

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

**Part Number:** [5014610501](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch FPC Connector, BackFlip™, Right Angle, SMT, Bottom Contact Style, 0.80mm (.031") Mated Height, 5 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) 5  
 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) Yes  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

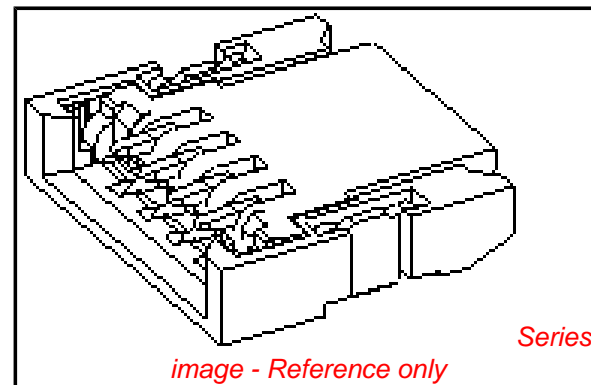
**Electrical**

Current - Maximum per Contact 0.3A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

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



*image - Reference only*

**EU RoHS**

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

**China RoHS**



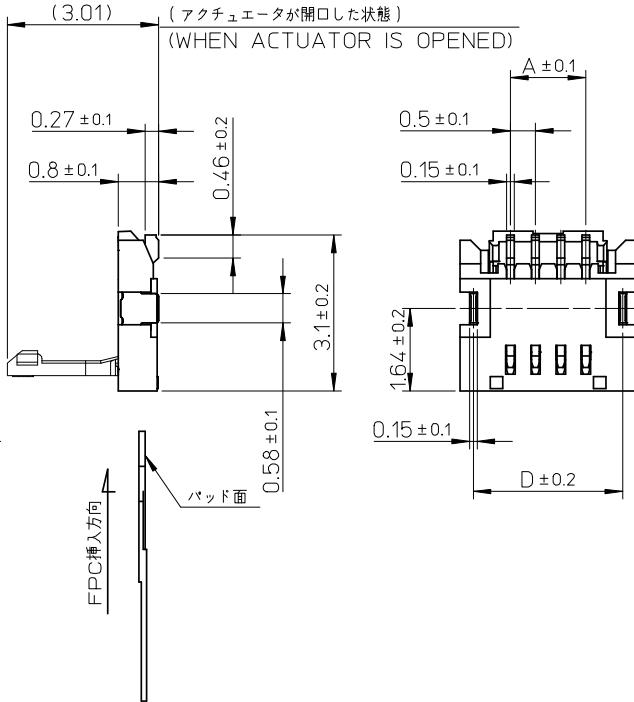
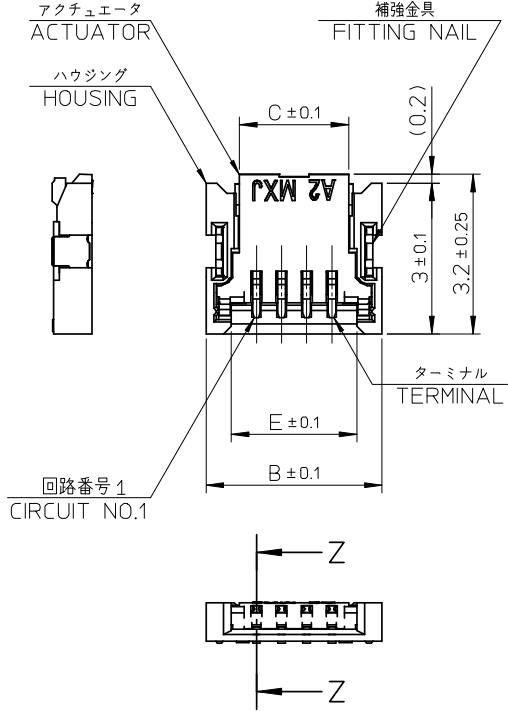
**Need more information on product environmental compliance?**

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](#)



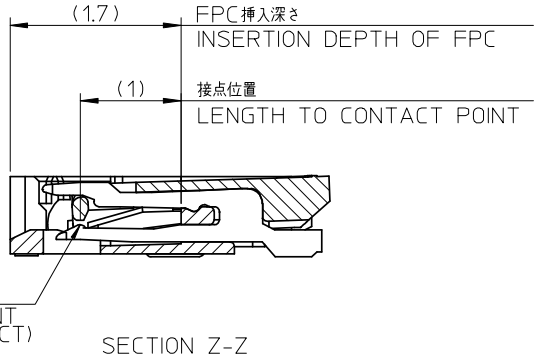
注記 NOTES:

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.

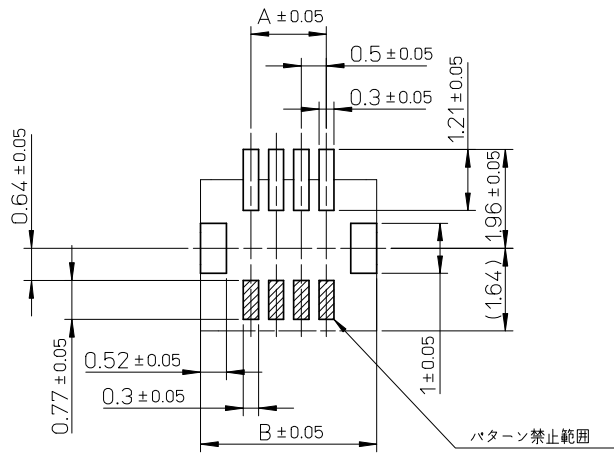
補強金具: 錫メッキ 1.0マイクロメートル以上  
NAIL : TIN PLATING 1.0 MICROMETER MINIMUM.  
下地 ニッケルメッキ 1.0マイクロメートル以上  
UNDER PLATING ; NICKEL PLATING 1.0 MICROMETER MINIMUM.

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

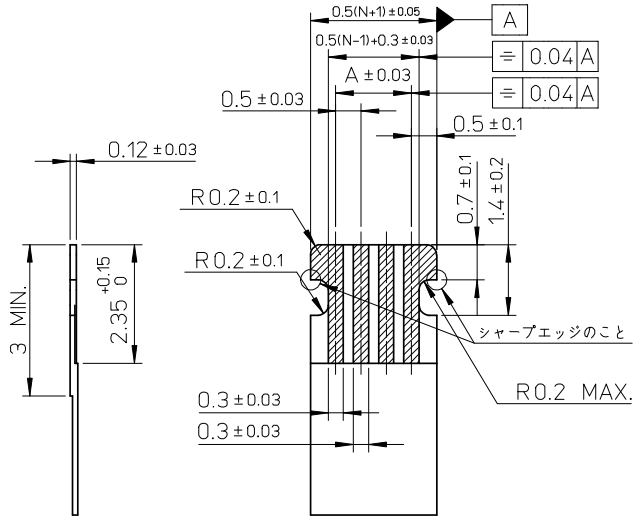


4.0	4.47	3.68	5.0	3.0	NOT AVAILABLE	NOT AVAILABLE	7
3.5	3.97	3.18	4.5	2.5	501461-0601	501461-0609	6
3.0	3.47	2.68	4.0	2.0	501461-0501	501461-0509	5
2.5	2.97	2.18	3.5	1.5	501461-0401	501461-0409	4
E	D	C	B	A	エンボス梱包品 EMBOSSED PACKAGING		製品番号 MATERIAL NO.
					ORDER No. オーダー番号		極数(N) CIRCUITS(N)

REVISED EC NO: J2008-4048 DRWN: MABEI 2008/06/13 CHKD: THARUYAMA 2008/06/16 APPR: NUKITA 2008/06/16	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



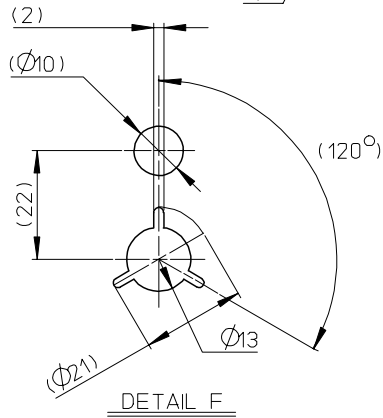
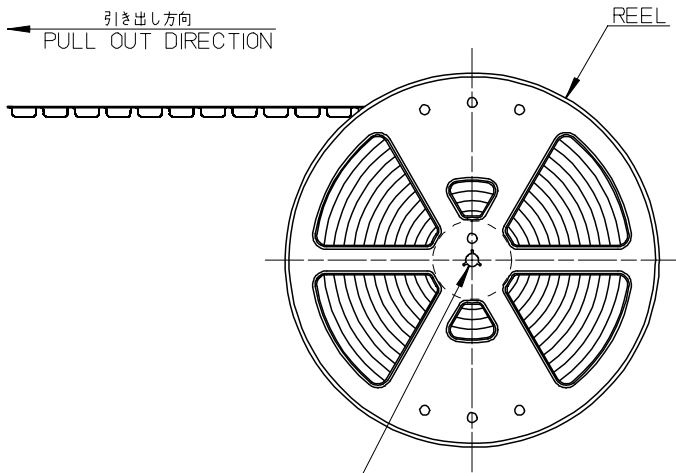
推奨FPC寸法  
RECOMMENDED FPC PATTERN LAYOUT

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.

REVISED EC NO: J2008-4048 DRWN: MWABEI 2008/06/13 CHKD: THARUYAMA 2008/06/16 APPR: NUKITA 2008/06/16	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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	10 OVER 30 UNDER	± 0.25	CHECKED BY HHIRATA	DATE 2004/11/10	MOLEX INCORPORATED		
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2004/11/10	DOCUMENT NO. SD-501461-001		
REV	DESCRIPTION	ANGULAR ±1 °	MATERIAL NO. SEE SHEET 1	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					

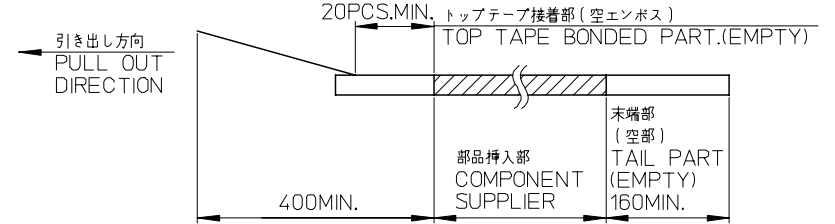
引き出し方向  
PULL OUT DIRECTION



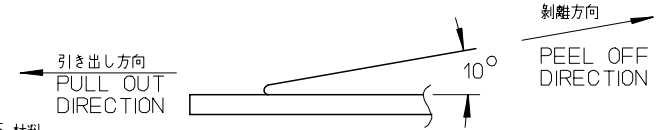
C ±1  
D ±1

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 CONTAINED>

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

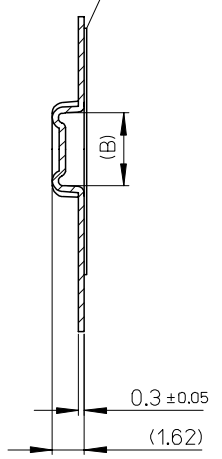
B

A

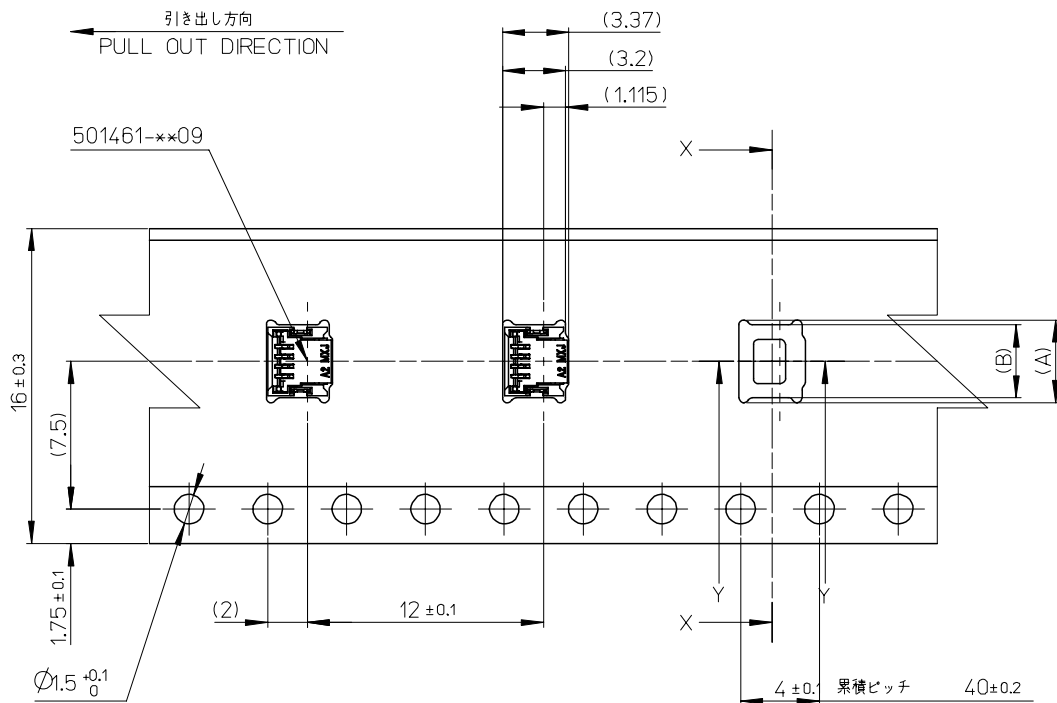
引き出し方向  
PULL OUT DIRECTION

トップテープ  
TOP TAPE

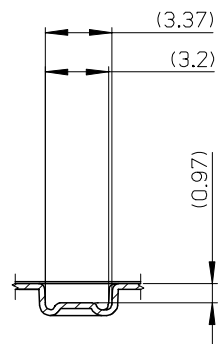
501461-\*\*-09



SECT. X-X



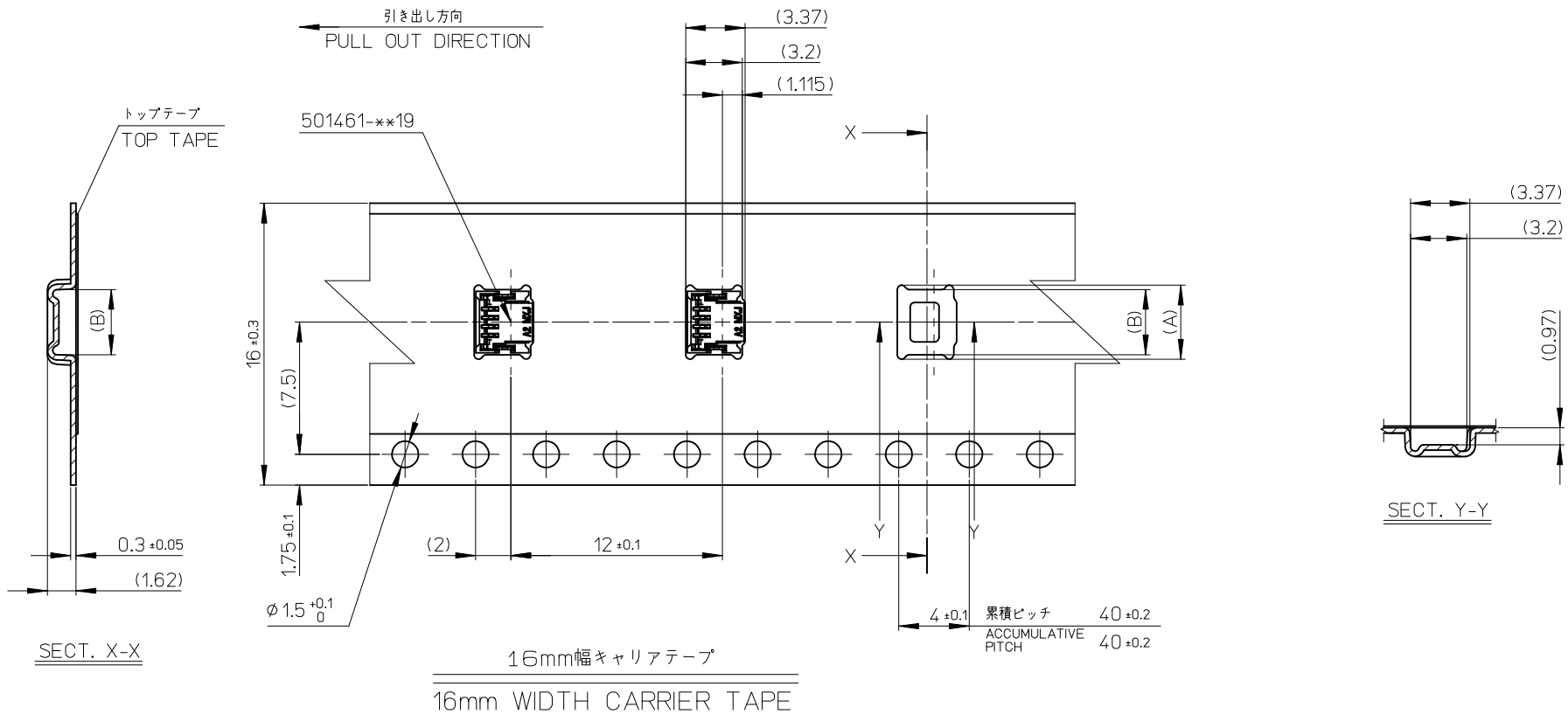
16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE



SECT. Y-Y

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: A0YAGI 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
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	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. 2 OF 2	
	ANGULAR	± 1	MATERIAL NO. SEE TABLE				
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					



16	21.4	17.4	4.7	5.2	501461-0611	6
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	極数 CIRCUITS

RELEASED EC NO: J2009-2494 DRW:ESATO 2009/05/21 CHK:D:MATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21 REV: 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1		DESIGN UNITS METRIC		501461-**-11		MODEL NO.	
	10 UNDER ± 0.2		DRAWN BY E. SATO		DATE 2009/03/24		TITLE 0.5 FPC CONN BACK FLIP H=0.8 EMBSTP PKG		THIRD ANGLE PROJECTION		SHEET NO.	
	10 OVER 30 UNDER ± 0.25		CHECKED BY H. MATSUMOTO		DATE 2009/03/24		MOLEX INCORPORATED		DOCUMENT NO.		2 OF 2	
	30 OVER ± 0.3		APPROVED BY N. UKITA		DATE 2009/03/24		SEE TABLE		SD-501461-006		INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
ANGULAR ± 1 °		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		EN-02JA(021)		2009/05/21		