUCT CUSTOMER DRAWING		
4 PLACES	± 0.2	CHK'D: YNUKANOBU		DOCUMENT NUMBER		
3 PLACES	± 0.2	APPR: YNAITO		5051101008-SD		
2 PLACES	± 0.2	INITIAL REVISION:		DOC TYPE		
1 PLACE	± 0.25	DRWN: JASANUMA		PSD		
0 PLACES	± 0.3	APPR: RTAKEUCHI		DOC PART		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		REVISION		
		DRAWING		C		
		SERIES		SHEET NUMBER		
		A3-SIZE		1 OF 4		
		MATERIAL NUMBER				
		CUSTOMER				



40.5	43.1	39.5	44.7	5051108096	80	25	27.6	24	29.2	5051104996	49	20	22.6	19	24.2	5051103996	39	15	17.6	14	19.2	5051102996	29
35.5	38.1	34.5	39.7	5051107096	70	24.5	27.1	23.5	28.7	5051104896	48	19.5	22.1	18.5	23.7	5051103896	38	14.5	17.1	13.5	18.7	5051102896	28
34.5	37.1	33.5	38.7	5051106896	68	24	26.6	23	28.2	5051104796	47	19	21.6	18	23.2	5051103796	37	14	16.6	13	18.2	5051102796	27
32.5	35.1	31.5	36.7	5051106496	64	23.5	26.1	22.5	27.7	5051104696	46	18.5	21.1	17.5	22.7	5051103696	36	13.5	16.1	12.5	17.7	5051102696	26
31	33.6	30	35.2	5051106196	61	23	25.6	22	27.2	5051104596	45	18	20.6	17	22.2	5051103596	35	13	15.6	12	17.2	5051102596	25
30.5	33.1	29.5	34.7	5051106096	60	22.5	25.1	21.5	26.7	5051104496	44	17.5	20.1	16.5	21.7	5051103496	34	12.5	15.1	11.5	16.7	5051102496	24
30	32.6	29	34.2	5051105996	59	22	24.6	21	26.2	5051104396	43	17	19.6	16	21.2	5051103396	33	12	14.6	11	16.2	5051102396	23
29.5	32.1	28.5	33.7	5051105896	58	21.5	24.1	20.5	25.7	5051104296	42	16.5	19.1	15.5	20.7	5051103296	32	11.5	14.1	10.5	15.7	5051102296	22
29	31.6	28	33.2	5051105796	57	21	23.6	20	25.2	5051104196	41	16	18.6	15	20.2	5051103196	31	11	13.6	10	15.2	5051102196	21
28.5	31.1	27.5	32.7	5051105696	56	20.5	23.1	19.5	24.7	5051104096	40	15.5	18.1	14.5	19.7	5051103096	30	10.5	13.1	9.5	14.7	5051102096	20
28	30.6	27	32.2	5051105596	55	D	C	B	A	EMBOSSED PACKAGE	Ckt	D	C	B	A	EMBOSSED PACKAGE	Ckt	D	C	B	A	EMBOSSED PACKAGE	Ckt
27.5	30.1	26.5	31.7	5051105496	54					オーダー番号 ORDER No.						オーダー番号 ORDER No.						オーダー番号 ORDER No.	
27	29.6	26	31.2	5051105396	53																		
26.5	29.1	25.5	30.7	5051105296	52																		
26	28.6	25	30.2	5051105196	51																		
25.5	28.1	24.5	29.7	5051105096	50																		
D	C	B	A	EMBOSSED PACKAGE	Ckt																		
				オーダー番号 ORDER No.																			

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DIMENSION UNITS: mm SCALE: 8:1

GENERAL TOLERANCES (UNLESS SPECIFIED):

ANGULAR TOL ± 3.0°

4 PLACES ± 0.2

3 PLACES ± 0.2

2 PLACES ± 0.2

1 PLACE ± 0.25

0 PLACES ± 0.3

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 505110

MATERIAL NUMBER: 5051101008-SD

CUSTOMER: PSD

SHEET NUMBER: 2 OF 4

EC NO: 720907

DRWN: RAJMOK 2022/09/09

CHK'D: YNUKANOBU 2022/09/22

APPR: YNAITO 2022/09/22

INITIAL REVISION:

DRWN: JASANUMA 2018/10/05

APPR: RTAKEUCHI 2018/10/10

DOCUMENT NUMBER: 5051101008-SD

DOC TYPE: PSD

DOC PART: 000

REVISION: C

PRODUCT CUSTOMER DRAWING

**molex**

0.5 FPC ZIF 2 CONT HSG ASSY



適合FPC/FFC推奨寸法  
APPLICABLE FPC/FFC RECOMMENDED DIMENSION

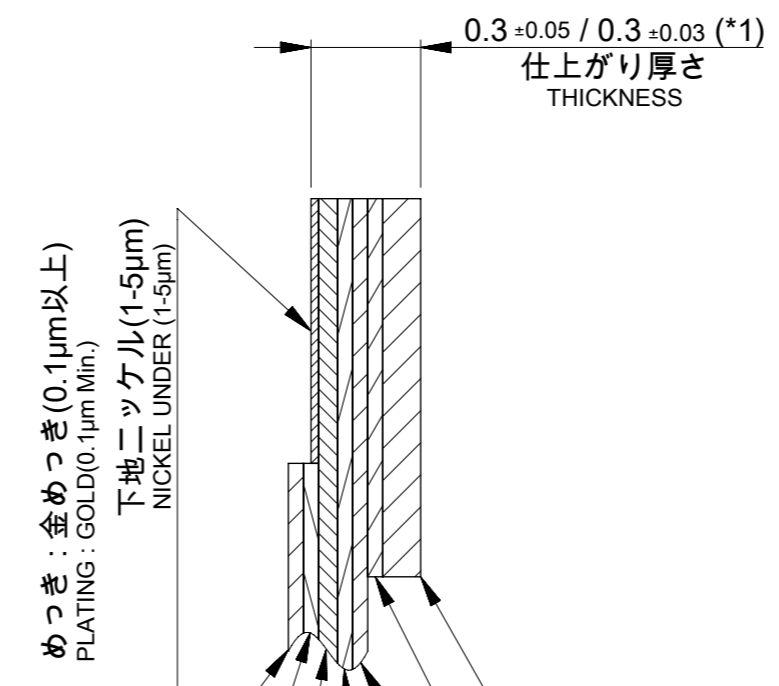
( ): FFCに適用  
( ): APPLY TO FFC



適合FPC/FFC推奨寸法  
APPLICABLE FPC/FFC RECOMMENDED DIMENSION

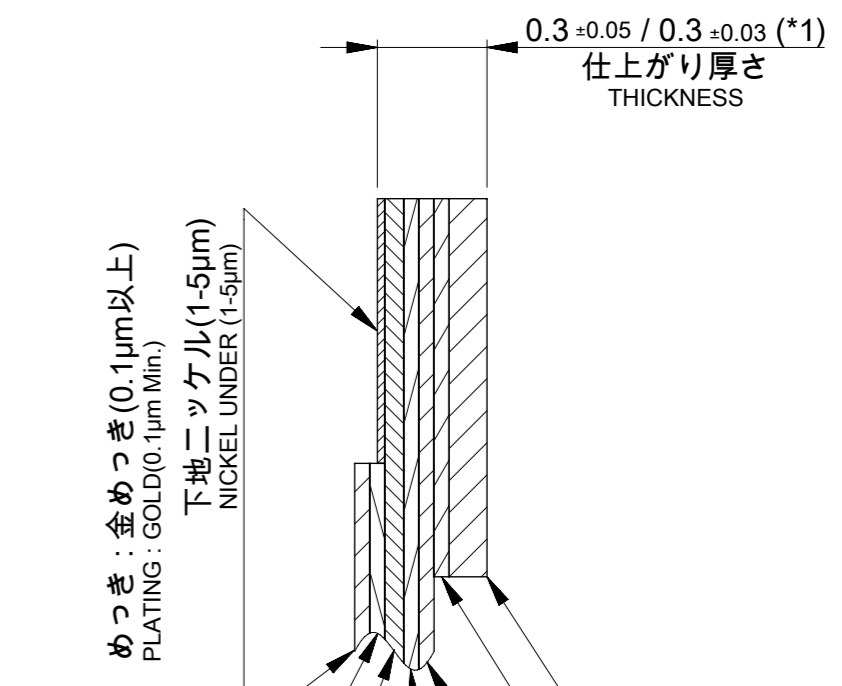
( ): FFCに適用  
( ): APPLY TO FFC

\*1: 125°Cを超える環境下で使用する場合に適用。  
Apply when use in over 125 deg.C environment.



- 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

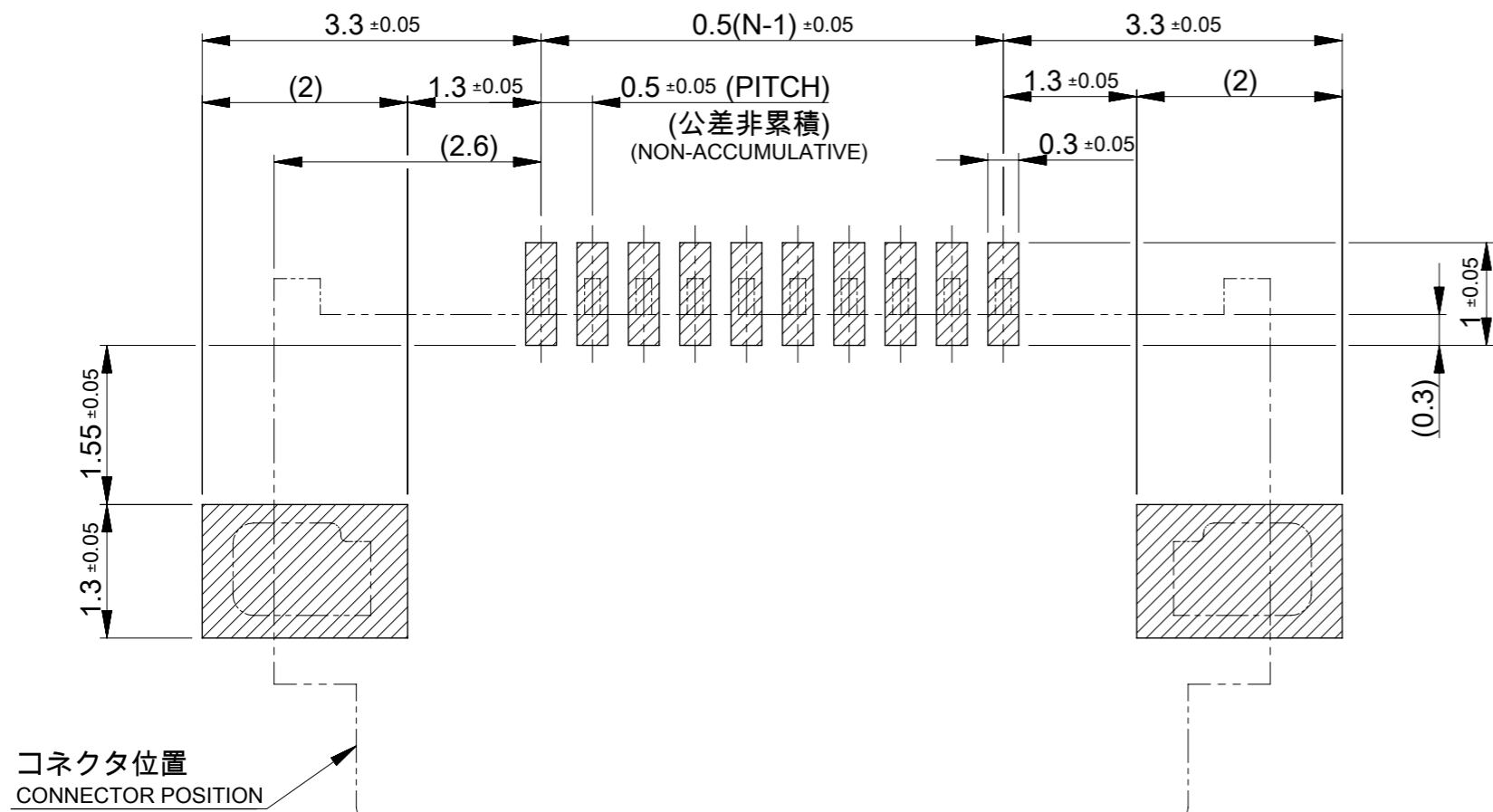
FPC構成推奨仕様  
STRUCTURE OF FPC



- 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

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DIMENSION UNITS		SCALE		CURRENT REV DESC:					
mm		10:1		<p style="text-align: center;"><b>molex</b></p> <p style="text-align: center;">0.5 FPC ZIF 2 CONT HSG ASSY</p> <p style="text-align: center;">PRODUCT CUSTOMER DRAWING</p>					
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL ± 3.0°									
4 PLACES		± 0.2							
3 PLACES		± 0.2							
2 PLACES		± 0.2							
1 PLACE		± 0.25		EC NO: 720907		2022/09/09			
0 PLACES		± 0.3		DRWN: RAJMOK		2022/09/22			
				CHK'D: YNUKANOBU		2022/09/22			
				APPR: YNAITO		2022/09/22			
INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE		DOC PART	
DRWN: JASANUMA		2018/10/05		5051101008-SD		PSD		000	
APPR: RTAKEUCHI		2018/10/10						C	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES	
						A3-SIZE		505110	
MATERIAL NUMBER				CUSTOMER		SHEET NUMBER			
						3 OF 4			



推奨基板レイアウト  
RECOMMENDED P.W.B PATTERN LAYOUT

参考マスク厚 : 100µm  
REFERENCE SCREEN THICKNESS : 100µm  
参考マスク開口率 : 100%  
REFERENCE 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た実使用において、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/確認をお願いいたします。  
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 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.

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 (ベージュ)  
HOUSING LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (BEIGE)  
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 : リン青銅 (t=0.15)  
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 (0.05µm以上)  
CONTACT AREA : SEPARATED GOLD PLATING (0.05µm MINIMUM)  
テール部 : 部分金めっき  
SOLDER TAIL AREA : SEPARATED GOLD PLATING  
下地:ニッケルめっき (1.0µm以上)  
UNDERPLATE : NICKEL OVERALL (1.0µm MINIMUM)  
金具 FITTING NAIL  
錫めっき (1.0µm以上)  
TIN PLATING (1.0µm MINIMUM)  
下地:ニッケルめっき (1.0µm以上)  
UNDER PLATING : NICKEL PLATING (1.0µm MINIMUM)

3. エンボステープ梱包時は、アクチュエータが閉じた状態とする。  
IN THE PACKAGE, ACTUATOR OF PART SHOULD BE CLOSED.

△4 パターン剥離止め用金具  
FITTING NAIL FOR PREVENTING PEELING OF P.W.B. PATTERN.

△5 R0.3はFPC/FFC導体部にかからないこと。  
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC/FFC.

6. N : 極数 N : CIRCUIT

7. テールと金具を併せた平坦度は0.1mm以下とする。  
TAILS AND NAILS COPLANALITY TO BE 0.1mm MAXIMUM.

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:							
mm		15:1									
GENERAL TOLERANCES (UNLESS SPECIFIED)											
ANGULAR TOL ± 3.0°				0.5 FPC ZIF 2 CONT HSG ASSY							
4 PLACES ± 0.2				PRODUCT CUSTOMER DRAWING							
3 PLACES ± 0.2				DOCUMENT NUMBER							
2 PLACES ± 0.2				5051101008-SD							
1 PLACE ± 0.25				DOC TYPE							
0 PLACES ± 0.3				PSD							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		SHEET NUMBER	
						A3-SIZE		505110		4 OF 4	