

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

**Part Number:** [5033204160](#)  
**Status:** **Active**  
**Description:** 0.25mm (.010") Pitch Easy-On™ Type FPC Connector, 1.65mm (.065") Mated Height, Right Angle, SMT, Bottom Contact Style, 41 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-503320-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [503320](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 41  
 Contact Position Bottom  
 Durability (mating cycles max) 10  
 Entry Angle 90° Angle  
 Mated Height (in) 0.065 In  
 Mated Height (mm) 1.65 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) 0.010 In  
 Pitch - Mating Interface (mm) 0.25 mm  
 Polarized to PCB Yes  
 Stackable No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

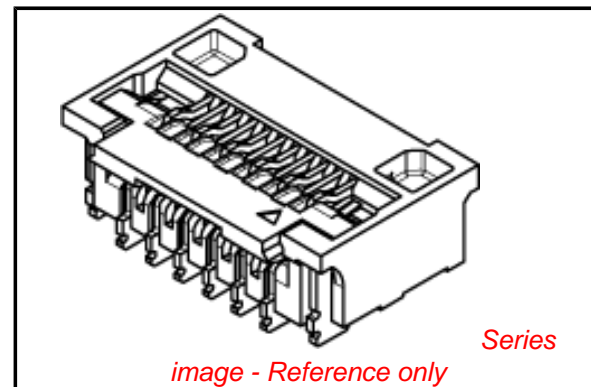
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-503320-001, RPS-503320-001  
 Sales Drawing SD-503320-001, SD-503320-002



**EU RoHS**

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

**China RoHS**

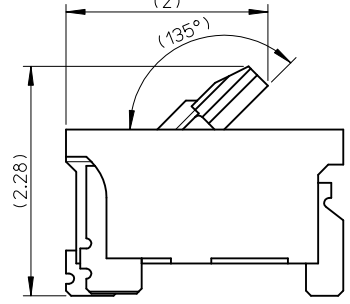
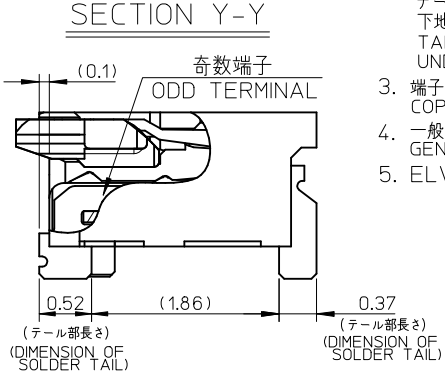
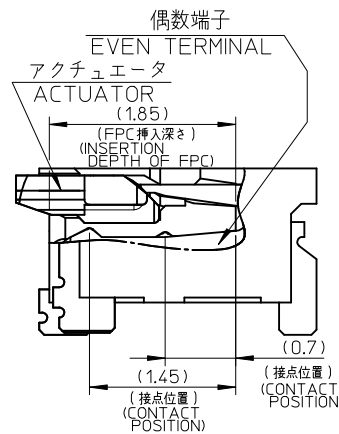
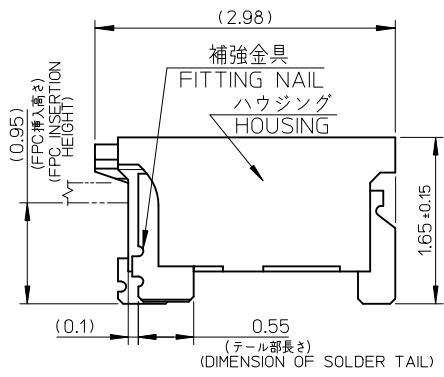
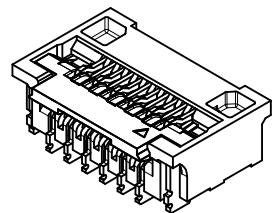
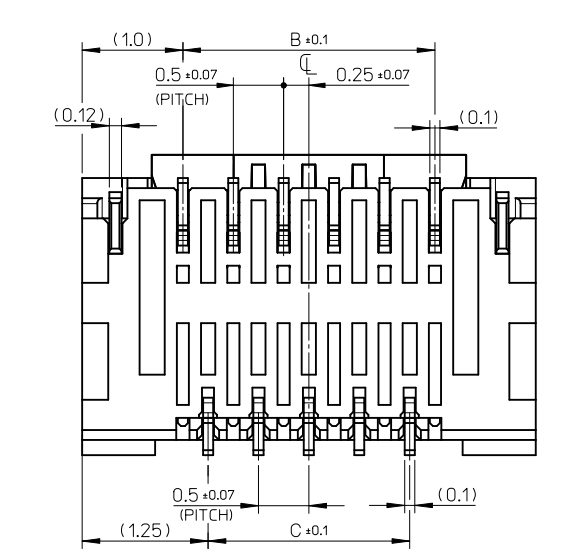
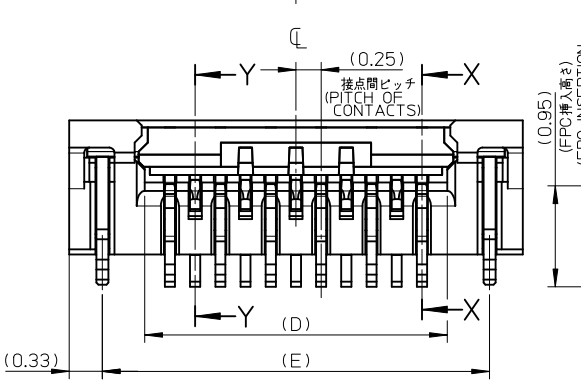
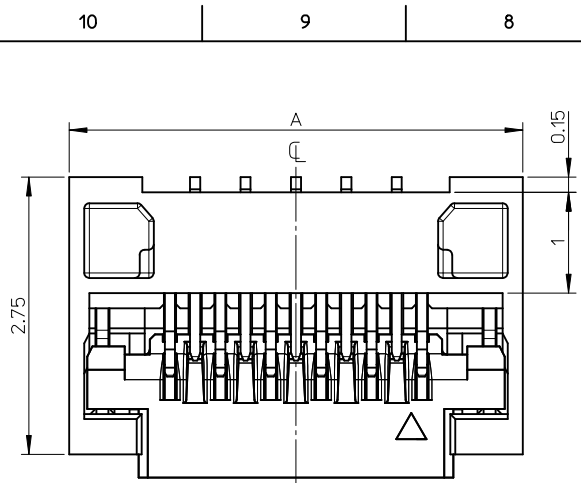


**Need more information on product  
 environmental compliance?**

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**  
[503320Series](#)

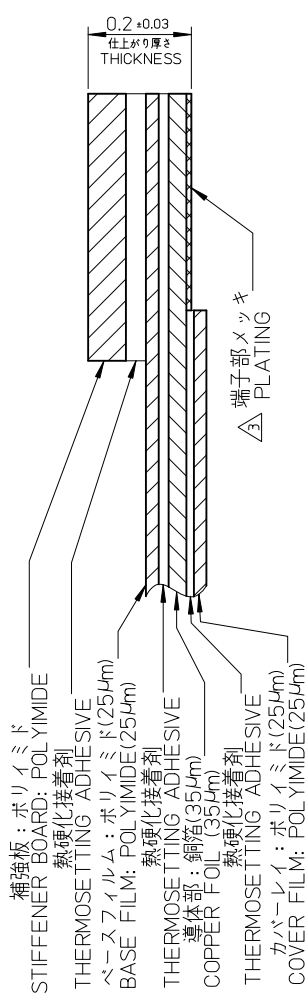


注記 NOTES

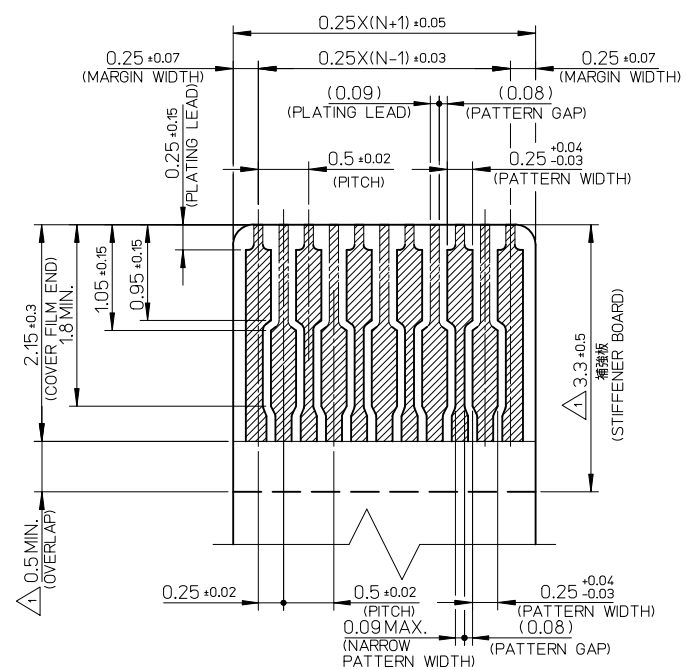
1. 使用材料 MATERIALS
  - ハウジング : 液晶ポリマー(ガラス充填, UL94V-0, ベージュ)
  - アクチュエータ : ポリアミド(ガラス充填, UL94V-0, 黒色)
  - 奇数端子 : 銅合金
  - 偶数端子 : 銅合金
  - 補強金具 : 銅合金
  - HOUSING : LIQUID CRYSTAL POLYMER (GLASS FILLED, BEIGE)
  - ACTUATOR : POLYAMIDE (GLASS FILLED, BLACK)
  - ODD TERMINAL : COPPER ALLOY
  - EVEN TERMINAL : COPPER ALLOY
  - FITTING NAIL : COPPER ALLOY
2. メッキ仕様 PLATING
  - 端子 TERMINAL
    - テール部 : 部分金メッキ
    - 接点部 : 部分金メッキ 0.1μm MIN.
    - 下地 : ニッケルメッキ 1.0μm MIN.
  - TAIL AREA : SEPARATED GOLD PLATING
  - CONTACT AREA : SEPARATED GOLD PLATING 0.1μm MIN.
  - UNDER PLATING : NICKEL PLATING 1.0μm MIN.
- 金具 FITTING NAIL
  - テール部 : スズメッキ 0.5μm MIN.
  - 下地 : ニッケルメッキ 1.0μm MIN.
  - TAIL AREA : TIN PLATING 0.5μm MIN.
  - UNDER PLATING : NICKEL PLATING 1.0μm MIN.
3. 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.
4. 一般公差 : ±0.3  
GENERAL TOLERANCES : ±0.3
5. ELV & RoHS COMPLIANT.

11.34	10.5	9.5	10.0	12.0	503320-4160	41
10.34	9.5	8.5	9.0	11.0	503320-3760	37
7.34	6.5	5.5	6.0	8.0	503320-2560	25
E	D	C	B	A	EMBOSSED PACKAGE	極数
CONNECTOR SERIES NO. 503320-**68						CIRCUITS
ORDER NUMBER ORDER NO.						

REVISED EC NO: J2010-1518 DRWN: YFUJITA 2010/02/03 CHKD: SHOSHIKAWA 2010/02/04 APPR: SHOSHIKAWA 2010/02/04	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 20:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	± ---	DRAWN BY M. TAKASAKI	DATE 2009/05/20	TITLE 0.25 PITCH FPC CONN E/O HGT=1.65 BTM CONTACT		
		10 OVER 30 UNDER	± ---	CHECKED BY M. HAYASHI	DATE 2009/05/20	MOLEX INCORPORATED		
		30 OVER	± ---	APPROVED BY N. UKITA	DATE 2009/05/20	DOCUMENT NO. SD-503320-001		
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				



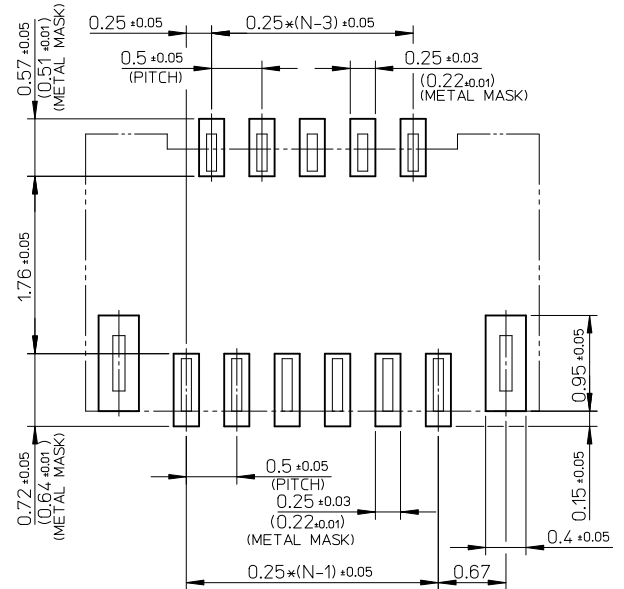
FPC 構成材料例  
EXAMPLE OF FPC COMPOSITION MATERIAL



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 推奨マスク厚 : 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.)

- △ 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

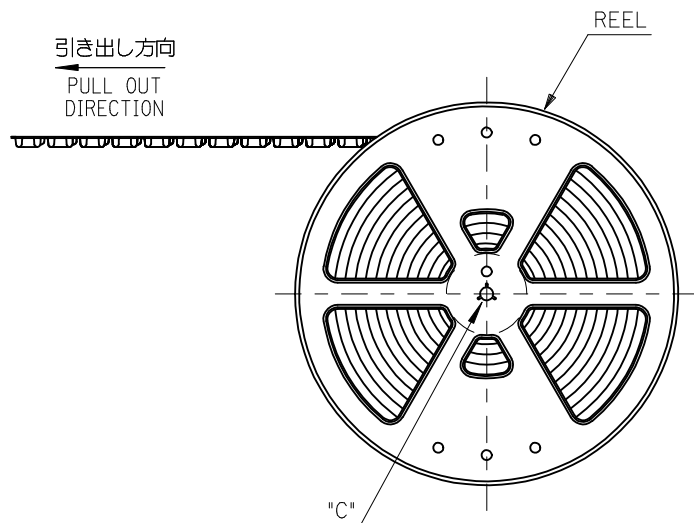
4 FPCについて (ABOUT FPC)  
抜き方向は、導体側から補強板側を推奨します  
補強板材質は、ポリイミドを推奨します  
接着剤は熱硬化接着剤を推奨します  
なお、接着剤の接点部への付着は導通不良の原因となりますので染み出しがないよう、お願いします  
RECOMMENDED PUNCHER DIRECTION:  
FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE  
RECOMMENDED MATERIAL:  
STIFFENER BOARD: POLYIMIDE  
BONDING AGENT: THERMOSETTING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON THE CONTACT AREA BECAUSE THE EXTRA ADHESIVE MAY CAUSE THE DEFECT IN ELECTRICAL CONTINUITY

REVISED EC NO.: J2010-1518 DRWN: YFUJITA 2010/02/03 CHKD: SHOSHIKAWA 2010/02/04 APPR: SHOSHIKAWA 2010/02/04	DESCRIPTION 10 UNDER 10 OVER 30 UNDER 30 OVER ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 20:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER ± ---	10 OVER 30 UNDER ± ---	30 OVER ± ---	DRAWN BY M. TAKASAKI	DATE 2009/05/20	TITLE 0.25 PITCH FPC CONN E/O HGT=1.65 BTM CONTACT	
					CHECKED BY M. HAYASHI	DATE 2009/05/20		
					APPROVED BY N. UKITA	DATE 2009/05/20	MOLEX MOLEX INCORPORATED	
					MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-503320-001	SHEET NO. 2 OF 2	

注記 NOTES

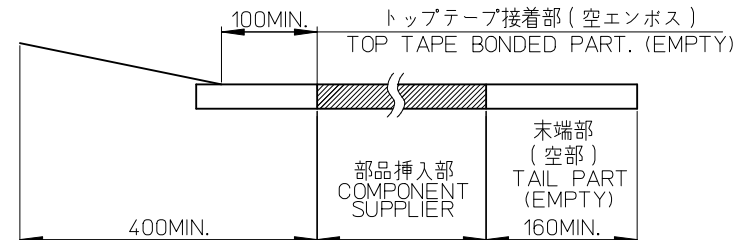
- 製品詳細寸法については図面 SD-503320-001 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-503320-001
- 梱包数量: 3000 個/リール  
NUMBER OF CONNECTORS: 3000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH

引き出し方向  
PULL OUT  
DIRECTION

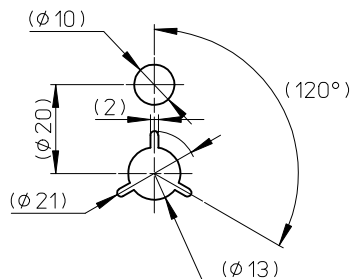


REEL

引き出し方向  
PULL OUT  
DIRECTION

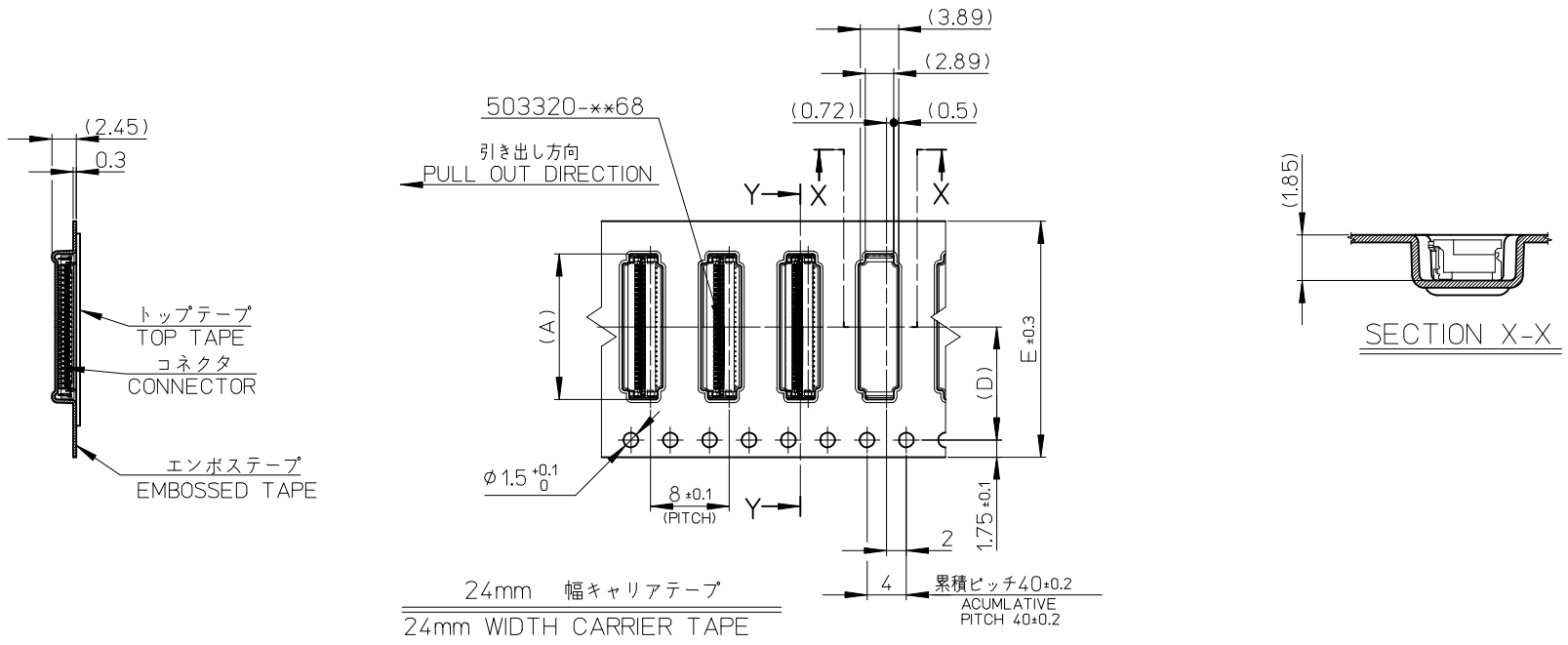


- 材料 MATERIAL  
 キャリアテープ (CARRIER TAPE): ポリスチレン (POLYSTYRENE)  
 トップテープ (TOP TAPE): PET, PE, PEF  
 リール (REEL): ポリスチレン (PS) <リサイクル材を含む>  
 POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>
- ELV & RoHS COMPLIANT



DETAIL "C"

RELEASED EC NO: J2010-0413 DRWN: CARIZONO 2009/09/15 CHKD: T. HARUYAMA 2009/09/15 APPR: NUKITA 2009/09/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	MATERIAL NO.	503320-**60
	10 UNDER	± ---	DRAWN BY C. ARIZONO	DATE 2009/05/20	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 OVER 30 UNDER	± ---	CHECKED BY T. HARUYAMA	DATE 2009/05/20	0.25MM PITCH FPC CONN HGT=1.65 HSG ASSY EMBOSSED TAPE PACKAGE MOLEX INCORPORATED	
	30 OVER	± ---	APPROVED BY N. UKITA	DATE 2009/05/20		
	ANGULAR	± --- °	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-503320-002	SHEET NO. 1 OF 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			



24	11.5	29.4	25.4	12.3	503320-4160	41
				11.3	503320-3760	37
				8.3	503320-2560	25
E キャリアテープ幅 CARRIER TAPE WIDTH	(D)	C	B	(A)	EMBOSSED PACKAGE オーダー番号 ORDER NO.	極数 CKT.
MATERIAL NO. 503320-**60						

RELEASED EC NO: J2010-0413 DRWN: C. ARIZONO 2009/09/15 CHKD: T. HARUYAMA 2009/09/15 APPR: N. UKITA 2009/09/15	DESCRIPTION REV: 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	± ---	DRAWN BY C. ARIZONO	DATE 2009/05/20	TITLE 0.25MM PITCH FPC CONN HGT=1.65 HSG ASSY EMBOSSED TAPE PACKAGE		
		10 OVER 30 UNDER	± ---	CHECKED BY T. HARUYAMA	DATE 2009/05/20	MOLEX INCORPORATED		
		30 OVER	± ---	APPROVED BY N. UKITA	DATE 2009/05/20	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-503320-002	SHEET NO. 2 OF 2
		ANGULAR ± --- °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								