



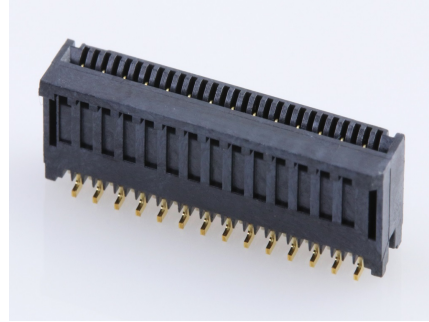
产品编号 : [781192820](#)

Product Description : 0.50mm Pitch Easy-On FFC/FPC Connector, Surface Mount, Vertical, Non-ZIF, Standard Footprint, Gold Plating, Black, 28 Circuits

系列号 : 78119

状态 : Active

Product Category : FFC / FPC Connectors



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## 文件和资源

### 图纸

[图纸 781192820\\_sd.pdf](#)

### 3D 模型和设计文件

[3D模型 781192820\\_stp.zip](#)

### 规格

[包装规格 781199200-200.pdf](#)

[产品规格 781190002-000.pdf](#)

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## 产物环境合规

### 合规

GADSL/IMDS	Not Relevant
China RoHS	
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2023)3788-DC (14 Jun 2023)
EU RoHS	Compliant per EU 2015/863

### 多部分产品合规性声明

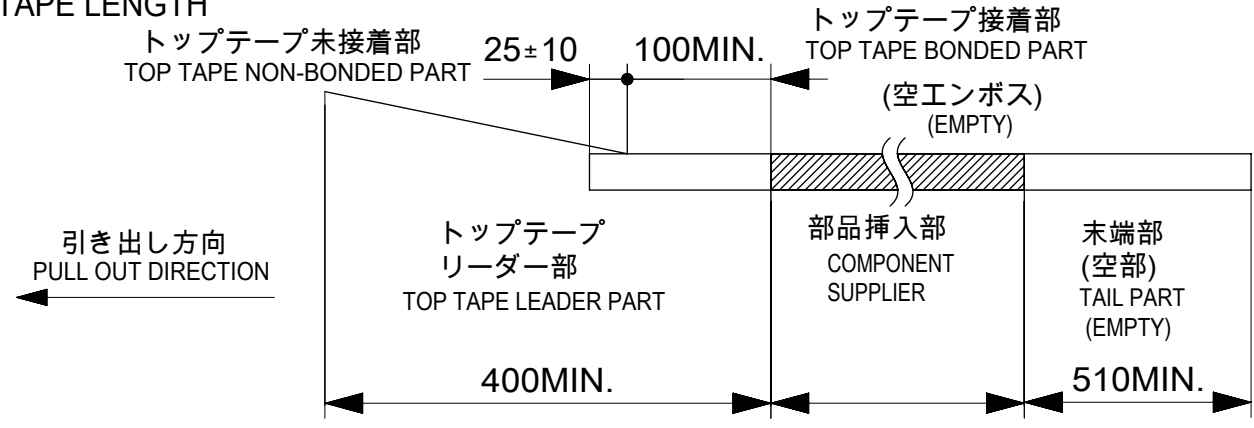
- Eu RoHS
- REACH SVHC
- Low-Halogen

### 多部分行业合规性文件

- IPC 1752A Class C
- IPC 1752A Class D

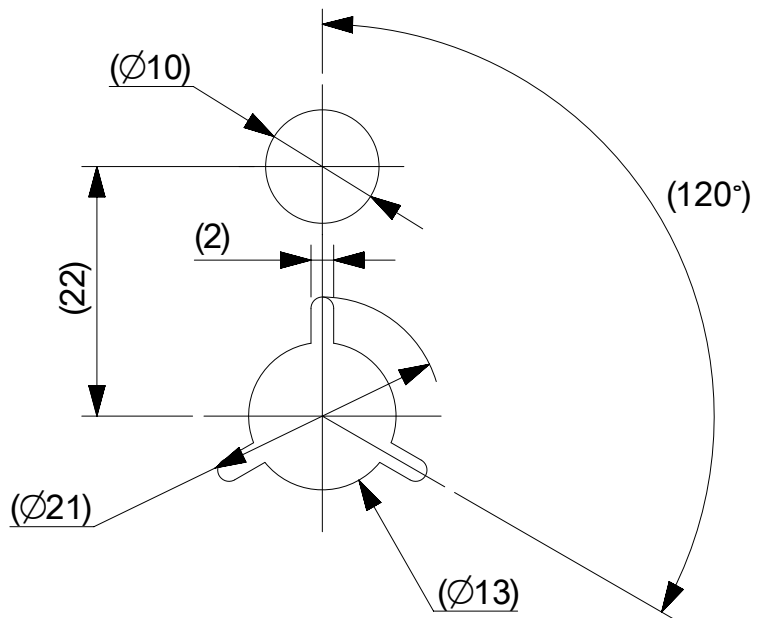
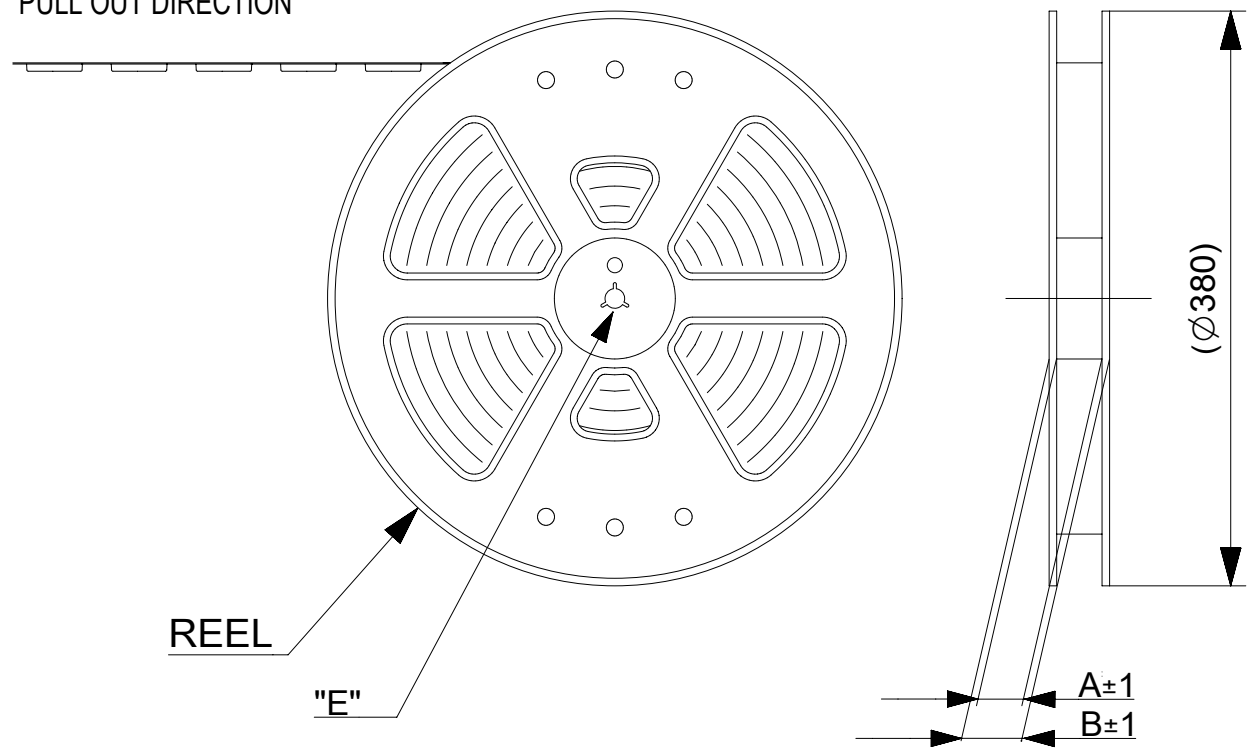
NOTES

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



- 3. 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.
- 4. 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.
- 5. 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)
- 6. 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.

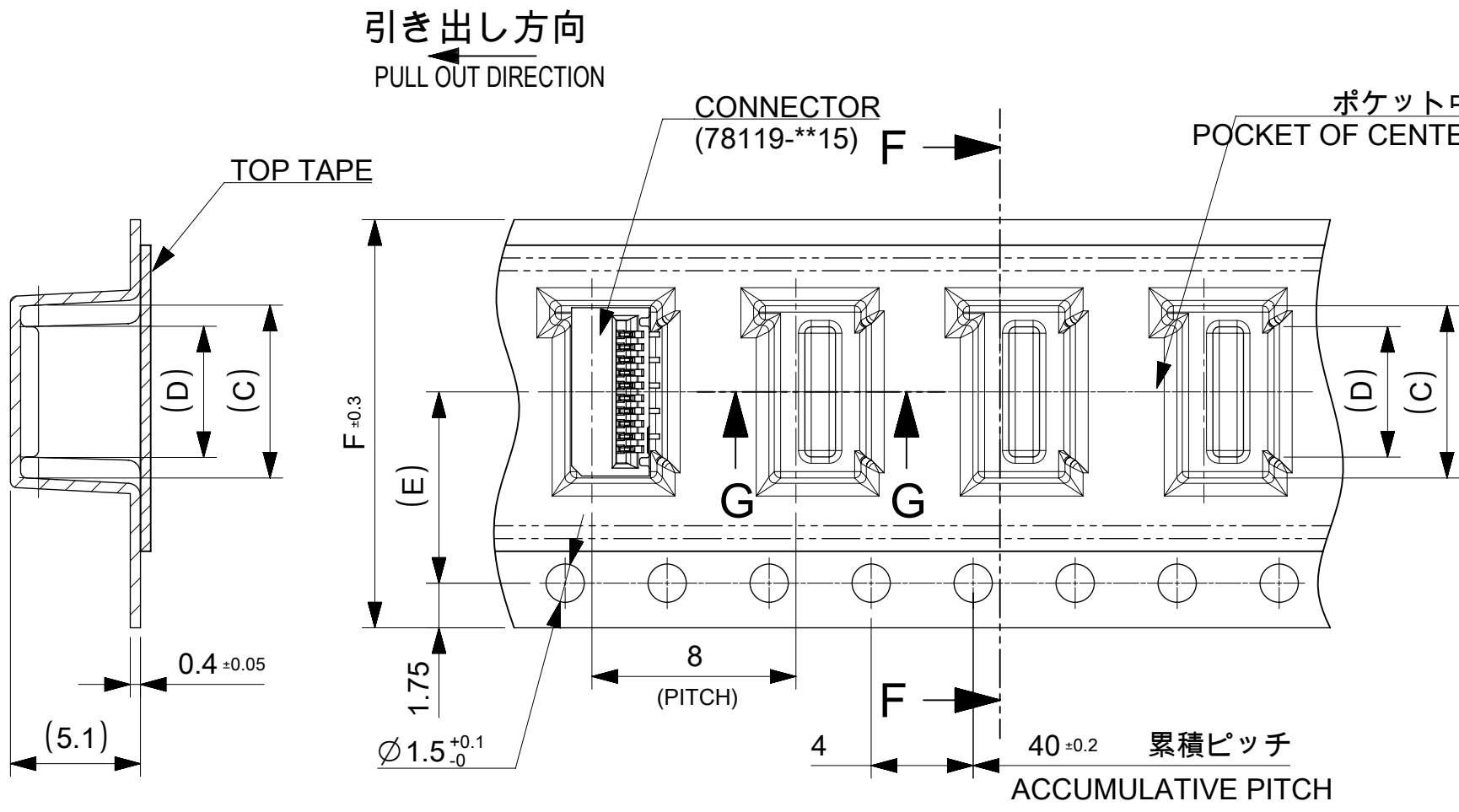
引き出し方向  
PULL OUT DIRECTION



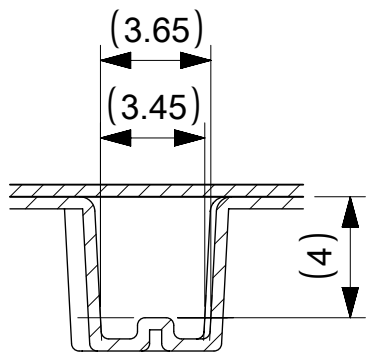
DETAIL "E"

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



SECTION F-F



SECTION G-G

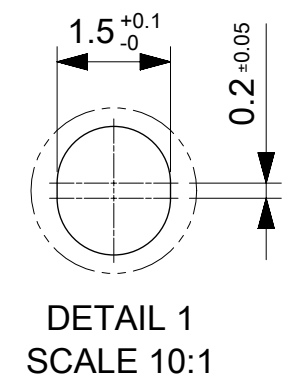
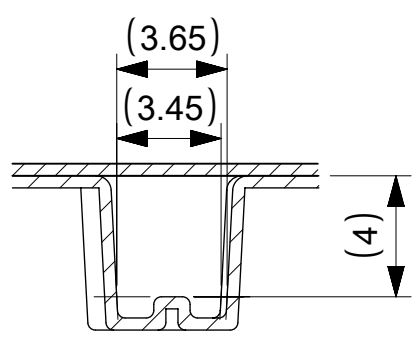
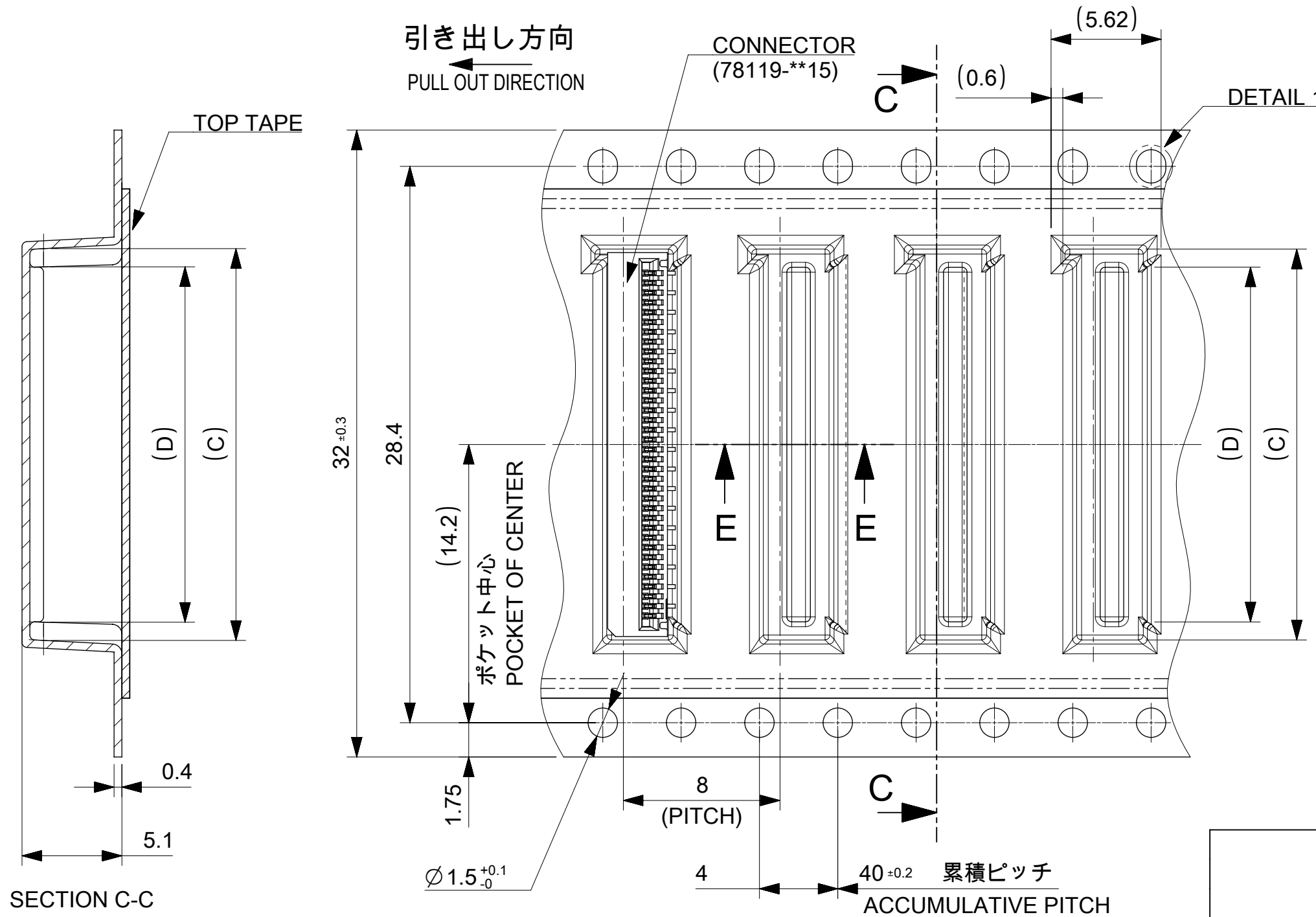
# 16mm, 24mm幅キャリアテープ

## 16mm, 24mm WIDTH CARRIER TAPE

F TAPE WIDTH	E	D	C	B	A	EMBOSSED PACKAGE オーダー番号 ORDER NO	CIRCUIT
24	11.5	29.4	25.4	14.1	15.8	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	21.4	17.4	7.1	8.8	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				

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		THIRD ANGLE PROJECTION		000	
		DRAWING		REVISION	
		A3-SIZE		B	
		SERIES		SHEET NUMBER	
		78119		2 OF 3	
		MATERIAL NUMBER		CUSTOMER	
		SEE TABLE			



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

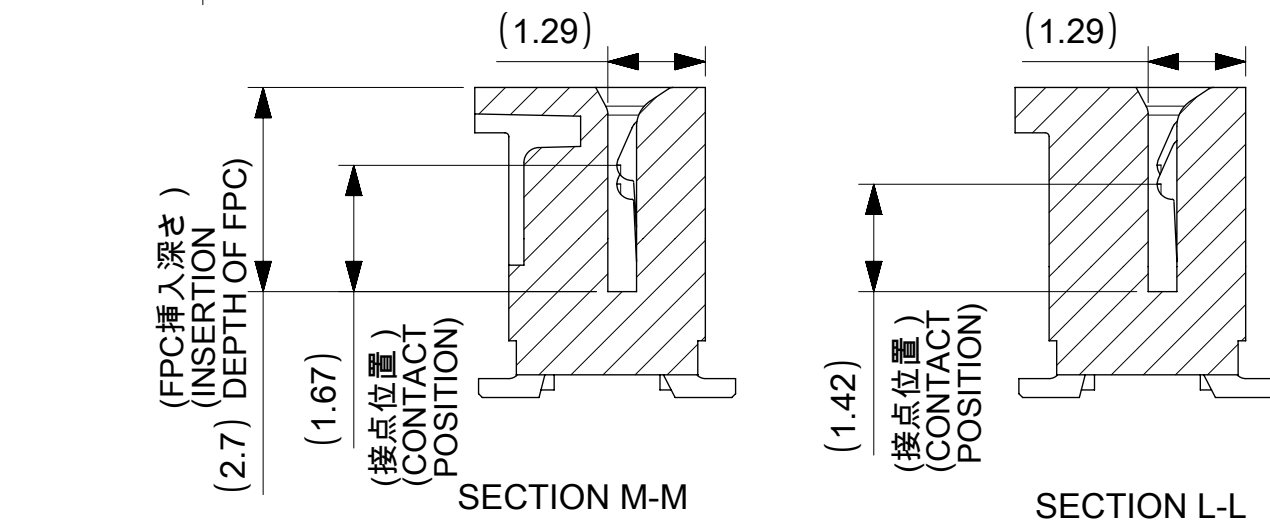
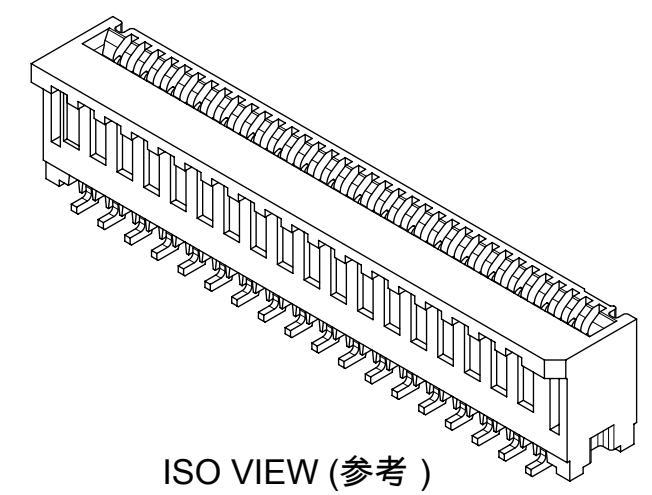
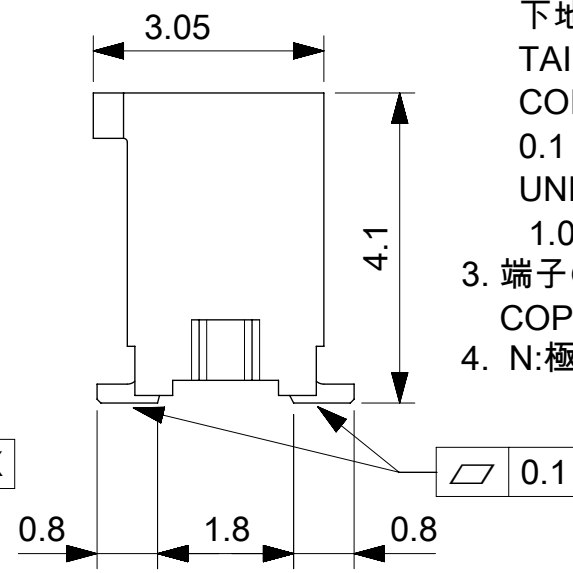
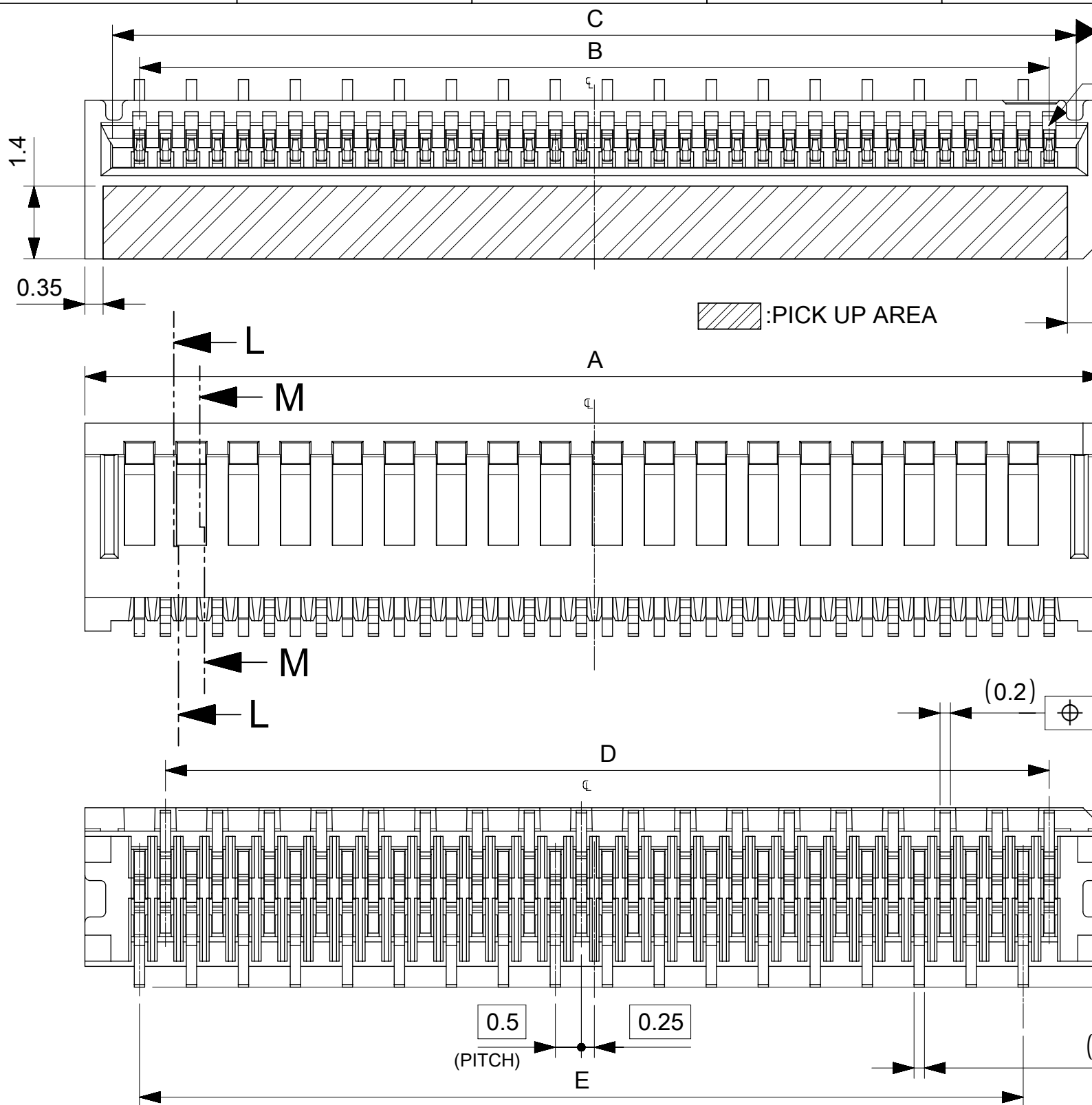
# 32mm幅キャリアテープ

## 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								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER		
			A3-SIZE	78119	SEE TABLE		3 OF 3		

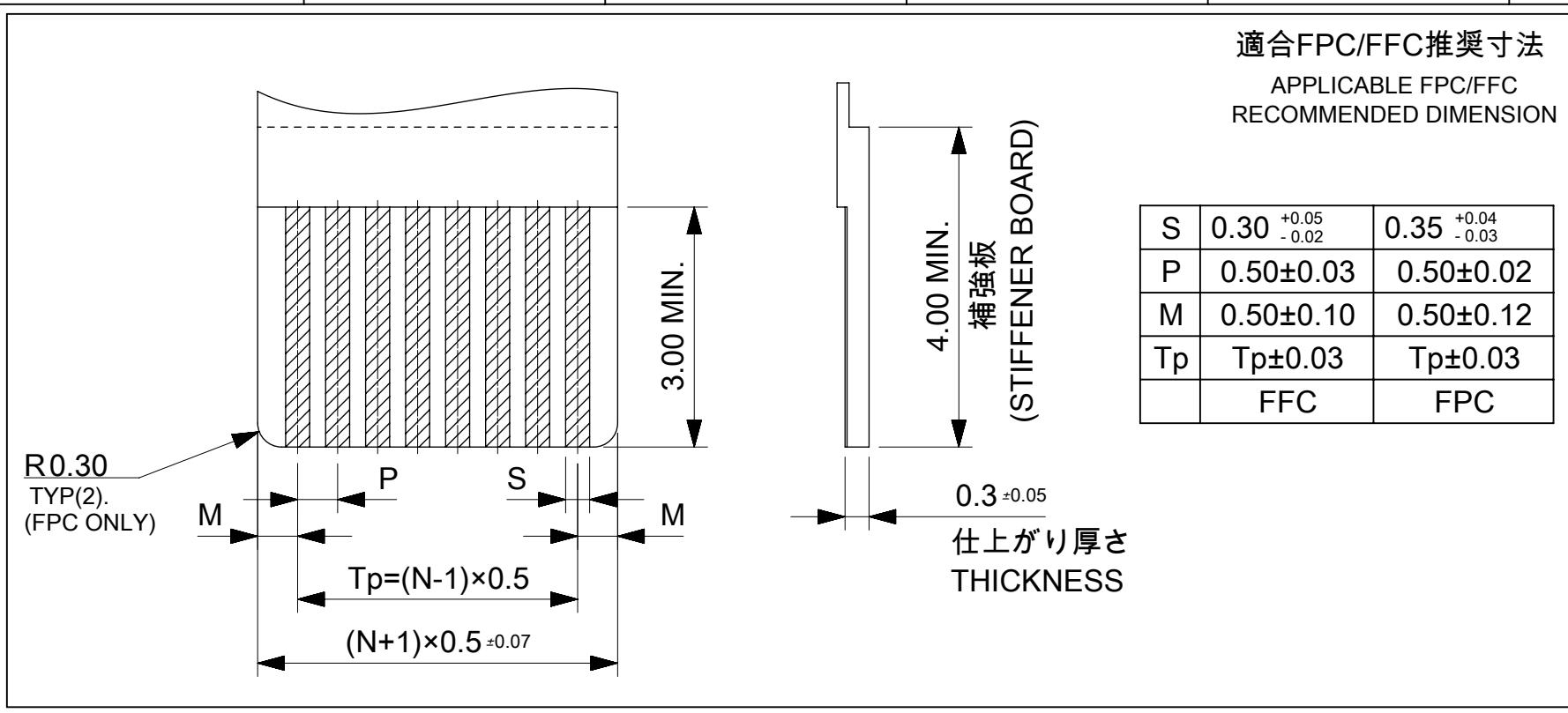
NOTES

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	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE							
	2016/08/01	ANGULAR TOL ± 1.0 °		MM	10:1							
	2016/08/02	4 PLACES	± 0.1	DRWN BY	DATE							
		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	SERIES	MATERIAL NUMBER	CUSTOMER					
			KMORIKAWA	2016/08/02	78119							
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE	THIRD ANGLE PROJECTION						
					A3							
RELEASE STATUS	P1	RELEASE DATE	02.08.2016	00:40:30	DOCUMENT NUMBER	781191002	DOC TYPE	PSD	DOC PART	000	SHEET NUMBER	1 OF 3



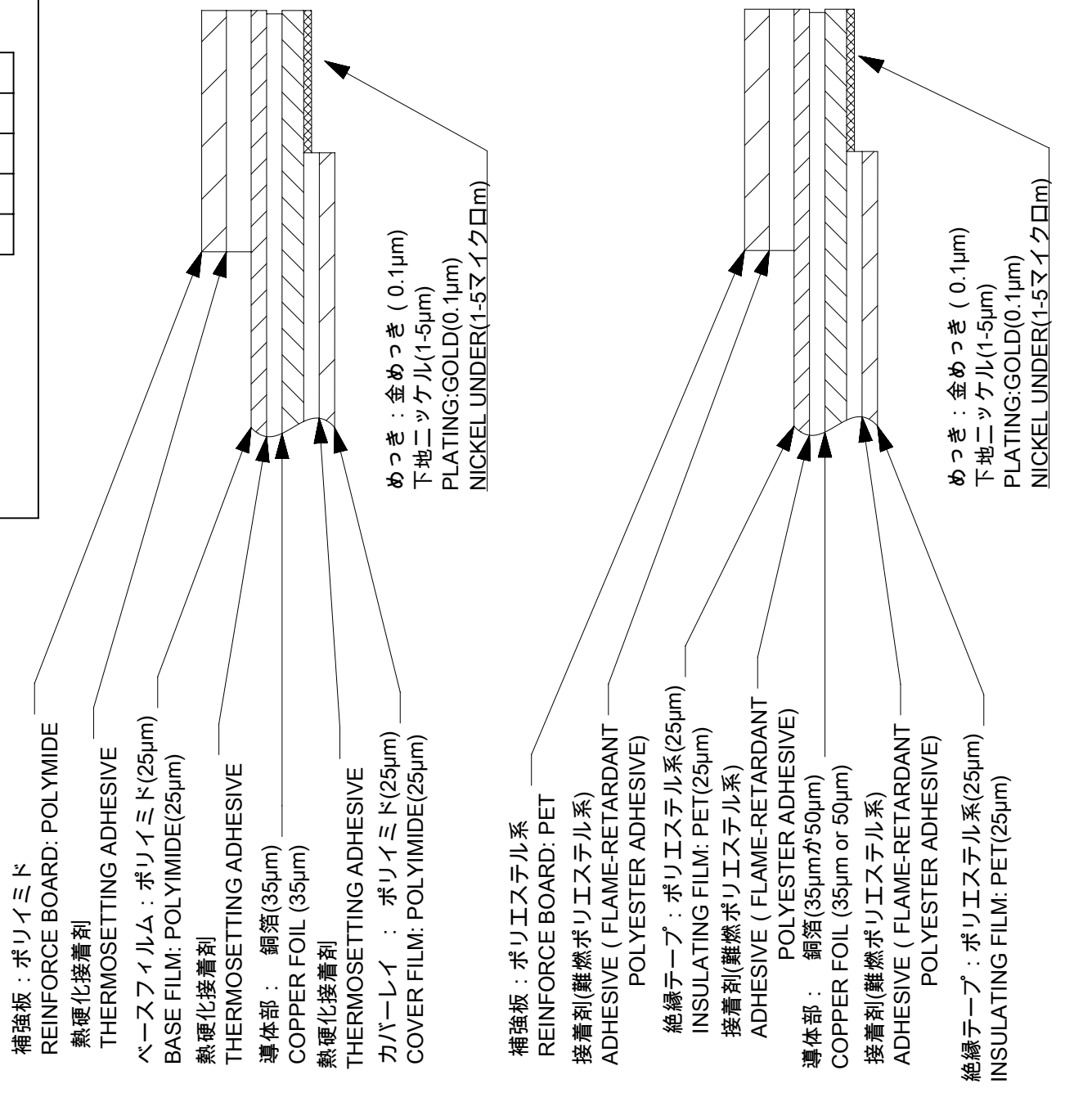
ELV & RoHS COMPLIANT

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

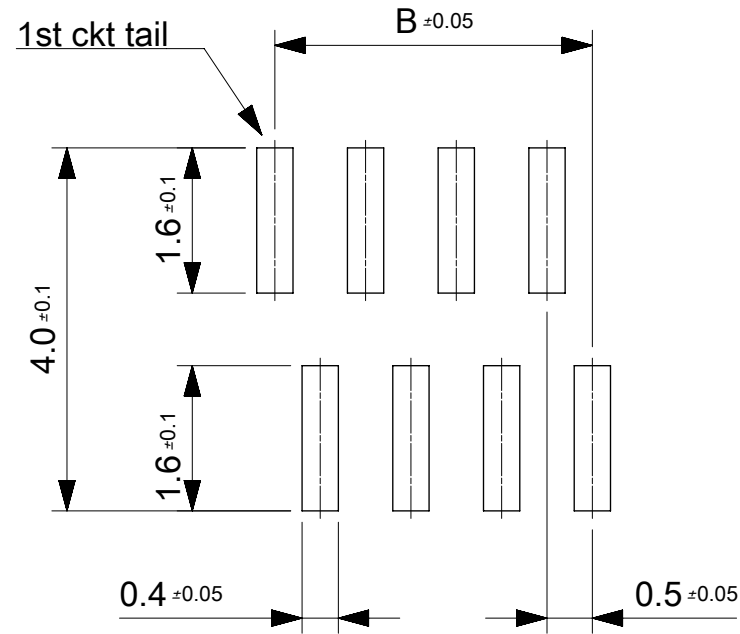
FFC構成推奨仕様  
STRUCTURE OF FFC

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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®			
					MM	12:1				
	4 PLACES	± 0.1			DRWN BY	DATE		NASANUMA	2016/02/17	
	3 PLACES	± 0.1			CHK'D BY	DATE		YKOBAYASHI02	2016/08/01	
	2 PLACES	± 0.1		APPR BY	DATE	KMORIKAWA	2016/08/02			
	1 PLACE	± 0.1		DRAWING SIZE	THIRD ANGLE PROJECTION	A3	PRODUCT CUSTOMER DRAWING			
	0 PLACES	± 0.1		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SERIES	MATERIAL NUMBER	CUSTOMER	
							78119			
							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	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			DRAWING SIZE		SHEET NUMBER			
A3					A3		781191002		3 OF 3	

- Molex Product Compliance Declaration

- IEC-62474

- chemSHERPA (xml)

欧盟 RoHS 合格证书

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## 产品详情

### 常规

状态	活动
类别	FFC / FPC Connectors
系列	78119
说明	0.50mm Pitch Easy-On FFC/FPC Connector, Surface Mount, Vertical, Non-ZIF, Standard Footprint, Gold Plating, Black, 28 Circuits
产品系列	Easy-On FFC FPC Connectors
产品名称	Easy-On
UPC	889056670869

### 电气

每触点最大电流	0.5A
电压 - 最大	50V

### 物理

驱动器类型	Non-ZIF
回路数 (已载入)	28
电路数 (最多)	28
颜色-树脂	黑色
接触部位	不适用
耐用性(插拔次数) - 最多次数	10
插配长度	4.10mm
材料 - 金属	Phosphor Bronze
材料 - 接合部位电镀	金牌
材料 - 终端电镀	金牌
材料 - 树脂	Liquid Crystal Polymer
净重	286.630/mg



方向	垂直
包装形式	Embossed Tape on Reel
PCB 定位器	否
PCB安装	Surface Mount
PCB 保持力	无
间距 - 插配接口	0.50mm
间距 - 终端界面	0.50mm
最薄镀层 - 接合部位	0.100µm
PCB 极性	否
可堆叠的	否
运行温度范围	-40° to +85° C
导线/电缆型号	FFC/FPC

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## 可配插/可连接使用的产品

### 可配插部件

描述	产品编号
0.50mm Pitch Premo-Flex FFC Jumpers	<u>15020</u>
0.50mm Pitch Premo-Flex FFC Jumpers	<u>15120</u>