

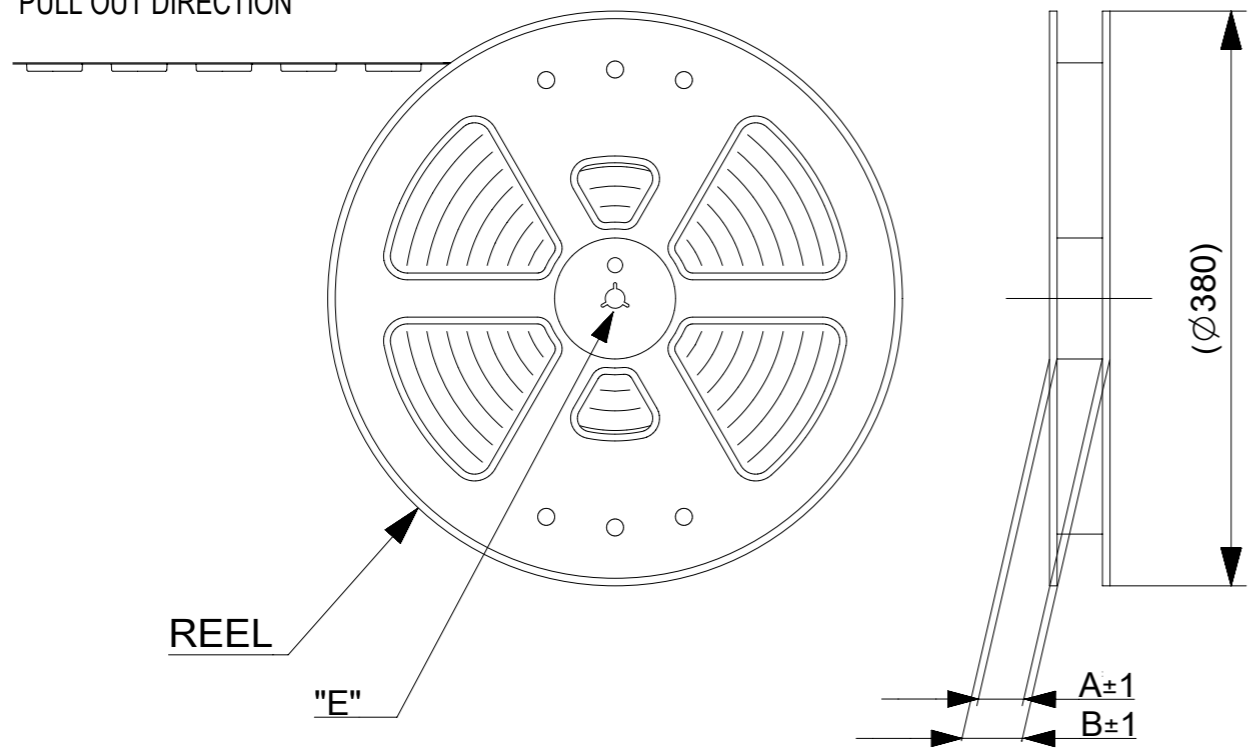
NOTES

- 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781191001をご参照ください。
REFER TO THE 781191001 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.

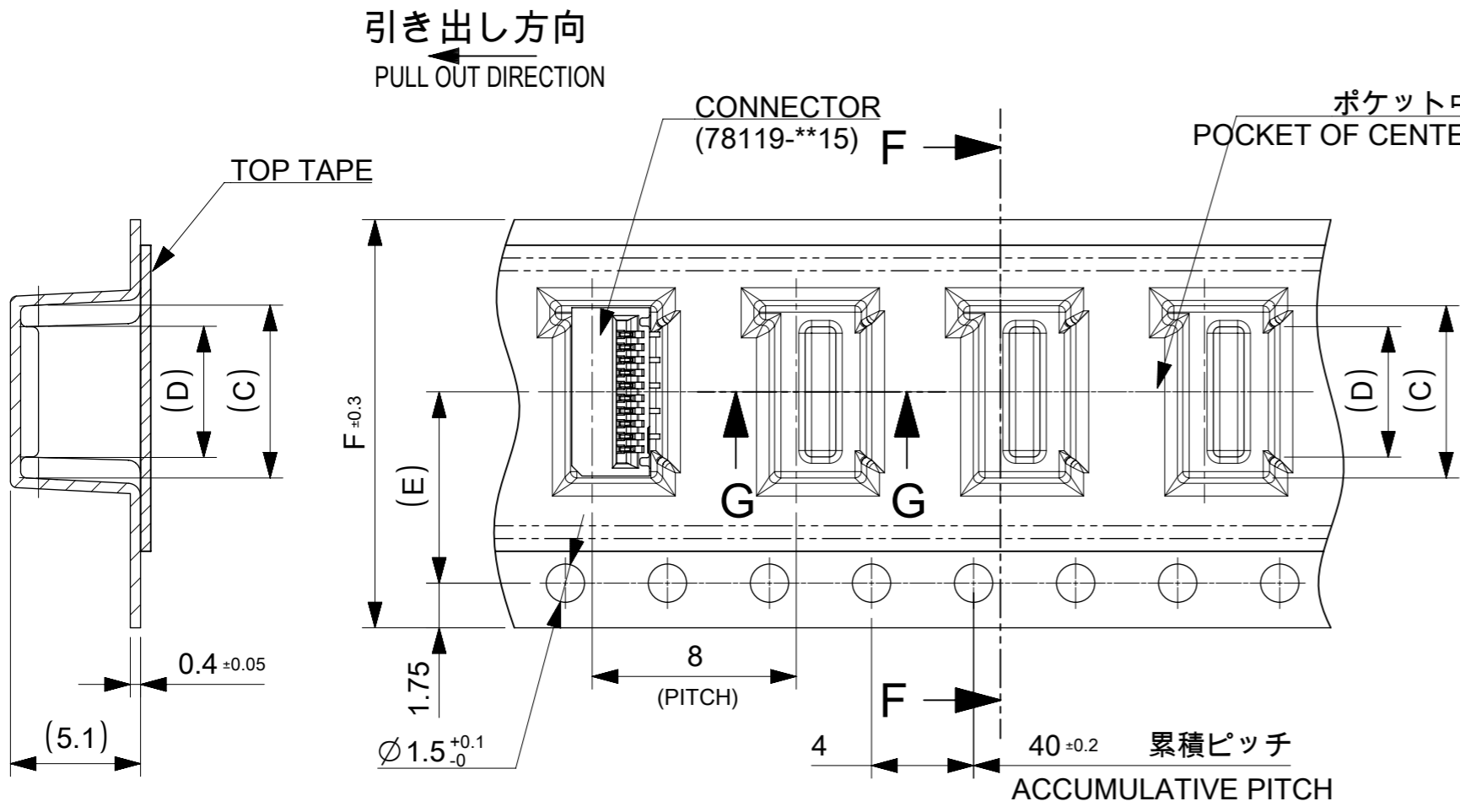
引き出し方向
PULL OUT DIRECTION



DETAIL "E"

CONNECTOR SERIES NO. 78119**15

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS mm		SCALE 2:1		CURRENT REV DESC:						molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)		ANGULAR TOL ± 1.0°		EC NO: 677105 DRWN: NARENC 2021/09/07 CHK'D: TKON 2021/09/13 APPR: SHOSHIKAWA 2021/09/16							
4 PLACES ± 0.1		3 PLACES ± 0.1		INITIAL REVISION:		DOCUMENT NUMBER		DOC TYPE		DOC PART	
2 PLACES ± 0.1		1 PLACE ± 0.1		DRWN: NASANUMA 2016/04/19 APPR: KMORIKAWA 2016/08/02		781190001		PSD		000 B	
0 PLACES ± 0.1		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3-SIZE		78119						SHEET NUMBER 1 OF 3	



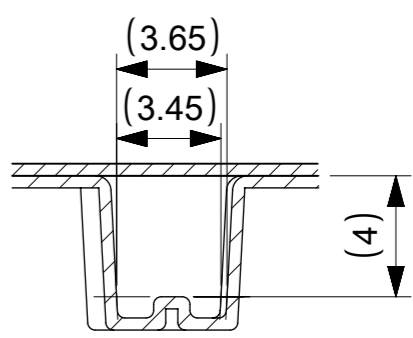
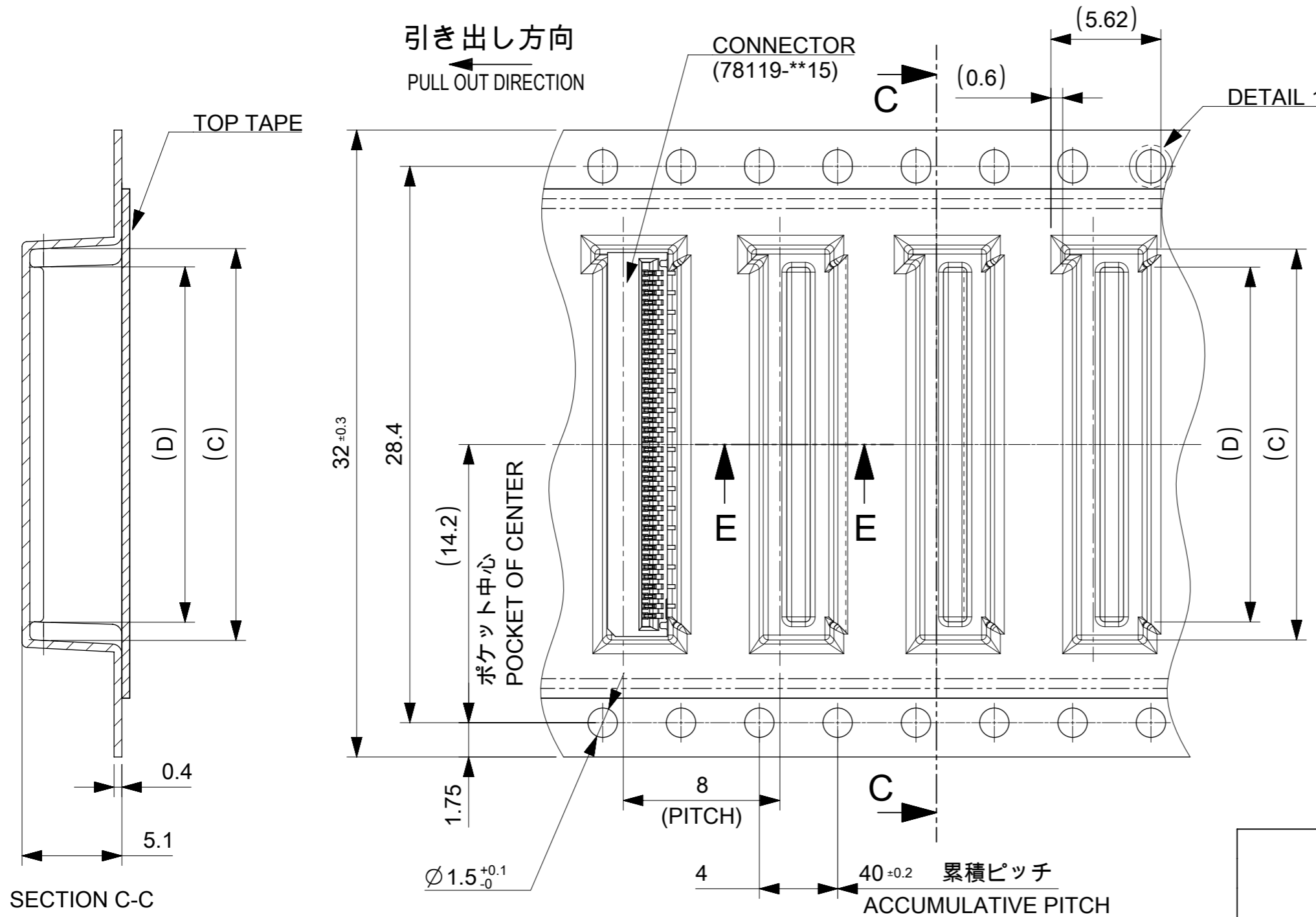
24	11.5	14.1	15.8	29.4	25.4	781192810	28
		13.6	15.3			781192710	27
		13.1	14.8			781192610	26
		12.6	14.3			781192510	25
		12.1	13.8			781192410	24
		11.6	13.3			781192310	23
		11.1	12.8			781192210	22
		10.6	12.3			781192110	21
		10.1	11.8			781192010	20
		9.6	11.3			781191910	19
		9.1	10.8			781191810	18
		8.6	10.3			781191710	17
		8.1	9.8			781191610	16
		7.6	9.3			781191510	15
16	7.5	7.1	8.8	21.4	17.4	781191410	14
		6.6	8.3			781191310	13
		6.1	7.8			781191210	12
		5.6	7.3			781191110	11
		5.1	6.8			781191010	10
		4.6	6.3			781190910	9
		4.1	5.8			781190810	8
		3.6	5.3			781190710	7
3.1	4.8	781190610	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

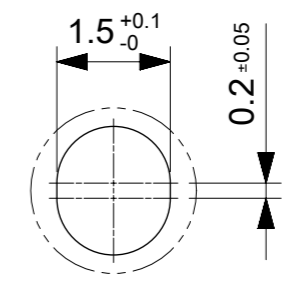
16mm, 24mm WIDTH CARRIER TAPE

CONNECTOR SERIES NO. 78119**15

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 mm	SCALE 4:1	EC NO: 677105 DRWN: NARENC CHK'D: TKON APPR: SHOSHIKAWA			
GENERAL TOLERANCES (UNLESS SPECIFIED)		2021/09/07 2021/09/13 2021/09/16		0.5 FPC CONN. N-ZIF ST SNBI EMBS TP PKG	
ANGULAR TOL	± 1.0 °	INITIAL REVISION:		PRODUCT CUSTOMER DRAWING	
4 PLACES	± 0.1	DRWN: NASANUMA APPR: KMORIKAWA		DOCUMENT NUMBER	DOC TYPE
3 PLACES	± 0.1	2016/04/19 2016/08/02		781190001	PSD
2 PLACES	± 0.1	THIRD ANGLE PROJECTION		DOC PART	REVISION
1 PLACE	± 0.1	DRAWING		000	B
0 PLACES	± 0.1	SERIES		SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3-SIZE		2 OF 3	



SECTION E-E



DETAIL 1
SCALE 10:1

32	18.1	19.8	37.4	33.4	781193610	36
	17.6	19.3			781193510	35
	17.1	18.8			781193410	34
	16.6	18.3			781193310	33
	16.1	17.8			781193210	32
	15.6	17.3			781193110	31
	15.1	16.8			781193010	30
	14.6	16.3			781192910	29
TAPE WIDTH	D	C	B	A	EMBOSSED PACKAGE オーダー番号 ORDER NO	CIRCUIT

CONNECTOR SERIES NO. 78119**15

32mm幅キャリアテープ

32mm WIDTH CARRIER TAPE

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DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	4:1	molex 0.5 FPC CONN. N-ZIF ST SNBI EMBS TP PKG PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 781190001 DOC TYPE: PSD DOC PART: 000 REVISION: B MATERIAL NUMBER: 78119 SERIES: A3-SIZE CUSTOMER: 78119 SHEET NUMBER: 3 OF 3							
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	78119	78119	3 OF 3		

NOTES

1. 使用材料 MATERIALS

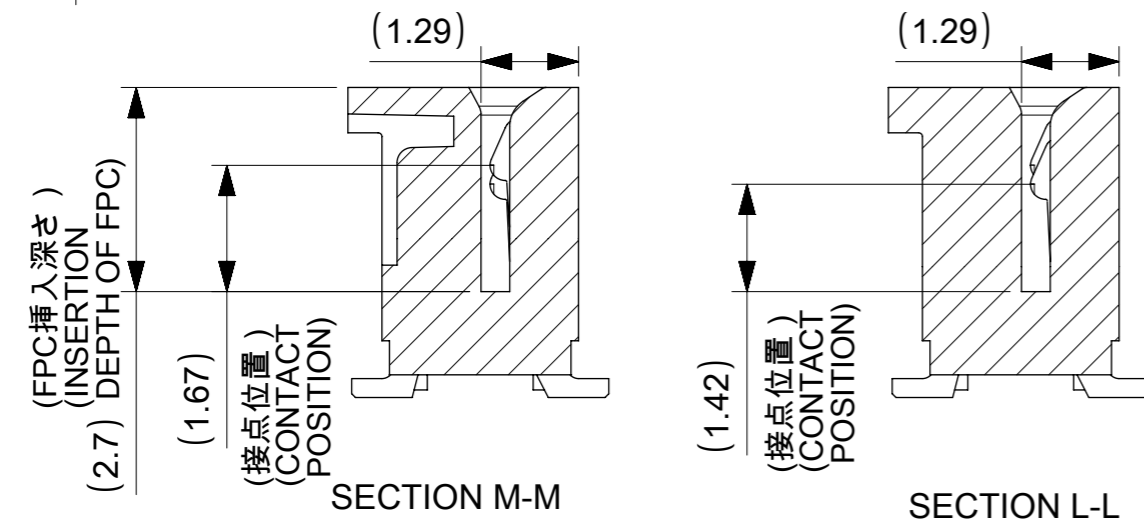
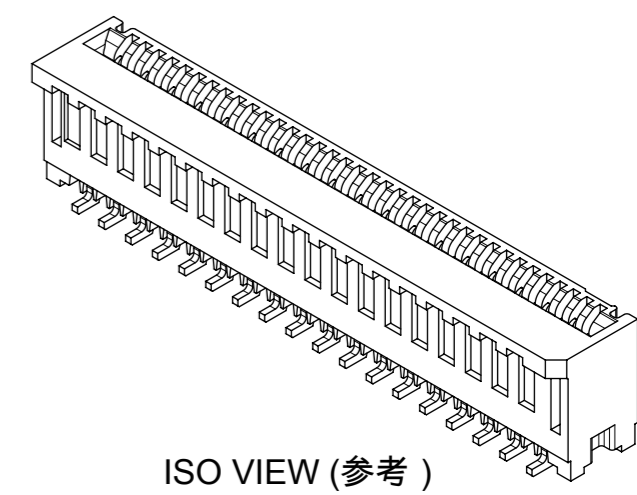
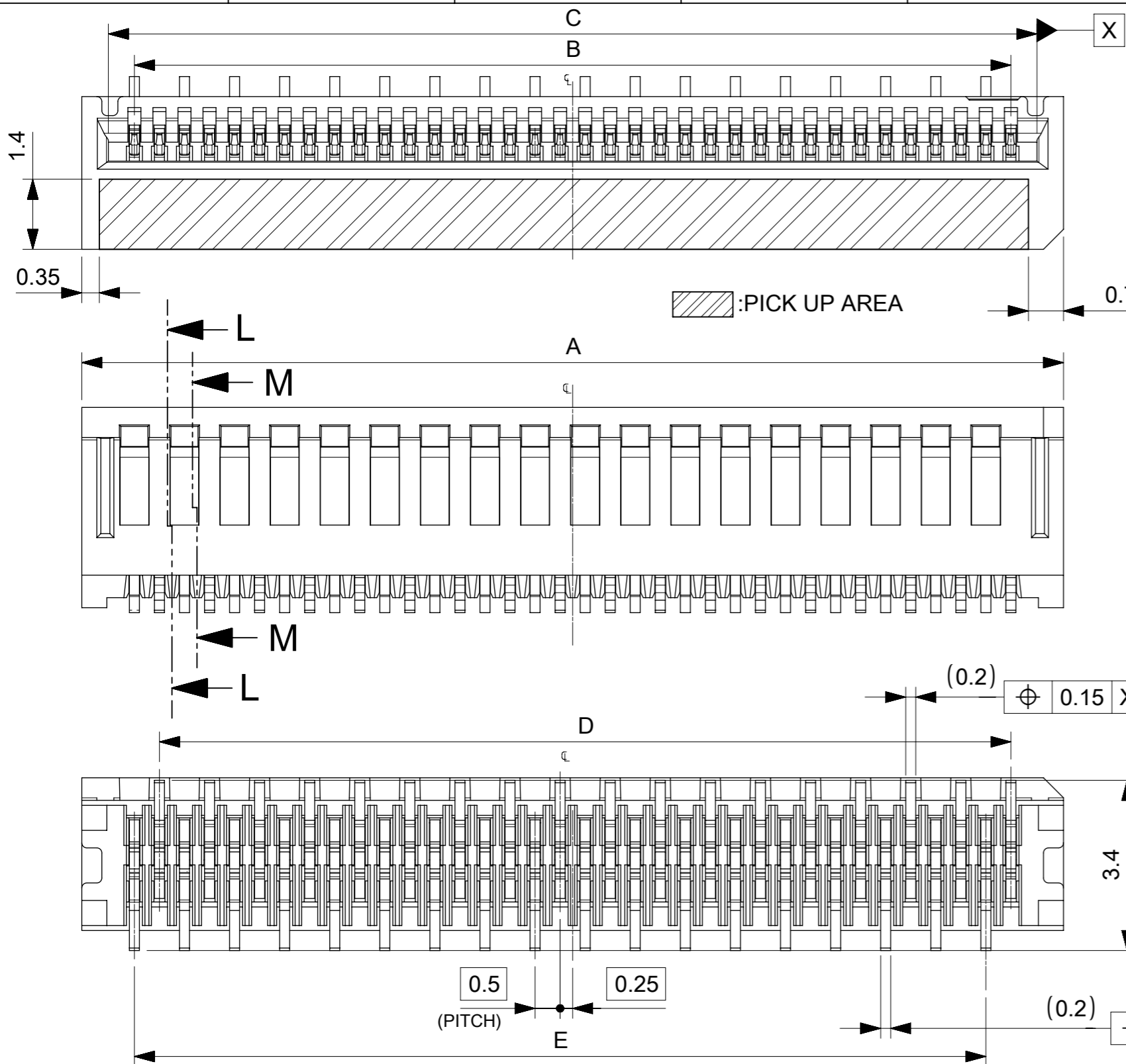
ハウジング : 液晶ポリマー(LCP)
 ガラス充填、UL94 V-0、黒色
 端子 : リン青銅 t=0.2mm
 HOUSING : LIQUID CRYSTAL POLYMER(LCP)
 GLASS FILLED, UL94 V-0, BLACK
 TERMINAL: PHOSPHOR BRONZE t=0.2mm

2. メッキ仕様 PLATING

端子 TERMINAL
 錫ビスマスマッキ 1.0µm以上
 下地 : ニッケルメッキ 1.0µm以上
 SnBi PLATING 1.0 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**15

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EC NO: 107065	DRWN: NASANUMA	CHK'D: YKOBAYASHI02	APPR: KMORIKAWA
2016/01/25	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	2016/01/25
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	
		0.5 PITCH NON-ZIF CONN. SMT ST ASSY	
		PRODUCT CUSTOMER DRAWING	
SERIES	MATERIAL NUMBER	CUSTOMER	
78119			
DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
781191001	PSD	000	1 OF 3



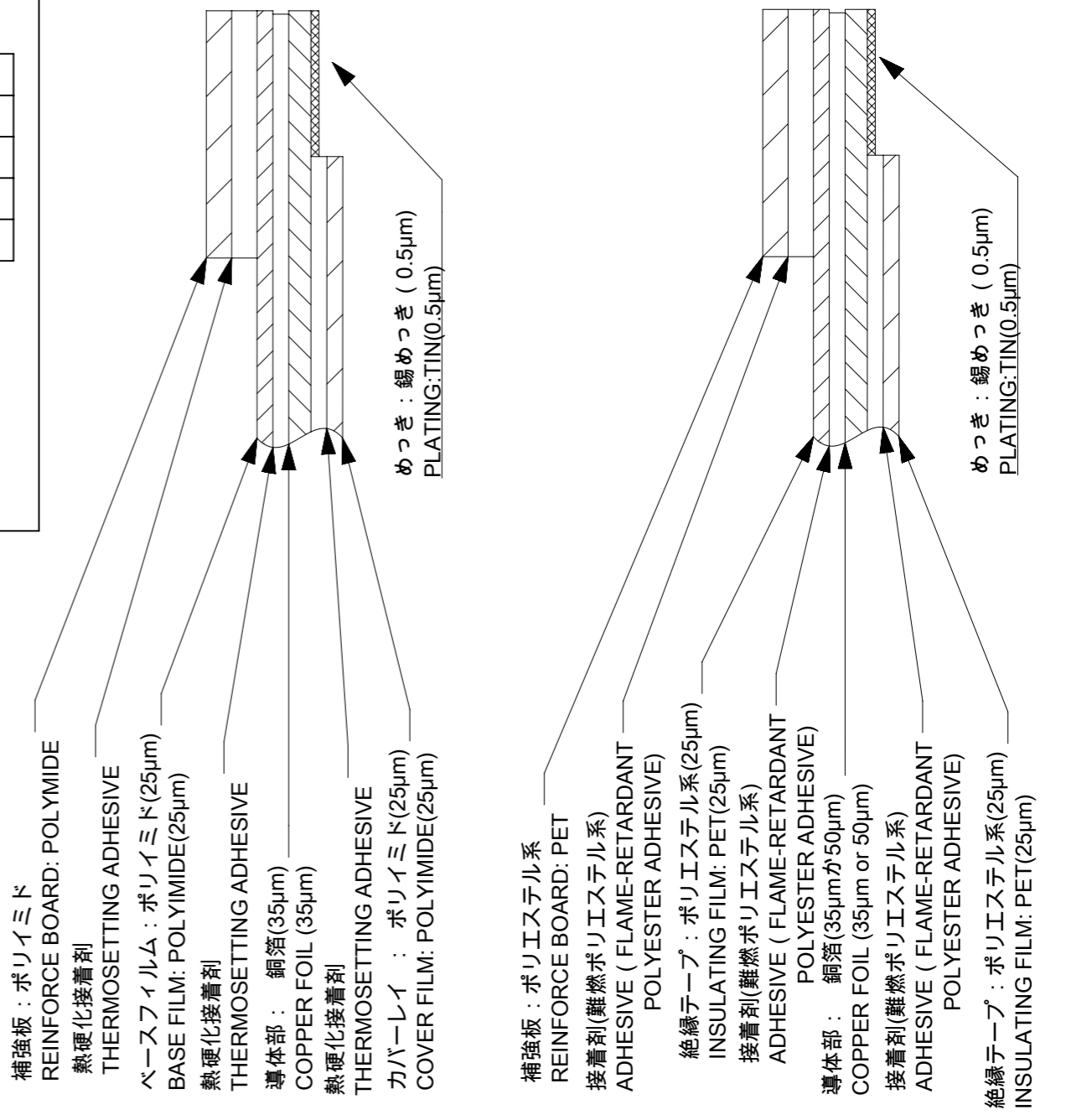
ELV & RoHS COMPLIANT

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.



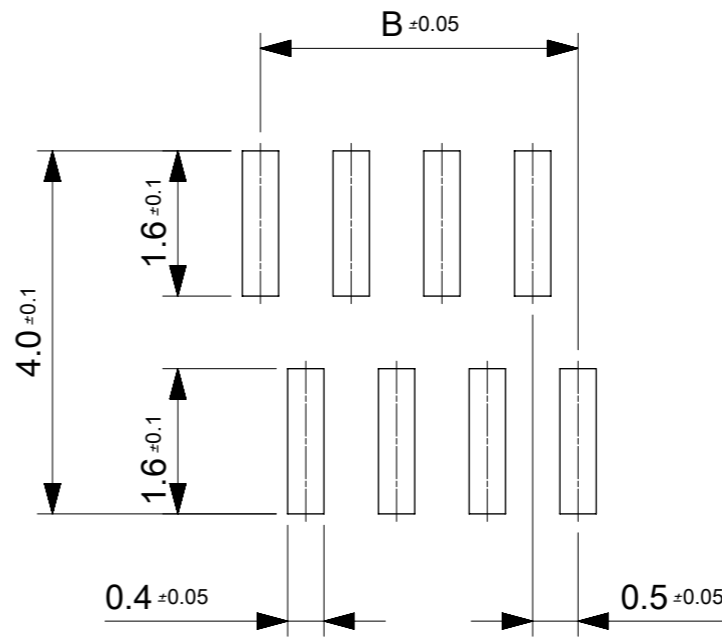
FPC構成推奨仕様
STRUCTURE OF FPC

FFC構成推奨仕様
STRUCTURE OF FFC

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EC NO: 107065 DRWN: NASANUMA CHK'D: YKOBAYASHI02 APPR: KMORIKAWA	2016/01/25	2016/08/01	2016/08/02	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE	molex®			
					MM	12:1				
	4 PLACES	± 0.1			DRWN BY	DATE		0.5 PITCH NON-ZIF CONN. SMT ST ASSY		
	3 PLACES	± 0.1			NASANUMA	2016/01/25				
3 PLACES	± 0.1		CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING					
2 PLACES	± 0.1		YKOBAYASHI02	2016/08/01						
1 PLACE	± 0.1		APPR BY	DATE	SERIES	MATERIAL NUMBER	CUSTOMER			
0 PLACES	± 0.1		KMORIKAWA	2016/08/02				78119		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWING SIZE	THIRD ANGLE PROJECTION	DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
A	REV				A3		781191001	PSD	000	2 OF 3

17	17	18.6	17.5	19.6	781193610	36
16	17	18.1	17	19.1	781193510	35
16	16	17.6	16.5	18.6	781193410	34
15	16	17.1	16	18.1	781193310	33
15	15	16.6	15.5	17.6	781193210	32
14	15	16.1	15	17.1	781193110	31
14	14	15.6	14.5	16.6	781193010	30
13	14	15.1	14	16.1	781192910	29
13	13	14.6	13.5	15.6	781192810	28
12	13	14.1	13	15.1	781192710	27
12	12	13.6	12.5	14.6	781192610	26
11	12	13.1	12	14.1	781192510	25
11	11	12.6	11.5	13.6	781192410	24
10	11	12.1	11	13.1	781192310	23
10	10	11.6	10.5	12.6	781192210	22
9	10	11.1	10	12.1	781192110	21
9	9	10.6	9.5	11.6	781192010	20
8	9	10.1	9	11.1	781191910	19
8	8	9.6	8.5	10.6	781191810	18
7	8	9.1	8	10.1	781191710	17
7	7	8.6	7.5	9.6	781191610	16
6	7	8.1	7	9.1	781191510	15
6	6	7.6	6.5	8.6	781191410	14
5	6	7.1	6	8.1	781191310	13
5	5	6.6	5.5	7.6	781191210	12
4	5	6.1	5	7.1	781191110	11
4	4	5.6	4.5	6.6	781191010	10
3	4	5.1	4	6.1	781190910	9
3	3	4.6	3.5	5.6	781190810	8
2	3	4.1	3	5.1	781190710	7
2	2	3.6	2.5	4.6	781190610	6
E	D	C	B	A	EMBOSSED PACKAGE オーダー番号 ORDER NO.	CIRCUIT



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**15

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EC NO: 107065 DRWN: NASANUMA CHK'D: YKOBAYASHI02 APPR: KMORIKAWA	2016/01/25	2016/08/01	2016/08/02	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	DIMENSION UNITS	SCALE				
					MM	12:1				
					DRWN BY	DATE		NASANUMA	2016/01/25	
					CHK'D BY	DATE		YKOBAYASHI02	2016/08/01	
					APPR BY	DATE		KMORIKAWA	2016/08/02	
				DRAWING SIZE	THIRD ANGLE PROJECTION		PRODUCT CUSTOMER DRAWING			
				A3			SERIES	MATERIAL NUMBER	CUSTOMER	
							78119			
							DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
							781191001	PSD	000	3 OF 3