

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [5014610401](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch FPC Connector, BackFlip™, Right Angle, SMT, Bottom Contact Style, 0.80mm (.031") Mated Height, 4 Circuits, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-501461-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [501461](#)  
 Product Name BackFlip™

**Physical**

Circuits (Loaded) 4  
 Contact Position Bottom  
 Durability (mating cycles max) 20  
 Entry Angle 90° Angle  
 Mated Height (in) 0.031 In  
 Mated Height (mm) 0.80 mm  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.020 In  
 Pitch - Mating Interface (mm) 0.50 mm  
 Polarized to PCB Yes  
 Stackable No  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

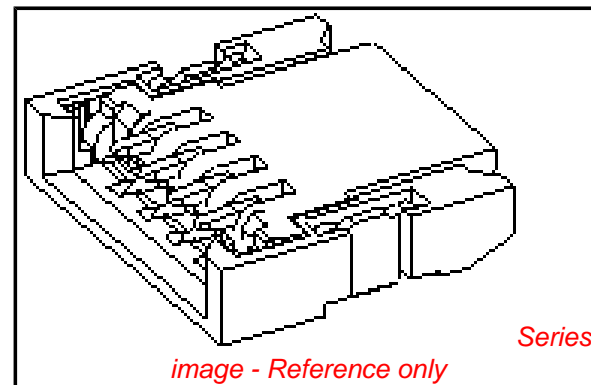
**Electrical**

Current - Maximum per Contact 0.3A  
 Voltage - Maximum 50V

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-501461-001, RPS-501461-001, RPS-501461-002, RPS-501461-005, RPS-501461-006, RPS-501461-007, RPS-501461-008  
 Sales Drawing SD-501461-001, SD-501461-002



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**  
 Not Reviewed

**China RoHS**



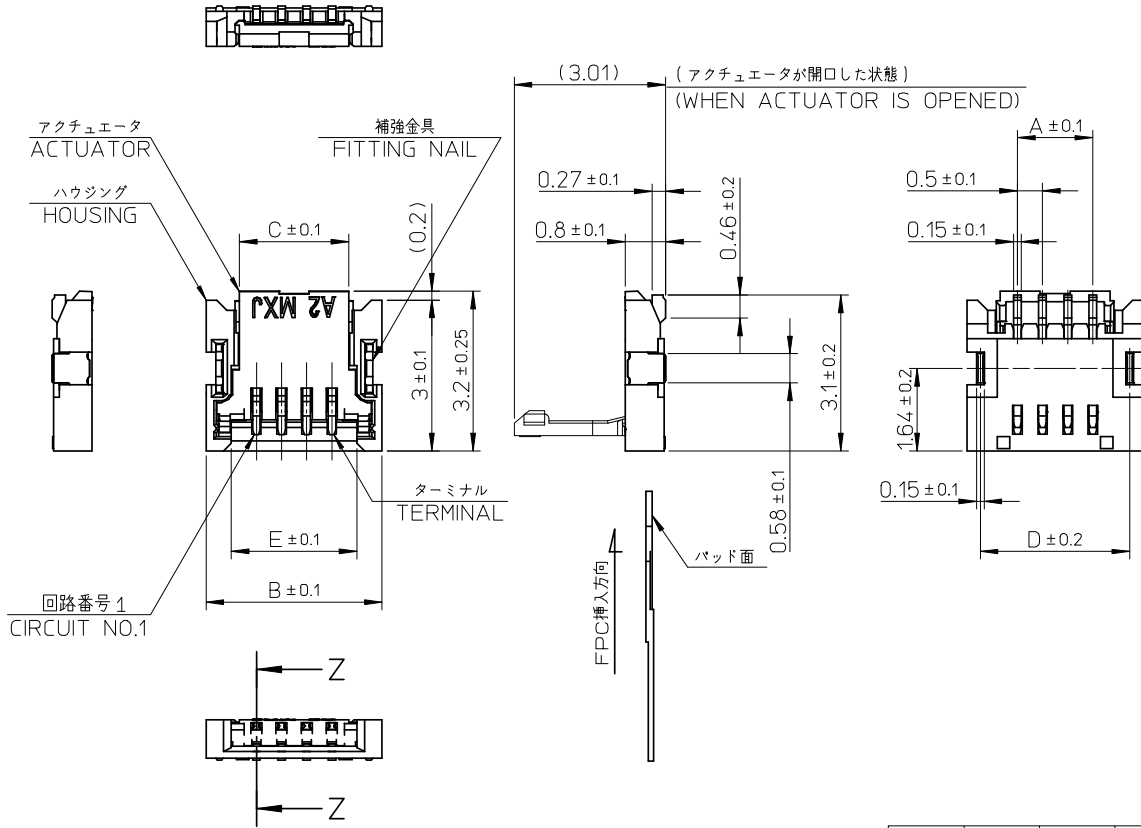
**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[501461Series](#)

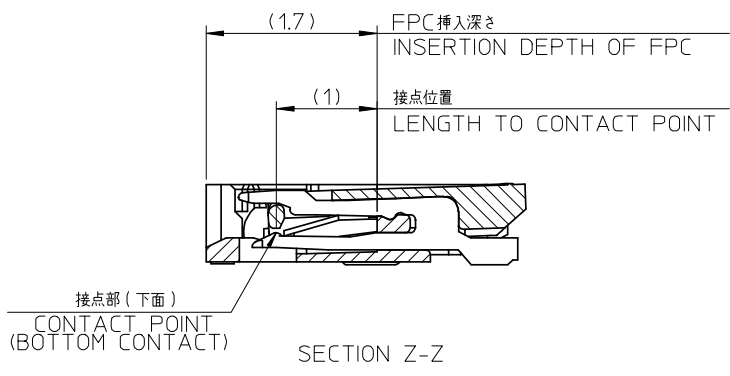


注記  
NOTES:

1.材質  
MATERIAL  
ハウジング:耐熱性樹脂、ガラス充填、UL94V-0  
HOUSING:HEAT RESISTANCE POLYMER,GLASS FILLED,UL94V-0  
アクチュエータ:耐熱性樹脂、ガラス充填、UL94V-0  
ACTUATOR:HEAT RESISTANCE POLYMER,GLASS FILLED,UL94V-0  
ターミナル:銅合金 (t=0.15)  
TERMINAL:COPPER ALLOY (t=0.15)  
補強金具:銅合金 (t=0.15)  
NAIL:COPPER ALLOY (t=0.15)

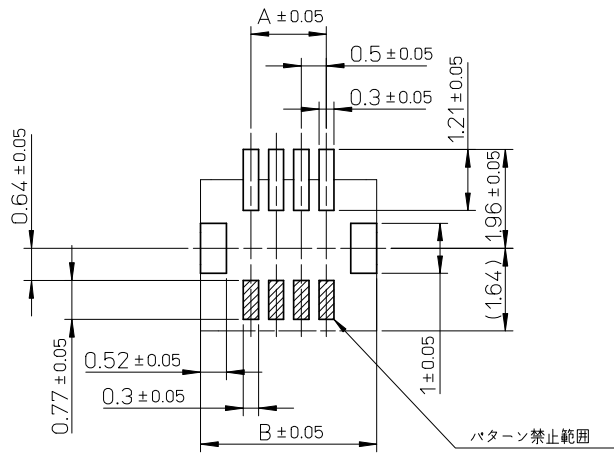
2.めっき仕様  
PLATING  
ターミナル: 部分金メッキ  
接点部 0.1マイクロメートル以上  
半田付け部 0.05マイクロメートル以上  
TERMINAL : SEPARATED GOLD PLATING  
CONTACT AREA 0.1 MICROMETER MINIMUM.  
SOLDER TAIL AREA 0.05 MICROMETER MINIMUM.  
下地 ニッケルメッキ 1.0マイクロメートル以上  
UNDER PLATING ; NICKEL PLATING 1.0 MICROMETER MINIMUM.  
補強金具: 錫メッキ 1.0マイクロメートル以上  
NAIL : TIN PLATING 1.0 MICROMETER MINIMUM.  
下地 ニッケルメッキ 1.0マイクロメートル以上  
UNDER PLATING ; NICKEL PLATING 1.0 MICROMETER MINIMUM.

3.平坦度は、0.1mm以下とする。  
TAILS AND NAILS COPLANARITY TO BE 0.1mm MAXIMUM.

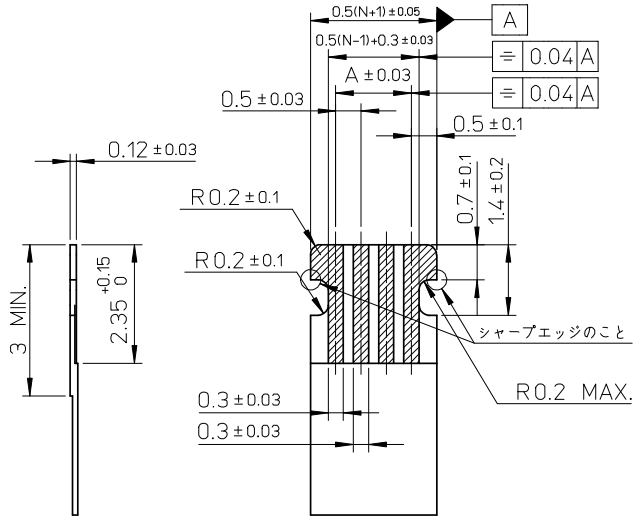


4.0	4.47	3.68	5.0	3.0	NOT AVAILABLE	NOT AVAILABLE	7
3.5	3.97	3.18	4.5	2.5	501461-0601	501461-0609	6
3.0	3.47	2.68	4.0	2.0	501461-0501	501461-0509	5
2.5	2.97	2.18	3.5	1.5	501461-0401	501461-0409	4
E	D	C	B	A	エンボス梱包品 EMBOSSED PACKAGING		製品番号 MATERIAL NO.
					ORDER No. オーダー番号		極数(N) CIRCUITS(N)

REVISED EC NO: J2008-4048 DRWN: MABEI 2008/06/13 CHKD: THARUYAMA 2008/06/16 APPR: NUKITA 2008/06/16 DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY RSUMIYA	DATE 2004/11/10	TITLE 0.5 FPC CONN BACK FLIP HGT=0.8 HSG ASSY -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY HIRATA	DATE 2004/11/10	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY MSASAO	DATE 2004/11/10	DOCUMENT NO. SD-501461-001		
ANGULAR ±1°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SHEET NO. 1 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



推奨基板寸法  
RECOMMENDED P.C. BOARD PATTERN LAYOUT



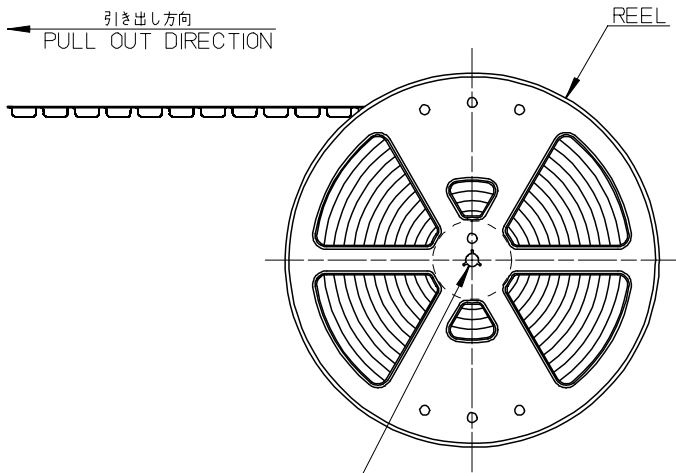
推奨FPC寸法  
RECOMMENDED FPC PATTERN LAYOUT

FPCについて:  
 抜き方向は、導体側から補強板側を推奨します。  
 補強フィルム材質は、ポリイミドを推奨します。  
 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、導通不良の原因となりますので染み出しが無いよう、お願いします。

ABOUT FPC:  
 RECOMMENDED PUNCHER DIRECTION:  
 FROM CONDUCTOR SIDE TO STIFFNER FILME SIDE.  
 RECOMMENDED MATERIAL:  
 STIFFNER FILME: POLYIMIDE  
 BONDING AGENT: THRMOSSETTING AGENT  
 PLEASE PUT APPROPRIATE AMOUNT OF ASHESIVE MAY CAUSE  
 THE DEFECT IN ELECTRICAL CONTINUITY.

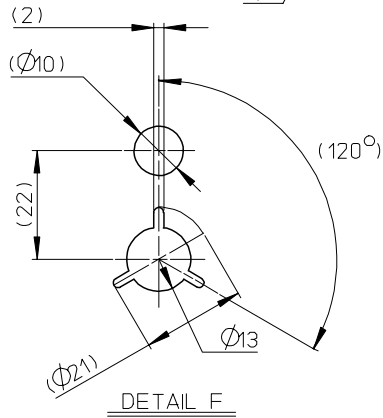
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	10 OVER 30 UNDER	± 0.25	CHECKED BY HHIRATA	DATE 2004/11/10	APPROVED BY MSASAO 2004/11/10			
	30 OVER	± 0.3	MATERIAL NO. SEE SHEET 1		DOCUMENT NO. SD-501461-001			
	ANGULAR ± 1 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		SHEET NO. 2 OF 2		

引き出し方向  
PULL OUT DIRECTION



REEL

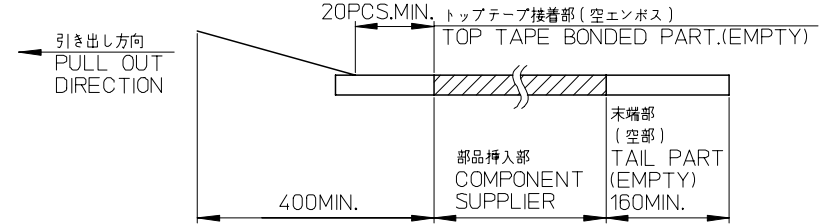
C ± 1  
D ± 1



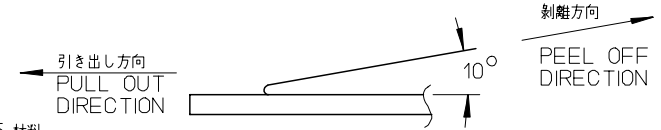
DETAIL F

NOTES

- 製品詳細寸法については製品単体図面を参照下さい。  
RE DETAILED DIMENSION, SEE PRODUCT DRAWING.
- 梱包数量: 3000個/リール  
NUMBER OF CONNECTORS 3000PCS/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- トップテープの剥離強度: 0.1N~1.3N { 10gf~130gf }  
(剥離強度は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 0.1N~1.3N(10gf~130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



- 材料  
MATERIAL  
キャリアテープ(CARRIRE TAPE): ホリスチレン (POLYSTYRENE)  
トップテープ(TOP TAPE): PET, PE, PEF  
リール(REEL): ホリスチレン (PS) <リサイクル材を含む>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAILED>

501461-\*\*01 MODEL NO.

REVISED EC NO: J2008-0606 DRWN: A0YAGI 2007/09/06 CHKD: THARUYAMA 2007/09/10 APPR: NUKITA 2007/09/10	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY RSUMIYA	DATE 2005/02/07	TITLE 0.5 FPC CONN BACK FLIP H=0.8 EMBSTP PKG -LEAD FREE-	
	10 OVER 30 UNDER	± 0.25	CHECKED BY HIRATA	DATE 2005/02/07	MOLEX INCORPORATED	
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2005/02/07	DOCUMENT NO. SD-501461-002	SHEET NO. 1 OF 2
	ANGULAR	± 1	MATERIAL NO. SEE SHEET 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		

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

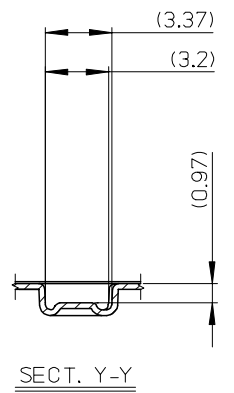
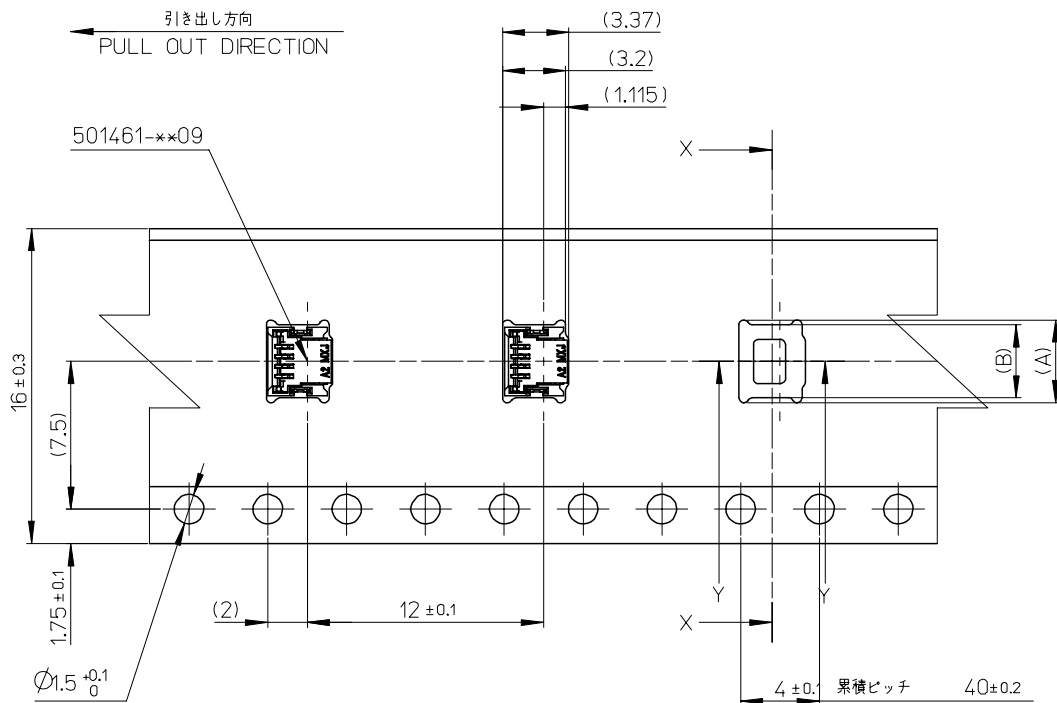
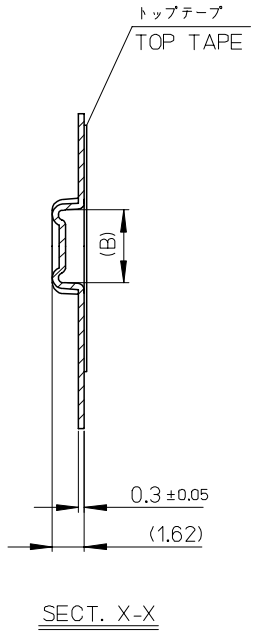
D

C

B

A

引き出し方向  
PULL OUT DIRECTION



16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

16	21.4	17.4	5.2	5.7	NOT AVAILABLE	7	
			4.7	5.2	501461-0601	6	
			4.2	4.7	501461-0501	5	
			3.7	4.2	501461-0401	4	
キャリアテープ幅 CARRIER TAPE WIDTH		D	C	(B)	(A)	MATERIAL NO.	極数 CIRCUITS

REVISED EC NO: J2008-0606 DRWN: AOYAGI 2007/09/06 CHKD: THARUYAMA 2007/09/10 APPR: NUKITA 2007/09/10	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY RSUMIYA	DATE 2005/02/07	TITLE 0.5 FPC CONN BACK FLIP H=0.8 EMBSTP PKG -LEAD FREE-		
	10 OVER 30 UNDER	± 0.25	CHECKED BY HIRATA	DATE 2005/02/07	MOLEX INCORPORATED		
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2005/02/07	DOCUMENT NO. SD-501461-002		
	ANGULAR	± 1	MATERIAL NO. SEE TABLE		SHEET NO. 2 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					