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Part Number: [5027904091](#)
Status: **Active**
Description: 0.50mm (.020") Pitch FPC Connector, ZIF, Easy-On™, Double Bottom Contact, 40 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) 40
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

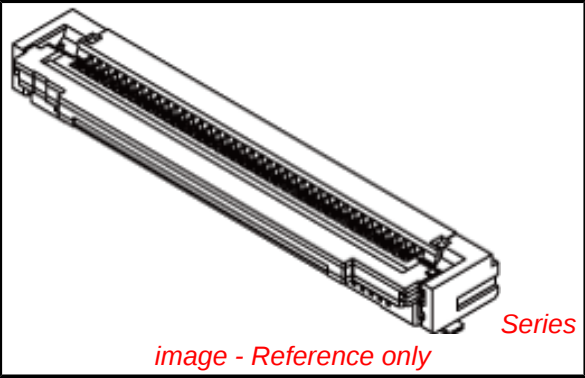
Electrical

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

Material Info

Reference - Drawing Numbers

Packaging Specification SPK-502790-001
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
Contains SVHC: No**
**Halogen-Free
Status**
Not Reviewed

China RoHS

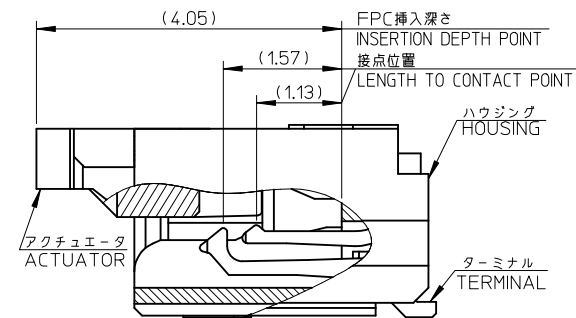
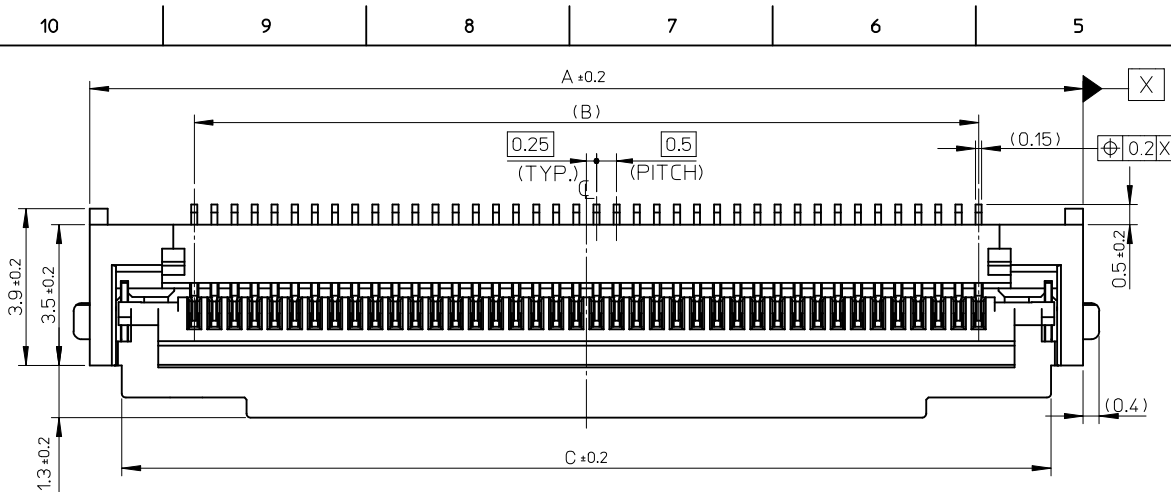


**Need more information on product
environmental compliance?**

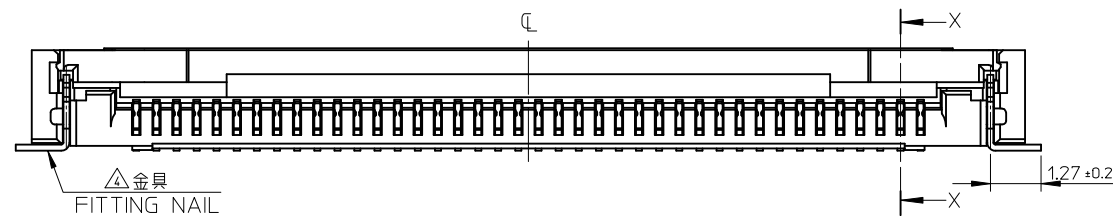
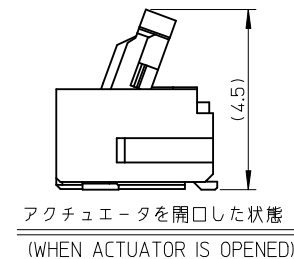
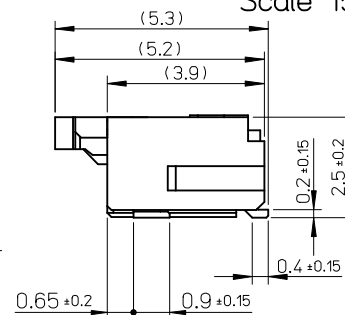
Email productcompliance@molex.com
For a multiple part number RoHS Certificate of
Compliance, [click here](#)

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

Search Parts in this Series
[502790Series](#)



SECTION X-X
Scale 15:1



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
銅めっき (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. エンボステープ梱包時は、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

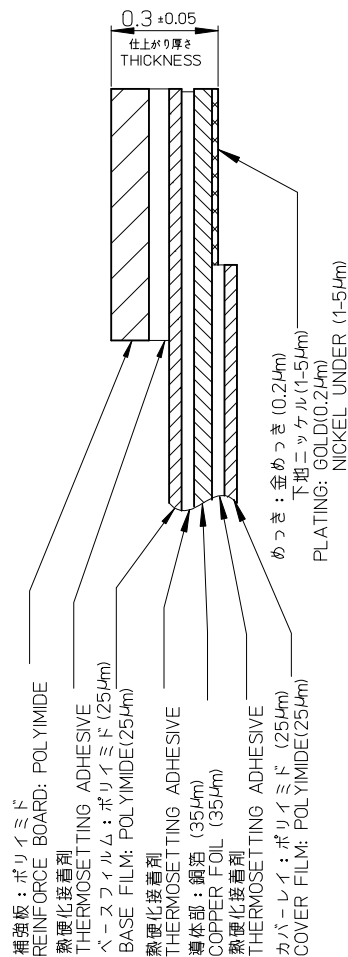
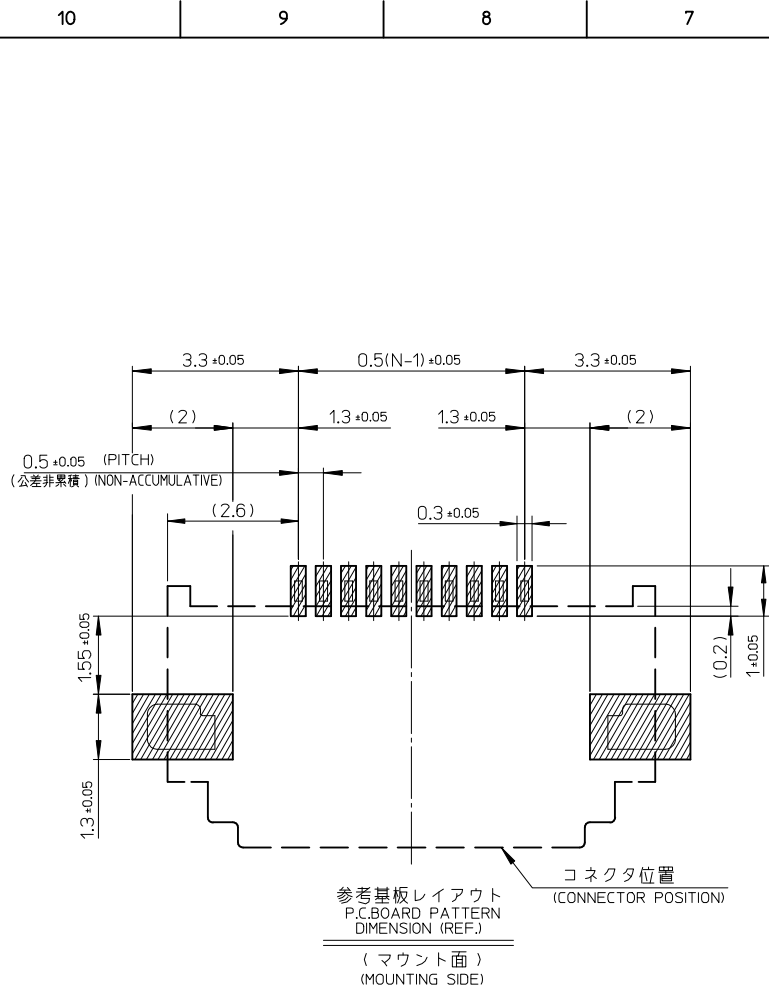
SCALE --- DESIGN UNITS METRIC THIRD ANGLE PROJECTION

0.5 FPC CONN. ZIF E/O
2 CONTACTS TYPE
HSG ASS'Y (H=2.5)

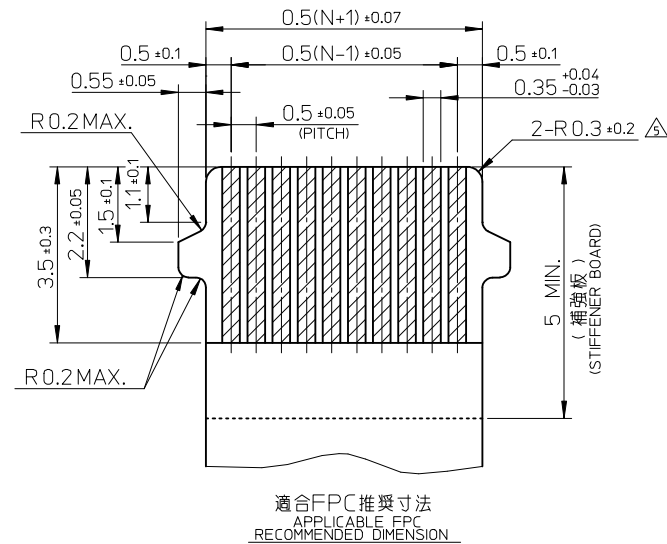
MOLEX INCORPORATED

MATERIAL NO. 502790-**11 DOCUMENT NO. SD-502790-001 SHEET NO. 1 OF 2

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



FPC構成推奨仕様
STRUCTURE OF FPC



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35 μmまたは50 μm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25 μm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 : 25 μm
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 DRAWN: TAKASAKI 2009/05/25 CHK'D: MAYASHI 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				
		30 OVER	± ---	APPROVED BY HHIRATA	DATE 2007/08/10				
		ANGULAR ± --- °		MATERIAL NO. 502790-**11		DOCUMENT NO. SD-502790-001			SHEET NO. 2 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					
	REV								

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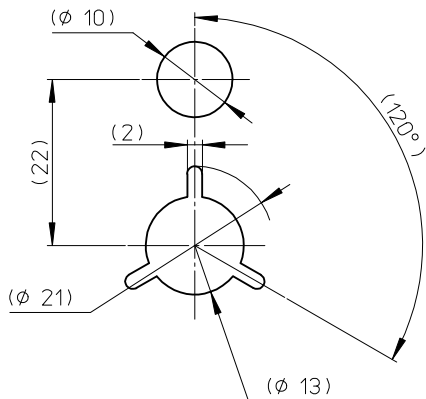
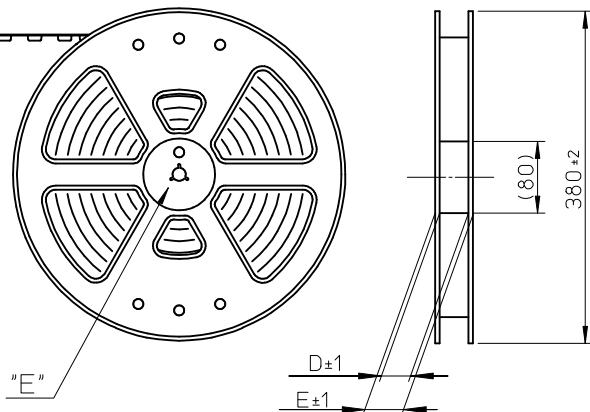
4

3

2

1

引き出し方向

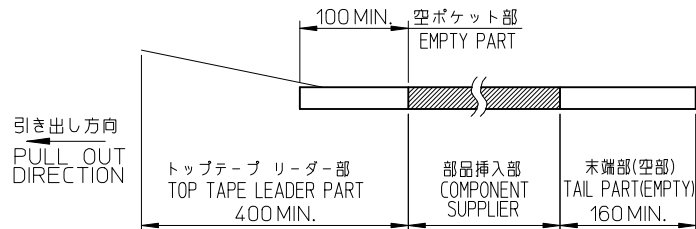
PULL OUT
DIRECTION

DETAIL "E"

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: J2009-2372	2009/04/20	DRAWN:MTAKASAKI	2009/04/20	CHKD:MHAYASHI	2009/04/20	APPR:NUKITA	2009/04/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
											MM ONLY		--	METRIC		
									10 UNDER		± ---	DRAWN BY	DATE	TITLE 0.5 FPC CONN ZIF E/O 2 CONTACTS TYPE EMBSTP PACKAGE (H=2.5)		
									10 OVER 30 UNDER		± ---	Y TAKAYASU	2007/11/05			
									30 OVER		± ---	CHECKED BY	DATE			
									ANGULAR ± --- °		KTAKAHASHI	2007/11/05				
									DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY	DATE	MOLEX MOLEX INCORPORATED			
											HHIRATA	2007/11/05				
											MATERIAL NO.				DOCUMENT NO.	SHEET NO.
											502790-**91		SD-502790-002		1 OF 2	
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
		A3														

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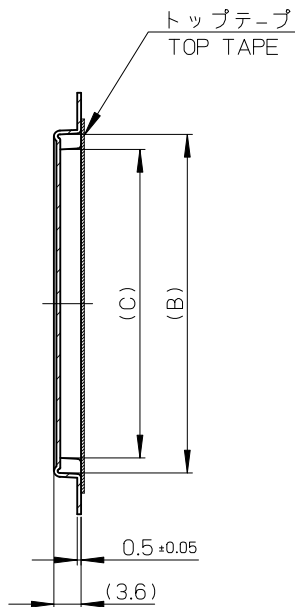
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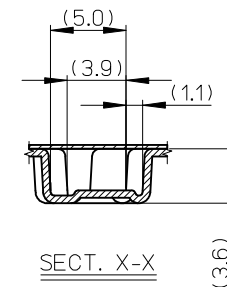
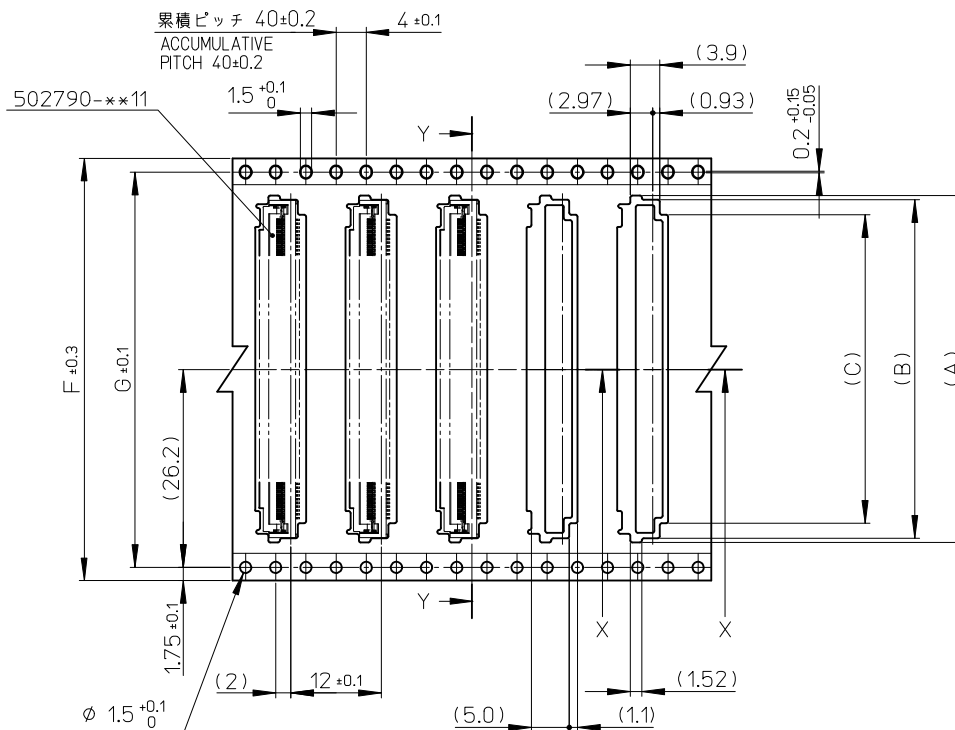
2

10 9 8 7 6 5 4 3 2 1

引き出し方向
PULL OUT
DIRECTION



SECT. Y-Y



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 DRAWN: TAKASAKI 2009/04/20 CHKD: HAYASHI 2009/04/20 APPR: NUKITA 2009/04/21	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE --	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± ---	Y TAKAYASU	2007/11/05	TITLE 0.5 FPC CONN ZIF E/O 2 CONTACTS TYPE EMBSTP PACKAGE (H=2.5)				
		10 OVER 30 UNDER	± ---	K TAKAHASHI	2007/11/05					
		30 OVER	± ---	H HIRATA	2007/11/05	MOLEX MOLEX INCORPORATED				
		ANGULAR ± --- °		MATERIAL NO. 502790-**91						
	REV	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						