

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

**Part Number:** [5022504191](#)  
**Status:** **Active**  
**Description:** 0.30mm (.012") Pitch Easy-On™ BackFlip™ FPC Connector, Right Angle, SMT, Dual Contact Style, 0.90mm (.012") Mated Height, 41 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-502250-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [502250](#)  
 Product Name BackFlip™, Easy-On™

**Physical**

Circuits (Loaded) 41  
 Color - Resin Black, Natural  
 Contact Position Dual  
 Durability (mating cycles max) 10  
 Entry Angle 90° Angle  
 Mated Height (in) 0.035 In  
 Mated Height (mm) 0.90 mm  
 Material - Metal Copper-Nickel-Tin  
 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) 0.012 In  
 Pitch - Mating Interface (mm) 0.30 mm  
 Polarized to PCB Yes  
 Stackable No  
 Temperature Range - Operating -25°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

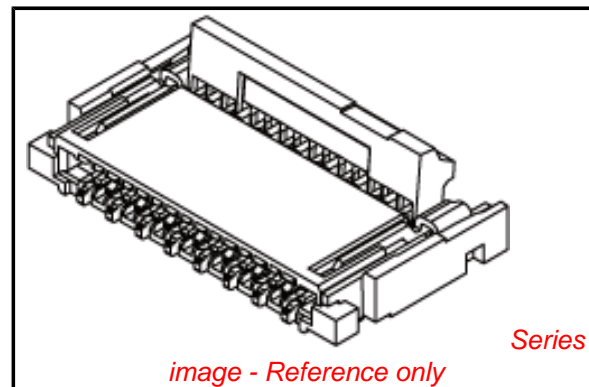
**Electrical**

Current - Maximum per Contact 0.2A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-502250-001, RPS-502250-001, RPS-502250-005, RPS-502250-007  
 Sales Drawing SD-502250-003, SD-502250-004



*image - Reference only*

**EU RoHS**

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

**China RoHS**

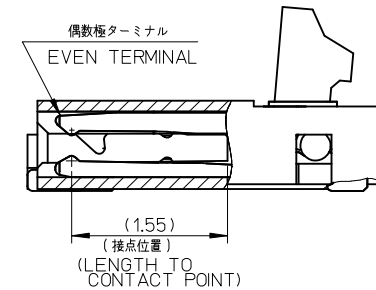
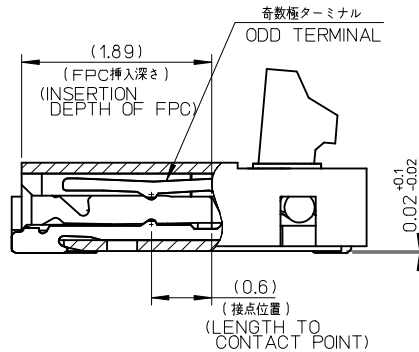
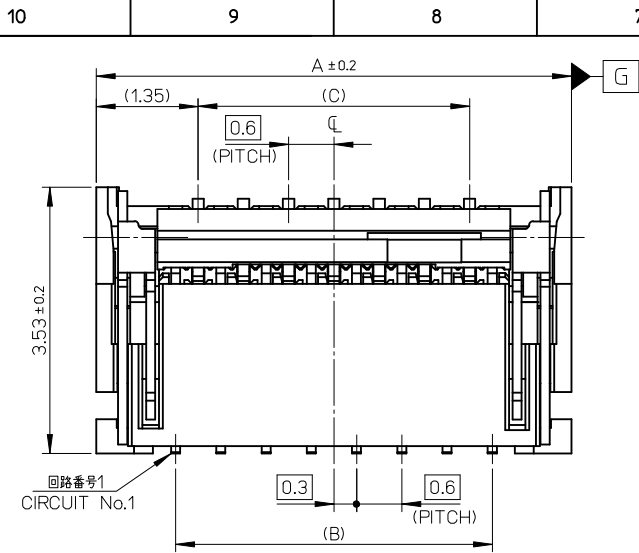


**Need more information on product  
 environmental compliance?**

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

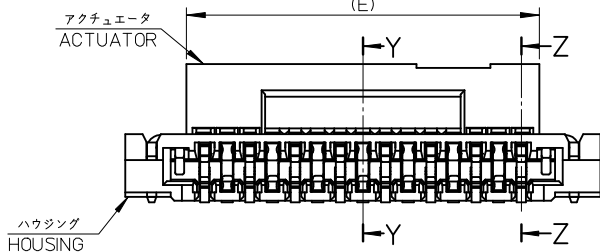
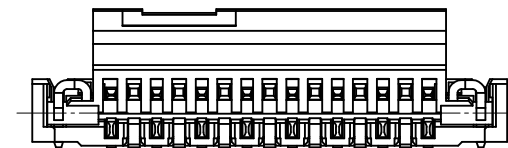
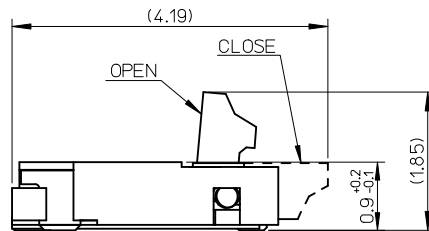
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[502250Series](#)

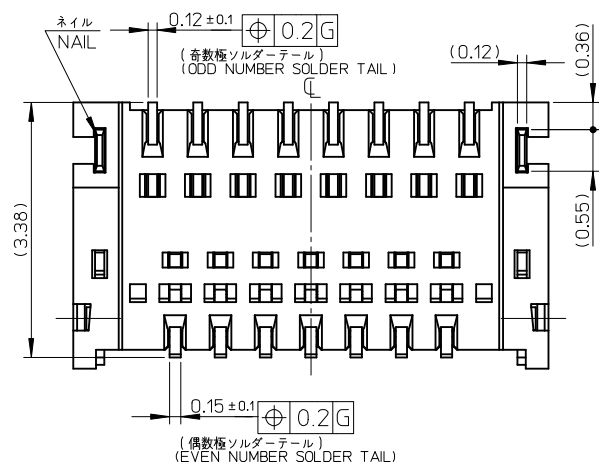


SECT. Z-Z

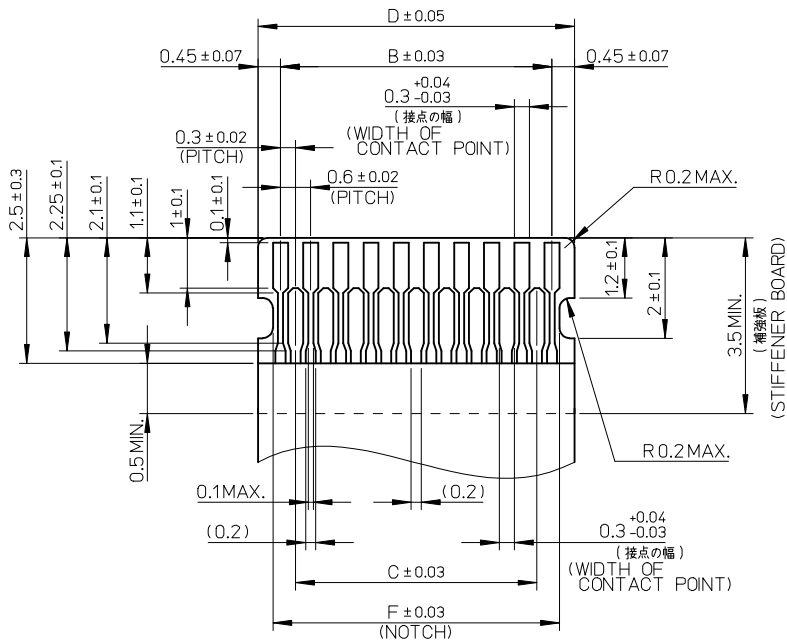
SECT. Y-Y



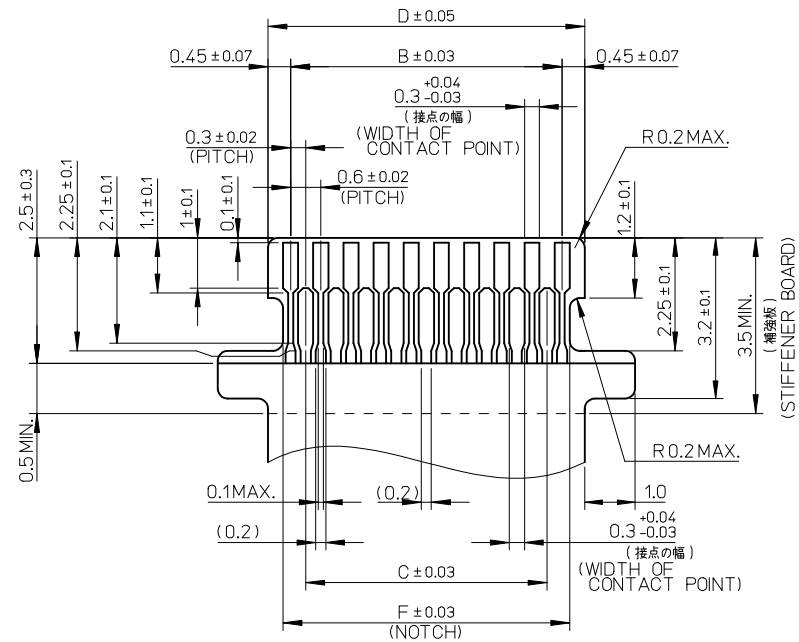
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11.7	11.88	12.3	10.8	11.4	13.5	502250-3991	502250-3920	39
10.5	10.68	11.1	9.6	10.2	12.3	502250-3591	502250-3520	35
9.9	10.08	10.5	9.0	9.6	11.7	502250-3391	502250-3320	33
8.1	8.28	8.7	7.2	7.8	9.9	502250-2791	502250-2720	27
6.9	7.08	7.5	6.0	6.6	8.7	502250-2391	502250-2320	23
6.3	6.48	6.9	5.4	6.0	8.1	502250-2191	502250-2120	21
5.1	5.28	5.7	4.2	4.8	6.9	502250-1791	502250-1720	17
F	E	D	C	B	A	EMBOSSED TAPE PKG ORDER NO.	MATERIAL No.	CIRCUITS



<b>REVISED</b> EC NO: J2009-1500 DR: NINTAKASAKI 2008/12/09 CHK: D. HAYASHI 2008/12/11 APPR: NUKITA 2008/12/11	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>15:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
	10 UNDER ±0.2 10 OVER 30 UNDER ±0.25 30 OVER ±0.3	DRAWN BY T. HIRAYAMA DATE 2008/01/31	TITLE <b>0.3 FPC CONN E/O B/F HSG ASSY HGT=0.9MM</b>	<b>MOLEX INCORPORATED</b> MODEL No. 502250-**20 DOCUMENT NO. SD-502250-003 SHEET NO. 1 OF 3		
	ANGULAR ±3 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY K. MORIKAWA DATE 2008/01/31				
	SEE TABLE	APPROVED BY H. HIRATA DATE 2008/01/31	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



標準 FPC  
STANDARD



挿入位置確認用耳つきFPC  
WITH EARS FOR FPC INSERTION ALIGNMENT

嵌合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ : 0.2±0.03)  
(THICKNESS : 0.2±0.03)

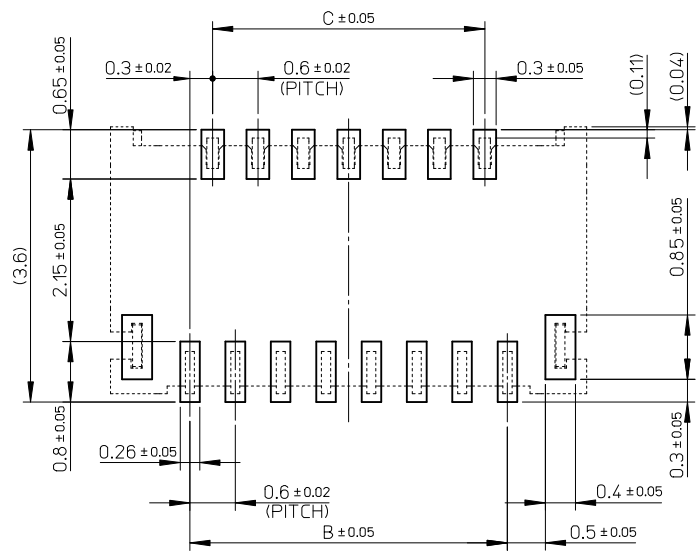
FPCについて:

抜き方向は、導体側から補強板側を推奨致します。  
補強フィルム材質は、ポリイミドを推奨致します。  
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になりますので、  
染み出しが無い様、お願い致します。

ABOUT FPC:

RECOMMENDED PUNCHER DIRECTION:  
FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED MATERIAL:  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND  
BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE  
CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

SEE SHEET 1 EC NO: J2009-1500 DRAWN: DRWIN/TAKASAKI 2008/12/09 CHECKED: CHIKD/MHAYASHI 2008/12/11 APPROVED: NUKITA 2008/12/11	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 T. HIRAYAMA	DATE 2008/01/31	TITLE 0.3 FPC CONN E/O B/F HSG ASSY HGT=0.9MM			
		10 OVER 30 UNDER	±0.25	CHECKED BY K. MORIKAWA	DATE 2008/01/31	MOLEX INCORPORATED DOCUMENT NO. SD-502250-003			
		30 OVER	±0.3	APPROVED BY H. HIRATA	DATE 2008/01/31				
ANGULAR ±3° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



推奨基板レイアウト図 (マウント面)  
P.C BOARD PATTERN  
RECOMMENDED DIMENSION  
(MOUNTING AREA)

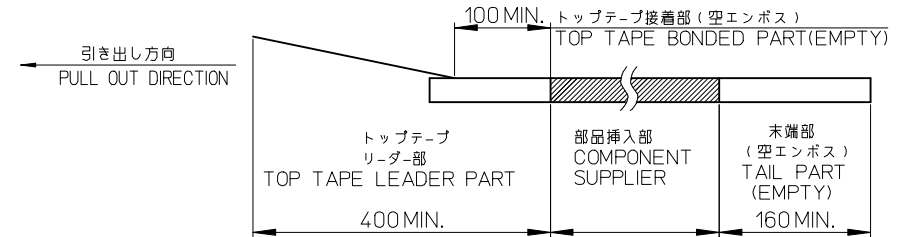
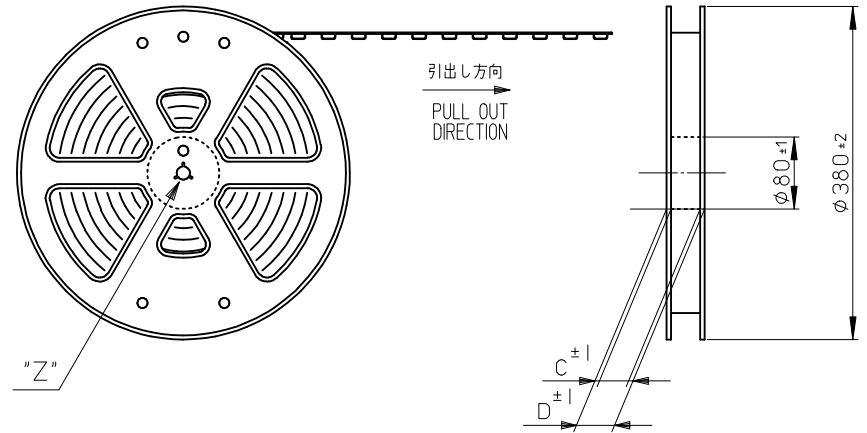
注記 NOTES

1. 使用材料 MATERIAL  
ハウジング : 液晶ポリマー ガラス充填 UL94V-0 (ナチュラル)  
HOUSING : LIQUID CRYSTAL POLYMER (GLASS FILLED)  
UL94V-0(COLOR:NATURAL)  
アクチュエータ : ポリフェニレンサルファイド ガラス充填 UL94V-0 (黒)  
ACTUATOR : POLYPHENYLENE SULFIDE (GLASS FILLED)  
UL94V-0(COLOR:BLACK)  
ターミナル : 銅ニッケルスズ合金、ニッケル下地部分金メッキ (接触部及びテール部)  
TERMINAL : COPPER NICKEL TIN ALLOY,  
PARTLY GOLD(CONTACT,TAIL) OVER NICKEL PLATING  
ネイル : リン青銅、ニッケル下地鍍めつき  
FITTING NAIL : PHOSPHOR-BRONZE, TIN OVER NICKEL PLATING
2. ソルダータール半田付け面、及びネイル半田付け面の平坦度 : 0.1mmMAX.  
COPLANARITY OF SOLDER TAILS AND FITTING NAILS  
TO BE 0.1mm MAX.
3. 基板実装前にアクチュエータを操作しないで下さい。  
PLEASE DO NOT OPERATE THE ACTUATOR BEFORE MOUNTING.  
必ず基板に実装し、FPCを挿入してからアクチュエータを操作して下さい。  
PLEASE OPERATE THE ACTUATOR AFTER MOUNTING ON  
THE SUBSTRATE,AND MATING FPC.
4. 推奨メタルマスク RECOMMENDED METAL MASK SPECIFICATION  
マスク厚 : 0.1mm MASK THICKNESS : 0.1mm  
なお、貴社にて上記以外でご使用頂く場合は、事前に確認頂きますようお願い致します。  
WHEN USE IT OTHER THAN THE ABOVE IN YOUR COMPANY,  
PLEASE CONFIRM IT BEFOREHAND.
5. ELV 及び RoHS適合品  
ELV AND RoHS COMPLIANT.

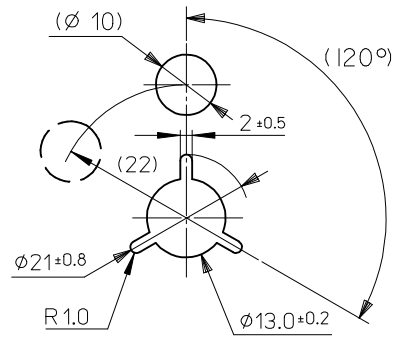
SEE SHEET 1 EC NO.: J2009-1500 DRWN:MTAKASAKI 2008/12/09 CHKD:MHAYASHI 2008/12/11 APPR:NUKITA 2008/12/11	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. HIRAYAMA	DATE 2008/01/31	TITLE 0.3 FPC CONN E/O B/F HSG ASSY HGT=0.9MM			
	10 OVER 30 UNDER	±0.25	CHECKED BY K. MORIKAWA	DATE 2008/01/31				
	30 OVER	±0.3	APPROVED BY H. HIRATA	DATE 2008/01/31	MOLEX INCORPORATED			
	ANGULAR ±3 °		MATERIAL NO. SEE SHEET 1					
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						

**NOTES**

- 製品 (502250-\*\*20) の詳細寸法については、  
図面SD-502250-003をご参照ください  
IN THE PACKAGE, PART NO. 502250-\*\*20 DETAILED DIMENSIONS,  
REFER TO SALES DRAWING NO. SD-502250-003.
- 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



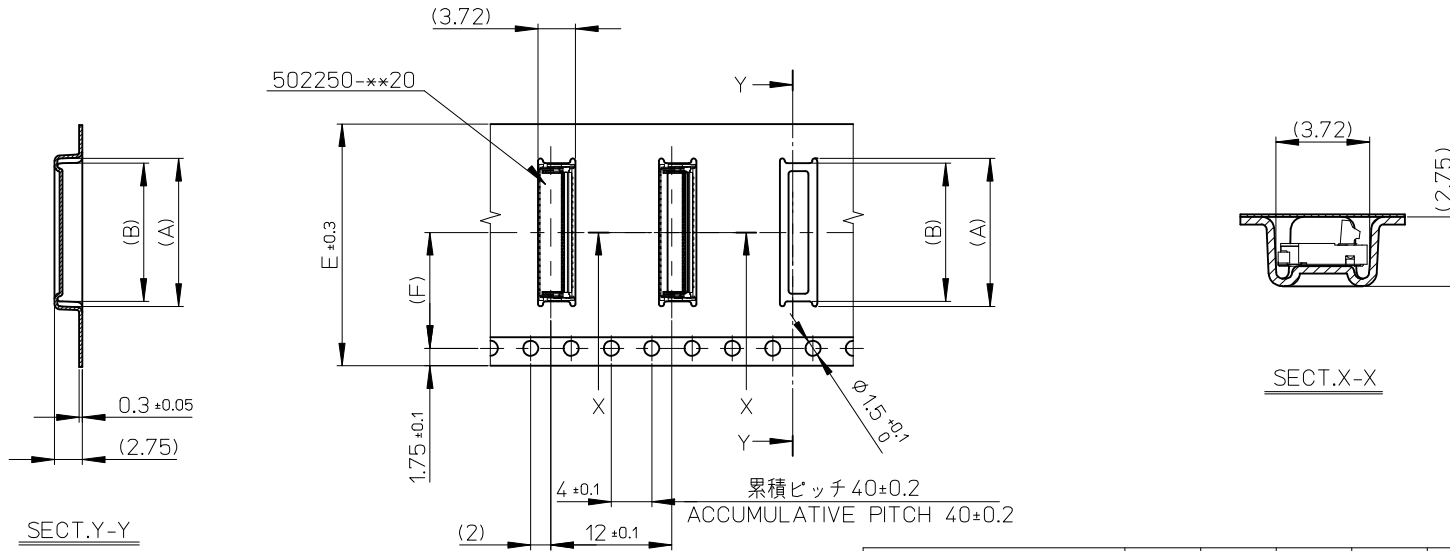
- 材料(MATERIAL)  
キャリアテープ(CARRIER TAPE): ポリスチレン(POLYSTYRENE)  
トップテープ(TOP TAPE): PET, OTHER  
リール(REEL): ポリスチレン(POLYSTYRENE)<リサイクル材を含む>  
<RECYCLE MATERIAL CONTAINED>
- ELV 及び RoHS適合品  
ELV AND RoHS COMPLIANT.



DETAIL "Z"

REVISED EC NO: J2009-1500 DRWN:MTAKASAKI 2008/12/09 CHKD:MHAYASHI 2008/12/11 APPR:NUKITA 2008/12/11	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	502250-**91	MODEL NO.
	10 UNDER ±0.2		DRAWN BY DATE T. HIRAYAMA 2008/01/31		TITLE	0.3 FPC CONN E/O B/F HGT=0.9MM EMBSTP PKG	
	10 OVER 30 UNDER ±0.25		CHECKED BY DATE K. MORIKAWA 2008/01/31			MOLEX INCORPORATED	
	30 OVER ±0.3		APPROVED BY DATE H. HIRATA 2008/01/31		MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	ANGULAR ±3 °		SEE CHART		SD-502250-004		
	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		1 OF 3		

引き出し方向  
PULL OUT DIRECTION



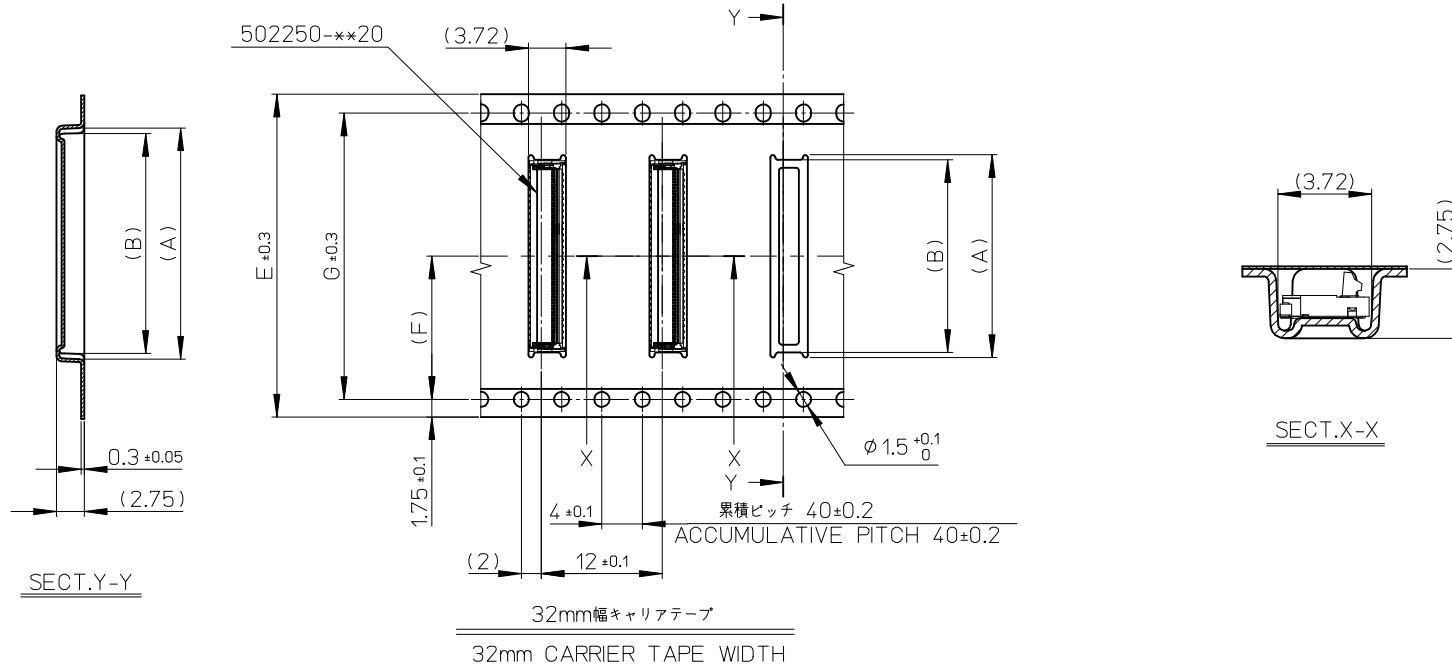
24	11.5	24	29.4	25.4	14.3	15.3	502250-4191	41
					13.7	14.7	502250-3991	39
					12.5	13.5	502250-3591	35
					11.9	12.9	502250-3391	33
					10.1	11.1	502250-2791	27
					8.9	9.9	502250-2391	23
16	7.5	16	21.4	17.4	8.3	9.3	502250-2191	21
					7.1	8.1	502250-1791	17
キャリアテープ幅 CARRIER TAPE WIDTH					(F)	E	D	C
					(B)	(A)	製品番号 MATERIAL NO.	極数 CIRCUIT

SEE SHEET 1

EC NO: J2009-1500  
DRWN:MTAKASAKI 2008/12/09  
CHKD:MHAYASHI 2008/12/11  
APPR:NUKITA 2008/12/11

DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
REV	10 UNDER ±0.2	MM ONLY	---	METRIC	☉
	10 OVER 30 UNDER ±0.25	DRAWN BY DATE	TITLE	MODEL No. 502250-**-91	
	30 OVER ±0.3	T. HIRAYAMA 2008/01/31	0.3 FPC CONN E/O B/F HGT=0.9MM EMBSTP PKG		
	ANGULAR ±3 °	CHECKED BY DATE	MOLEX INCORPORATED		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	K. MORIKAWA 2008/01/31		DOCUMENT NO.	SHEET NO.
		APPROVED BY DATE	SD-502250-004	2 OF 3	
		H. HIRATA 2008/01/31	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		MATERIAL NO.			

引き出し方向  
PULL OUT DIRECTION



32	28.4	14.2	32	37.4	33.4	17.3	18.3	502250-5191	51
キャリアテープ幅 CARRIER TAPE WIDTH	G	(F)	E	D	C	(B)	(A)	製品番号 MATERIAL NO.	極数 CIRCUIT

SEE SHEET 1 EC NO.: J2009-1500 DRWN: MTAKASAKI 2008/12/09 CHKD: HAYASHI 2008/12/11 APPR: NUKITA 2008/12/11	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	MODEL No. 502250-**-91	
	10 UNDER	±0.2	DRAWN BY T. HIRAYAMA	DATE 2008/01/31	TITLE 0.3 FPC CONN E/O B/F HGT=0.9MM EMBSTP PKG		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. MORIKAWA	DATE 2008/01/31	MATERIAL NO. 502250-004		
	30 OVER	±0.3	APPROVED BY H. HIRATA	DATE 2008/01/31	SHEET NO. 3 OF 3		
	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO. 502250-004	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			