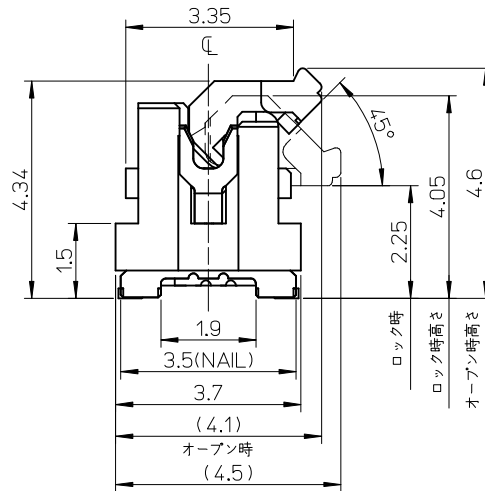


断面図 (参考)

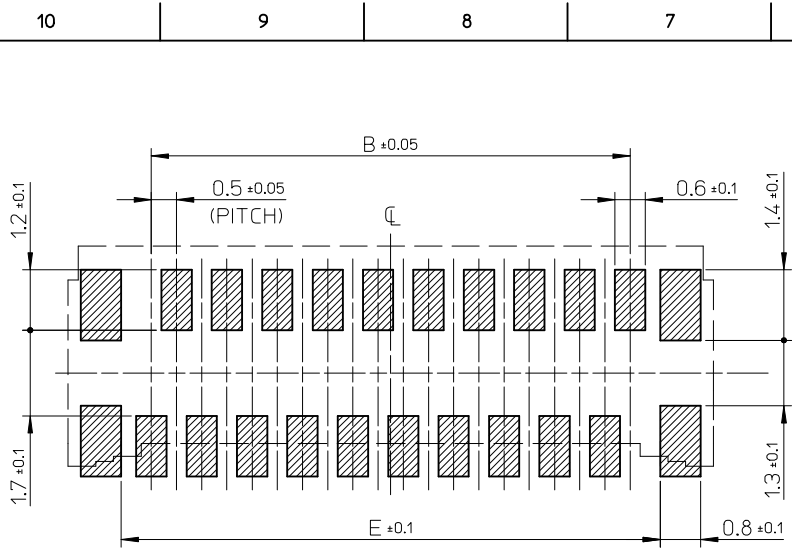


注記 NOTES

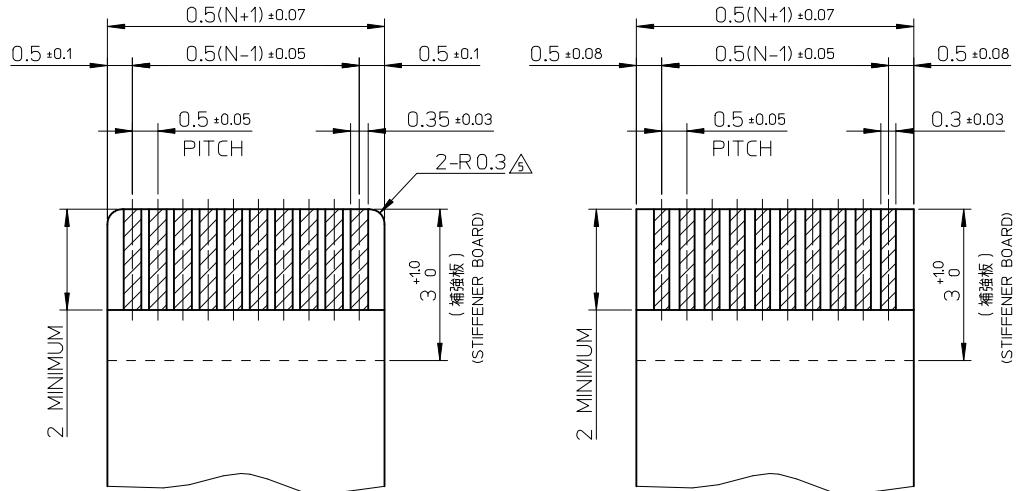
1. 使用材料 MATERIAL  
 ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)  
 HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)  
 アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)  
 ACTUATOR : POLYAMIDE 9T, GLASS FILLED, UL94V-0 (BROWN)  
 ターミナル : 銅合金(t=0.15)  
 TERMINAL : COPPER ALLOY  
 金具 : 銅合金(t=0.2)  
 FITTING NAIL : COPPER ALLOY
  2. めっき仕様 PLATING  
 ターミナル TERMINAL  
 コネクタ部 : 部分金めっき(0.1μm以上)  
 テール部 : 部分金めっき  
 下地 : ニッケルめっき(1.0μm以上)  
 CONTACT AREA : SEPARATED GOLD PLATING (0.1 MICROMETER MINIMUM)  
 SOLDER TAIL AREA : SEPARATED GOLD PLATING UNDERPLATE : NICKEL OVERALL  
 金具 FITTING NAIL  
 ニッケル下地めっき  
 銅めっき(1.0μm以上)  
 ニッケルめっき(1.0μm以上)  
 TIN(Sn) OVER NICKEL(Ni) PLATING.  
 TIN PLATING (1.0 MICROMETER MINIMUM)  
 NICKEL PLATING (1.0 MICROMETER MINIMUM)
  3. テールと金具を併せた平坦度は 0.1ミリメートル以下(リフロー前)  
 TAILS AND NAILS COPLANARITY TO BE 0.1 MAX. (BEFORE REFLOW)
  4. ELV及びRoHS適合品  
 ELV AND RoHS COMPLIANT
- △ R0.3は、FPC導体部にかからないこと。  
 R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

8	35.7	37.1	37.4	34.5	37.8	501951-7019	70
	30.7	32.1	32.4	29.5	32.8	501951-6019	60
	25.7	27.1	27.4	24.5	27.8	501951-5019	50
	23.2	24.6	24.9	22	25.3	501951-4519	45
	20.7	22.1	22.4	19.5	22.8	501951-4019	40
	16.7	18.1	18.4	15.5	18.8	501951-3219	32
	15.7	17.1	17.4	14.5	17.8	501951-3019	30
	12.7	14.1	14.4	11.5	14.8	501951-2419	24
	11.7	13.1	13.4	10.5	13.8	501951-2219	22
10.7	12.1	12.4	9.5	12.8	501951-2019	20	
F	E	D	C	B	A	MATERIAL NO.	CIRCUITS

REVISED EC NO.: J2015-1526 DRAWN: ISHII 2015/05/18 CHKD: KAKAHASHI 2015/05/18 APPR: YNOGAWA 2015/05/20	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		0.25 UNDER	±0.03	DRAWN BY TRSUZUKI		DATE 2006/08/21	TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)		
		0.25 OVER 0.5 UNDER	±0.05	CHECKED BY HIRATA		DATE 2006/08/21	molex		
		0.5 OVER 1.0 UNDER	±0.1	APPROVED BY MSASAO		DATE 2006/08/21			
		1.0 OVER 10 UNDER	±0.2	MATERIAL NO.		DOCUMENT NO.	SHEET NO.		
10 OVER 30 UNDER	±0.25	ANGULAR ±1 °		SEE CHART		SD-501951-003	1 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



参考基板レイアウト (マウント面)  
P.C. BOARD PATTERN DIMENSION (REF.)  
(MOUNT AREA)



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.05)  
(THICKNESS: 0.3 ± 0.05)

N:極数  
N:CIRCUITS

適合FFC推奨寸法  
APPLICABLE FFC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.05)  
(THICKNESS: 0.3 ± 0.05)

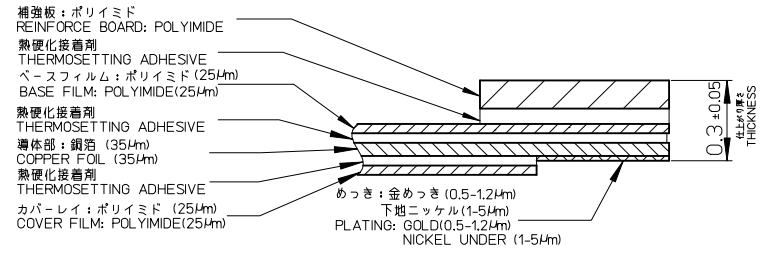
N:極数  
N:CIRCUITS

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 MATERIAL/THICKNESS.  
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. THERE IS A POSSIBILITY THAT THE PRESCRIPT TEMPERATURE OF FFC IS SET TO SINGLE IT.

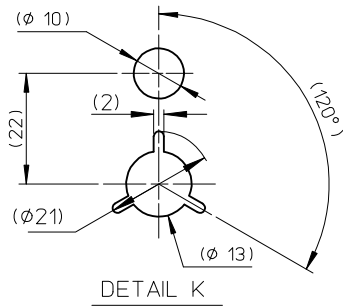
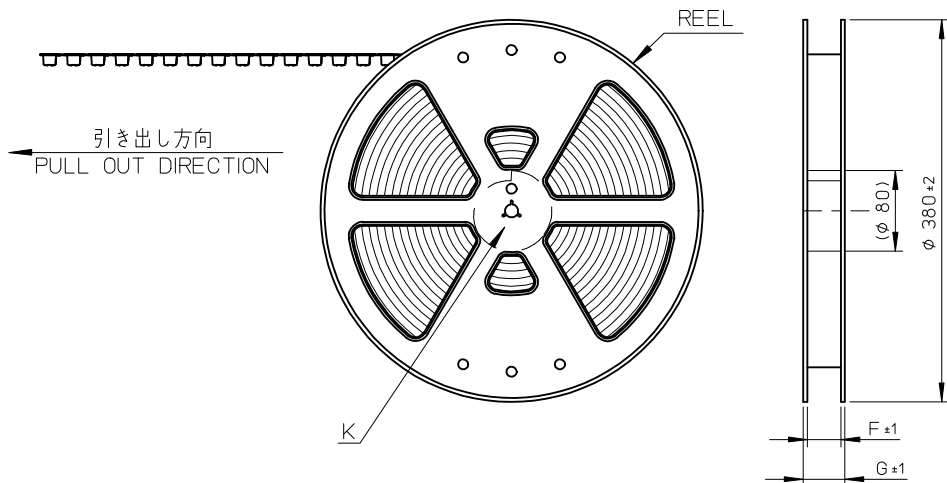
FPC/FFCについて ABOUT FPC/FFC

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での実使用において、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/確認をお願い致します。  
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.)



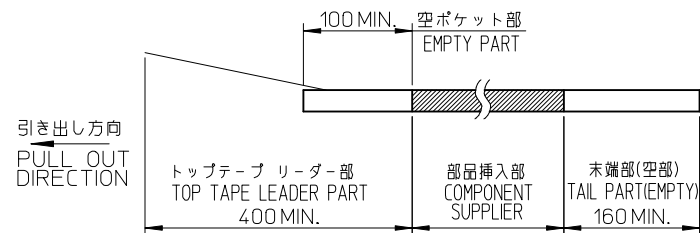
FPC構成推奨仕様  
STRUCTURE OF FPC

SEE SHEET 1 OF 2 EC NO: J2015-1526 DRAWN BY: DRWNAISHI 2015/05/18 CHECKED BY: CHKD:TAKAHASHI 2015/05/18 APPR: YNOGAWA 2015/05/20	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	0.25 UNDER	±0.03	DRAWN BY	DATE	TITLE		
	0.25 OVER 0.5 UNDER	±0.05	TRSUZUKI	2006/08/21	0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)		
	0.5 OVER 1.0 UNDER	±0.1	CHECKED BY	DATE	molex		
1.0 OVER 10 UNDER	±0.2	HIRATA	2006/08/21	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.
10 OVER 30 UNDER	±0.25	MSASAO	2006/08/21	SEE SHEET 1 OF 2		SD-501951-003	SHEET NO. 2 OF 2
30 OVER	±0.3			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
ANGULAR	±1 °						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							



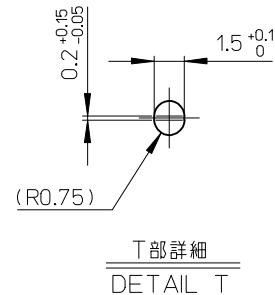
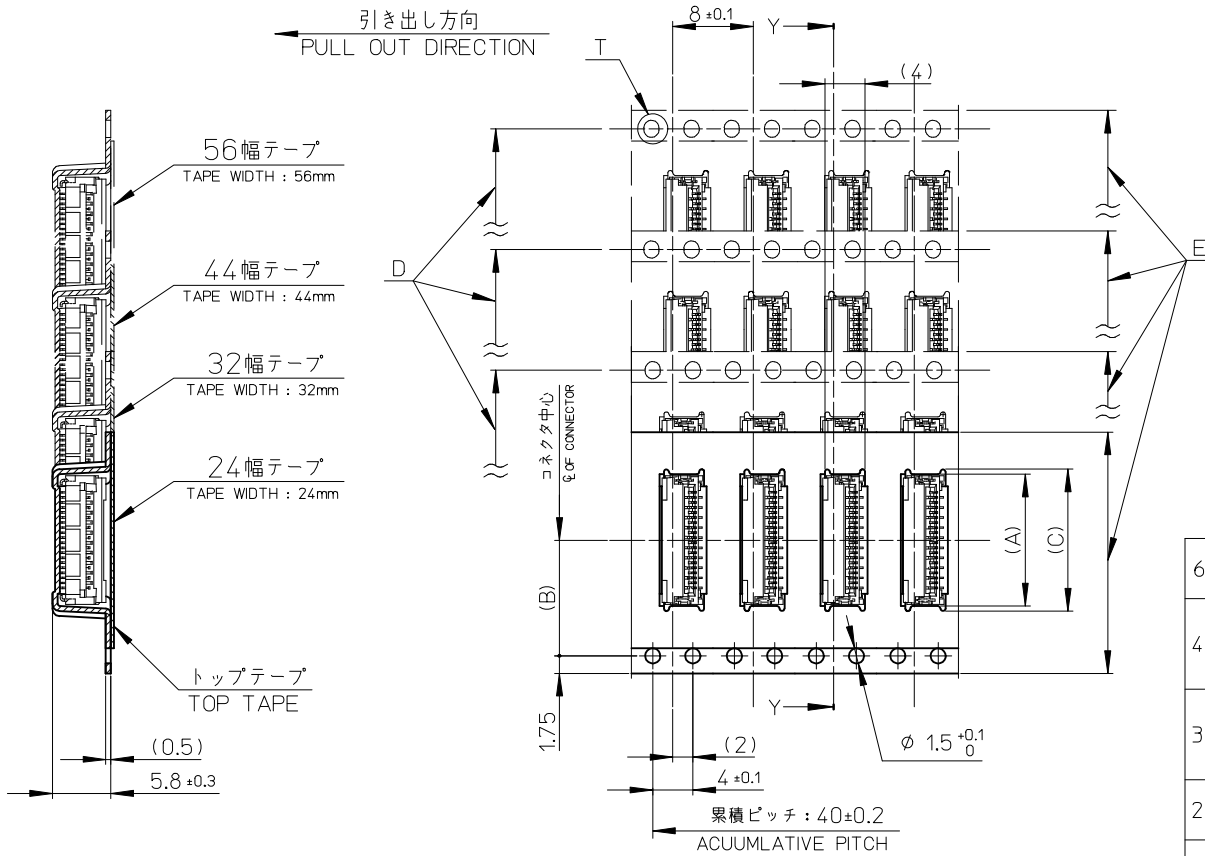
NOTES

- 製品詳細寸法については図面 SD-501951-003を参照下さい。  
FOR DIMENSIONS OF PRODUCT, REFER TO SD-501951-003.
- 梱包数量 : 2000個/リール  
NUMBER OF CONNECTORS : 2000PIECES/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- 材料 MATERIAL  
 キャリアテープ : ポリプロピレン  
 CARRIER TAPE : POLYPROPYLENE  
 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  
 TOP TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE  
 リール : ポリスチレン<リサイクル材を含む>  
 REEL : POLYSTYRENE <RECYCLE MATERIAL CONTAINED>
- ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

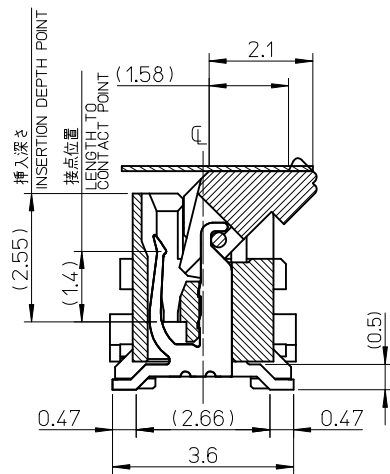
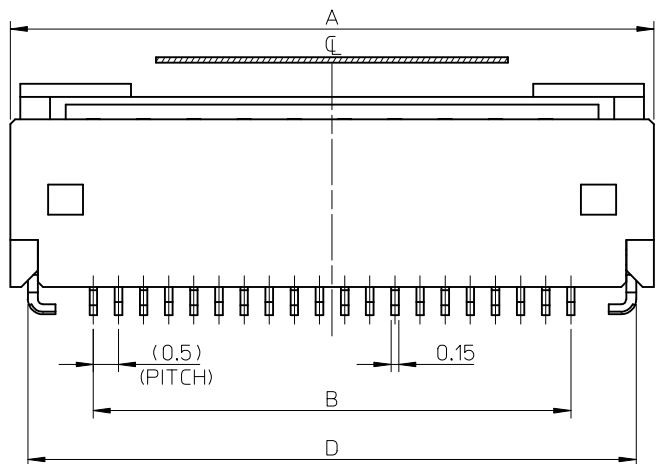
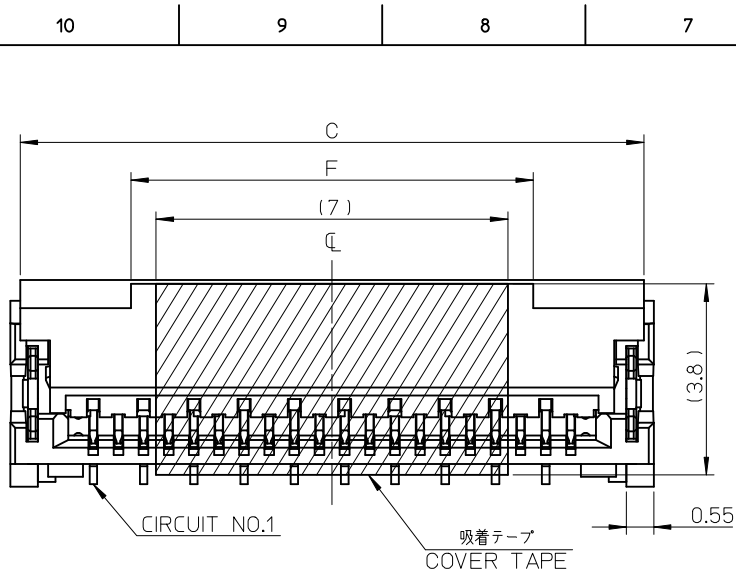
REVISED EC NO.: J2014-0085 DRWN: KONDO 2013/07/17 CHKD: TAKAHASHI 2013/07/17 APPR: YNOGAWA 2013/07/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD)	
	10 OVER 30 UNDER	± 0.25	CHECKED BY HHRATA	DATE 2006/09/05		
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2006/09/05		
REV	DESCRIPTION	ANGULAR ± 1 °	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-501951-004	SHEET NO. 1 OF 2	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



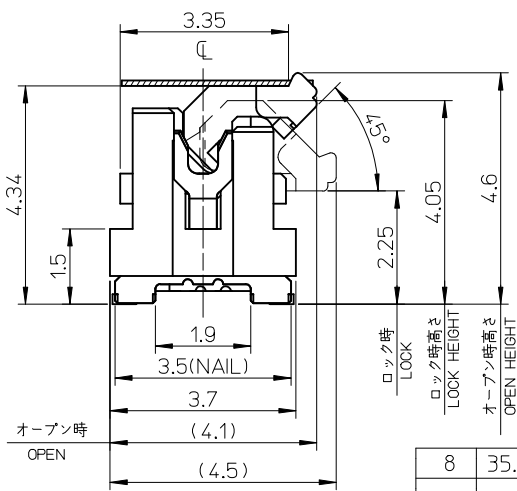
断面 Y-Y  
SECTION Y-Y

61.4	57.4	56±0.3	52.4	39.1	26.2	38.1	501951-7010	70
				34.1		33.1	501951-6010	60
49.4	45.4	44±0.3	40.4	29.1	20.2	28.1	501951-5010	50
				26.6		25.6	501951-4510	45
				24.1		23.1	501951-4010	40
37.4	33.4	32±0.3	28.4	20.1	14.2	19.1	501951-3210	32
				19.1		18.1	501951-3010	30
				16.1		15.1	501951-2410	24
29.4	25.4	24±0.3	—	15.1	11.5	14.1	501951-2210	22
				14.1		13.1	501951-2010	20
G	F	E キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	製品番号 MATERIAL NO.	極数 CIRCUITS

REVISED EC NO: J2014-0085 DR: WNKONO 2013/07/17 CHKD: TAKAHASHI 2013/07/17 APPR: YNOGAWA 2013/07/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD)			
	10 OVER 30 UNDER	±0.25	CHECKED BY HHIRATA	DATE 2006/09/05				
	30 OVER	±0.3	APPROVED BY MSASAO	DATE 2006/09/05				
ANGULAR	±1 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-501951-004	SHEET NO. 2 OF 2		
REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SIZE A3					



断面図 (参考)  
SECTION (REFERENCE)

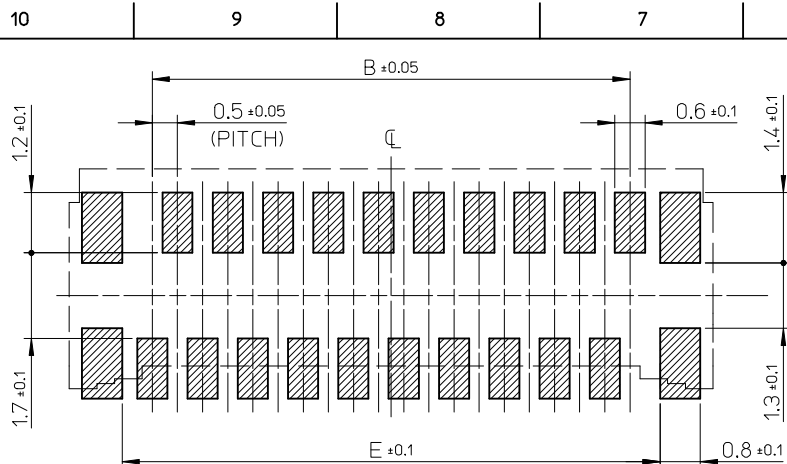


注記 NOTES

1. 使用材料 MATERIAL  
 ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)  
 HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)  
 アクチュエータ : ポリアミド, ガラス充填, UL94V-0(茶)  
 ACTUATOR : POLYAMIDE, GLASS FILLED, UL94V-0 (BROWN)  
 ターミナル : 銅合金(t=0.15)  
 TERMINAL : COPPER ALLOY  
 金具 : 銅合金(t=0.2)  
 FITTING NAIL : COPPER ALLOY  
 吸着テープ : ポリアミド(t=0.125)  
 COVER TAPE : POLYIMIDE(t=0.125)
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 0.1マイクロメートル以上  
 CONTACT AREA :SEPARATED GOLD PLATING 0.1μm MIN.  
 テール部: 部分金めっき  
 TAIL AREA :SEPARATED GOLD PLATING  
 下地: ニッケルめっき 1マイクロメートル以上  
 UNDERPLATE: NICKEL OVERALL 1.0μm MIN.  
 金具 FITTING NAIL  
 銅めっき 1.0マイクロメートル以上  
 TIN PLATING 1.0μm MIN.  
 下地: ニッケルめっき 1マイクロメートル以上  
 UNDERPLATE: NICKEL OVERALL 1.0μm MIN.
3. テールと金具を併せた平坦度は 0.1ミリメートル以下  
 TAILS AND NAILS COPLANARITY TO BE 0.1 MAX.
4. ELV及びRoHS適合品  
 ELV AND RoHS COMPLIANT
- △ R0.3は、FPC導体部にかからないこと。  
 R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.
6. 本製品は 501951-7019 の吸着テープ付き品である。  
 THIS PRODUCT IS COVER TAPE VERSION OF 501951-7019.

8	35.7	37.1	37.4	34.5	37.8	501951-7020	501951-7029	70
F	E	D	C	B	A	EMBOSSED TAPE	製品番号	極数
						ORDER NO. オーダー番号	MATERIAL NO.	CIRCUITS
						MODEL NO. 501951-**29		

RELEASED EC NO: J2016-0731 DRWN: NKONDO 2016/01/14 CHKD: TAKAHASHI 2016/01/14 APPR: KMORIKAWA 2016/01/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	0.25 UNDER ±0.2		MM ONLY		10:1	METRIC	□	
	0.25 OVER 0.5 UNDER ±0.2		DRAWN BY DATE		TITLE			
	0.5 OVER 1.0 UNDER ±0.2		NKONDO 2016/01/14		0.5 FPC CONN. HSG ASSY			
	1.0 OVER 10 UNDER ±0.2		CHECKED BY DATE		EASY ON / STRAIGHT			
10 OVER 30 UNDER ±0.25		TAKAHASHI 2016/01/14		GOLD				
30 OVER ±0.3		APPROVED BY DATE						
ANGULAR ±1 °		KMORIKAWA 2016/01/15						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
		SEE CHART		SD-501951-009		1 OF 2		
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

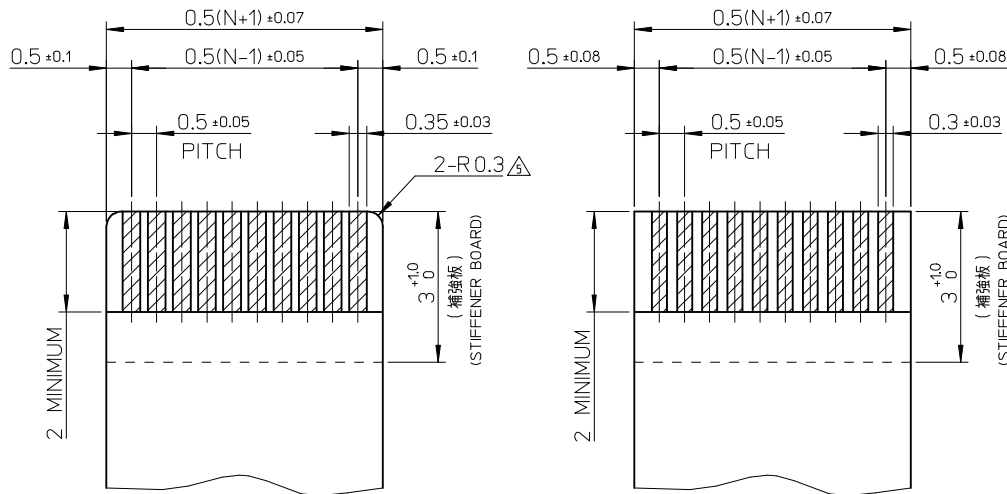


参考基板レイアウト (マウント面)

P.C. BOARD PATTERN DIMENSION (REF.)  
(MOUNT AREA)

参考マスク厚: 120 μm  
参考マスク開口率: 100%

REFERENCE SCREEN THICKNESS: 120 μm  
REFERENCE SCREEN OPEN RATIO: 100%



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
N:極数  
N:CIRCUITS  
(仕上がり厚さ: 0.3 ±0.03)  
(THICKNESS: 0.3 ±0.03)

適合FFC推奨寸法  
APPLICABLE FFC  
RECOMMENDED DIMENSION  
N:極数  
N:CIRCUITS  
(仕上がり厚さ: 0.3 ±0.03)  
(THICKNESS: 0.3 ±0.03)

FPC について:

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25 μm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。

ABOUT FPC

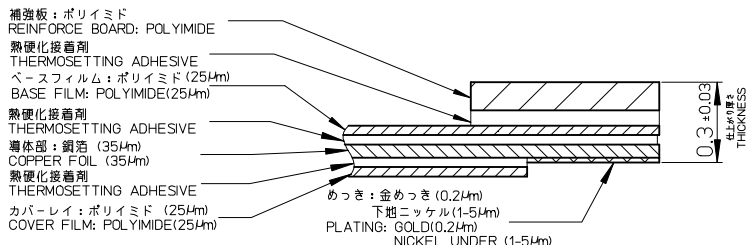
RECOMMENDED STIFFENER MATERIAL: POLYIMIDE  
RECOMMENDED BASE FILM THICKNESS: 25 MICROMETER  
RECOMMENDED ADHESIVE: THERMOSETTING ADHESIVE  
NOTE: PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

FPC/FFC について:

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銅箔35 μmまたは50 μmを推奨します。  
FFCに規定された定格温度がFPC単体前提である場合がございます。  
コネクタと組み合わせての実使用において、接着層が劣化するなど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 PUNCHER DIRECTION: FROM CONDUCTOR SIDE TO STIFFENER FILM 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構成推奨仕様  
STRUCTURE OF FPC

RELEASED EC NO.: J2016-0731	DRWN: NKONDO 2016/01/14	CHKD: TAKAHASHI 2016/01/14	APPR: KMORIKAWA 2016/01/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	DESCRIPTION			0.25 UNDER ±0.2	0.25 OVER ±0.2	0.5 UNDER ±0.2	0.5 OVER ±0.2	1.0 UNDER ±0.2	1.0 OVER ±0.2	10 UNDER ±0.25
DRAWN BY DATE NKONDO 2016/01/14				CHECKED BY DATE TAKAHASHI 2016/01/14		APPROVED BY DATE KMORIKAWA 2016/01/15		TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)		
MATERIAL NO. SEE SHEET 1				DOCUMENT NO. SD-501951-009		SHEET NO. 2 OF 2		molex		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						