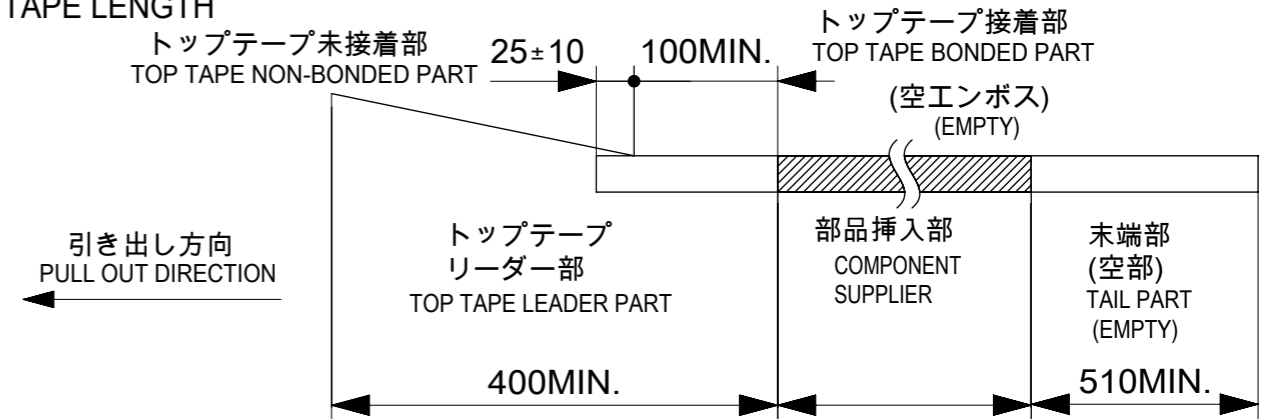


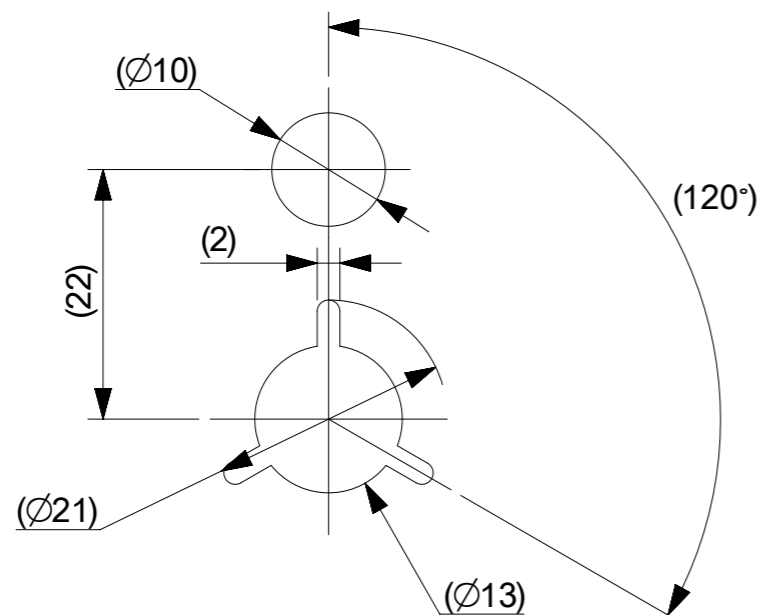
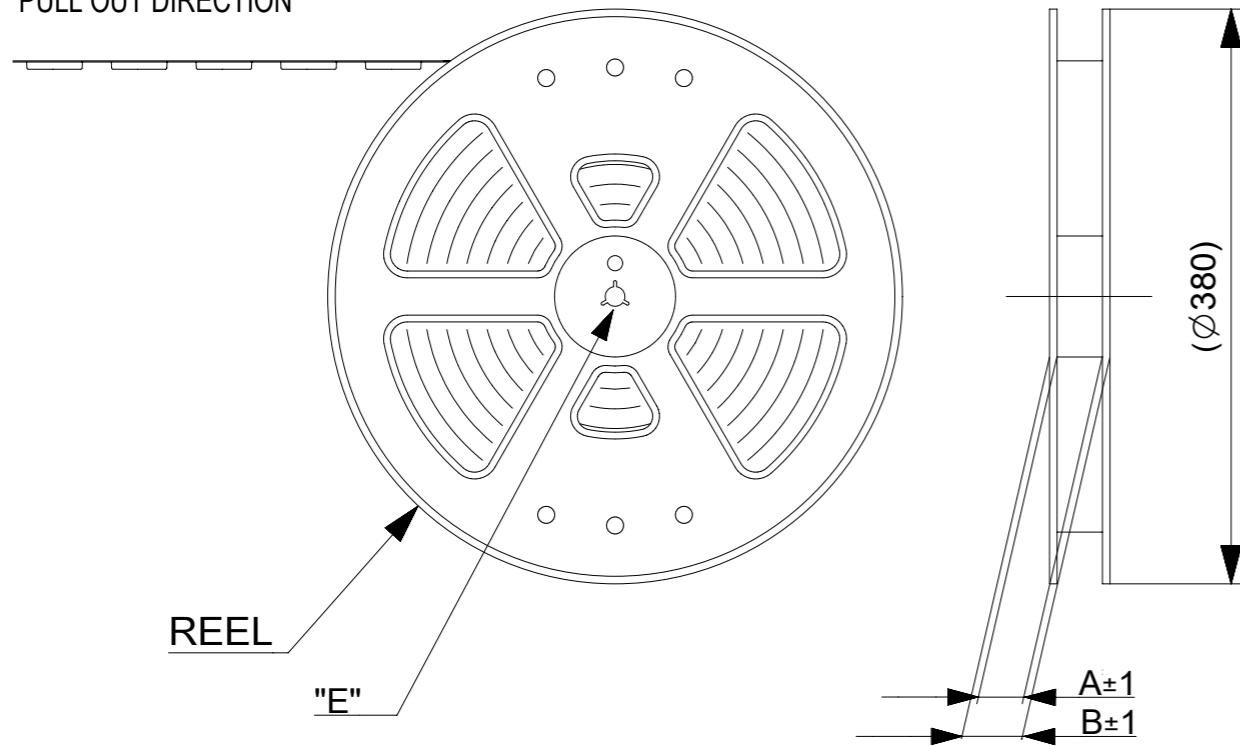
NOTES

- 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.

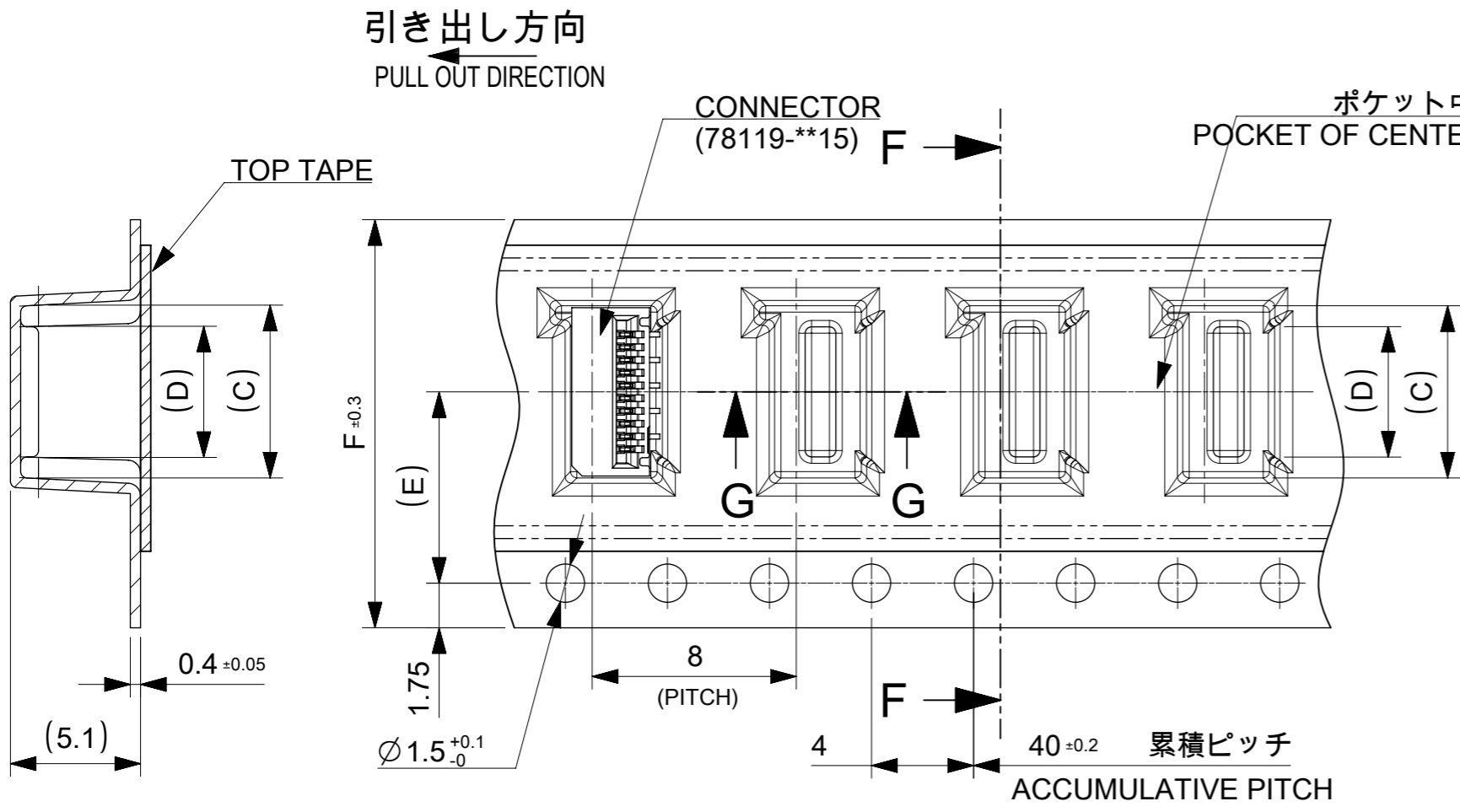
引き出し方向  
PULL OUT DIRECTION



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		781190002		
3 PLACES	± 0.1	DRWN: NARENC		PSD		
2 PLACES	± 0.1	CHK'D: TKON		000		
1 PLACE	± 0.1	APPR: SHOSHIKAWA		B		
0 PLACES	± 0.1	INITIAL REVISION:		REVISION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER
			A3-SIZE	78119	SEE TABLE	
DATE: 2020/01/14						SHEET NUMBER
						1 OF 3

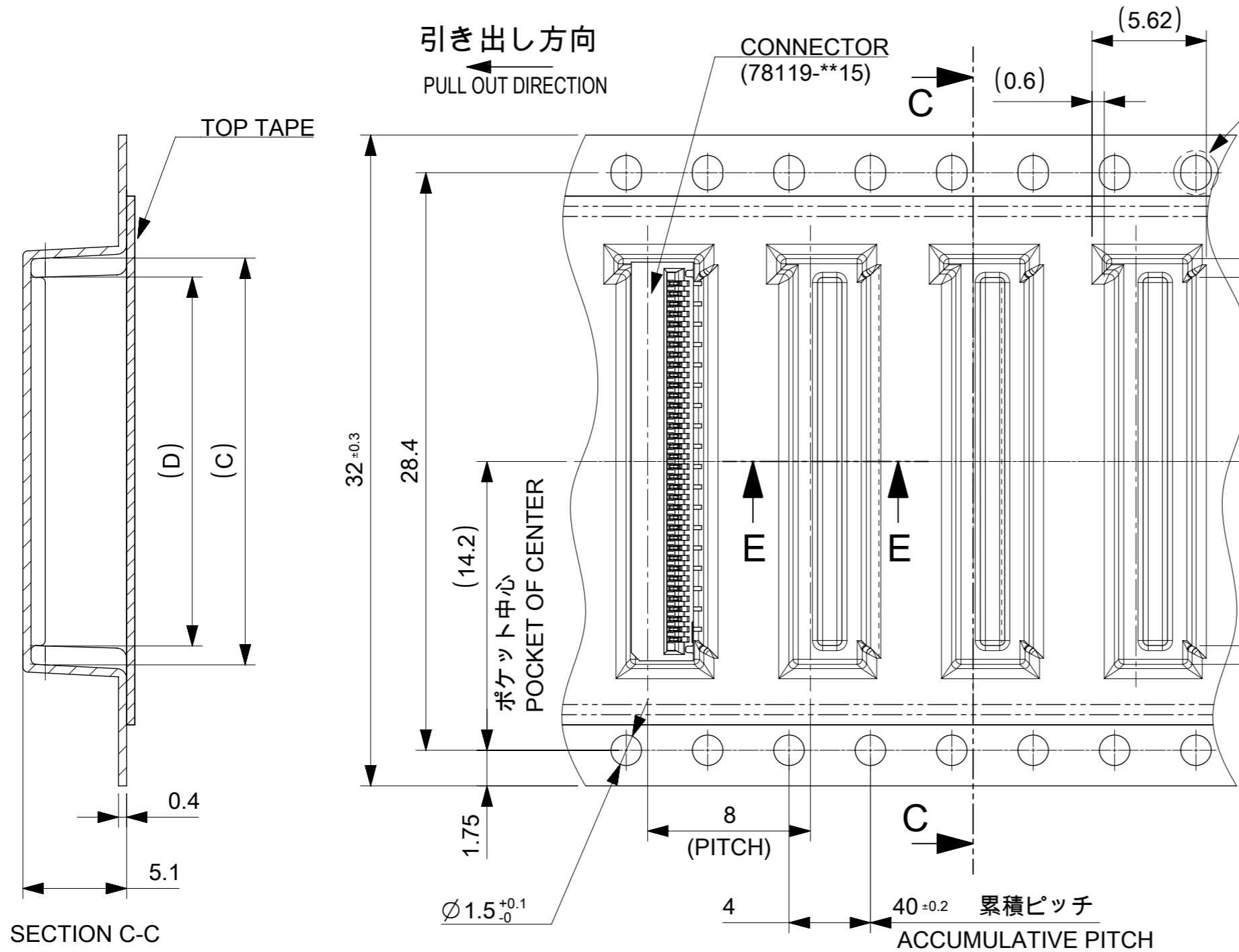


24	11.5	14.1	15.8	29.4	25.4	781192820	28
		13.6	15.3			781192720	27
		13.1	14.8			781192620	26
		12.6	14.3			781192520	25
		12.1	13.8			781192420	24
		11.6	13.3			781192320	23
		11.1	12.8			781192220	22
		10.6	12.3			781192120	21
		10.1	11.8			781192020	20
		9.6	11.3			781191920	19
		9.1	10.8			781191820	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	SCALE	EC NO: 677105			
mm	4:1	DRWN: NARENC 2021/09/07		PRODUCT CUSTOMER DRAWING	
GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: TKON 2021/09/13		DOCUMENT NUMBER	
ANGULAR TOL ± 1.0°		APPR: SHOSHIKAWA 2021/09/16		781190002	
4 PLACES ± 0.1	INITIAL REVISION:		DOC TYPE		DOC PART
3 PLACES ± 0.1	DRWN: NASANUMA 2016/04/26		PSD		000
2 PLACES ± 0.1	APPR: KMORIKAWA 2016/08/02		REVISION		B
1 PLACE ± 0.1	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NUMBER		CUSTOMER
0 PLACES ± 0.1	THIRD ANGLE PROJECTION		SEE TABLE		SHEET NUMBER
DRAWING		SERIES		2 OF 3	
A3-SIZE		78119			



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

CONNECTOR SERIES NO. 78119\*\*25

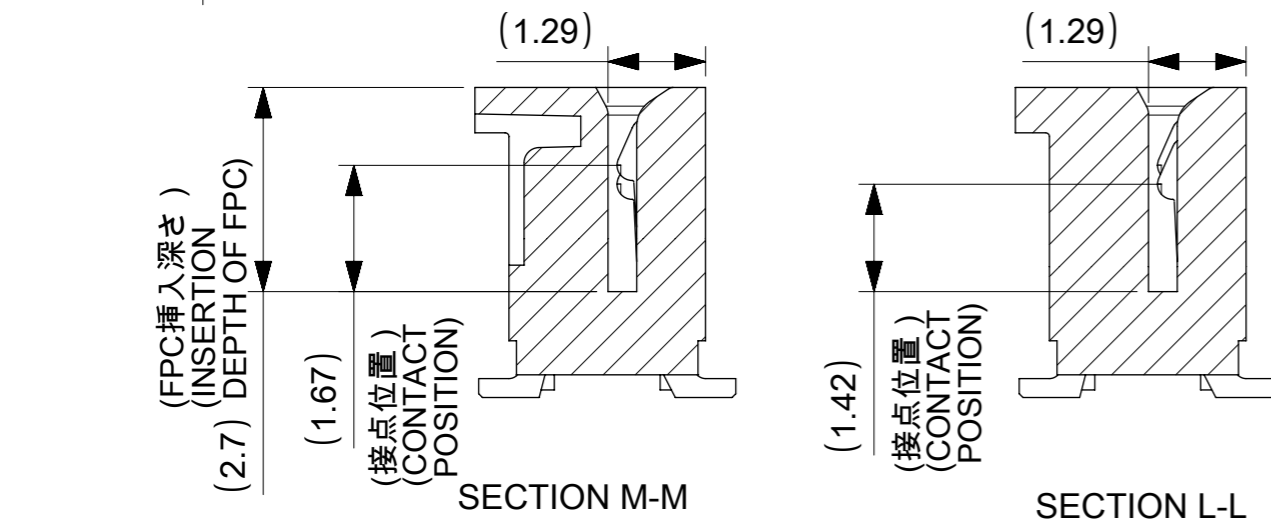
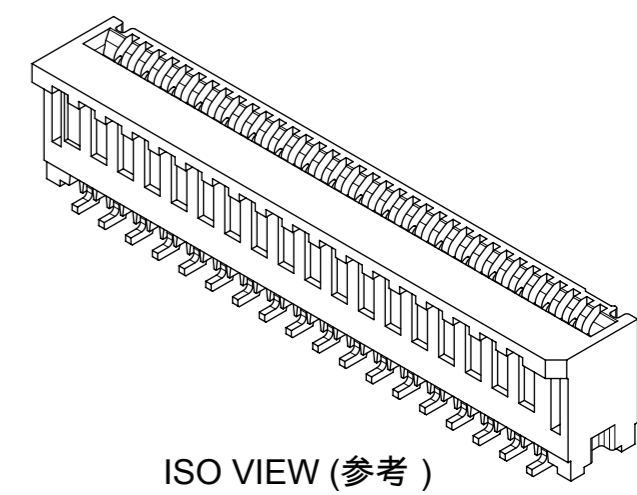
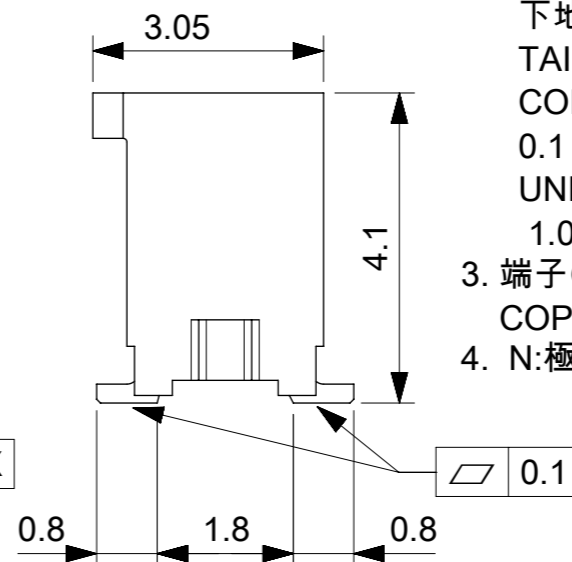
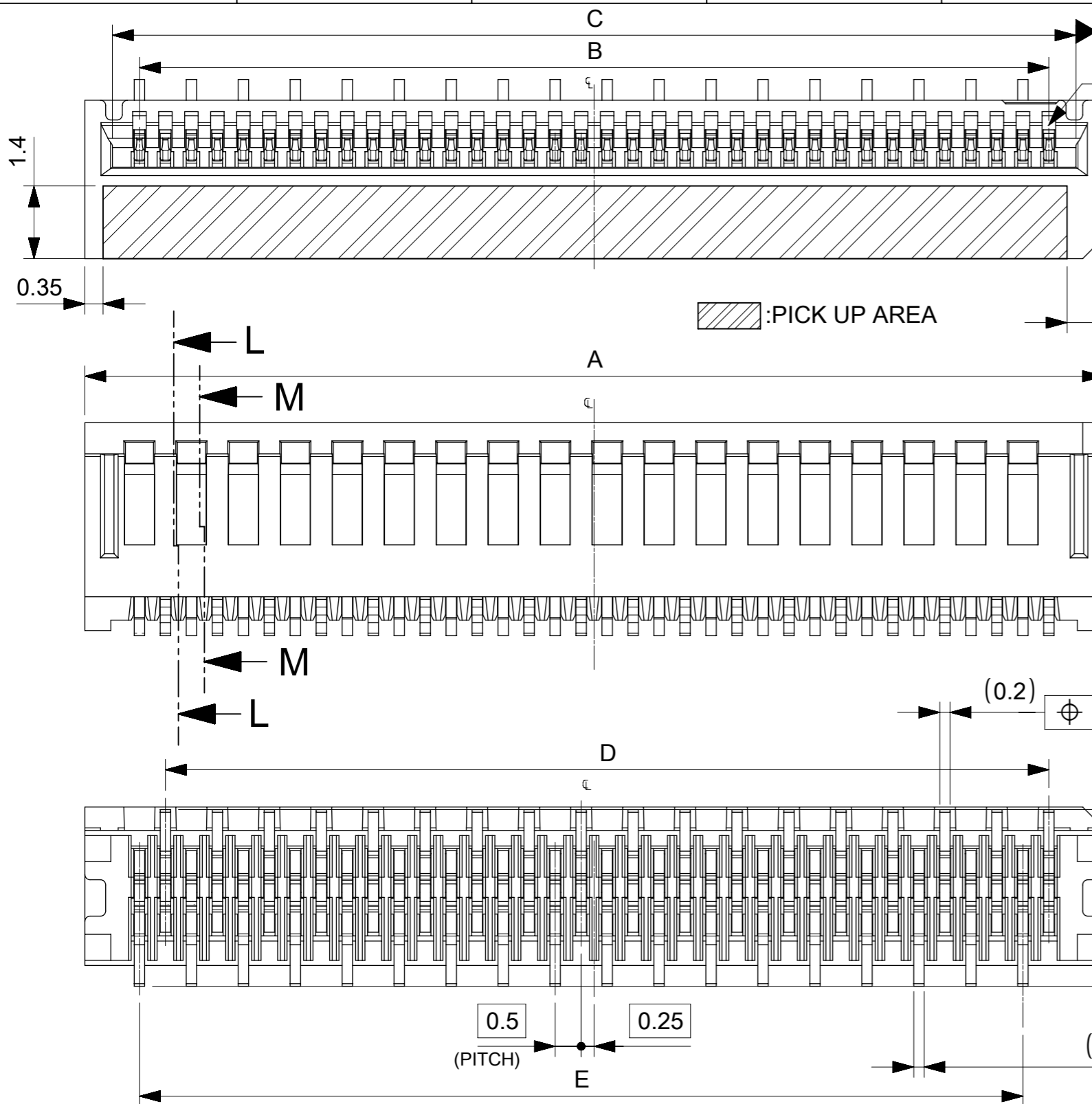
# 32mm幅キャリアテープ

## 32mm WIDTH CARRIER TAPE

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

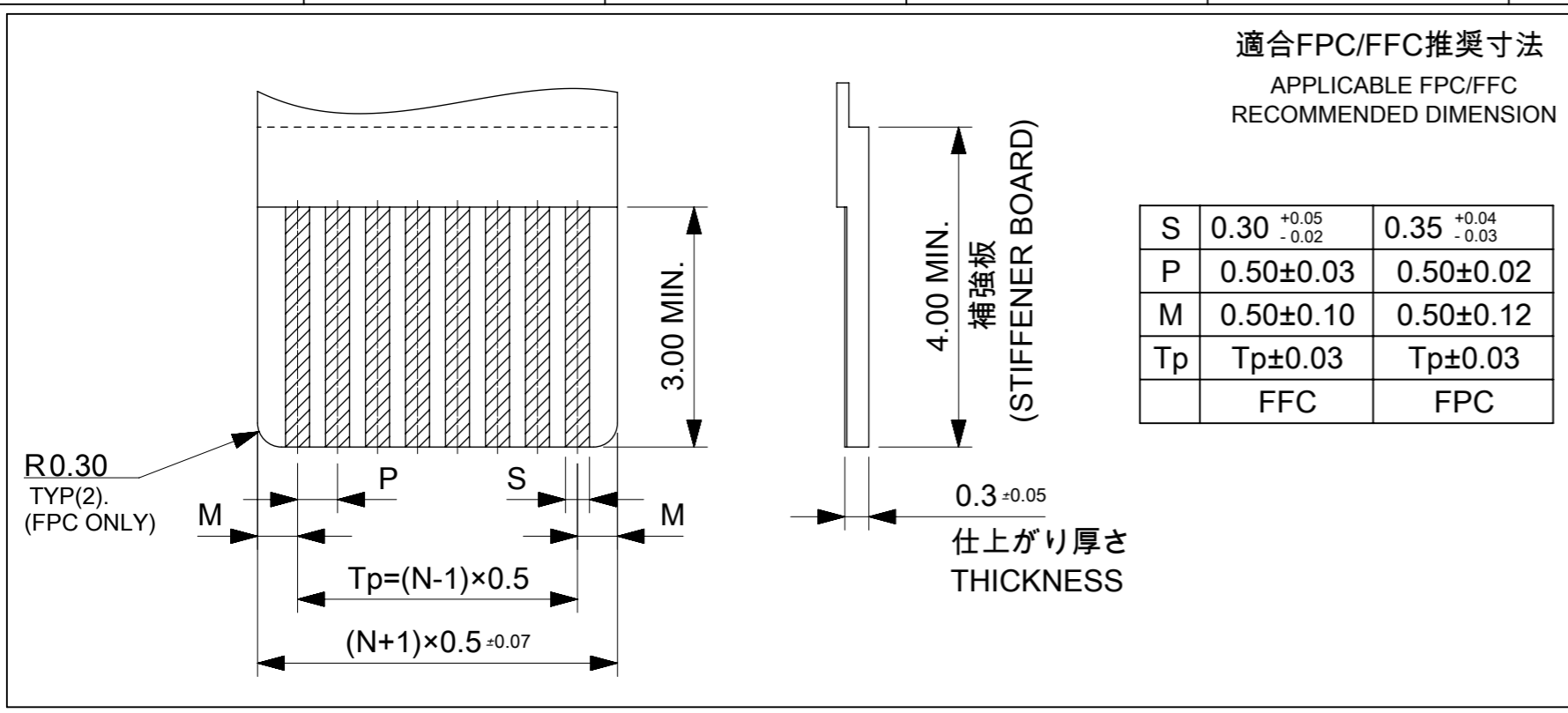
NOTES

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



CONNECTOR SERIES NO. 78119\*\*25

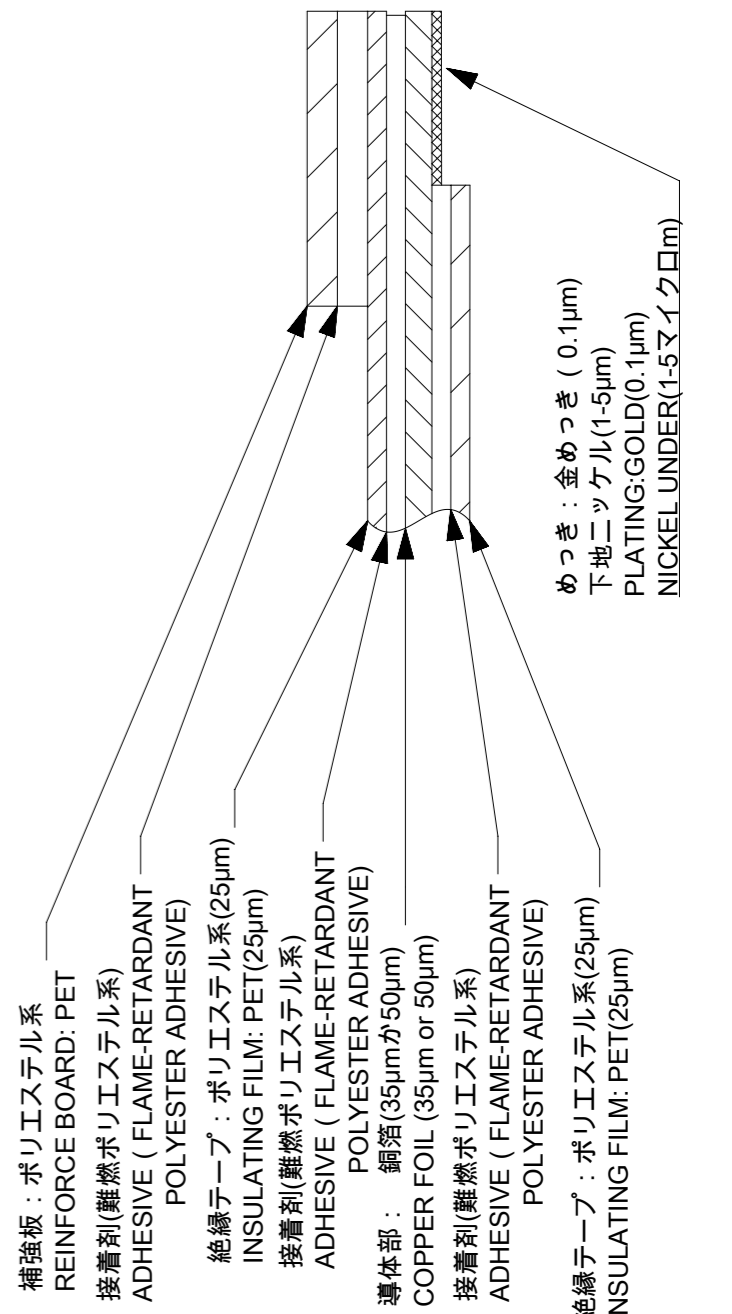
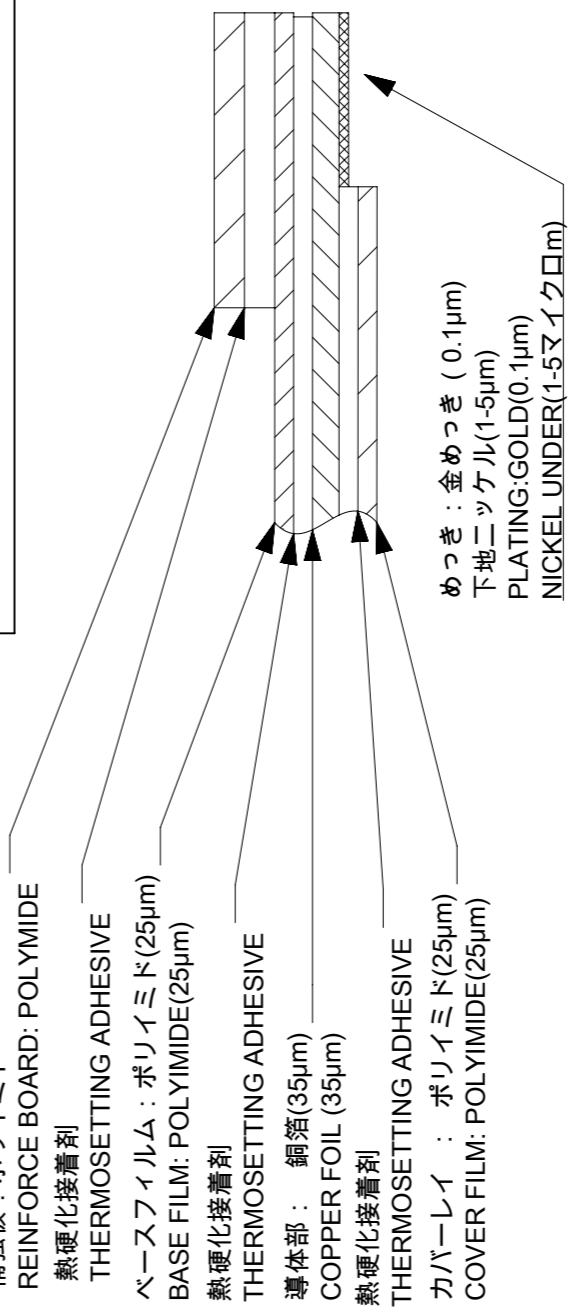
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
EC NO: 107065	DRWN: NASANUMA	CHK'D: YKOBAYASHI02	APPR: KMORIKAWA
2016/02/17	2016/08/01	2016/08/02	
GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE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



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

S	0.30 <sup>+0.05</sup> / <sub>-0.02</sub>	0.35 <sup>+0.04</sup> / <sub>-0.03</sub>
P	0.50±0.03	0.50±0.02
M	0.50±0.10	0.50±0.12
Tp	Tp±0.03	Tp±0.03
	FFC	FPC

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.

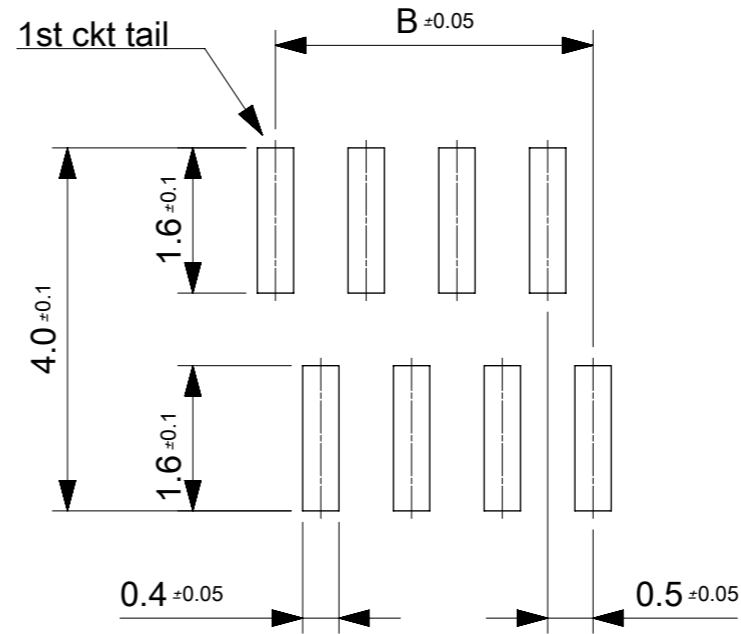
FPC構成推奨仕様  
STRUCTURE OF FPC

FFC構成推奨仕様  
STRUCTURE OF FFC

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 2016/08/01 2016/08/02	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE	<p>0.5 PITCH NON-ZIF CONN. SMT AU ST ASSY</p> <p>PRODUCT CUSTOMER DRAWING</p> <p>SERIES: 78119 MATERIAL NUMBER: CUSTOMER: 781191002 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 2 OF 3</p>			
		ANGULAR TOL ± 1.0 °		MM	12:1				
		4 PLACES ± 0.1	DRWN BY: NASANUMA		DATE: 2016/02/17				
		3 PLACES ± 0.1	CHK'D BY: YKOBAYASHI02		DATE: 2016/08/01				
		2 PLACES ± 0.1	APPR BY: KMORIKAWA		DATE: 2016/08/02				
1 PLACE ± 0.1	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A3	THIRD ANGLE PROJECTION					
0 PLACES ± 0.1									

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

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	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	PRODUCT CUSTOMER DRAWING				
	1 PLACE	±	0.1	YKOBAYASHI02	2016/08/01					
0 PLACES	±	0.1	APPR BY	DATE	SERIES: 78119 MATERIAL NUMBER: CUSTOMER:					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			KMORIKAWA	2016/08/02						
DRAWING SIZE		THIRD ANGLE PROJECTION			DOCUMENT NUMBER: 781191002 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 3 OF 3					
A3										