

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

**Part Number:** [5020783960](#)  
**Status:** **Active**  
**Description:** 0.25mm (.010") Pitch Easy-On™ Type FPC Connector, 1.00mm (.039") Mated Height, Right Angle, SMT, Bottom Contact Style, with Extended Actuator, 39 Circuits, Halogen Free

**Documents:**

[3D Model](#) [Product Specification PS-502078-003 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [502078](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 39  
 Contact Position Bottom  
 Durability (mating cycles max) 10  
 Entry Angle 90° Angle  
 Mated Height (in) 0.039 In  
 Mated Height (mm) 1.00 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.010 In  
 Pitch - Mating Interface (mm) 0.25 mm  
 Polarized to PCB Yes  
 Stackable No  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

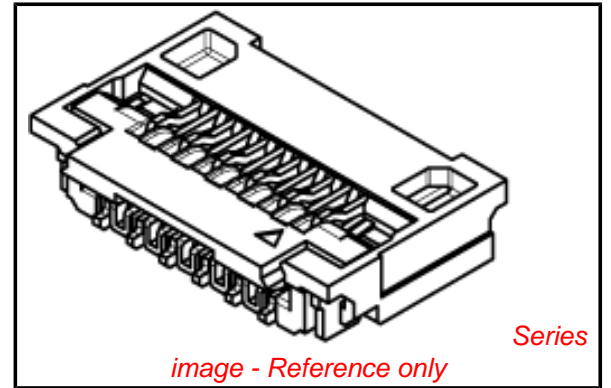
**Electrical**

Current - Maximum per Contact 0.2A  
 Voltage - Maximum 50V

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-502078-003  
 Sales Drawing SD-502078-005, SD-502078-006



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC  
 Contains SVHC: No**  
**Halogen-Free  
 Status**

**China RoHS**

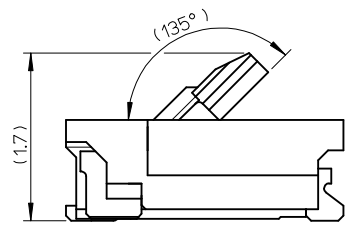
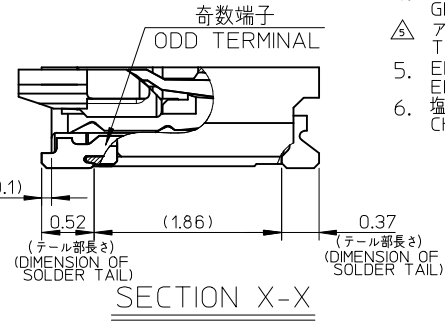
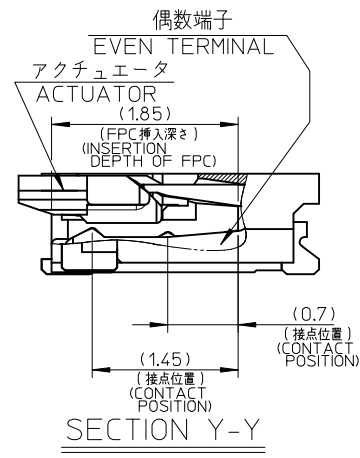
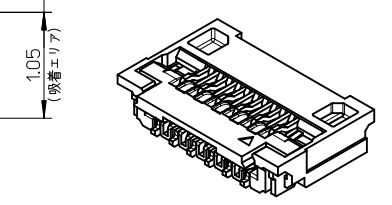
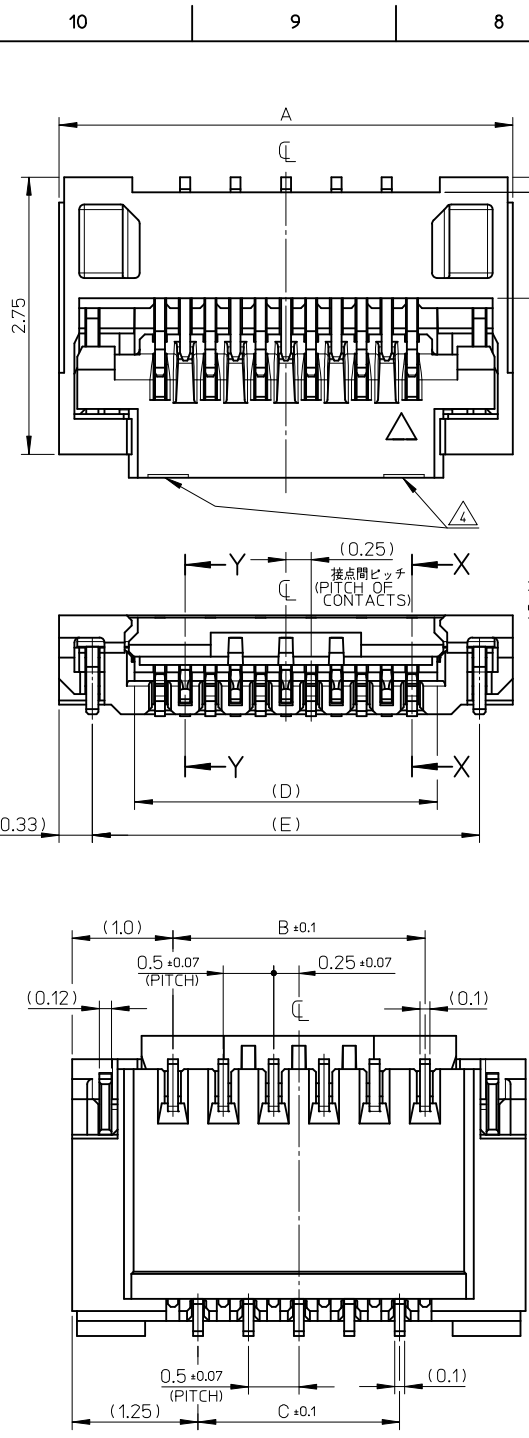


**Need more information on product  
 environmental compliance?**

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**  
[502078Series](#)

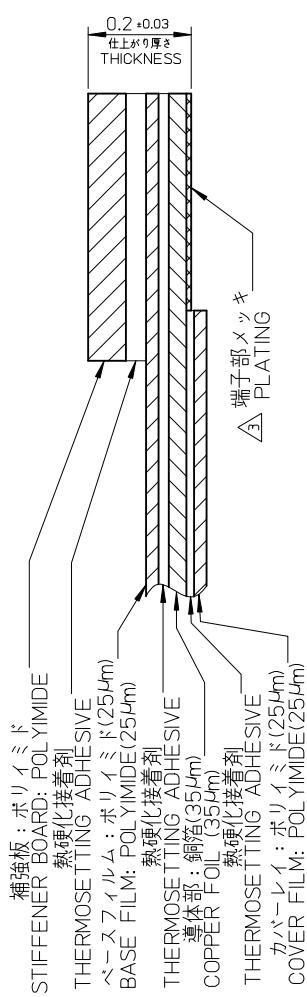


注記 NOTES

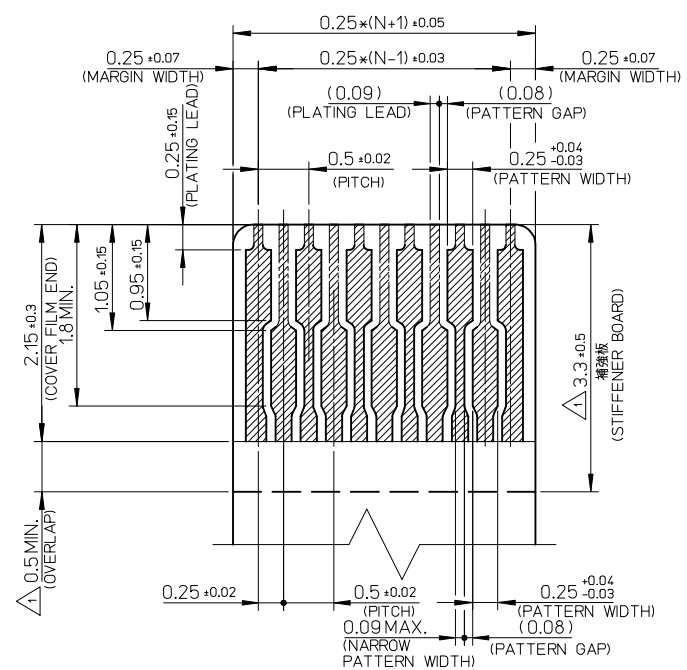
1. 使用材料 MATERIALS  
ハウジング : 液晶ポリマー(UL94V-0、ベージュ)  
アクチュエータ : ポリアミド(UL94HB、黒色)  
端子 : リン青銅  
補強金具 : リン青銅  
HOUSING : LCP (BEIGE)  
ACTUATOR : PA (BLACK)  
TERMINAL : PHOSPHOR BRONZE  
FITTING NAIL : PHOSPHOR BRONZE
2. メッキ仕様 PLATING  
端子 TERMINAL  
接点部 : 金メッキ0.14μm以上  
下地 : ニッケルメッキ1.0μm以上  
CONTACT AREA : Gold PLATING 0.14μm MINIMUM  
UNDER PLATING : Nickel PLATING 1.0μm MINIMUM  
金具 FITTING NAIL  
表面 : スズメッキ 0.5μm以上  
下地 : ニッケルメッキ1.0μm以上  
ALL OVER : Tin PLATING 0.5μm MINIMUM  
UNDER PLATING : Nickel PLATING 1.0μm MINIMUM
3. 端子、補強金具のコプラナリティーは 0.1 以下とする  
COPLANALITY OF SOLDER TAILS AND FITTING NAILS : 0.1MAX.
4. 一般公差 : ± 0.3  
GENERAL TOLERANCES : ±0.3  
△ アクチュエータの図示箇所にゲート逃げの凹みがかかります  
THERE ARE DENT SHAPES AT ACTUATOR FOR MOLDING GATE
5. ELV & RoHS 適合品  
ELV & RoHS COMPLIANT
6. 塩素系・臭素系難燃剤非使用  
CHLORINATED AND BROMINATED FLAME RETARDANTS FREE

16.34	15.5	14.5	15	17	502078-6160	502078-6168	61
10.84	10	9	9.5	11.5	502078-3960	502078-3968	39
10.34	9.5	8.5	9	11	502078-3760	502078-3768	37
E	D	C	B	A	ORDER NO.	MATERIAL NO.	CKT. =N
						502078-**68	MODEL NO.

REVISED EC NO: J2010-0687 DRWN: YFUJITA CHKD: SHOSHIKAWA APPR: SHOSHIKAWA 2009/10/05 2009/10/05 2009/10/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 20:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	± ---	DRAWN BY YFUJITA	DATE 2009/08/07	TITLE 0.25 PITCH FPC CONN E/O HGT=1.0 BTM CONTACT TYPE		
		10 OVER 30 UNDER	± ---	CHECKED BY SHOSHIKAWA	DATE 2009/08/07	MOLEX INCORPORATED		
		30 OVER	± ---	APPROVED BY AHORINO	DATE 2009/08/07	DOCUMENT NO. SD-502078-005		
ANGULAR ±1 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART	SHEET NO. 1 OF 2			
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



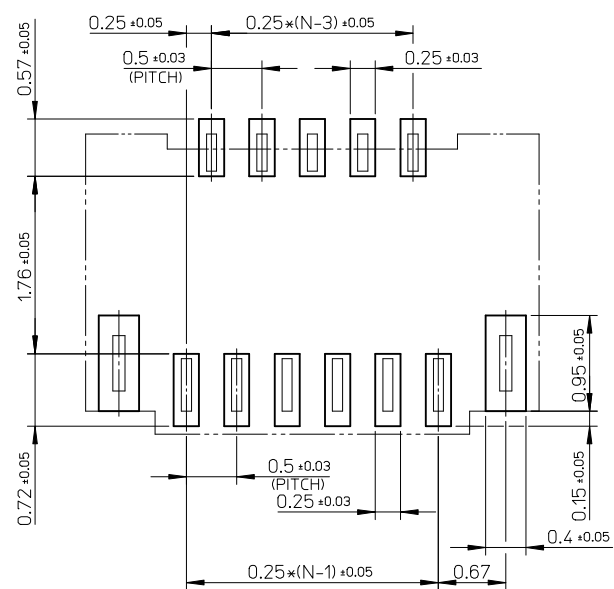
FPC 構成材料例  
EXAMPLE OF FPC COMPOSITION MATERIAL



適合するFPC 推奨寸法  
APPLICABLE FPC RECOMMENDED DIMENSION  
(端子部仕上がり厚さ: 0.2±0.03)  
(THICKNESS: 0.2±0.03)

注記 NOTES

- △ 補強板長さが図面通り確保できない場合は、カバーレイと補強板のオーバーラップ寸法を 0.5mm 以上としてください  
WHEN STIFFENER BOARD DIMENSION CAN NOT BE SECURED AS DRAWING, PLEASE GIVE THE OVERLAP SIZE OF COVER FILM AND STIFFENER BOARD AS 0.5mm MINIMUM
- 2 推奨ペースト厚 : 100μm  
推奨マスク開口率 : 80%  
RECOMMEND SCREEN THICKNESS : 100μm  
RECOMMEND SCREEN OPEN RATIO : 80%



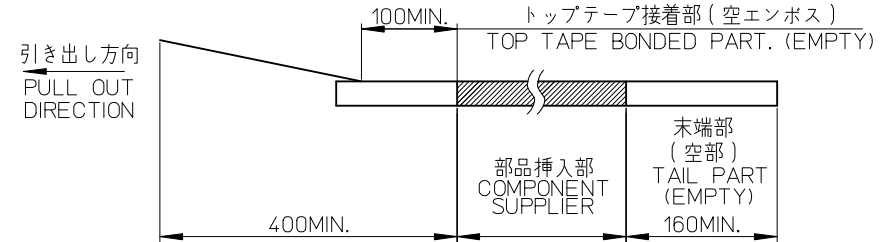
FPC 挿入側  
FPC INSERTION SIDE  
参考基板レイアウト  
RECOMMENDED PCB PATTERN DIMENSIONS (REF.)

4 FPCについて (ABOUT FPC)  
抜き方向は、導体側から補強板側を推奨します  
補強板材質は、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  
なお、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ないよう、お願いします  
RECOMMENDED PUNCHER DIRECTION: FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE  
RECOMMENDED MATERIAL: STIFFENER BOARD: POLYIMIDE  
BONDING AGENT: THERMOSETTING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON THE CONTACT AREA BECAUSE THE EXTRA ADHESIVE MAY CAUSE THE DEFECT IN ELECTRICAL CONTINUITY

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		30 OVER	± ---	APPROVED BY AHORINO	DATE 2009/08/07			
ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 1 OF 2	DOCUMENT NO. SD-502078-005	SHEET NO. 2 OF 2				

注記 NOTES

- 製品詳細寸法については図面 SD-502078-005 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-502078-005
- 梱包数量：3000 個/リール  
NUMBER OF CONNECTORS : 3000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



4. 材料 MATERIAL

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

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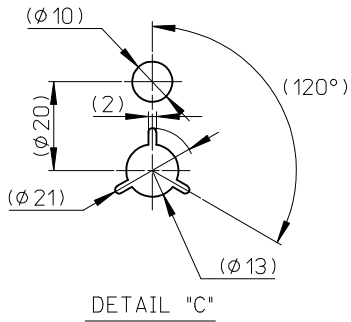
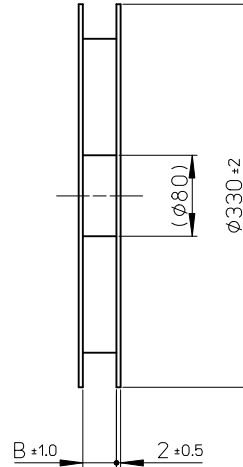
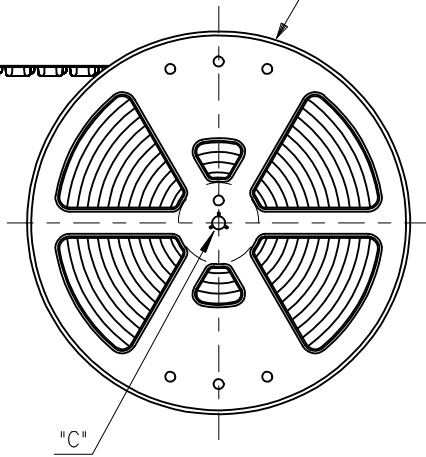
3

2

1

引き出し方向  
PULL OUT  
DIRECTION

REEL



MODEL NO. 502078-\*\*60

REVISED EC NO: J2010-0687 DRWN: YFUJITA 2009/10/05 CHKD: SHOSHIKAWA 2009/10/05 APPR: SHOSHIKAWA 2009/10/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± ---	DRAWN BY YFUJITA	DATE 2009/08/07	TITLE 0.25MM PITCH FPC CONN HGT=1.0 HSG ASSY EMBOSSED TAPE PACKAGE				
		10 OVER 30 UNDER	± ---	CHECKED BY SHOSHIKAWA	DATE 2009/08/07	MOLEX INCORPORATED				
		30 OVER	± ---	APPROVED BY AHORINO	DATE 2009/08/07	DOCUMENT NO. SD-502078-006				
		ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART		SHEET NO. 1 OF 3				

9

8

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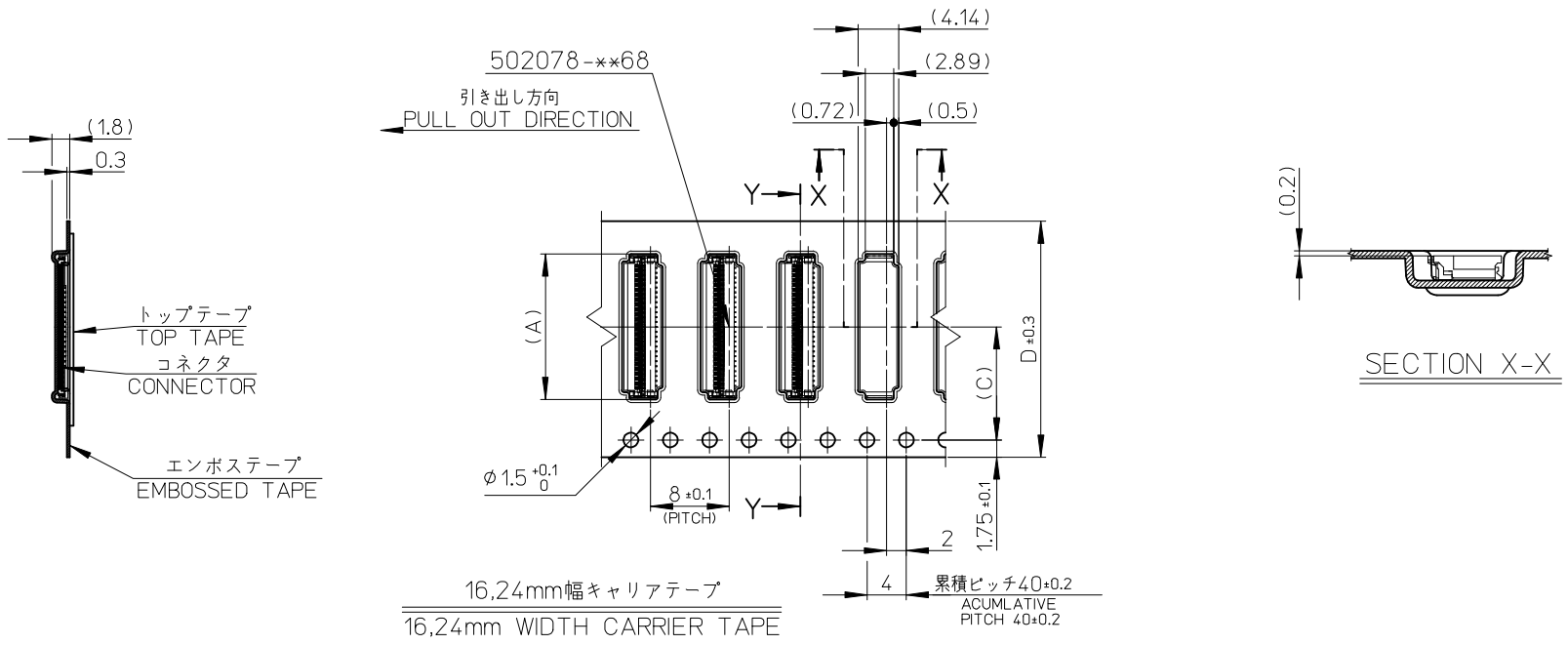
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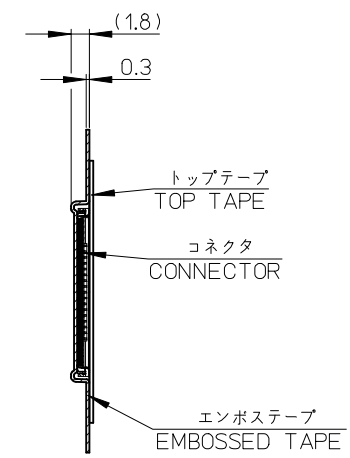
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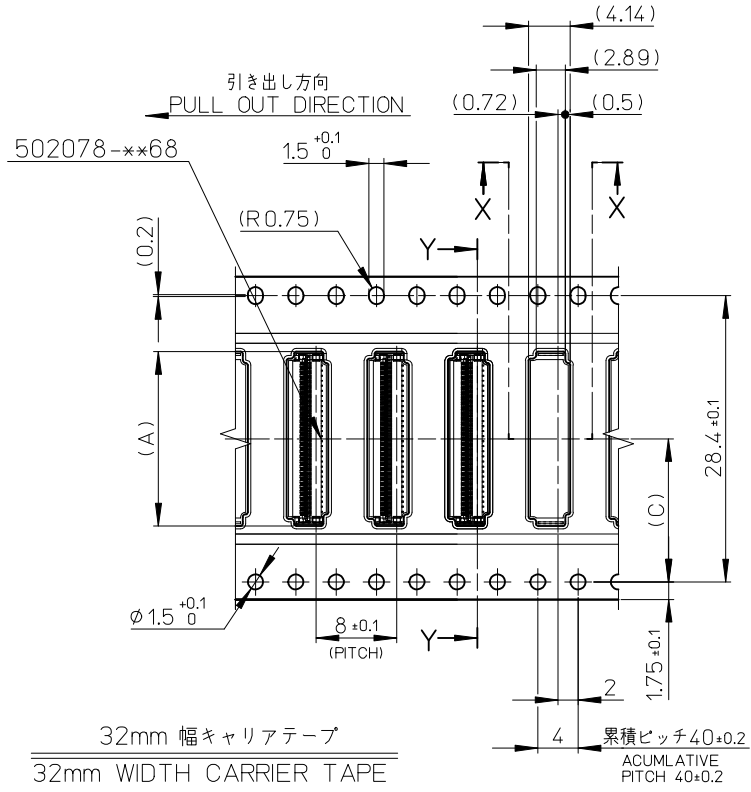


24	11.5	25.4	11.8	502078-3960	39
			11.3	502078-3760	37
D キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	製品番号 MATERIAL NO.	極数 CKT.
MODEL NO.				502078-**-60	

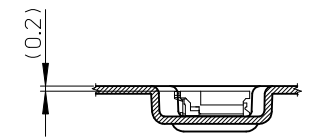
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		10 UNDER		± ---	MM ONLY		1:1		METRIC		◎ THIR ANGLE PROJ ECTION	
		10 OVER 30 UNDER		± ---	DRAWN BY		DATE		TITLE		0.25MM PITCH FPC CONN HGT=1.0 HSG ASSY EMBOSSED TAPE PACKAGE MOLEX INCORPORATED	
		30 OVER		± ---	YFUJITA		2009/08/07					
ANGULAR		±1 °	CHECKED BY		DATE		MATERIAL NO.		DOCUMENT NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SHOSHIKAWA		2009/08/07		SEE CHART		SD-502078-006			
			APPROVED BY		DATE		SIZE		SHEET NO.			
			AHORINO		2009/08/07		A3		2 OF 3			
			MATERIAL NO.				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



SECTION Y-Y



32mm 幅キャリアテープ  
32mm WIDTH CARRIER TAPE



SECTION X-X

14.2	33.4	17.3	502078-6160	61
C	B	(A)	製品番号 MATERIAL NO.	極数 CKT.
MODEL NO.			502078-***60	

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		30 OVER	± ---	APPROVED BY AHORINO	DATE 2009/08/07	DOCUMENT NO. SD-502078-006				
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