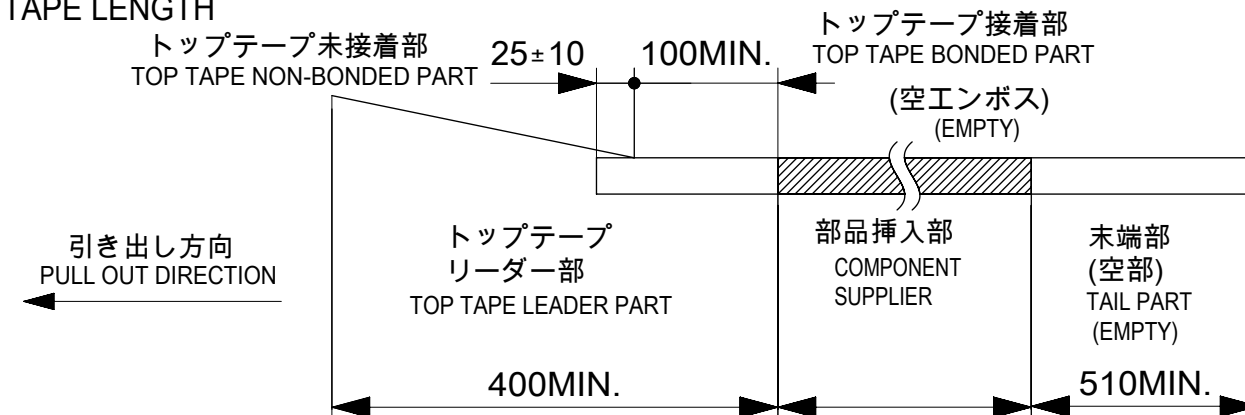


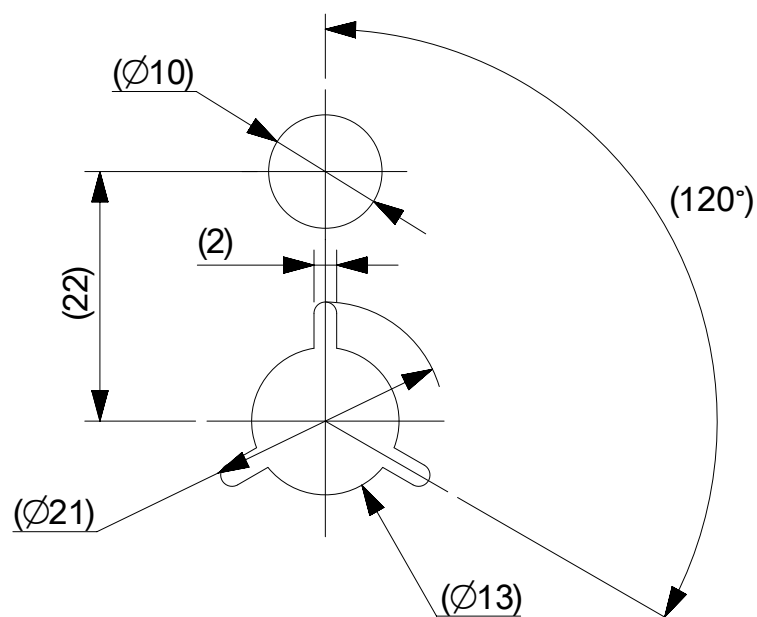
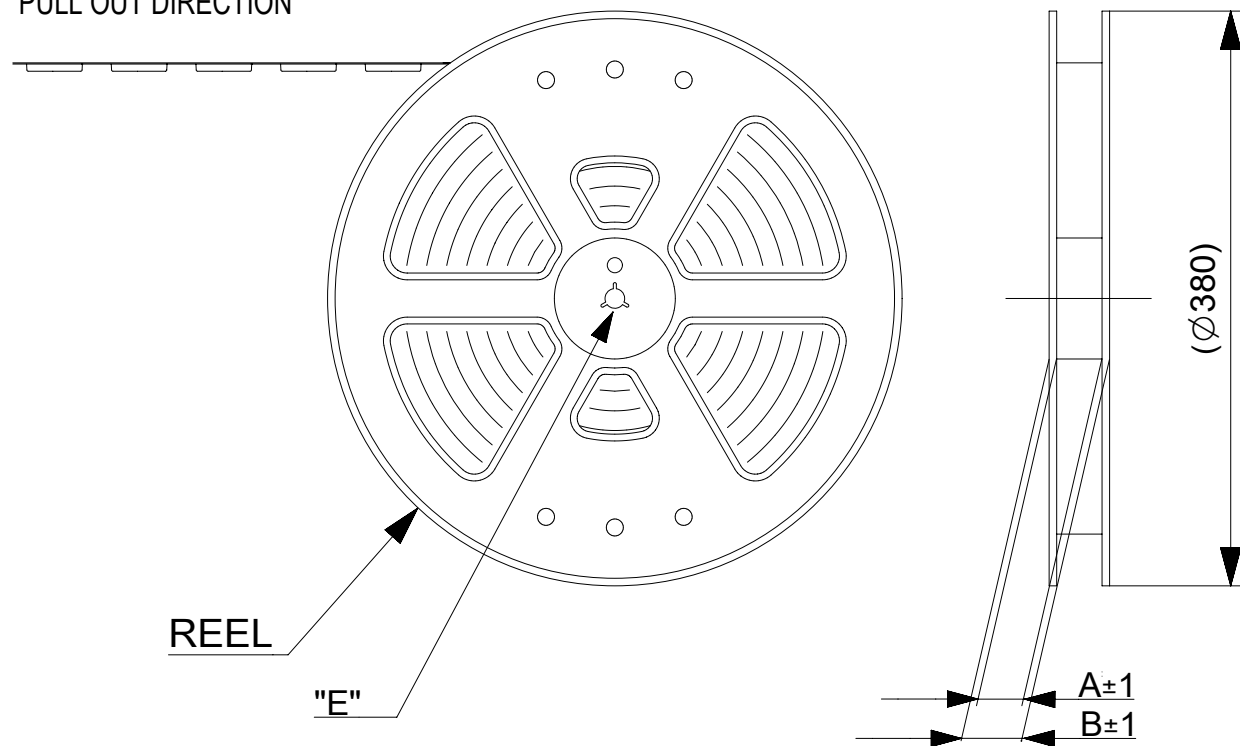
NOTES

- 梱包数量 : 2000個 / リール  
NUMBER OF CONNECTORS : 2000 PCS/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- トップテープの剥離強度については、IEC60286-3に準拠。  
TOP TAPE PEEL FORCE IS DEFINED BY IEC60286-3.
- 製品詳細寸法については、図面781191002をご参照ください。  
REFER TO THE 781191002 ABOUT DIMENSIONS IN DETAIL.
- 材料  
 キャリアテープ : ポリスチレン(PS)  
 トップテープ : PET, OTHER  
 リール : ポリスチレン(PS)(リサイクル材を含む)
- MATERIAL  
 CARRIER TAPE : POLYSTYRENE(PS)  
 TOP TAPE : PET, OTHER  
 REEL : POLYSTYRENE(PS) (RECYCLE MATERIAL CONTAINED)
- 環境負荷物質の管理のため「化学物質ガイドライン」の内容を満足すること。  
"CHEMICAL SUBSTANCES GUIDELINE" SHALL BE APPLIED FOR MANAGEMENT OF ENVIRONMENTAL HAZARDOUS MATERIALS.

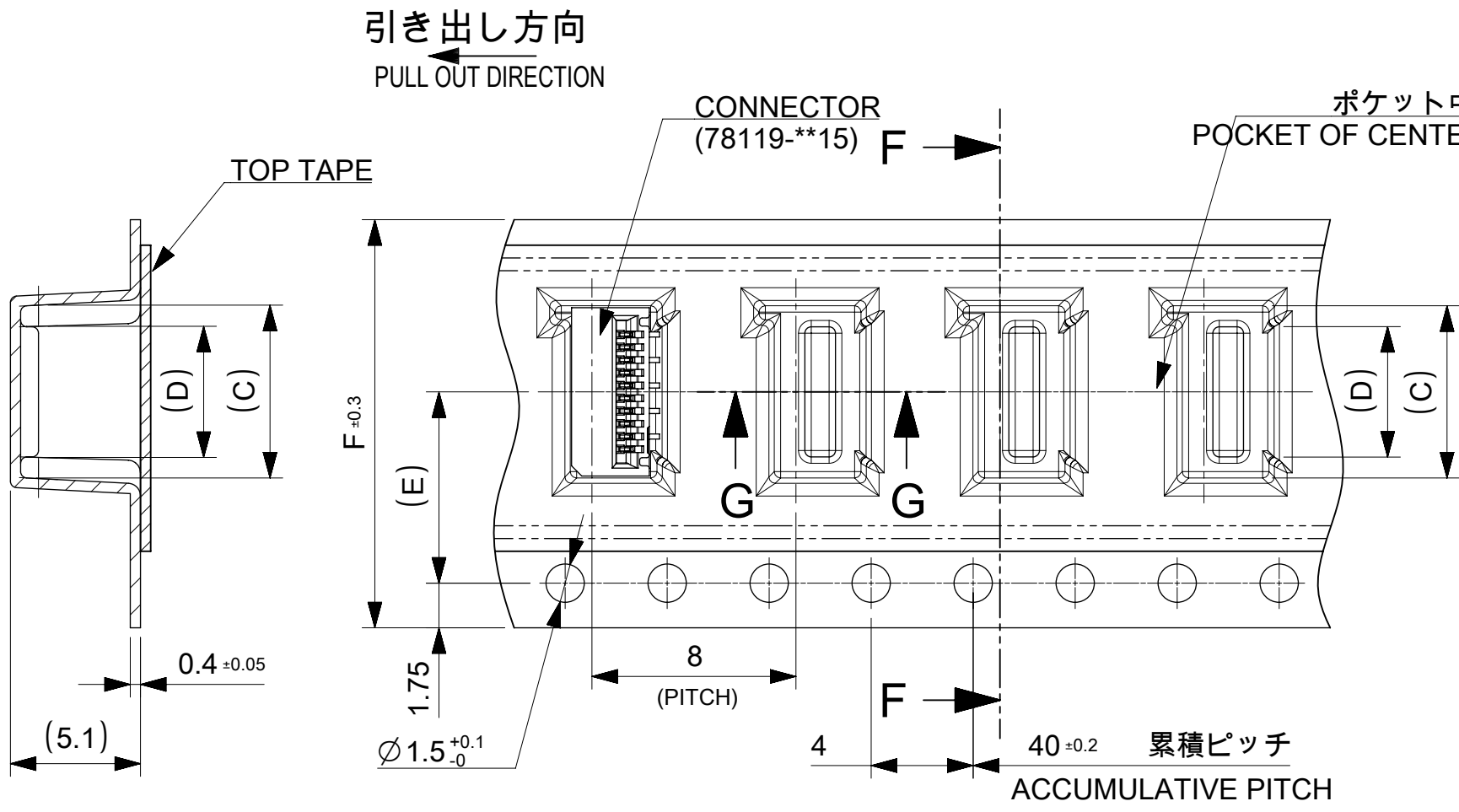
引き出し方向  
PULL OUT DIRECTION



DETAIL "E"

CONNECTOR SERIES NO. 78119\*\*25

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 CONN. N-ZIF ST AU EMBS TP PKG	
GENERAL TOLERANCES (UNLESS SPECIFIED)				PRODUCT CUSTOMER DRAWING	
ANGULAR TOL	± 1.0 °			DOCUMENT NUMBER	
4 PLACES	± 0.1	EC NO: 677105	2021/09/07	781190002	
3 PLACES	± 0.1	DRWN: NARENC	2021/09/13	DOC TYPE	DOC PART
2 PLACES	± 0.1	CHK'D: TKON	2021/09/16	PSD	000
1 PLACE	± 0.1	APPR: SHOSHIKAWA		REVISION	B
0 PLACES	± 0.1	INITIAL REVISION:		SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: NASANUMA	2016/04/26	1 OF 3	
THIRD ANGLE PROJECTION		APPR: KMORIKAWA	2016/08/02		
DRAWING		SERIES	MATERIAL NUMBER	CUSTOMER	
A3-SIZE		78119	SEE TABLE		

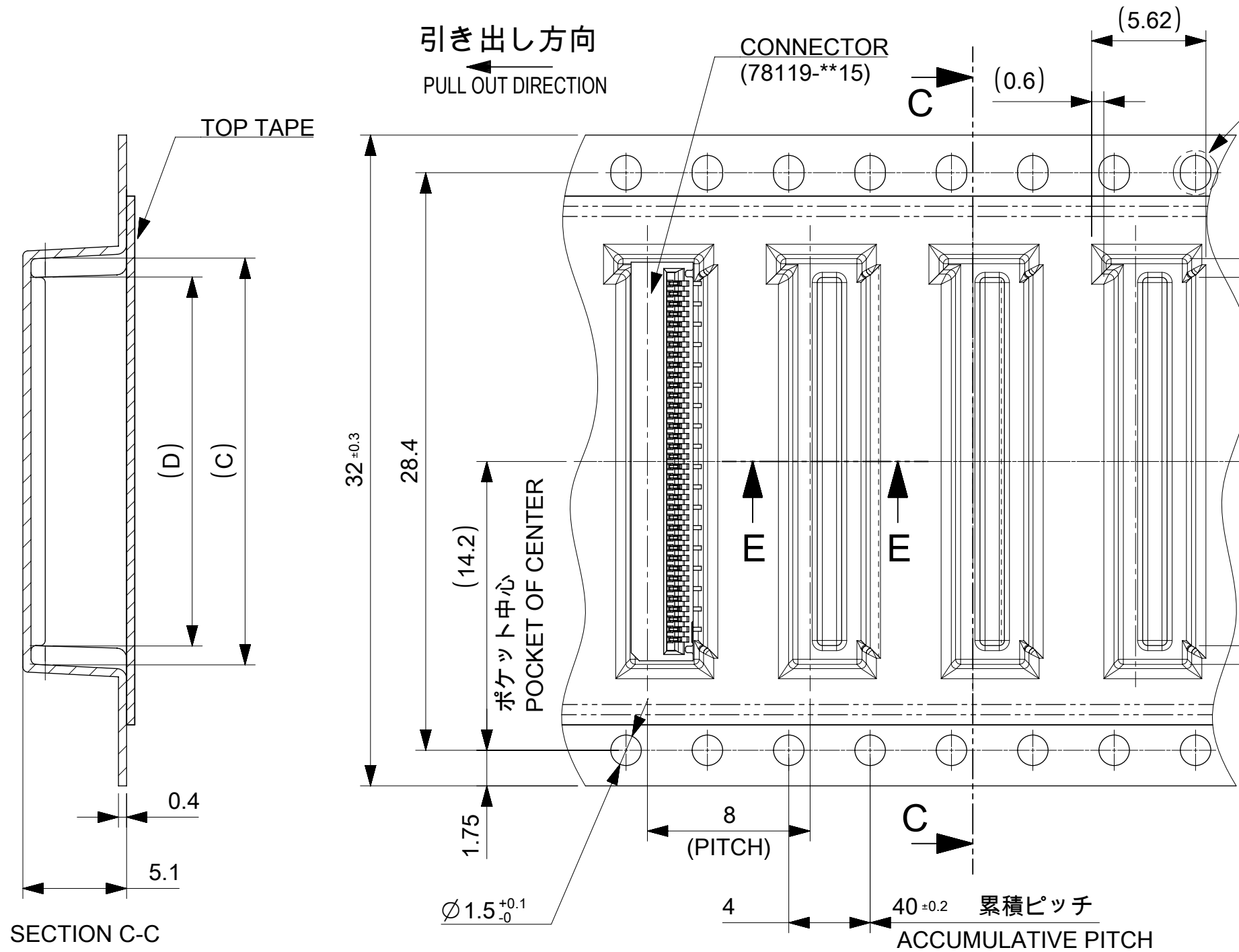


24	11.5	14.1	15.8	29.4	25.4	781192820	28
		13.6	15.3			781192720	27
		13.1	14.8			781192620	26
		12.6	14.3			781192520	25
		12.1	13.8			781192420	24
		11.6	13.3			781192320	23
		11.1	12.8			781192220	22
		10.6	12.3			781192120	21
		10.1	11.8			781192020	20
		9.6	11.3			781191920	19
		9.1	10.8			781191820	18
		8.6	10.3			781191720	17
8.1	9.8	781191620	16				
7.6	9.3	781191520	15				
16	7.5	7.1	8.8	21.4	17.4	781191420	14
		6.6	8.3			781191320	13
		6.1	7.8			781191220	12
		5.6	7.3			781191120	11
		5.1	6.8			781191020	10
		4.6	6.3			781190920	9
		4.1	5.8			781190820	8
		3.6	5.3			781190720	7
3.1	4.8	781190620	6				
F TAPE WIDTH	E	D	C	B	A	EMBOSSED PACKAGE オーダー番号 ORDER NO	CIRCUIT

16mm, 24mm幅キャリアテープ  
16mm, 24mm WIDTH CARRIER TAPE

CONNECTOR SERIES NO. 78119\*\*25

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 mm	SCALE 4:1	EC NO: 677105 DRWN: NARENC CHK'D: TKON APPR: SHOSHIKAWA			
GENERAL TOLERANCES (UNLESS SPECIFIED)		2021/09/07		0.5 FPC CONN. N-ZIF ST AU EMBS TP PKG	
ANGULAR TOL	± 1.0 °	2021/09/13		PRODUCT CUSTOMER DRAWING	
4 PLACES	± 0.1	2021/09/16		DOCUMENT NUMBER	
3 PLACES	± 0.1	INITIAL REVISION:		781190002	
2 PLACES	± 0.1	DRWN: NASANUMA		DOC TYPE	
1 PLACE	± 0.1	APPR: KMORIKAWA		PSD	
0 PLACES	± 0.1	2016/04/26		DOC PART	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		2016/08/02		000	
THIRD ANGLE PROJECTION		DRAWING		REVISION	
A3-SIZE		SERIES		B	
78119		MATERIAL NUMBER		SHEET NUMBER	
SEE TABLE		CUSTOMER		2 OF 3	



32	18.1	19.8	37.4	33.4	781193620	36
	17.6	19.3			781193520	35
	17.1	18.8			781193420	34
	16.6	18.3			781193320	33
	16.1	17.8			781193220	32
	15.6	17.3			781193120	31
	15.1	16.8			781193020	30
	14.6	16.3			781192920	29
TAPE WIDTH	D	C	B	A	EMBOSSED PACKAGE オーダー番号 ORDER NO	CIRCUIT

# 32mm幅キャリアテープ

## 32mm WIDTH CARRIER TAPE

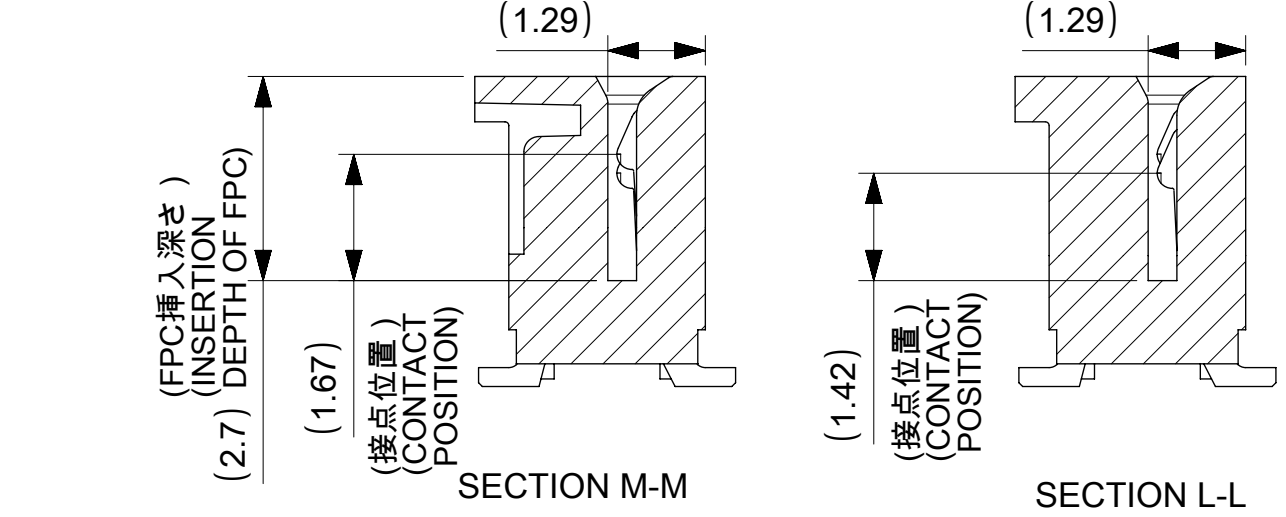
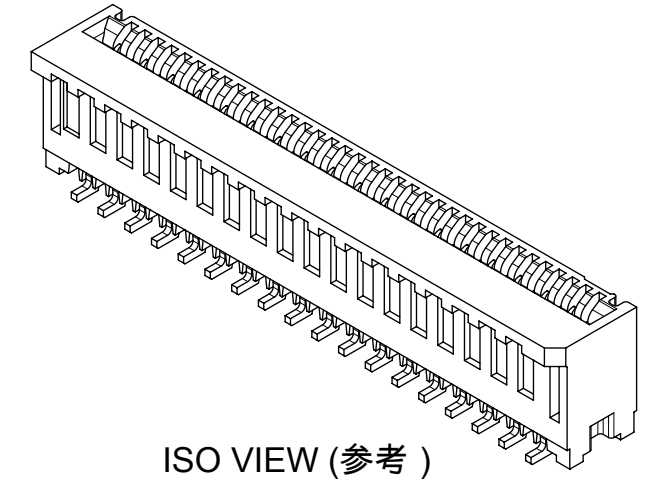
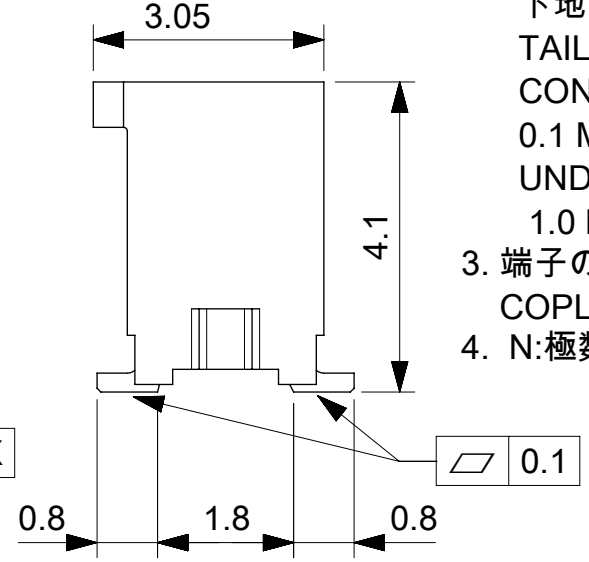
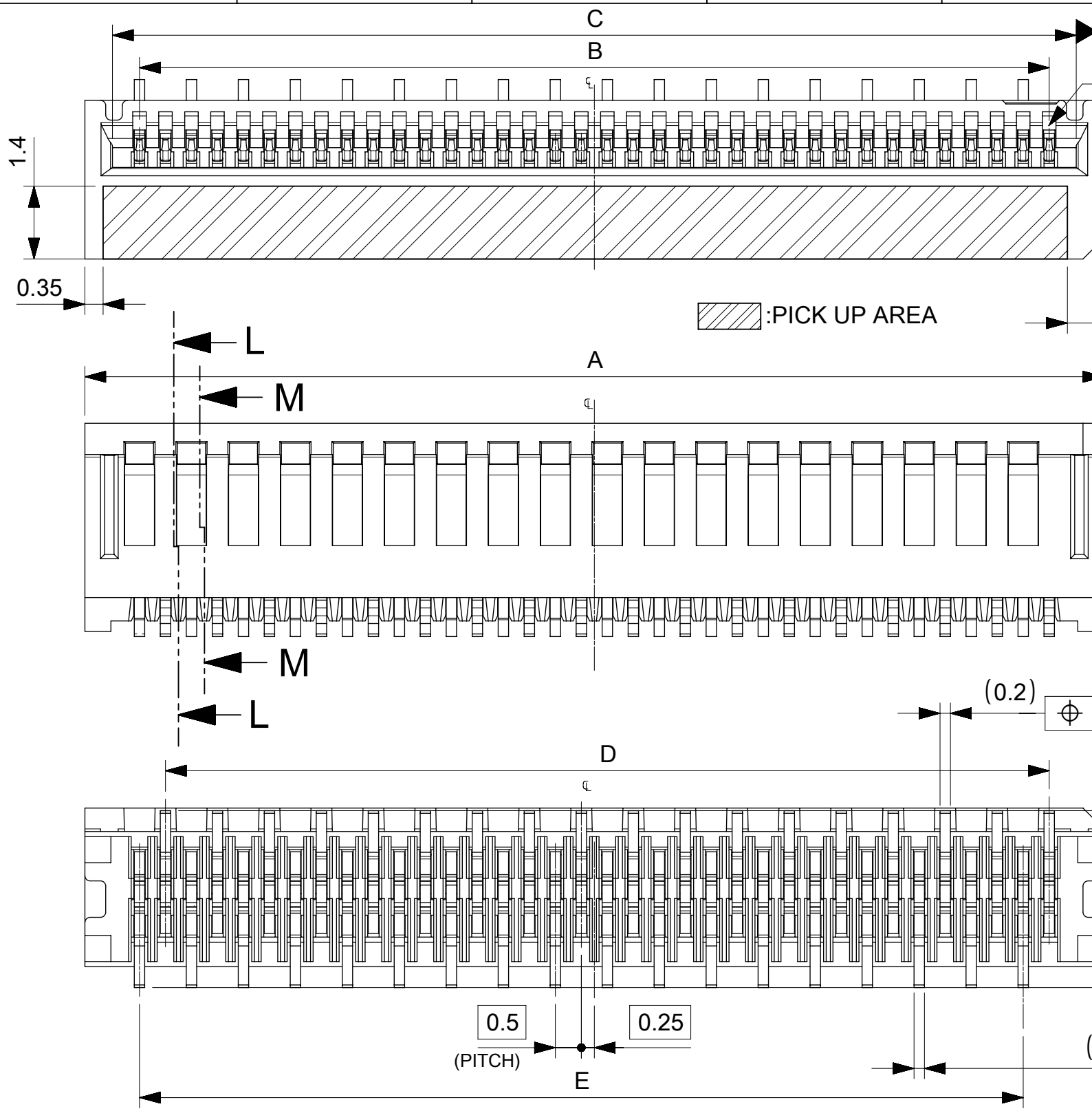
CONNECTOR SERIES NO. 78119\*\*25

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	EC NO: 677105			
mm	4:1	DRWN: NARENC 2021/09/07		0.5 FPC CONN. N-ZIF ST AU EMBS TP PKG	
GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: TKON 2021/09/13		PRODUCT CUSTOMER DRAWING	
ANGULAR TOL	± 1.0 °	APPR: SHOSHIKAWA 2021/09/16		DOCUMENT NUMBER	
4 PLACES	± 0.1	INITIAL REVISION:		781190002	
3 PLACES	± 0.1	DRWN: NASANUMA 2016/04/26		DOC TYPE	DOC PART
2 PLACES	± 0.1	APPR: KMORIKAWA 2016/08/02		PSD	000
1 PLACE	± 0.1	MATERIAL NUMBER		REVISION	B
0 PLACES	± 0.1	CUSTOMER		3 OF 3	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER
			A3-SIZE	78119	SEE TABLE

NOTES

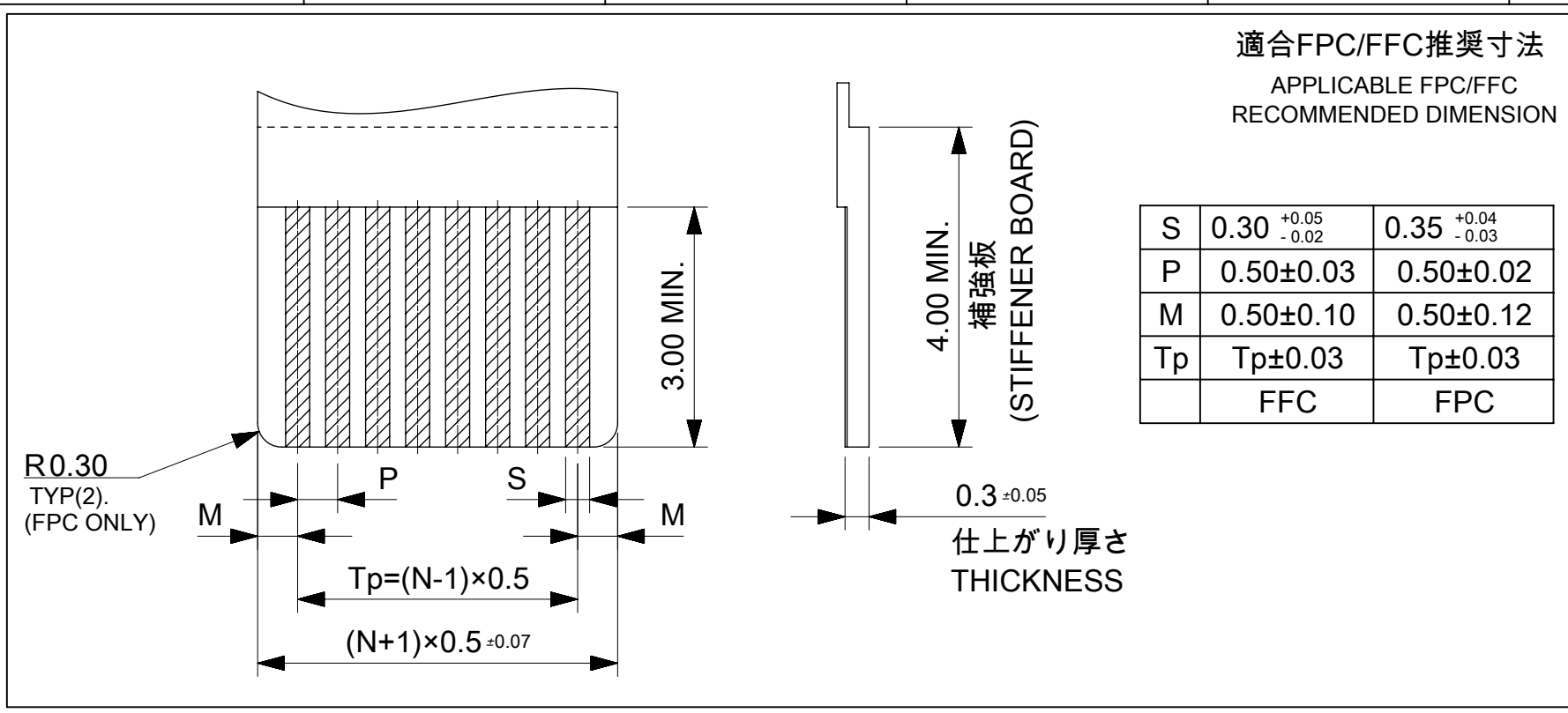
1. 使用材料 MATERIALS  
 ハウジング : 液晶ポリマー (LCP)  
 ガラス充填、UL94 V-0、黒色  
 端子 : リン青銅 t=0.2mm  
 HOUSING : LIQUID CRYSTAL POLYMER(LCP)  
 GLASS FILLED, UL94 V-0, BLACK  
 TERMINAL: PHOSPHOR BRONZE t=0.2mm
2. メッキ仕様 PLATING  
 端子 TERMINAL  
 テール部 : 金メッキ  
 接点部 : 金メッキ 0.1μm以上  
 下地 : ニッケルメッキ 1.0μm以上  
 TAIL AREA : GOLD PLATING  
 CONTACT AREA : GOLD PLATING  
 0.1 MICROMETER MINIMUM  
 UNDER PLATING: Nickel PLATING  
 1.0 MICROMETER MINIMUM
3. 端子の平坦度はテール部にて0.1mm以下とする。  
 COPLANALITY OF SOLDER TAILS: 0.1mm MAX.
4. N: 極数 N: CIRCUIT

1st ckt contact



CONNECTOR SERIES NO. 78119\*\*25

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
EC NO: 107065 DRWN: NASANUMA CHK'D: YKOBAYASHI02 APPR: KMORIKAWA	2016/02/17	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	2016/08/01	ANGULAR TOL ± 1.0 °	
	2016/08/02	4 PLACES	± 0.1
		3 PLACES	± 0.1
		2 PLACES	± 0.1
		1 PLACE	± 0.1
		0 PLACES	± 0.1
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
DIMENSION UNITS		SCALE	
MM		10:1	
DRWN BY	DATE		
NASANUMA	2016/02/17		
CHK'D BY	DATE		
YKOBAYASHI02	2016/08/01		
APPR BY	DATE		
KMORIKAWA	2016/08/02		
DRAWING SIZE		THIRD ANGLE PROJECTION	
A3			
<b>molex</b>			
0.5 PITCH NON-ZIF CONN. SMT AU ST ASSY			
PRODUCT CUSTOMER DRAWING			
SERIES	MATERIAL NUMBER	CUSTOMER	
78119			
DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
781191002	PSD	000	1 OF 3



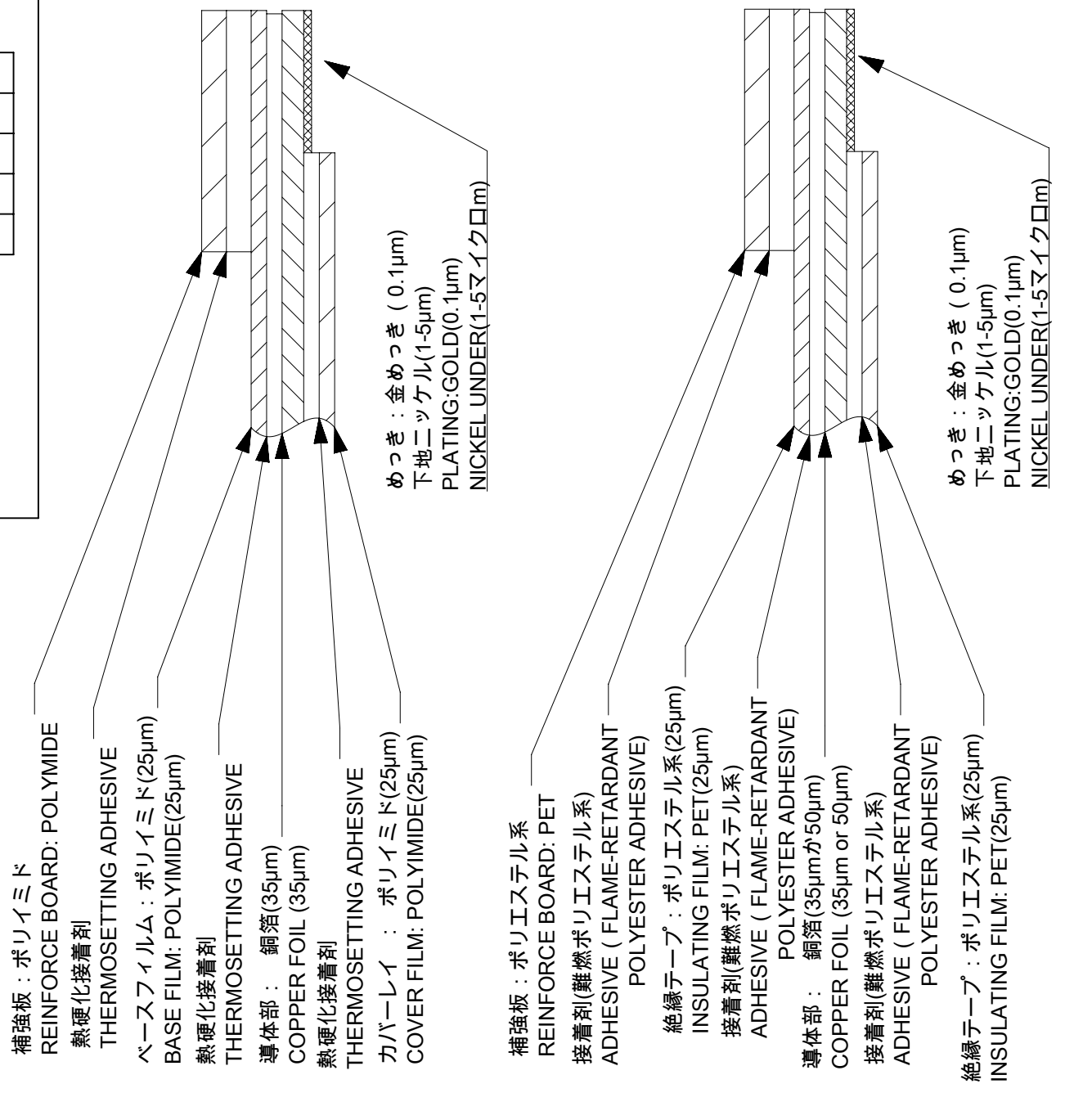
ELV & RoHS COMPLIANT

FPC/FFCについて  
打抜き方向は導体側から補強版側を推奨します。  
導体部については軟箔銅35μmまたは、50μmを推奨いたします。  
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、染み出し無きことを推奨いたします。  
FPC/FFCに規定された定格温度が、FPC/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、接着層が劣化する等の信頼性を満足できないケースを回避する為、  
実機での評価 / 確認をお願い致します。

ABOUT FPC/FFC  
RECOMMENDED PUNCHING DIRECTION: FROM CONDUCTOR SIDE TO STIFFENER SIDE.  
RECOMMENDED CONDUCTOR SPEC: SOFT COPPER FOIL.  
RECOMMENDED CONDUCTOR THICKNESS: 35 MICROMETER OR 50 MICROMETER.  
RECOMMENDED PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.  
THE HEAT RESISTANCE OF FPC/FFC IS ONLY FPC/FFC SPEC.  
TO PREVENT THE CASE THAT RELIABILITY CANNOT BE SATISFIED (THE ADHESIVE IS DETERIORATED etc.) PLEASE DO THE EVALUATION AND THE CONFIRMATION WITH ACTUAL CONNECTOR.

FPCについて  
補強フィルム材は、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。

ABOUT FPC  
RECOMMENDED STIFFENER MATERIAL: POLYIMIDE.  
RECOMMENDED BASE FILM THICKNESS: 25 MICROMETER.  
RECOMMENDED ADHESIVE: THERMOSETTING ADHESIVE.



FPC構成推奨仕様  
STRUCTURE OF FPC

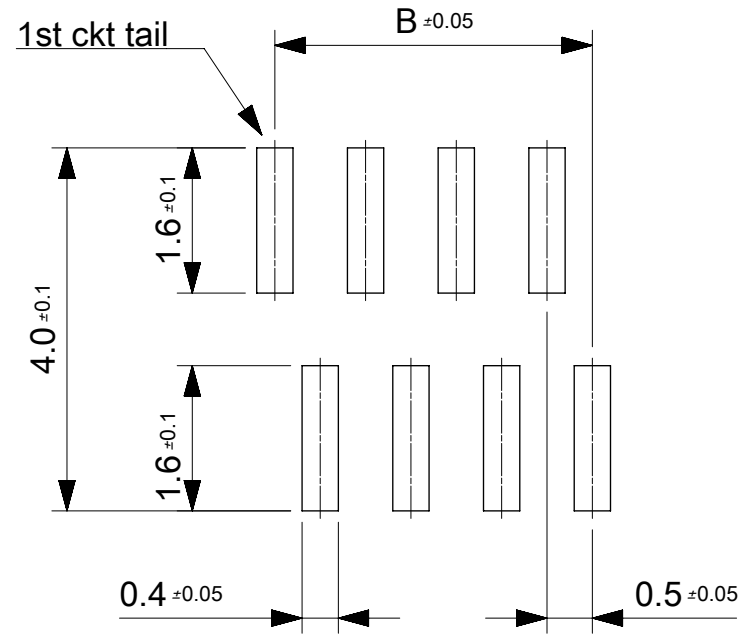
FFC構成推奨仕様  
STRUCTURE OF FFC

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EC NO: 107065 DRWN: NASANUMA CHK'D: YKOBAYASHI02 APPR: KMORIKAWA	2016/02/17	2016/08/01	2016/08/02	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE	molex®			
	4 PLACES	± 0.1	NASANUMA		2016/02/17	MM		12:1		
	3 PLACES	± 0.1	CHK'D BY		DATE					
	2 PLACES	± 0.1	YKOBAYASHI02		2016/08/01					
1 PLACE	± 0.1	APPR BY	DATE			PRODUCT CUSTOMER DRAWING				
0 PLACES	± 0.1	KMORIKAWA	2016/08/02			SERIES	MATERIAL NUMBER	CUSTOMER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRAWING SIZE	THIRD ANGLE PROJECTION	78119				
A	REV			A3			DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
							781191002	PSD	000	2 OF 3

17	17	18.6	17.5	19.6	781193620	36
16	17	18.1	17	19.1	781193520	35
16	16	17.6	16.5	18.6	781193420	34
15	16	17.1	16	18.1	781193320	33
15	15	16.6	15.5	17.6	781193220	32
14	15	16.1	15	17.1	781193120	31
14	14	15.6	14.5	16.6	781193020	30
13	14	15.1	14	16.1	781192920	29
13	13	14.6	13.5	15.6	781192820	28
12	13	14.1	13	15.1	781192720	27
12	12	13.6	12.5	14.6	781192620	26
11	12	13.1	12	14.1	781192520	25
11	11	12.6	11.5	13.6	781192420	24
10	11	12.1	11	13.1	781192320	23
10	10	11.6	10.5	12.6	781192220	22
9	10	11.1	10	12.1	781192120	21
9	9	10.6	9.5	11.6	781192020	20
8	9	10.1	9	11.1	781191920	19
8	8	9.6	8.5	10.6	781191820	18
7	8	9.1	8	10.1	781191720	17
7	7	8.6	7.5	9.6	781191620	16
6	7	8.1	7	9.1	781191520	15
6	6	7.6	6.5	8.6	781191420	14
5	6	7.1	6	8.1	781191320	13
5	5	6.6	5.5	7.6	781191220	12
4	5	6.1	5	7.1	781191120	11
4	4	5.6	4.5	6.6	781191020	10
3	4	5.1	4	6.1	781190920	9
3	3	4.6	3.5	5.6	781190820	8
2	3	4.1	3	5.1	781190720	7
2	2	3.6	2.5	4.6	781190620	6

E	D	C	B	A	EMBOSSED PACKAGE	CIRCUIT
オーダー番号 ORDER NO.						



参考マスク厚:100μm  
 参考開口率:100%  
 REFERENCE SCREEN THICKNESS:100  
 REFERENCE SCREEN OPEN RATIO:100%

推奨基板レイアウト  
 RECOMMENDED PCB LAYOUT

CONNECTOR SERIES NO. 78119\*\*25

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EC NO: 107065 DRWN: NASANUMA CHK'D: YKOBAYASHI02 APPR: KMORIKAWA	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION UNITS	SCALE					
	ANGULAR TOL ± 1.0 °				MM	12:1					
	4 PLACES	±	0.1	DRWN BY		DATE	0.5 PITCH NON-ZIF CONN. SMT AU ST ASSY				
	3 PLACES	±	0.1	NASANUMA		2016/02/17					
	2 PLACES	±	0.1	CHK'D BY		DATE					
1 PLACE	±	0.1	YKOBAYASHI02		2016/08/01	PRODUCT CUSTOMER DRAWING					
0 PLACES	±	0.1	APPR BY		DATE						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				KMORIKAWA		2016/08/02	SERIES	MATERIAL NUMBER	CUSTOMER		
				DRAWING SIZE	THIRD ANGLE PROJECTION		78119				
				A3			DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER	
							781191002	PSD	000	3 OF 3	