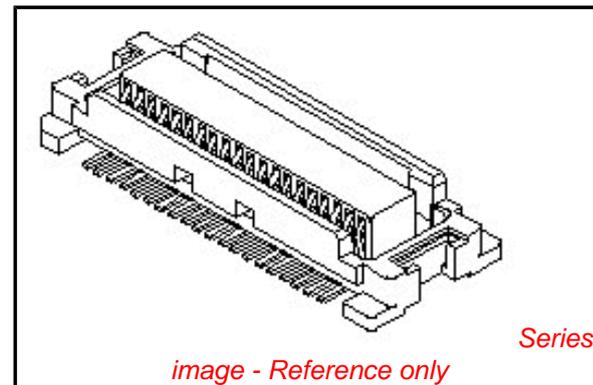


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0529910308](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical, 3.00 and 4.00mm (.118 and .157") Stacking Heights, Lower Circuit Size Version, White, 30 Circuits

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-52991-008 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">Product Specification PS-54167-002 (PDF)</a>
<a href="#">Product Specification PS-52991-003 (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>



**General**

Product Family	PCB Receptacles
Series	<a href="#">52991</a>
Application	Board-to-Board
Product Name	SlimStack™

**Physical**

Circuits (Loaded)	30
Glow-Wire Compliant	No
Mated Height (in)	0.118 In, 0.157 In
Mated Height (mm)	3.00 mm, 4.00 mm
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.020 In
Pitch - Mating Interface (mm)	0.50 mm
Plating min: Mating (µin)	4
Plating min: Mating (µm)	0.1
Plating min: Termination (µin)	10
Plating min: Termination (µm)	0.25
Polarized to PCB	No
Surface Mount Compatible (SMC)	N/A
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification	PS-52991-003, PS-52991-008, PS-54167-002, RPS-52991-012, RPS-52991-013, RPS-52991-016, RPS-52991-017, RPS-52991-019
Sales Drawing	SD-52991-004, SD-52991-005

**EU RoHS**

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

**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.

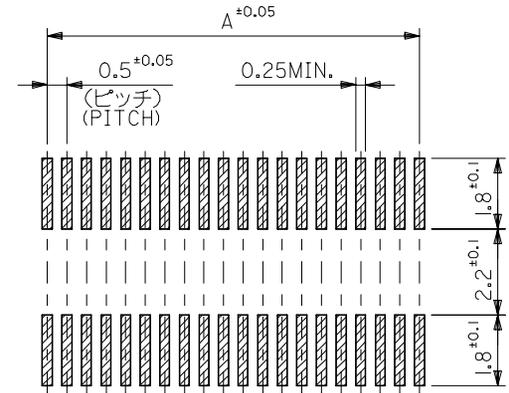
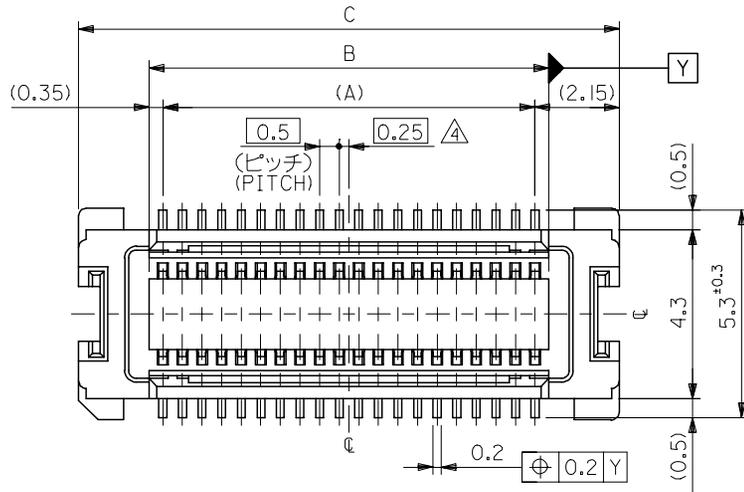
**Search Parts in this Series**

[52991Series](#)

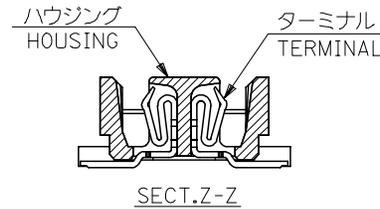
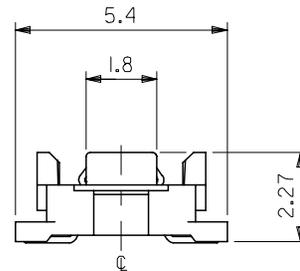
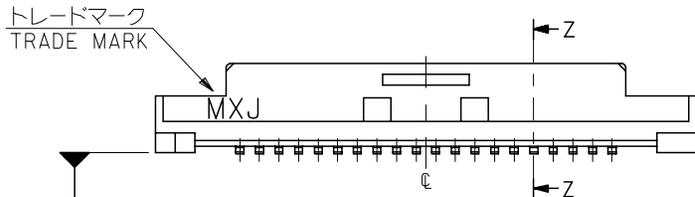
**Mates With**

[53916](#) , [53748](#)

10 9 8 7 6 5 4 3 2 1



参考基板レイアウト (マウント面)  
P.C.BOARD PATTERN  
DIMENSION (REF.)  
(MOUNTING AREA)



23.8	20.2	19.5	52991-0800	80
21.3	17.7	17.0	-0700	70
18.8	15.2	14.5	-0600	60
16.3	12.7	12.0	-0500	50
13.8	10.2	9.5	-0400	40
11.3	7.7	7.0	-0300	30
8.8	5.2	4.5	52991-0200	20
C	B	A	MATERIAL NO.	極数 CIRCUIT

注記 NOTES:

1. 使用材料 MATERIAL  
ハウジング: LCPガラス入り (白), UL94V-0  
HOUSING: LCP(G.F.)(COLOR:WHITE), UL94V-0  
ターミナル: リン青銅 (t=0.15)  
TERMINAL: PHOSPHOR BRONZE (t=0.15)
2. ヌッキ仕様 PLATING  
全体仕上げ: 金メッキ 0.1 MICROMETER MIN.  
ALL OVER: GOLD 0.1 MICROMETER MIN.  
下地メッキ: ニッケルメッキ 1.5 MICROMETER MIN.  
UNDER PLATING: NICKEL 1.5 MICROMETER MIN.

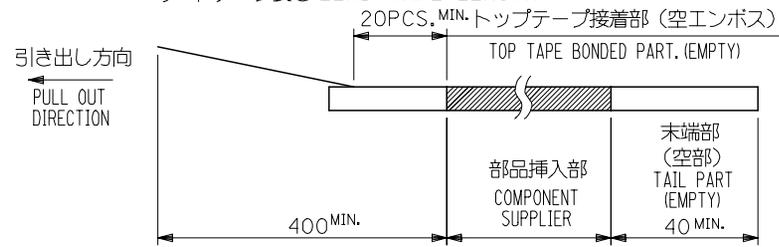
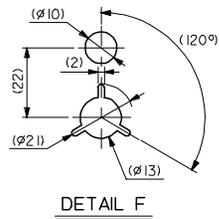
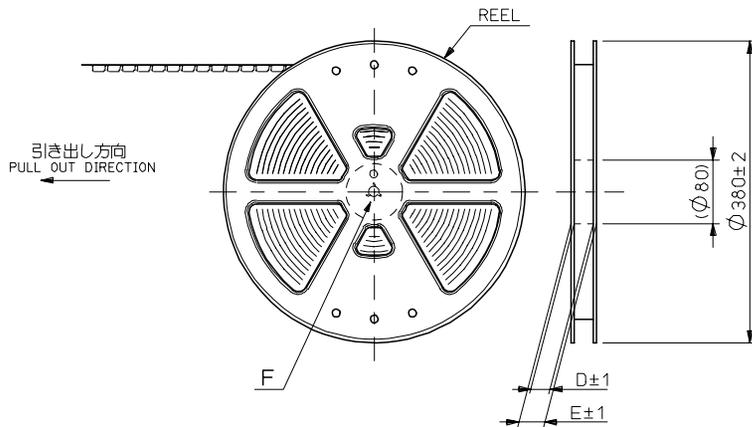
- 5 嵌合相手: 53748 シリーズ 53916 シリーズ 502280 シリーズ  
MATE WITH: 53748 SERIES, 53916 SERIES, 502280 SERIES.
- 6 テール平坦度は、0.1MAX.  
TAIL COPLANARITY TO BE 0.1MAX.

3. 基準面 [X] からのソルダーテールの半田付け面のズレ量は、上方向 0、下方向 0.15MAX. とする。  
MISALIGNMENT OF SOLDER TAIL FROM [X]  
: UPPER DIRECTION 0, LOWER DIRECTION 0.15 MAX.  
△ (全極数/2) = 偶数の場合に適用。  
APPLY FOR (CIRCUIT/2)=EVEN.

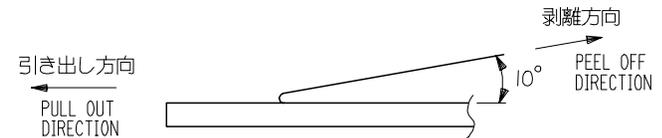
REVISED EC NO: J2007-0273 DRWN: TENAGASE 2006/07/28 CHKD: THARUYAMA 2006/08/03 APPR: NUKITA 2006/08/07	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 8:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY S. AIHARA	DATE '96/02/27	TITLE 0.5 B/B CONN REC HOUSING ASSY(W/O BOSS, W/O NAIL) -LEAD FREE-			
		10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE '01/12/26				
		30 OVER	±0.3	APPROVED BY M. SASAO	DATE '01/12/26				
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-52991-004		SHEET NO. 1 OF 1	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

NOTES

- 製品詳細寸法については図面 SD-52991-004 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-52991-004
- 梱包数量：3000個/リール  
NUMBER OF CONNECTORS : 3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- トップテープの剥離強度：0.1N~1.3N (10gf~130gf) (剥離方向は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 0.1N~1.3N (10gf~130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED , DURING TRANSPORTATION.



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

52991-\*\*\*8 MODEL NO.

REVISED EC NO: J2006-0604 DRW:NAIDA 2005/08/31 CHKD:KTOYODA 2005/09/01 APPR:NUKITA 2005/09/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	± 0.2	DRAWN BY T. NIITSU	DATE '95/10/17	TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-			
	10 OVER 30 UNDER	± 0.25	CHECKED BY T. ITO	DATE '01/01/31	MOLEX INCORPORATED			
	30 OVER	± 0.3	APPROVED BY M. FUKUSHIMA	DATE '01/01/31	DOCUMENT NO. SD-52991-005		SHEET NO. 1 OF 6	
	ANGULAR	± 3 °	MATERIAL NO. SEE CHART					
D	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			

10 9 8 7 6 5 4 3 2 1

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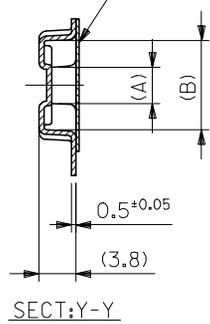
C

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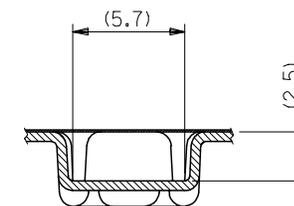
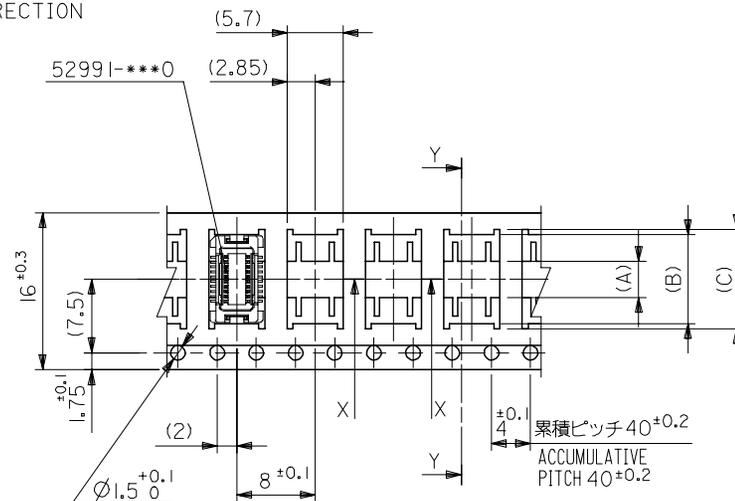
A

引き出し方向  
PULL OUT DIRECTION

トップテープ  
TOP TAPE



SECT:Y-Y



SECT:X-X  
(SCALE 4:1)

16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

REVISED EC NO: J2006-0604 DRWN:NAIDA 2005/08/31 CHKD:KTOYODA 2005/09/01 APPR:NUKITA 2005/09/09	52991-***8 MODEL NO.		16	21.4	17.4	10.1	9.1	3.7	52991-0208	20
	GENERAL TOLERANCES (UNLESS SPECIFIED)		キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.
	10 UNDER ± ---		DIMENSION STYLE MM ONLY		SCALE ---		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
	10 OVER 30 UNDER ± ---		DRAWN BY DATE T.NIITSU '95/10/17		TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-		APPROVED BY DATE M.FUKUSHIMA '01/01/31		MOLEX INCORPORATED	
30 OVER ± ---		CHECKED BY DATE T.ITO '01/01/31		MATERIAL NO.		DOCUMENT NO. SD-52991-005		SHEET NO. 2 OF 6		
ANGULAR ± --- °		APPROVED BY DATE M.FUKUSHIMA '01/01/31		SIZE A3		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										



10 9 8 7 6 5 4 3 2 1

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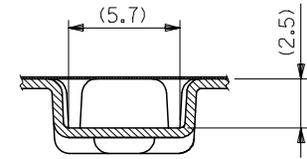
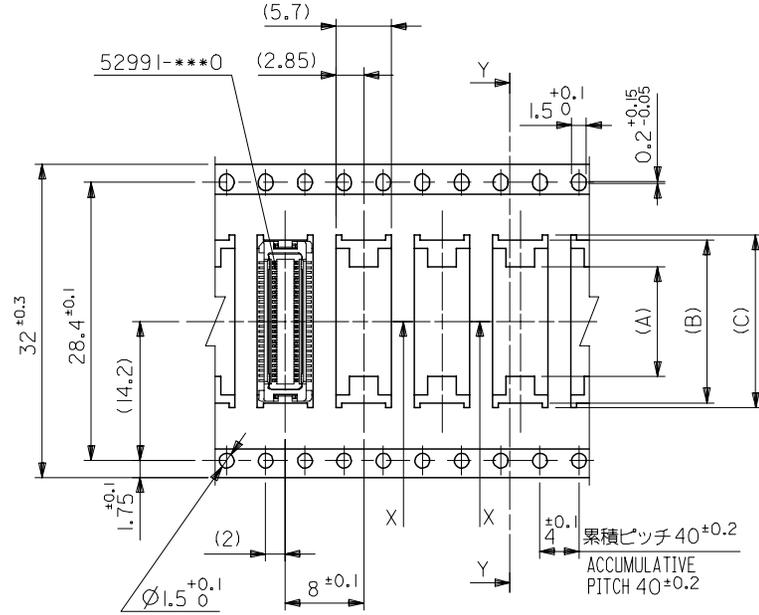
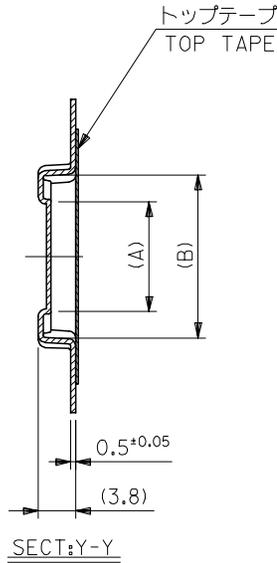
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引き出し方向  
PULL OUT DIRECTION



32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE

32	37.4	33.4	17.6	16.6	11.2	52991-0508	50
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED	DESCRIPTION
EC NO: J2006-0604	2005/08/31
DRW:NAIDA	2005/09/01
CHKD:TOYODA	2005/09/01
APPR:NUKITA	2005/09/09
D	REV

52991-***8	MODEL NO.
GENERAL TOLERANCES (UNLESS SPECIFIED)	
10 UNDER	± ---
10 OVER 30 UNDER	± ---
30 OVER	± ---
ANGULAR	± --- °
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY T. YASUI	DATE '96/04/15
CHECKED BY T. ITO	DATE '01/01/31
APPROVED BY M. FUKUSHIMA	DATE '01/01/31
MATERIAL NO.	
SIZE A3	

SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-		
MOLEX INCORPORATED		
DOCUMENT NO. SD-52991-005	SHEET NO. 4 OF 6	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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10 9 8 7 6 5 4 3 2 1

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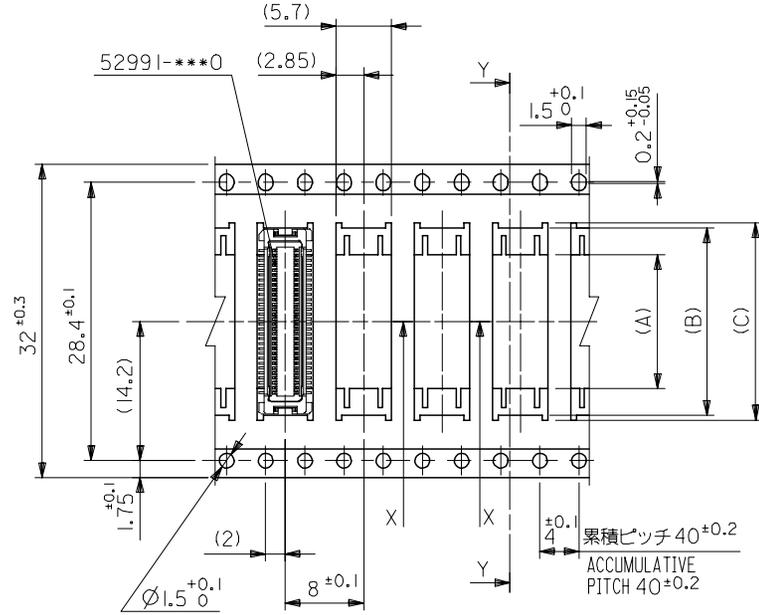
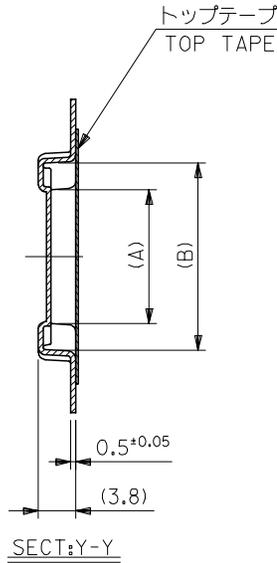
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引き出し方向  
PULL OUT DIRECTION



32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE

32	37.4	33.4	20.1	19.1	13.7	52991-0608	60
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

52991-\*\*\*8 MODEL NO.

REVISED	DESCRIPTION
EC NO: J2006-0604	2005/08/31
DRW:NAIDA	2005/09/01
CHK:KTOYODA	2005/09/01
APP:NUKITA	2005/09/09
D	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
10 UNDER	± ---
10 OVER 30 UNDER	± ---
30 OVER	± ---
ANGULAR	± --- °
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY S. AIHARA	DATE '96/04/01
CHECKED BY T. ITO	DATE '01/01/31
APPROVED BY M. FUKUSHIMA	DATE '01/01/31
MATERIAL NO. SEE CHART	
SIZE A3	

SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-		
MOLEX INCORPORATED		
DOCUMENT NO. SD-52991-005	SHEET NO. 5 OF 6	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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10 9 8 7 6 5 4 3 2 1

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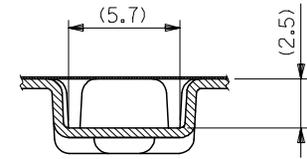
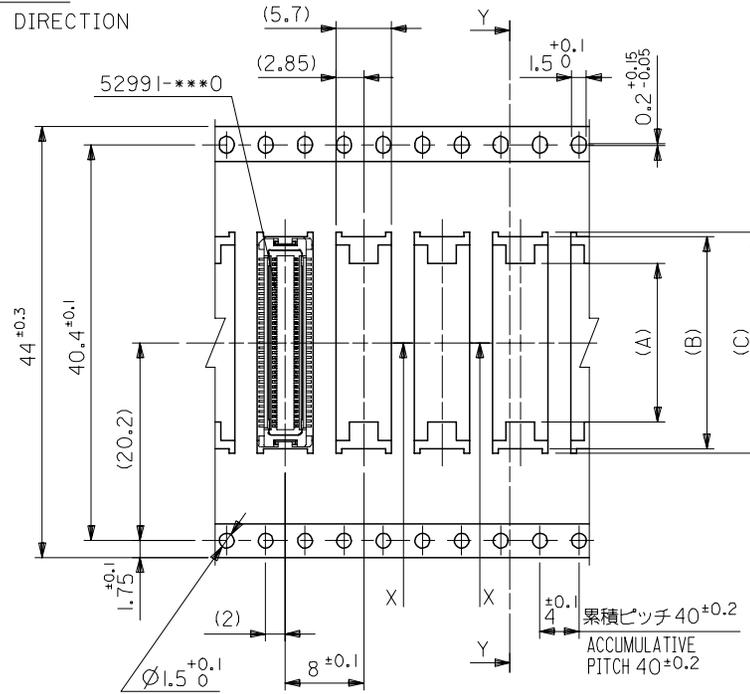
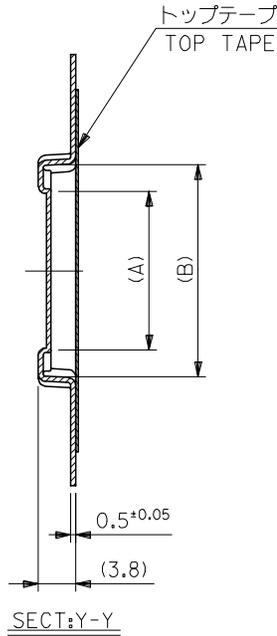
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引き出し方向  
PULL OUT DIRECTION



44mm幅キャリアテープ  
44mm WIDTH CARRIER TAPE

44	49.4	45.4	25.1	24.1	18.7	52991-0808	80
			22.6	21.6	16.2	52991-0708	70
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED	EC NO: J2006-0604	2005/08/31
	DRWN:NAIDA	2005/09/01
	CHKD:TOYODA	2005/09/01
	APPR:NUKITA	2005/09/09

52991-***8	MODEL NO.
GENERAL TOLERANCES (UNLESS SPECIFIED)	
10 UNDER	± ---
10 OVER 30 UNDER	± ---
30 OVER	± ---
ANGULAR	± --- °
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
DRAWN BY T. YASUI	DATE '96/04/15	TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-		
CHECKED BY T. ITO	DATE '01/01/31	MOLEX INCORPORATED		
APPROVED BY M. FUKUSHIMA	DATE '01/01/31	MATERIAL NO.	DOCUMENT NO. SD-52991-005	SHEET NO. 6 OF 6
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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