



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



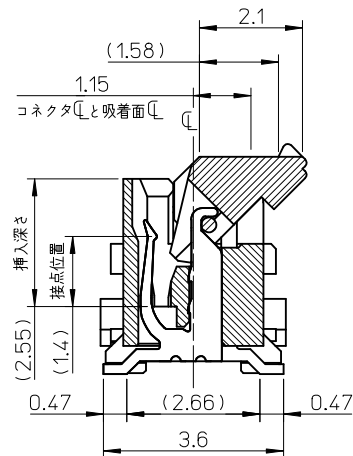
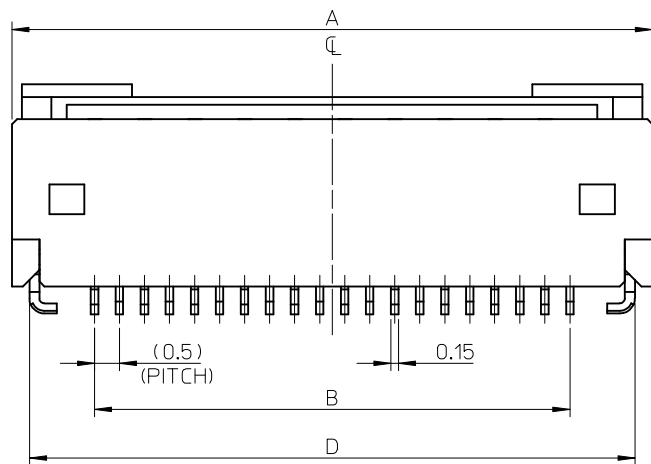
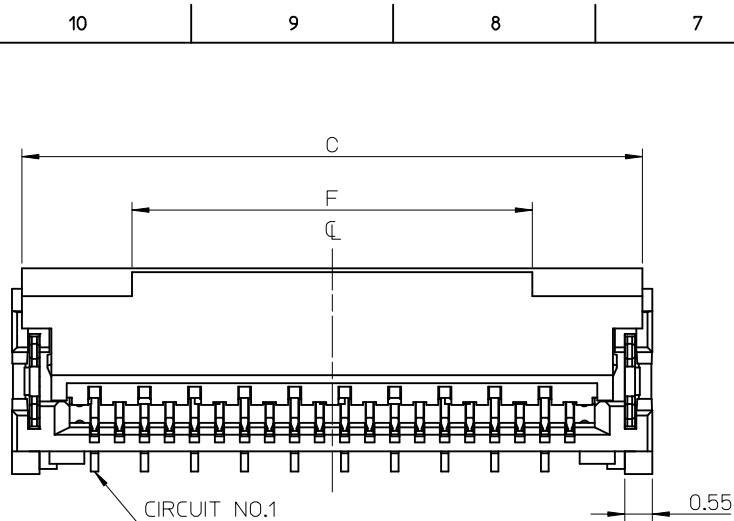
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

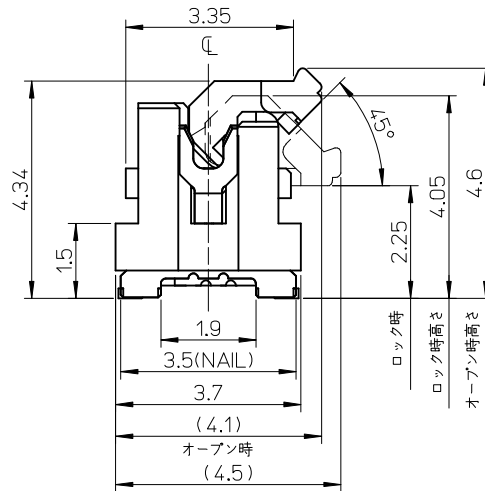
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





断面図 (参考)

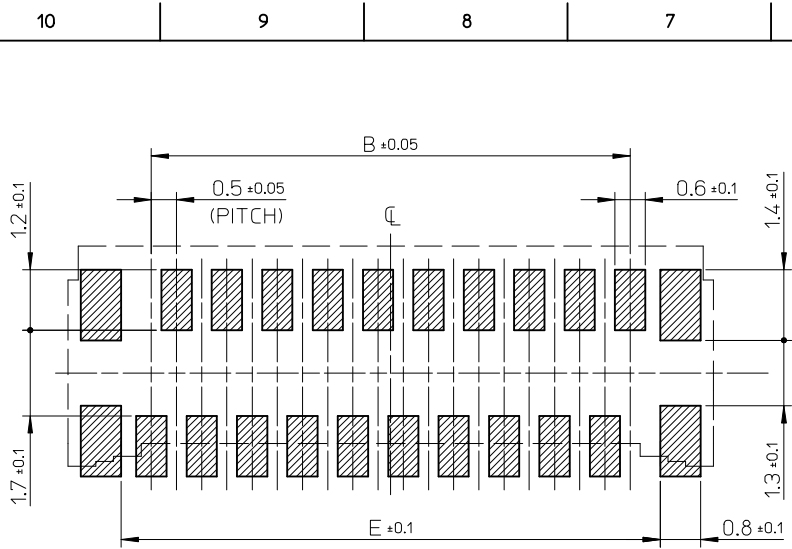


注記 NOTES

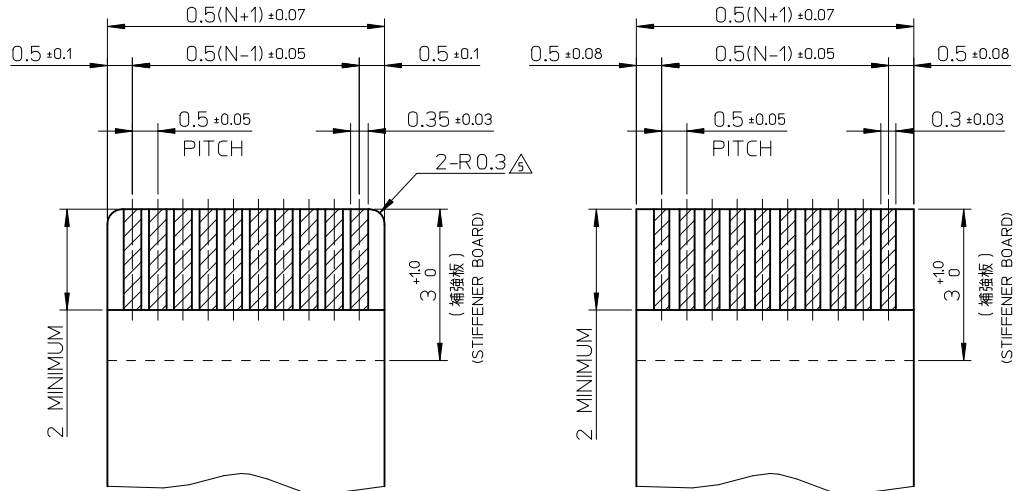
1. 使用材料 MATERIAL
 ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)
 HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)
 アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)
 ACTUATOR : POLYAMIDE 9T, GLASS FILLED, UL94V-0 (BROWN)
 ターミナル : 銅合金(t=0.15)
 TERMINAL : COPPER ALLOY
 金具 : 銅合金(t=0.2)
 FITTING NAIL : COPPER ALLOY
 2. めっき仕様 PLATING
 ターミナル TERMINAL
 コンタクト部 : 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 CHK: KAKAHASHI 2015/05/18 APPR: YNOGAWA 2015/05/20	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 10:1	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			
10 OVER	30 UNDER	± 0.25	APPROVED BY	DATE	SD-501951-003			
30 OVER	± 0.3		MSASAO	2006/08/21	DOCUMENT NO.			
ANGULAR ±1 °			MATERIAL NO.		SHEET NO.			
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

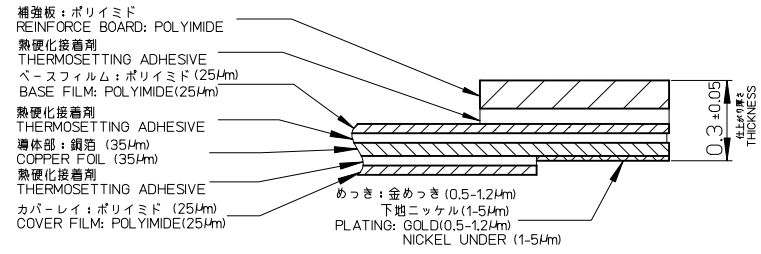
適合FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3 ± 0.05)
(THICKNESS: 0.3 ± 0.05)
N: 極数
N: CIRCUITS

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.

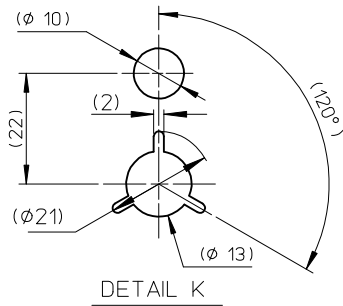
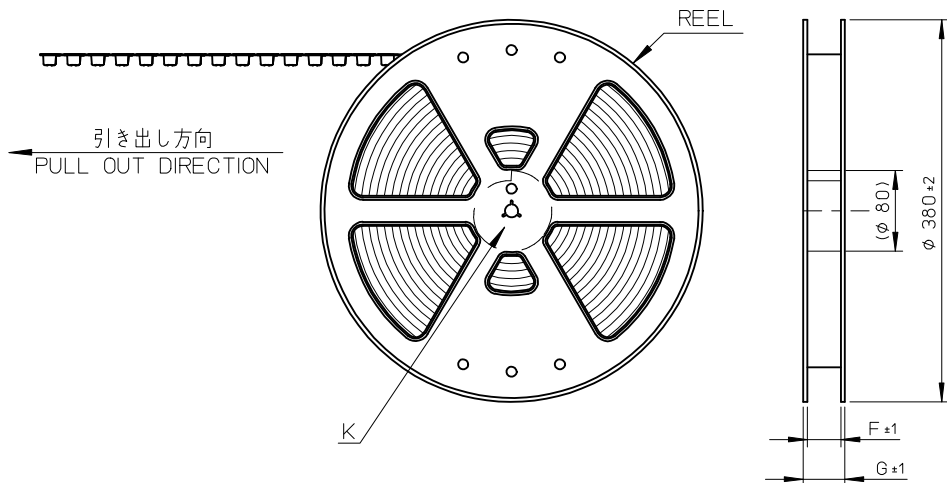
FPC/FFCについて ABOUT FPC/FFC

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.)



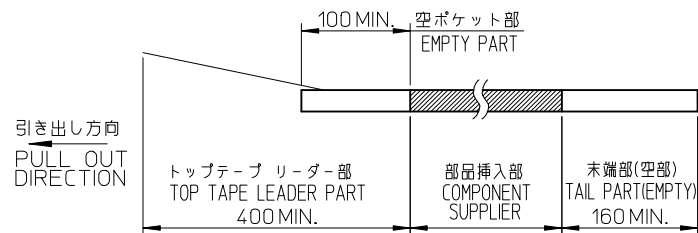
FPC構成推奨仕様
STRUCTURE OF FPC

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	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		



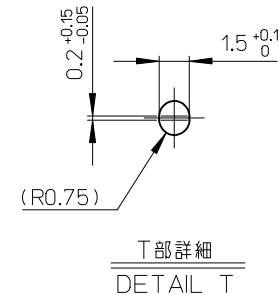
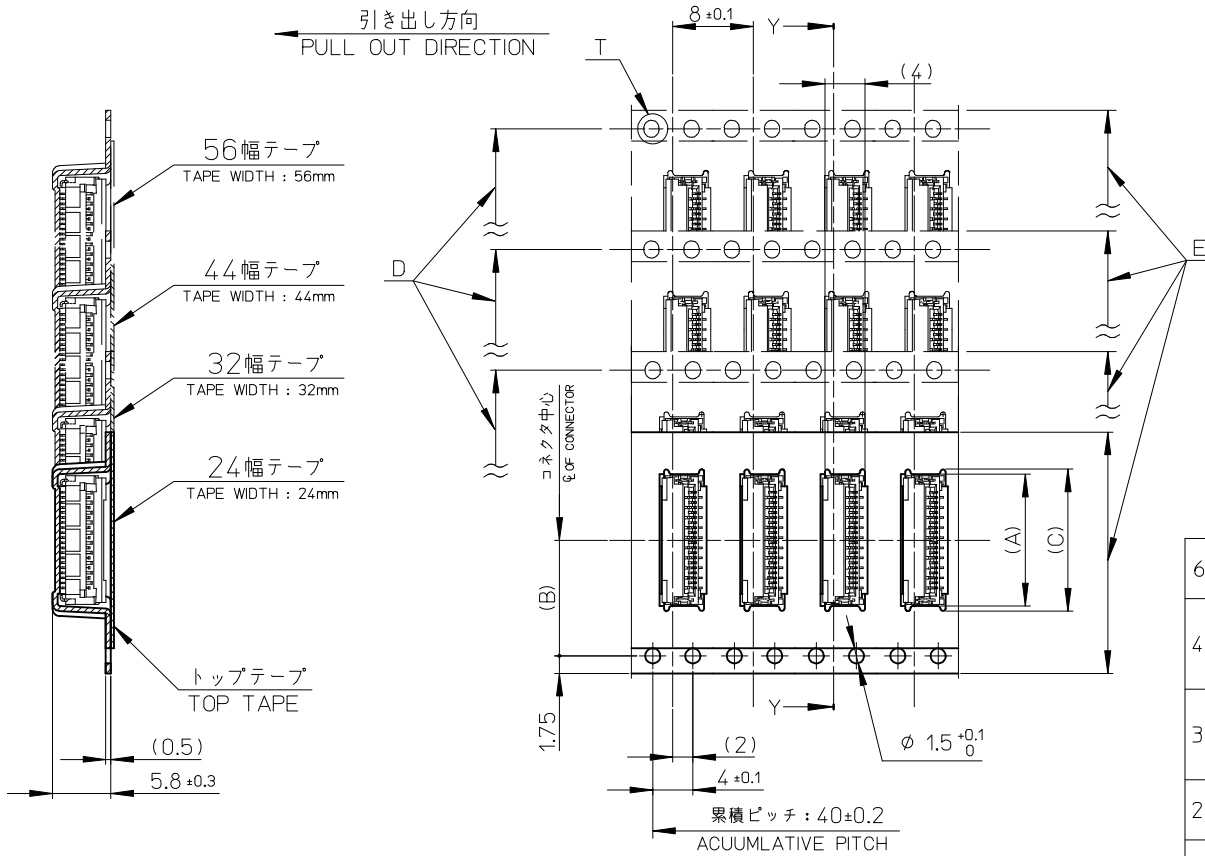
NOTES

- 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

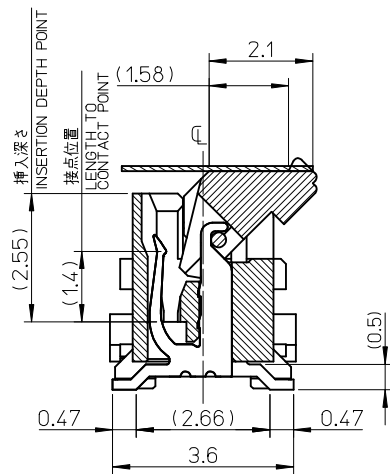
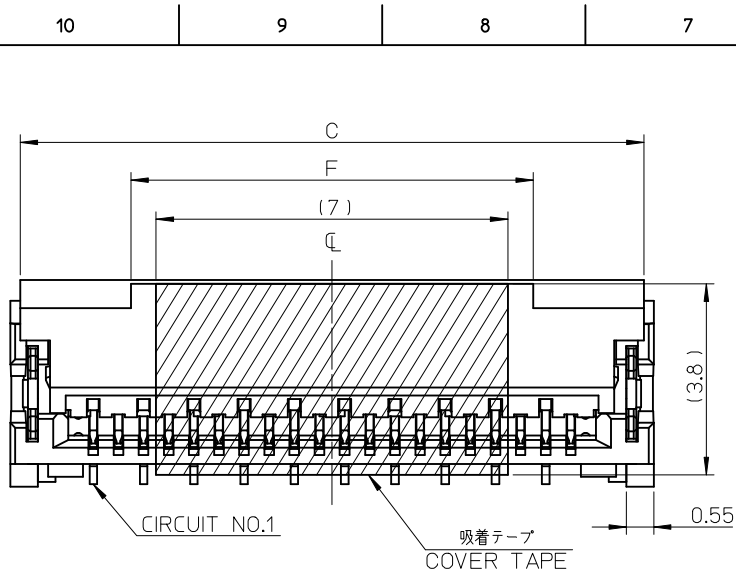
REVISED EC NO.: J2014-0085 DRWN: N. KONDO 2013/07/17 CHKD: K. TAKAHASHI 2013/07/17 APPR: Y. NOGAWA 2013/07/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY 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	molex DOCUMENT NO. SD-501951-004 SHEET NO. 1 OF 2		
ANGULAR ±1 °		MATERIAL NO. SEE CHART					
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			



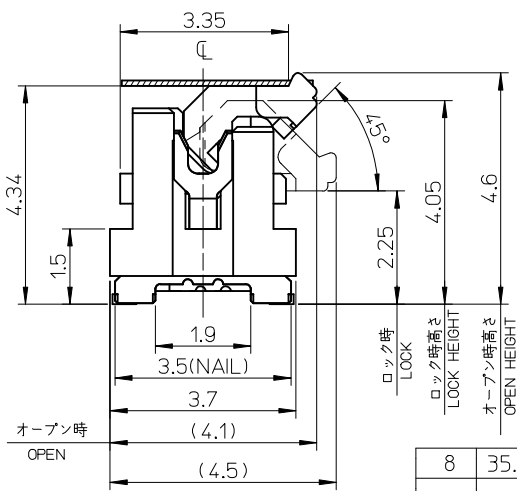
61.4	57.4	56±0.3	52.4	39.1	26.2	38.1	501951-7010	70
				34.1		33.1	501951-6010	60
49.4	45.4	44±0.3	40.4	29.1	20.2	28.1	501951-5010	50
				26.6		25.6	501951-4510	45
				24.1		23.1	501951-4010	40
37.4	33.4	32±0.3	28.4	20.1	14.2	19.1	501951-3210	32
				19.1		18.1	501951-3010	30
				16.1		15.1	501951-2410	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

断面 Y-Y
SECTION Y-Y

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							

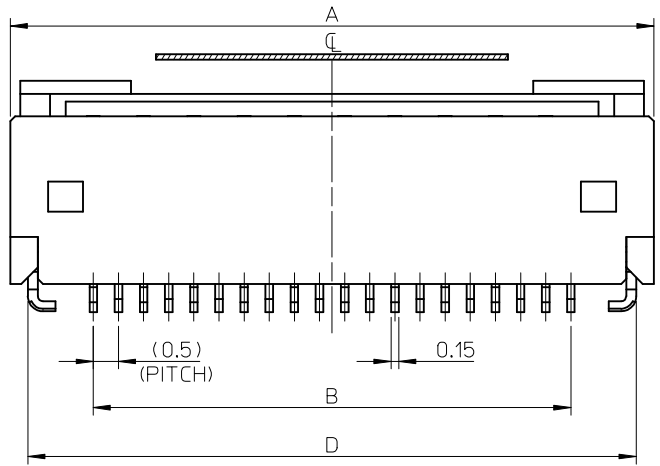


断面図 (参考)
SECTION (REFERENCE)



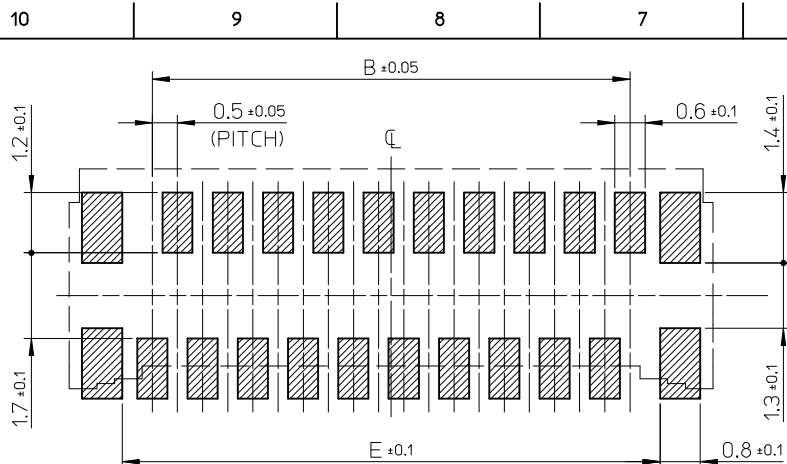
注記 NOTES

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.		SEE CHART		DOCUMENT NO.		SHEET NO.	
				A3		SD-501951-009		1 OF 2	

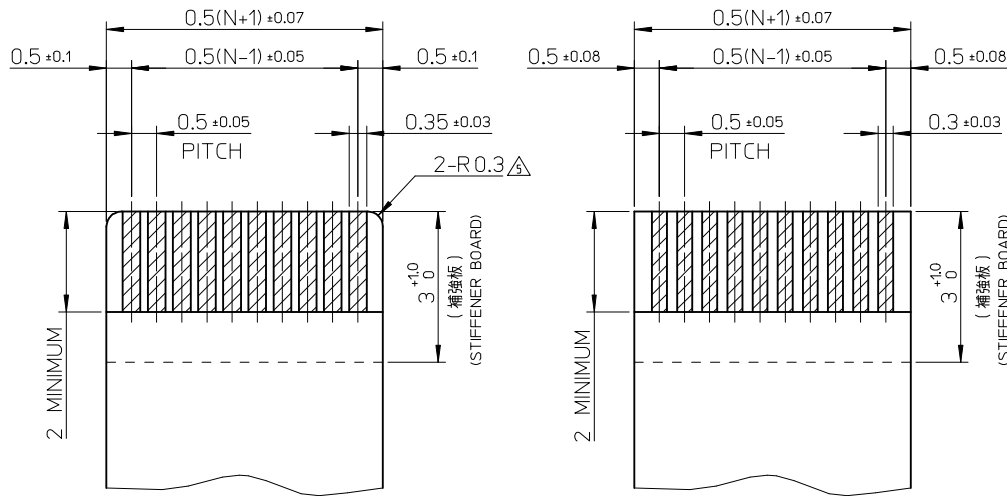


参考基板レイアウト (マウント面)

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

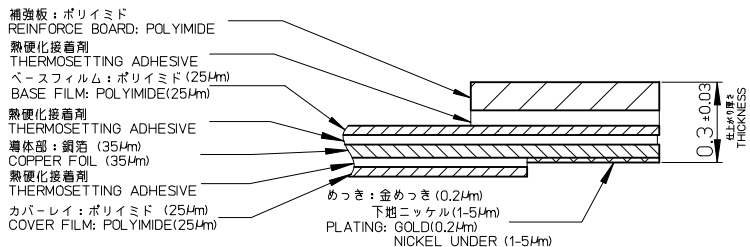
RECOMMENDED STIFFENER MATERIAL: POLYIMIDE
RECOMMENDED BASE FILM THICKNESS: 25 MICROMETER
RECOMMENDED ADHESIVE: THERMOSETTING ADHESIVE
NOTE: PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

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 O	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: NKONDO 2016/01/14				CHECKED BY: TAKAHASHI 2016/01/14		APPROVED BY: KMORIKAWA 2016/01/15		MATERIAL NO.		DOCUMENT NO.
DRAWN BY: NKONDO 2016/01/14				CHECKED BY: TAKAHASHI 2016/01/14		APPROVED BY: KMORIKAWA 2016/01/15		SEE SHEET 1		SD-501951-009
DRAWN BY: NKONDO 2016/01/14				CHECKED BY: TAKAHASHI 2016/01/14		APPROVED BY: KMORIKAWA 2016/01/15		SIZE: A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
DRAWN BY: NKONDO 2016/01/14				CHECKED BY: TAKAHASHI 2016/01/14		APPROVED BY: KMORIKAWA 2016/01/15		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 2 OF 2