

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

**Part Number:** [5027905091](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch FPC Connector, ZIF, Easy-On™, Double Bottom Contact, 50 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-502790-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [502790](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 50  
 Contact Position Bottom  
 Durability (mating cycles max) 20  
 Entry Angle 90° Angle  
 Mated Height (in) 0.098 In  
 Mated Height (mm) 2.50 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 1  
 Orientation Right Angle  
 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  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

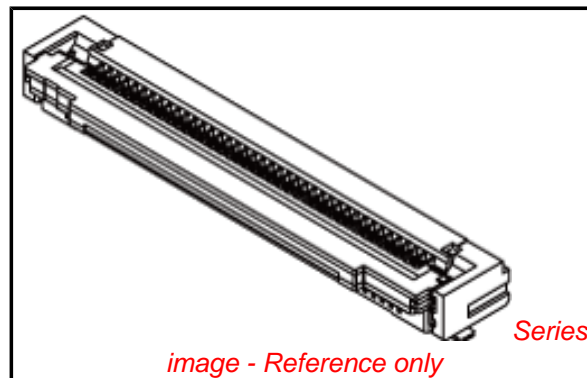
**Electrical**

Current - Maximum per Contact 0.5A  
 Voltage - Maximum 50V

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-502790-001, RPS-502790-001, RPS-502790-005, RPS-502790-006, RPS-502790-007, RPS-502790-009, RPS-502790-010, RPS-502790-011  
 Sales Drawing SD-502790-001, SD-502790-002



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

**China RoHS**

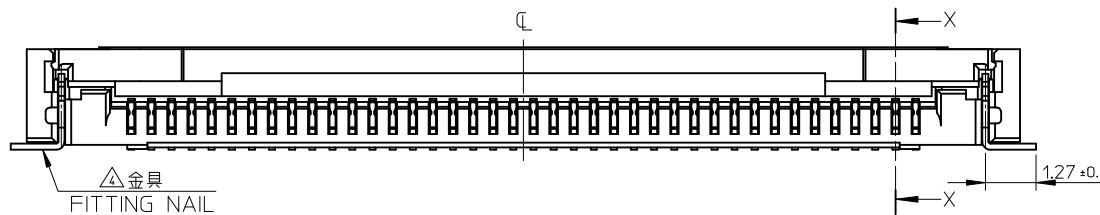
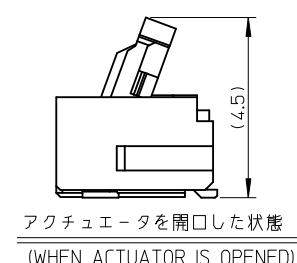
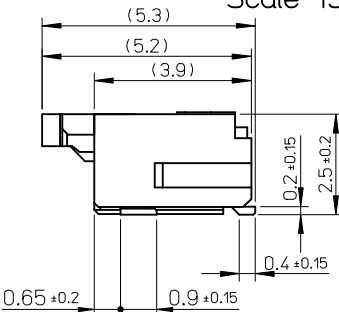
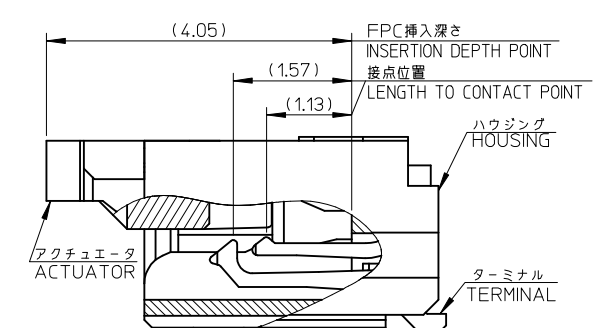
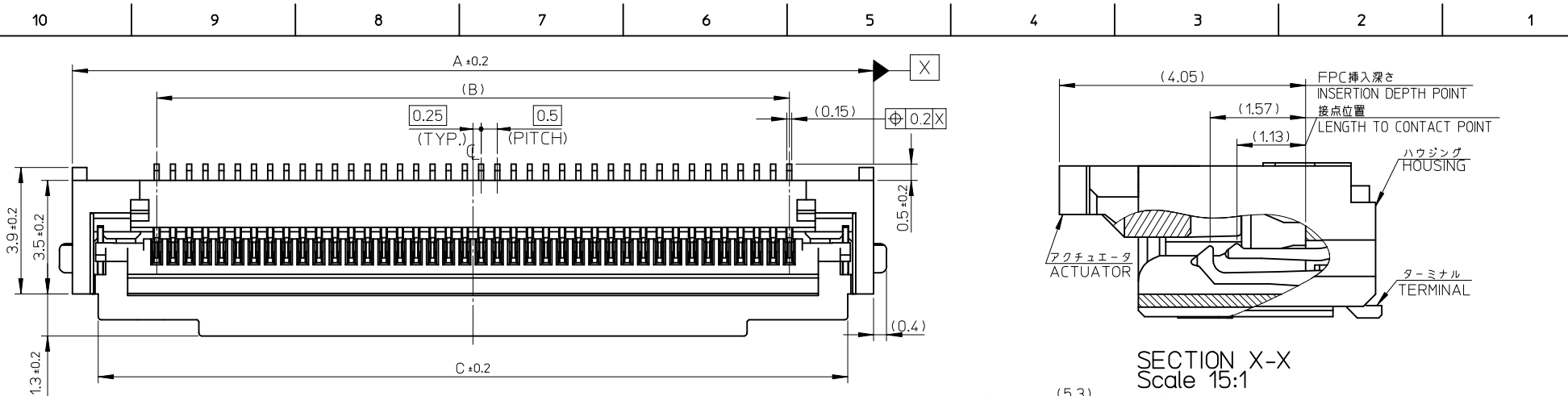


**Need more information on product environmental compliance?**

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**  
[502790Series](#)



注記 NOTES

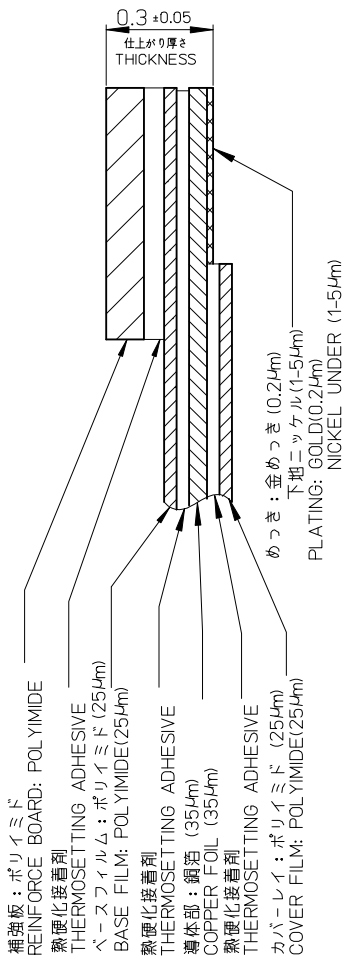
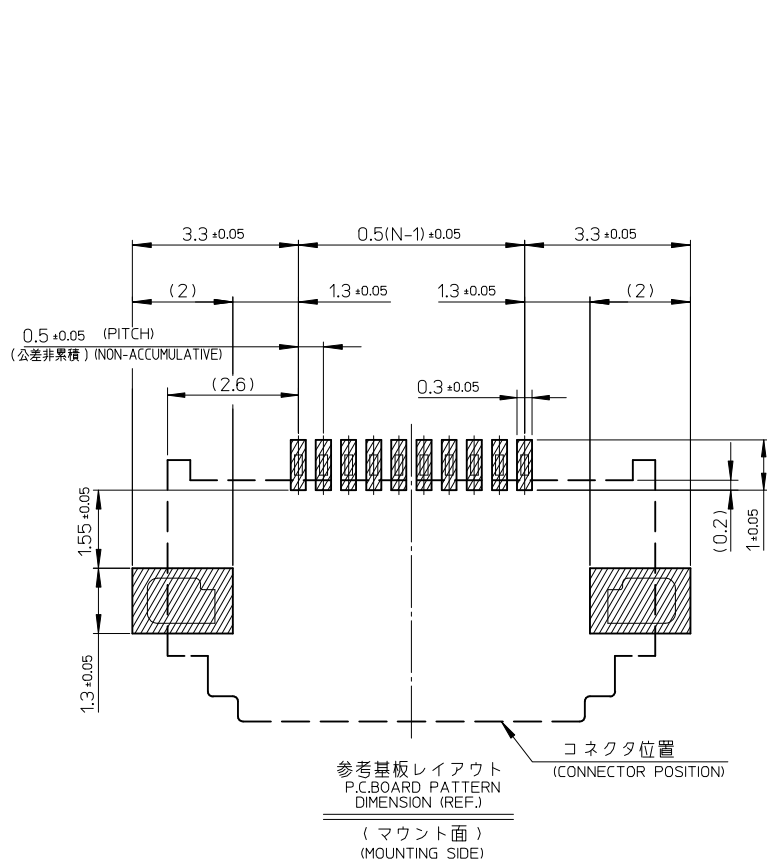
1. 使用材料 MATERIAL  
 ハウジング : 液晶ポリマー ガラス充填, UL94-V0(ベージュ)  
 HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0(BEIGE)  
 アクチュエータ : PPS ガラス充填, UL94-V0(黒)  
 ACTUATOR : PPS GLASS FILLED, UL94V-0(BLACK)  
 ターミナル : リン青銅(t=0.15)  
 TERMINAL : PHOSPHOR BRONZE  
 金具 : リン青銅(t=0.15)  
 FITTING NAIL : PHOSPHOR BRONZE
2. めっき仕様 PLATING  
 ターミナル TERMINAL  
 コンタクト部: 部分金めっき (0.05 μm以上)  
 テール部: 部分金めっき  
 下地: ニッケルめっき (1.0 μm以上)  
 CONTACT AREA : SEPARATED GOLD PLATING (0.05 MICROMETER MINIMUM)  
 SOLDER TAIL AREA : SEPARATED GOLD PLATING  
 UNDERPLATE : NICKEL OVERALL (1.0 MICROMETER MINIMUM)  
 金具 FITTING NAIL  
 鍍め (1.0 μm以上)  
 下地: ニッケルめっき (1.0 μm以上)  
 TIN PLATING (1.0 MICROMETER MIN.)  
 UNDER PLATING : NICKEL PLATING (1.0 MICROMETER MIN.)
3. エンボスタープ梱包時は、アクチュエータが開いた状態とする。  
 IN THE PACKAGE, ACTUATOR OF PART 502790-\*\*11 SHOULD BE CLOSED.

4. パターン剥離止め用金具  
 FITTING NAIL FOR PREVENTION OF PEELING OF P.C.B. PATTERN.
5. R0.3は、FPC導体部にかからないこと。  
 R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.
6. N: 極数 N: CIRCUIT.
7. ELV及びRoHS適合品  
 ELV AND ROHS COMPLIANT
8. テールと金具を併せた平坦度は0.1mm以下とする。  
 TAILS AND NAILS COPLANALITY TO BE 0.1mm MAX.

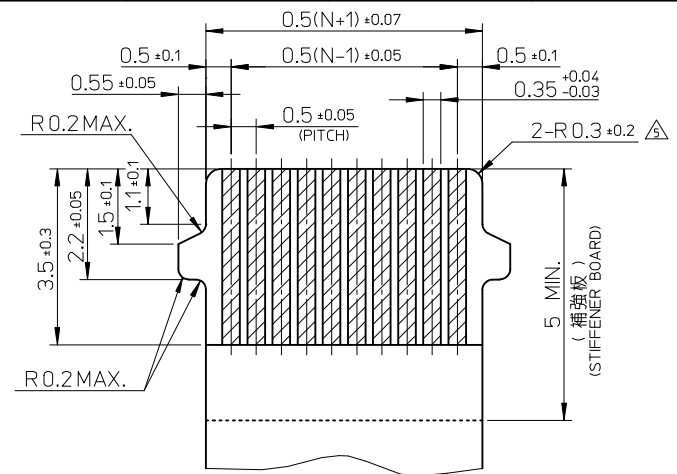
43.1	39.5	44.7	502790-8091	80
35.1	31.5	36.7	502790-6491	64
33.1	29.5	34.7	502790-6091	60
28.1	24.5	29.7	502790-5091	50
23.1	19.5	24.7	502790-4091	40
18.1	14.5	19.7	502790-3091	30
C	B	A	EMBOSSED PACKAGE	CIRCUIT
オーダー番号 ORDER No.				

CONNECTOR SERIES No. 502790-\*\*11

REVISED EC NO: J2009-2576 DRWN: TAKASAKI 2009/05/28 CHKD: HAYASHI 2009/05/28 APPR: NUKITA 2009/05/28	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± ---	DRAWN BY YTAKAYASU	DATE 2007/08/10	TITLE 0.5 FPC CONN. ZIF E/O 2 CONTACTS TYPE HSG ASS'Y (H=2.5)				
		10 OVER 30 UNDER	± ---	CHECKED BY KTAKAHASHI	DATE 2007/08/10	MOLEX INCORPORATED				
		30 OVER	± ---	APPROVED BY HHRATA	DATE 2007/08/10	DOCUMENT NO. 502790-**11				
C	REV	ANGULAR ± --- ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		SHEET NO. 1 OF 2				



FPC構成推奨仕様  
STRUCTURE OF FPC



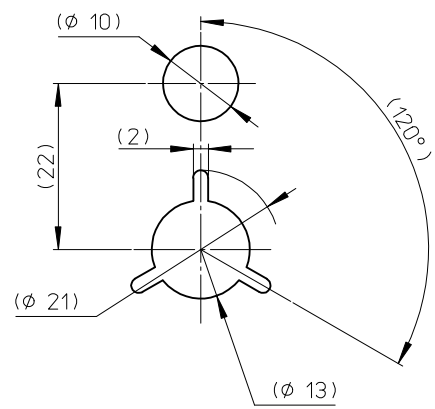
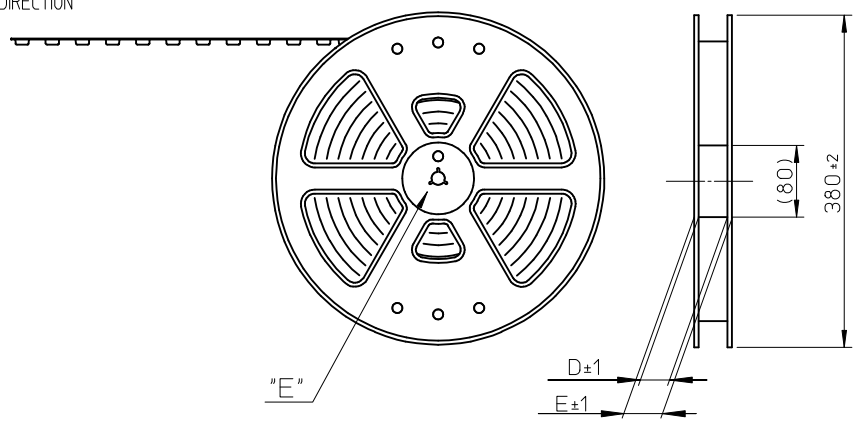
適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION

**FPC について:**  
 打ち抜き方向は導体側から補強板側を推奨します。  
 導体部については軟銅箔35µmまたは50µm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。ベースフィルムは25µm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 CONDUCTOR SPEC :  
 THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.  
 RECOMMENDED MATERIAL/THICKNESS.  
 STIFFENER FILM : POLYIMIDE  
 BASE FILM THICKNESS : 25µm  
 BONDING AGENT : THERMOSETTING BONDING AGENT  
 PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

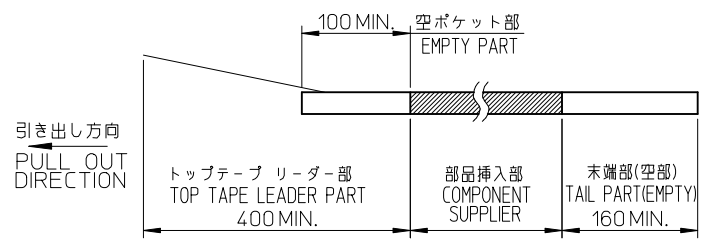
SEE SHEET 1 OF 2 EC NO: J2009-2576 DRWN:MTAKASAKI 2009/05/25 CHKD:HAYASHI 2009/05/28 APPR:NUKITA 2009/05/28	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± ---	DRAWN BY YTAKAYASU	DATE 2007/08/10	TITLE 0.5 FPC CONN. ZIF E/O 2 CONTACTS TYPE HSG ASS'Y (H=2.5)		
	10 OVER 30 UNDER	± ---	CHECKED BY KTAHASHI	DATE 2007/08/10	MOLEX INCORPORATED		
	30 OVER	± ---	APPROVED BY HHRATA	DATE 2007/08/10	MATERIAL NO. 502790-***11	DOCUMENT NO. SD-502790-001	SHEET NO. 2 OF 2
REV	DESCRIPTION	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					

引き出し方向  
PULL OUT DIRECTION



NOTES

1. 梱包数量 : 2000個/リール  
NUMBER OF CONNECTORS : 2000PIECES/REEL
2. リードテープ長さ  
LEAD TAPE LENGTH



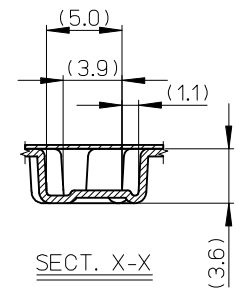
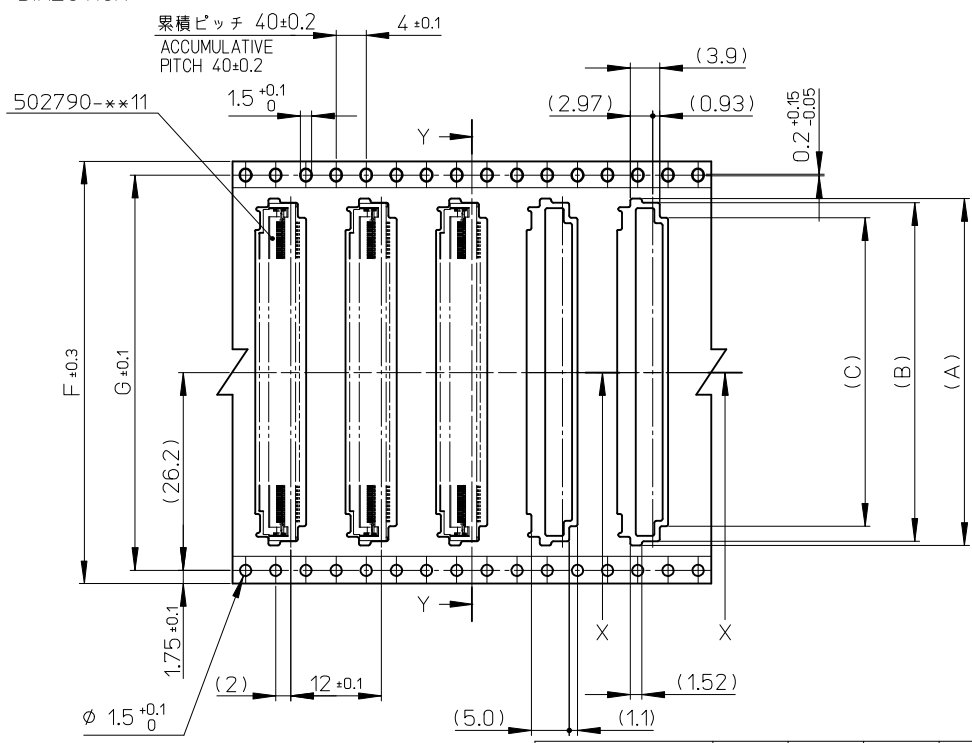
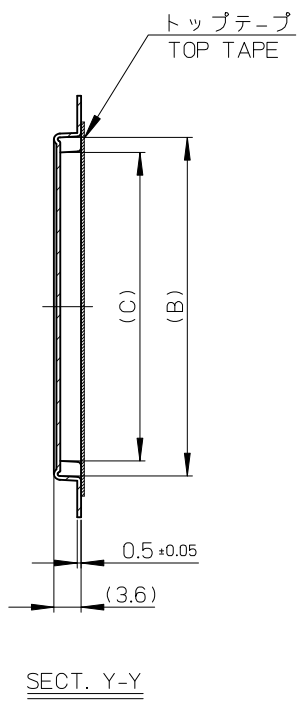
3. 製品詳細寸法については図面 SD-502790-001を参照下さい。  
FOR DIMENSIONS OF PRODUCT, REFER TO SD-502790-001.

4. 材料 MATERIAL  
 キャリアテープ : ポリスチレン  
 CARRIER TAPE : POLYSTYRENE  
 トップテープ : ポリエチレンテレフタレート, ポリエチレン  
 TOP TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE  
 リール : ポリスチレン<リサイクル材を含む>  
 REEL : POLYSTYRENE<RECYCLE MATERIAL CONTAINED>

5. ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

REVISED EC NO: J2009-2322 DR: MNTAKASAKI 2009/04/20 CH: D:MHAYASHI 2009/04/20 APPR: NUKITA 2009/04/21	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE --	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±---	DRAWN BY YTAKAYASU	DATE 2007/11/05	TITLE 0.5 FPC CONN ZIF E/O 2 CONTACTS TYPE EMBSTP PACKAGE (H=2.5)			
		10 OVER 30 UNDER	±---	CHECKED BY KTAKAHASHI	DATE 2007/11/05	MOLEX MOLEX INCORPORATED			
		30 OVER	±---	APPROVED BY HHIRATA	DATE 2007/11/05				
		ANGULAR ±--- °		MATERIAL NO. 502790-***91		DOCUMENT NO. SD-502790-002	SHEET NO. 1 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



56	52.4	56	61.4	57.4	40.9	44.9	46	502790-8091	80
	52.4	56	61.4	57.4	32.9	36.9	38	502790-6491	64
	52.4	56	61.4	57.4	30.9	34.9	36	502790-6091	60
44	40.4	44	49.4	45.4	25.9	29.9	31	502790-5091	50
	40.4	44	49.4	45.4	20.9	24.9	26	502790-4091	40
32	28.4	32	37.4	33.4	15.9	19.9	21	502790-3091	30
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 OF 2 EC NO.: J2009-2322 DRWN: TAKASAKI 2009/04/20 CH'KD: HAYASHI 2009/04/20 APPR: NUKITA 2009/04/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE --	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	10 UNDER	± ---	DRAWN BY YTAKAYASU	DATE 2007/11/05	TITLE 0.5 FPC CONN ZIF E/O 2 CONTACTS TYPE EMBSTP PACKAGE (H=2.5)				
	10 OVER 30 UNDER	± ---	CHECKED BY KTAKAHASHI	DATE 2007/11/05	MOLEX INCORPORATED				
	30 OVER	± ---	APPROVED BY HHRATA	DATE 2007/11/05	MATERIAL NO. 502790-***91		DOCUMENT NO. SD-502790-002	SHEET NO. 2 OF 2	
	ANGULAR ± --- °		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				