

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



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:		molex			
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	



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
					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
20.2	40.4	44	49.4	45.4	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
					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
14.2	28.4	32	37.4	33.4	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
					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
H	G	F	E	D	C	B	A	EMBOSSED PACKAGE	
								オーダー番号 ORDER No.	
								Ckt	
								C	
								B	

26.2	52.4	56	61.4	57.4	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
H	G	F	E	D	C	B	A	EMBOSSED PACKAGE	
								オーダー番号 ORDER No.	
								Ckt	

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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	MATERIAL NUMBER
	A3-SIZE	505110	SEE CHART
CUSTOMER		DOC TYPE	DOC PART
5051100008-SD		PSD	000
SHEET NUMBER		REVISION	
3 OF 3		A	



: 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 mm	SCALE 8:1	CURRENT REV DESC:		molex		
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	SCALE	CURRENT REV DESC:	
mm	8:1		
GENERAL TOLERANCES (UNLESS SPECIFIED)			
ANGULAR TOL	± 3.0°		
4 PLACES	± 0.2	EC NO: 720907	2022/09/09
3 PLACES	± 0.2	DRWN: RAJMOK	2022/09/22
2 PLACES	± 0.2	CHK'D: YNUKANOBU	2022/09/22
1 PLACE	± 0.25	APPR: YNAITO	2022/09/22
0 PLACES	± 0.3	INITIAL REVISION:	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JASANUMA	2018/10/05
THIRD ANGLE PROJECTION		APPR: RTAKEUCHI	2018/10/10
DRAWING		SERIES	MATERIAL NUMBER
A3-SIZE		505110	5051101008-SD
CUSTOMER		DOCUMENT NUMBER	DOC TYPE
		5051101008-SD	PSD
SHEET NUMBER		DOC PART	REVISION
2 OF 4		000	C



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

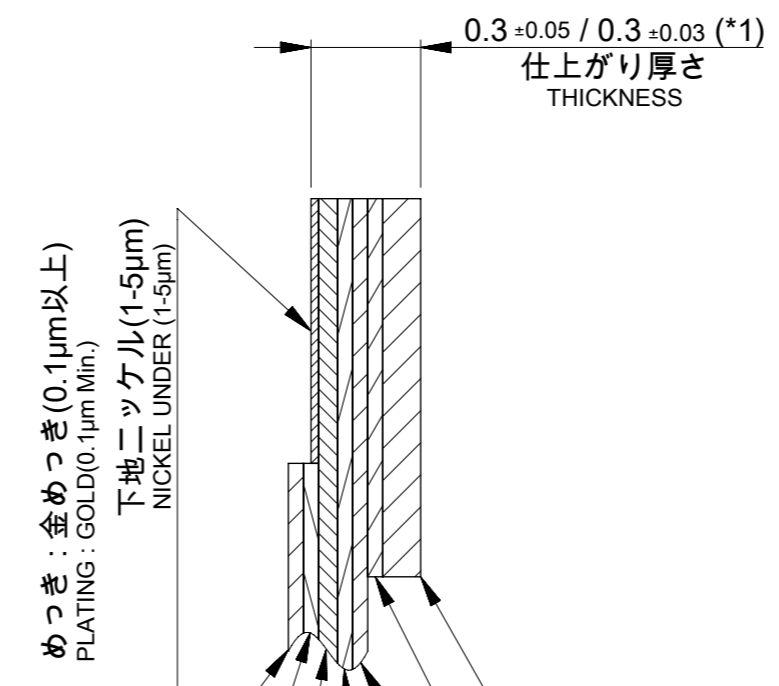
() : FFCに適用
() : APPLY TO FFC



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

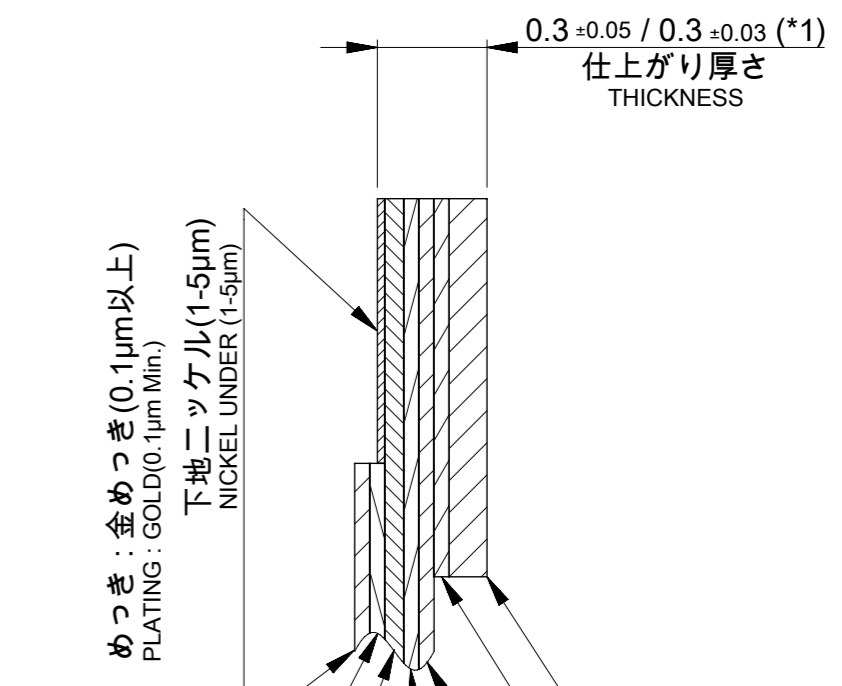
() : FFCに適用
() : APPLY TO FFC

*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.



- めっき : 金めっき (0.1µm以上)
PLATING : GOLD (0.1µm Min.)
- 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

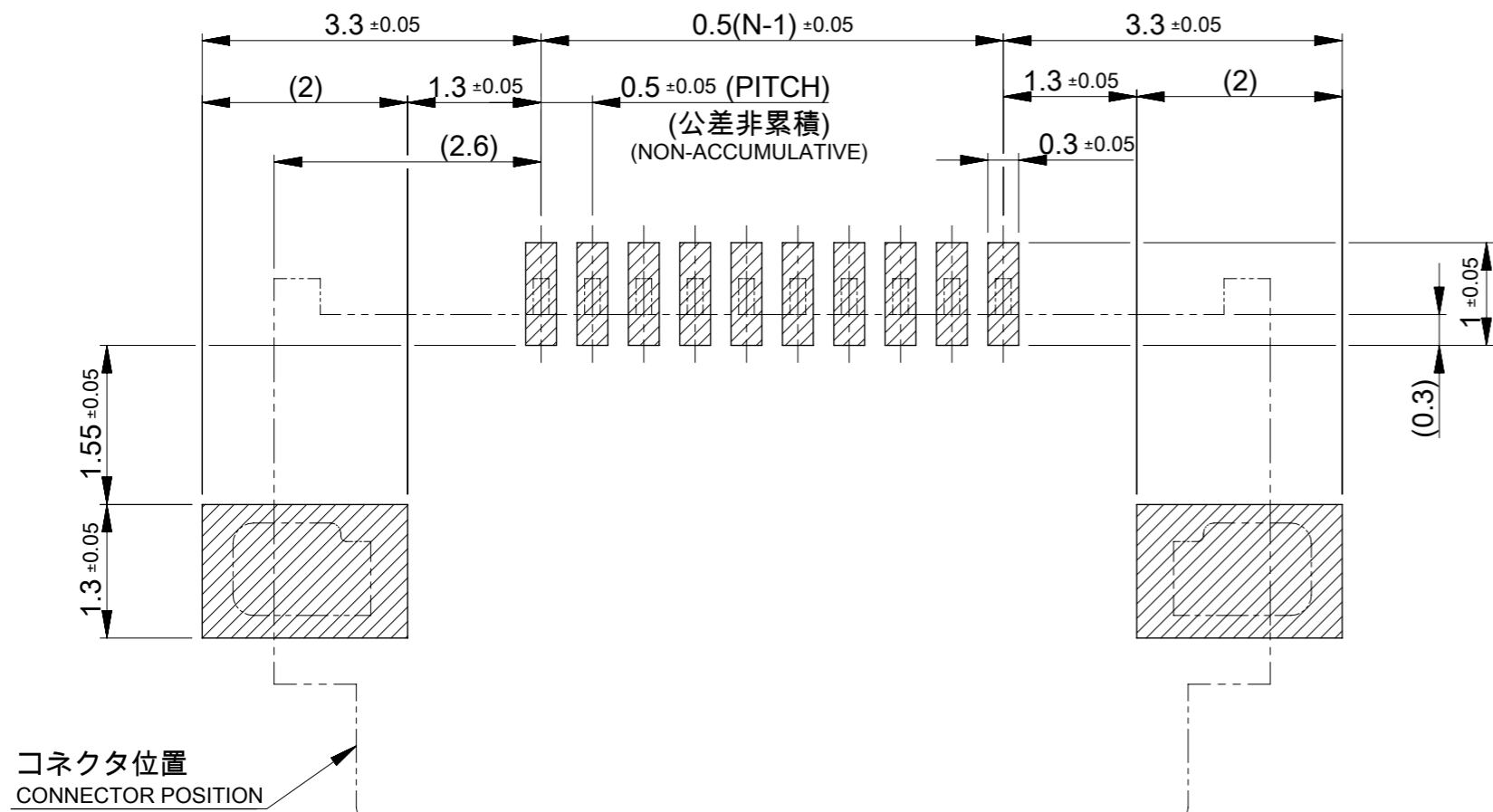
FPC構成推奨仕様
STRUCTURE OF FPC



- めっき : 金めっき (0.1µm以上)
PLATING : GOLD (0.1µm Min.)
- 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

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DIMENSION UNITS		SCALE		CURRENT REV DESC.					
mm		10:1		<p>molex</p> <p>0.5 FPC ZIF 2 CONT HSG ASSY</p> <p>PRODUCT CUSTOMER DRAWING</p> <p>DOCUMENT NUMBER: 5051101008-SD</p> <p>DOC TYPE: PSD</p> <p>DOC PART: 000</p> <p>REVISION: C</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							
0 PLACES		± 0.3							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES	
A3-SIZE		505110		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
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		APPR: RTAKEUCHI		2018/10/10			



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.

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DIMENSION UNITS		SCALE		CURRENT REV DESC:					
mm		15:1							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL ± 3.0°				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					
4 PLACES ± 0.2									
3 PLACES ± 0.2									
2 PLACES ± 0.2									
1 PLACE ± 0.25									
0 PLACES ± 0.3				DOCUMENT NUMBER		DOC TYPE		DOC PART REVISION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES	
		A3-SIZE		505110		5051101008-SD		PSD 000 C	
DOCUMENT STATUS				P1		RELEASE DATE		2022/09/22 11:54:38	