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Part Number: [5020464070](#)
Status: **Active**
Description: 1.25mm (.049") Pitch Duo-Clasp™ Wire-to-Board PCB Receptacle, Dual Row, Right Angle, 40 Circuits

Documents:

[3D Model](#) [Product Specification PS-501931-002 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Application Specification \(PDF\)](#)

General

Product Family PCB Receptacles
 Series [502046](#)
 Application Wire-to-Board
 Product Name Duo-Clasp™

Physical

Circuits (Loaded) 40
 Color - Resin Natural
 Durability (mating cycles max) 30
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Lock to Mating Part Yes
 Mated Height (in) 0.309 In
 Mated Height (mm) 7.85 mm
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Number of Rows 2
 Orientation Right Angle
 PCB Locator No
 PCB Retention Yes
 Packaging Type Embossed Tape on Reel
 Pitch - Mating Interface (in) 0.049 In
 Pitch - Mating Interface (mm) 1.25 mm
 Polarized to Mating Part Yes
 Polarized to PCB No
 Stackable No
 Temperature Range - Operating -25°C to +85°C
 Termination Interface: Style Surface Mount

Electrical

Current - Maximum per Contact 1A
 Voltage - Maximum 50V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

Application Specification AS-503110-001, AS-503110-002
 Packaging Specification SPK-502046-001
 Product Specification PS-501931-002, RPS-501931-002
 Sales Drawing SD-502046-001, SD-502046-002

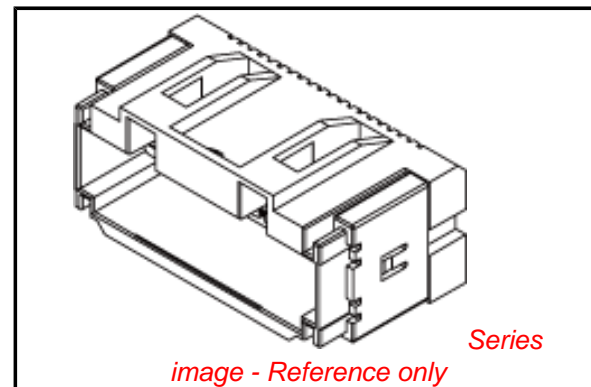


image - Reference only

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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

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

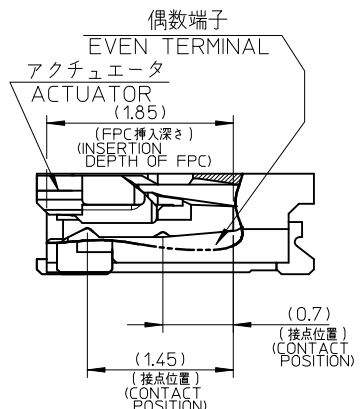
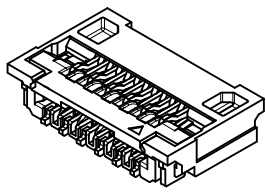
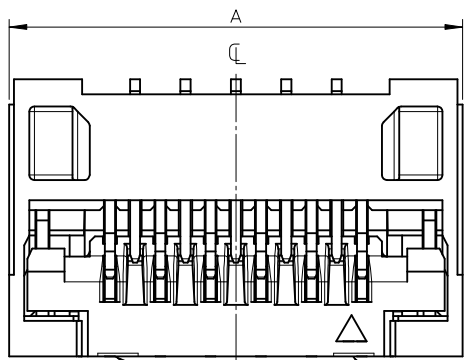
Search Parts in this Series

[502046Series](#)

Mates With

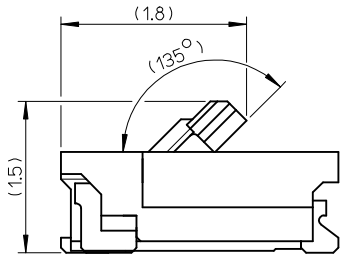
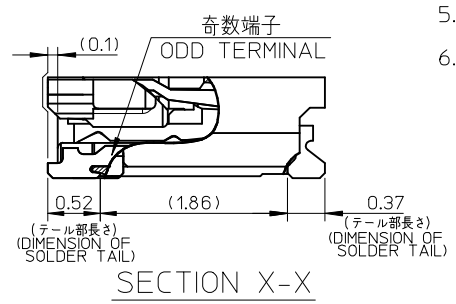
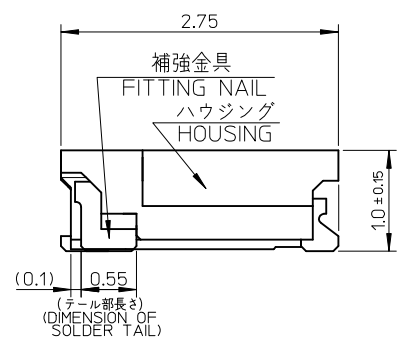
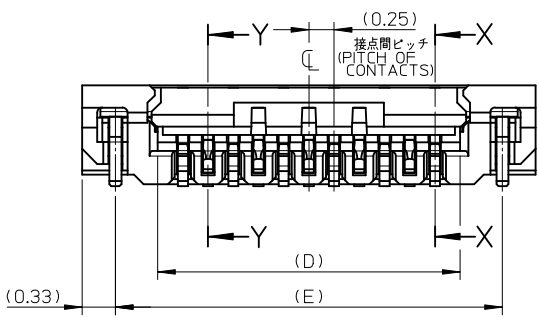
[503110](#) Crimp Housing . [501930](#) Crimp Terminal

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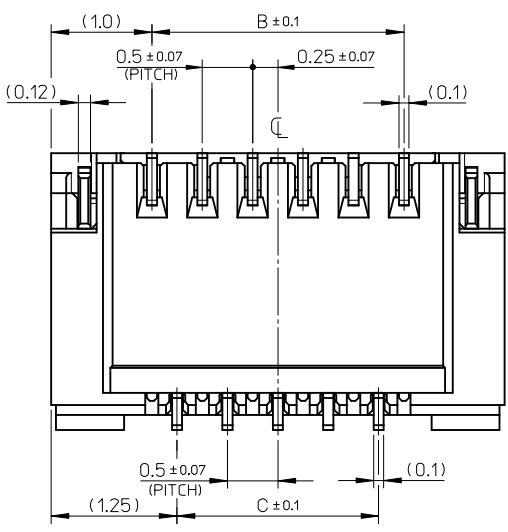


注記 NOTES

1. 使用材料 MATERIALS
 ハウジング : 耐熱性樹脂(UL94V-0、ベージュ)
 アクチュエータ : 耐熱性樹脂(UL94HB、黒色)
 奇数端子 : 銅合金、ニッケル下地、金メッキ
 偶数端子 : 銅合金、ニッケル下地、金メッキ
 補強金具 : 銅合金、ニッケル下地、スズメッキ
 HOUSING : G.F. HEAT RESISTANCE PLASTIC (BEIGE)
 ACTUATOR : G.F. HEAT RESISTANCE PLASTIC (BLACK)
 ODD TERMINAL : COPPER ALLOY, Gold OVER Nickel PLATING
 EVEN TERMINAL : COPPER ALLOY, Gold OVER Nickel PLATING
 FITTING NAIL : COPPER ALLOY, Tin OVER Nickel PLATING
- △ 端子、補強金具のコプラナリティーは 0.1 以下とする
 COPLANARITY OF SOLDER TAILS AND FITTING NAILS : 0.1MAX.
3. 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あります
 THERE ARE DENT SHAPES AT ACTUATOR FOR MOLDING GATE
5. ELV 及び RoHS 適合品
 ELV AND ROHS COMPLIANT
6. 塩素系・臭素系難燃剤非使用
 CHLORINATED AND BROMINATED FLAME RETARDANTS FREE

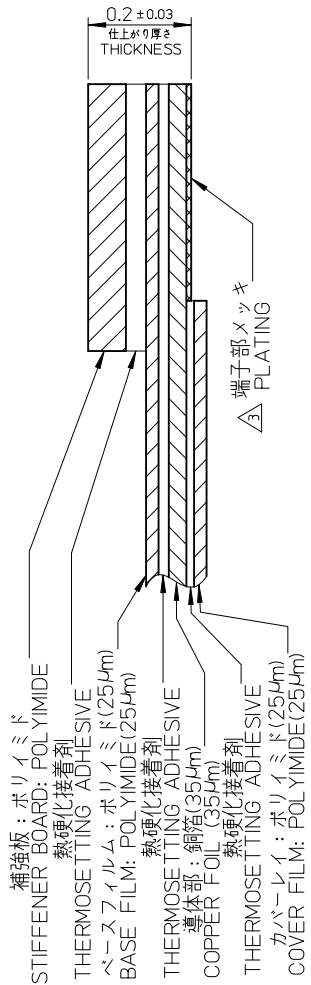


アクチュエータ開放位置
ACTUATOR OPENING POSITION

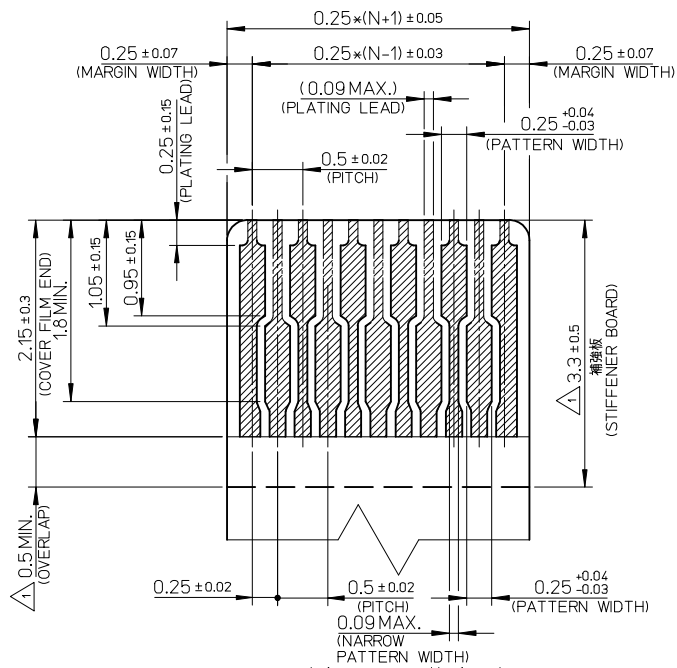


13.84	13	12	12.5	14.5	502078-5110	502078-5118	51
10.84	10	9	9.5	11.5	502078-3910	502078-3918	39
9.34	8.5	7.5	8	10	502078-3310	502078-3318	33
7.34	6.5	5.5	6	8	502078-2510	502078-2518	25
6.34	5.5	4.5	5	7	502078-2110	502078-2118	21
5.34	4.5	3.5	4	6	502078-1710	502078-1718	17
E	D	C	B	A	ORDER NO.	MATERIAL NO.	CKT.=N

RELEASED EC NO.: J2009-1529 DRWN: YFUJITA 2008/12/15 CHKD: TKANEKO 2008/12/15 APPR: TKANEKO 2008/12/15 REV: O	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 20:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± ---	DRAWN BY	DATE	TITLE		
	10 OVER 30 UNDER	± ---	YFUJITA	2008/12/15	0.25 PITCH FPC CONN E/O HGT=1.0 BTM CONTACT TYPE		
	30 OVER	± ---	TKANEKO	2008/12/15	MOLEX INCORPORATED		
ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY AHORINO 2008/12/15	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-502078-003	SHEET NO. 1 OF 2		
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

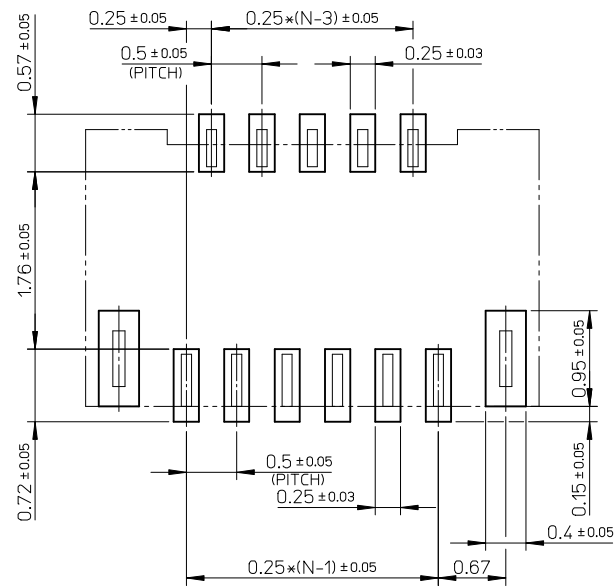


適合するFPC 推奨寸法
APPLICABLE FPC RECOMMENDED DIMENSION

(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
- 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 INSERSION 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

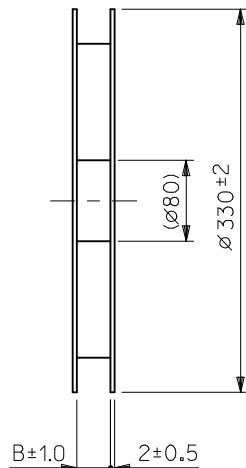
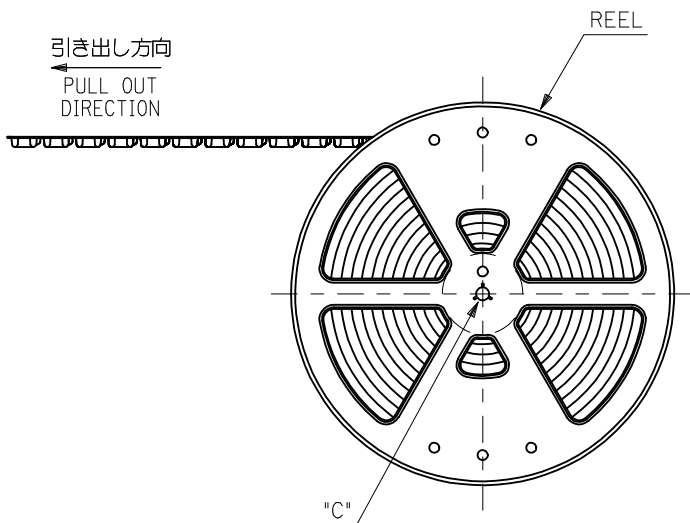
- FPCパターンのメッキ仕様は
金メッキ : 0.1μm以上
下地ニッケルメッキ : 2~6μm
FPC PATTERN PLATING
GOLD PLATING : 0.1μm MINIMUM
NICKEL UNDER PLATING : 2~6μm

RELEASED EC NO: J2009-1529 DRWN: YFUJITA 2008/12/15 CHKD: TKANEKO 2008/12/15 APPR: TKANEKO 2008/12/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			MM ONLY	20:1	METRIC	☉ □
	10 UNDER	± ---	DRAWN BY	TITLE		
	10 OVER 30 UNDER	± ---	DATE	0.25 PITCH FPC CONN E/O		
	30 OVER	± ---	YFUJITA 2008/12/15	HGT=1.0 BTM CONTACT TYPE		
	ANGULAR ±1 °	CHECKED BY	MOLEX INCORPORATED			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DATE	DOCUMENT NO.			
		TKANEKO 2008/12/15	SD-502078-003			
		APPROVED BY	SHEET NO.			
		DATE	2 OF 2			
		AHORINO 2008/12/15	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		MATERIAL NO.				
		SEE SHEET 1 OF 2				
		SIZE				
		A3				

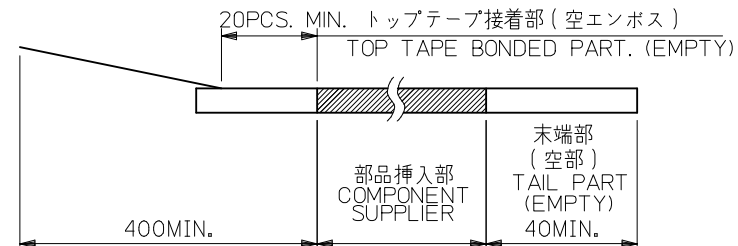
注記 NOTES

- 製品詳細寸法については図面 SD-502078-003 を参照下さい。
RE DETAILED DIMENSION, SEE SD-502078-003
- 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

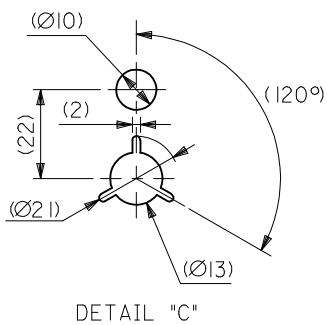
引き出し方向
PULL OUT
DIRECTION



引き出し方向
PULL OUT
DIRECTION

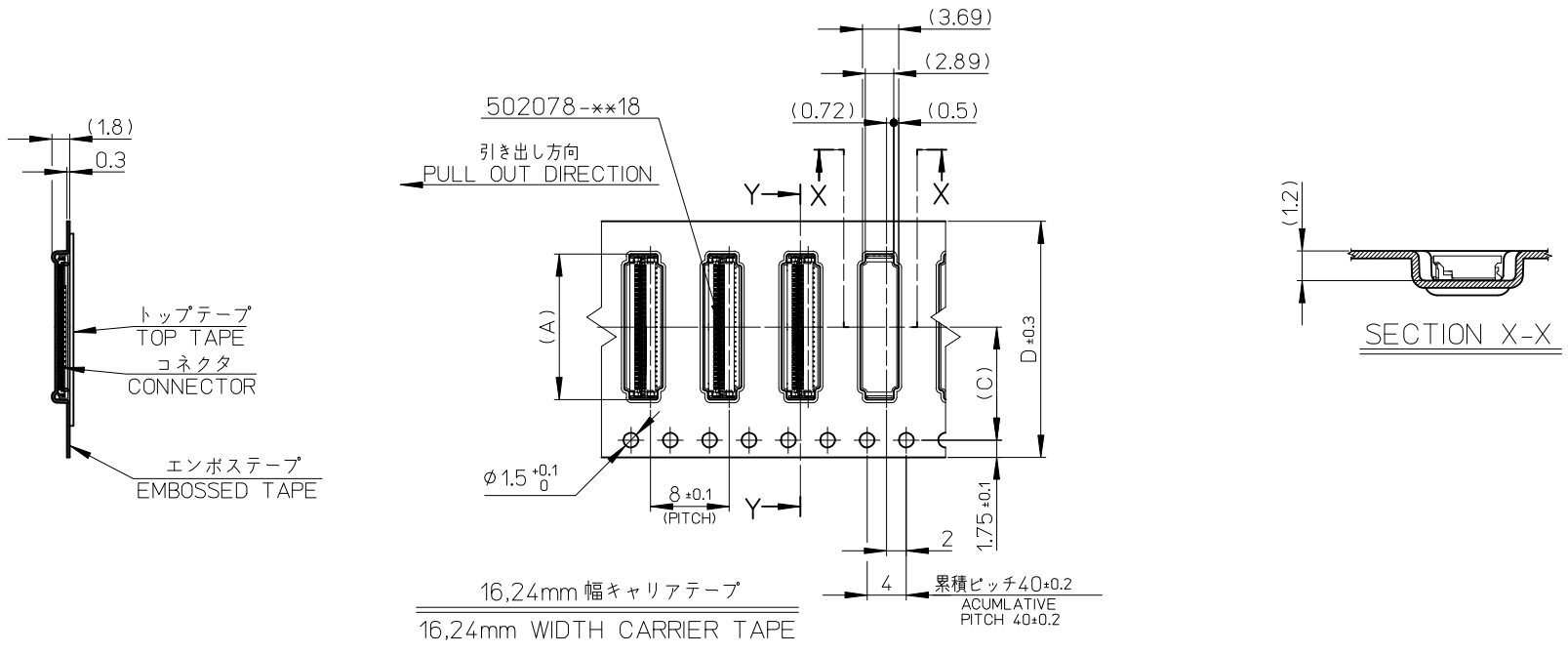


- 材料 MATERIAL
キャリアテープ (CARRIER TAPE): ポリスチレン (POLYSTYRENE)
トップテープ (TOP TAPE): PET, PE, PEF
リール (REEL): ポリスチレン (PS) <リサイクル材を含む>
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>



DETAIL "C"

RELEASED EC NO.: J2009-1529 DRWN: YFUJITA 2008/12/15 CHKD: TKANEKO 2008/12/15 APPR: TKANEKO 2008/12/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	MODEL NO. 502078-**10
	10 UNDER	±0.2	DRAWN BY YFUJITA	DATE 2008/12/15	TITLE 0.25 FPC CONN E/O HSG ASSY EMBOSSED TAPE PACKAGE		
	10 OVER 30 UNDER	±0.25	CHECKED BY TKANEKO	DATE 2008/12/15			
	30 OVER	±0.3	APPROVED BY AHORINO	DATE 2008/12/15	MOLEX INCORPORATED		
	ANGULAR ±1 °		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-502078-004			
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					



24	11.5	25.4	14.8	502078-5110	51
			11.8	502078-3910	39
			10.3	502078-3310	33
			8.3	502078-2510	25
			7.3	502078-2110	21
16	7.5	17.4	6.3	502078-1710	17
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-**-10		

RELEASED EC NO: J2009-1529 DRWN: YFUJITA 2008/12/15 CHKD: TKANEKO 2008/12/15 APPR: TKANEKO 2008/12/15 REV: 0	DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) MM ONLY 10 UNDER ±0.2 10 OVER 30 UNDER ±0.25 30 OVER ±0.3 ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		DRAWN BY YFUJITA	DATE 2008/12/15	TITLE 0.25MM FPC CONN E/O HSG ASSY EMBOSSSED TAPE PACKAGE			
		CHECKED BY TKANEKO	DATE 2008/12/15	MOLEX INCORPORATED			
		APPROVED BY AHORINO	DATE 2008/12/15	SEE CHART	DOCUMENT NO. SD-502078-004	SHEET NO. 2 OF 2	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					