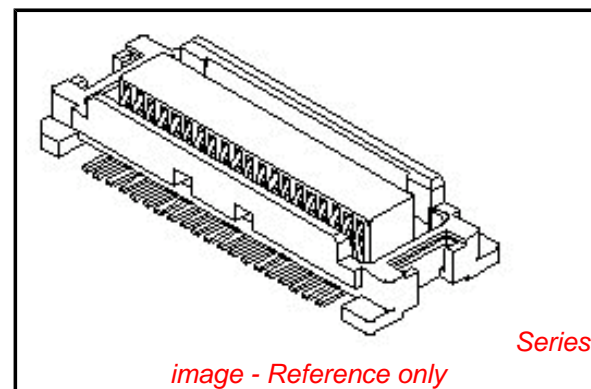


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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:

3D Model	Product Specification PS-52991-008 (PDF)
Drawing (PDF)	Product Specification PS-54167-002 (PDF)
Product Specification PS-52991-003 (PDF)	RoHS Certificate of Compliance (PDF)



General

Product Family	PCB Receptacles
Series	52991
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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

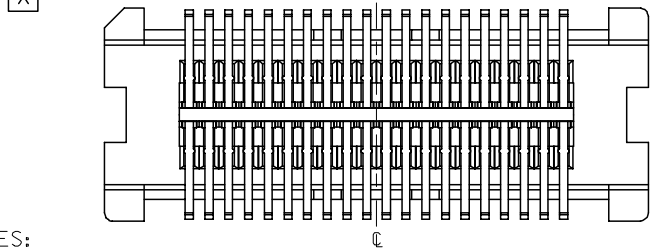
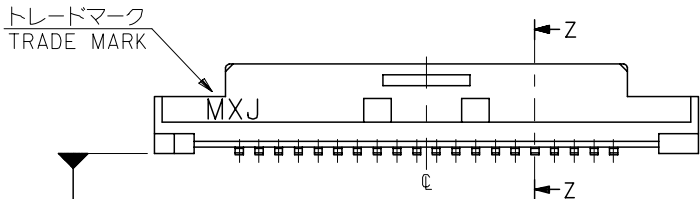
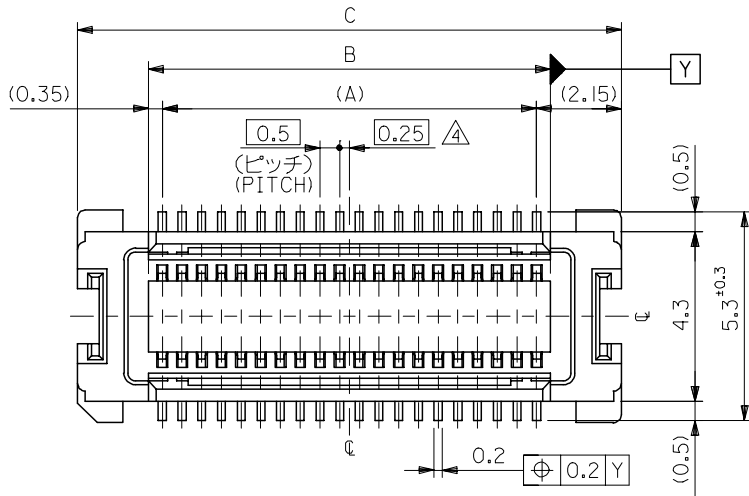
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[52991Series](#)

Mates With

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



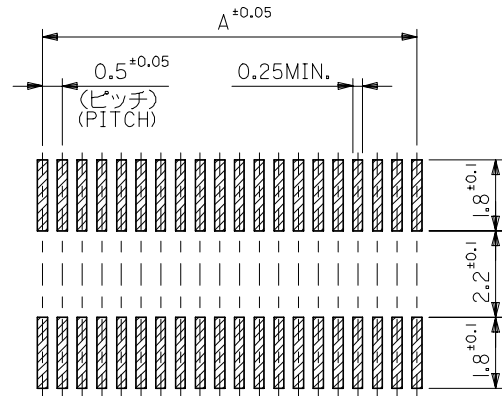
注記 NOTES:

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.

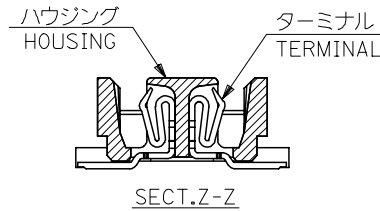
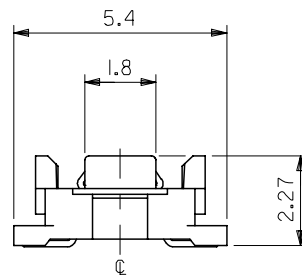
3. 基準面 [X] からのソルダーテールの半田付け面のズレ量は、上方向 0、下方向 0.15MAX. とする。
MISALIGNMENT OF SOLDER TAIL FROM [X]
: UPPER DIRECTION 0, LOWER DIRECTION 0.15 MAX.

△ (全極数/2) = 偶数の場合に適用。
APPLY FOR (CIRCUIT/2)=EVEN.

- 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.



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

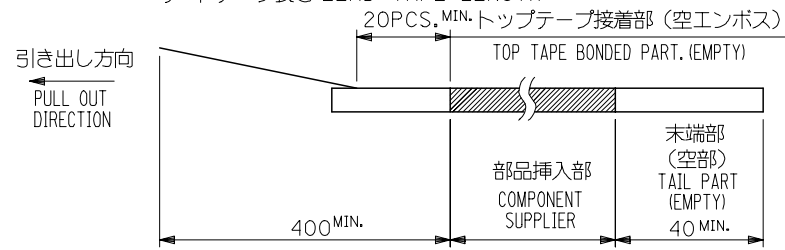
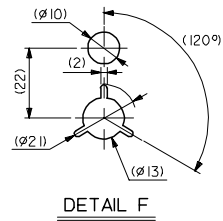
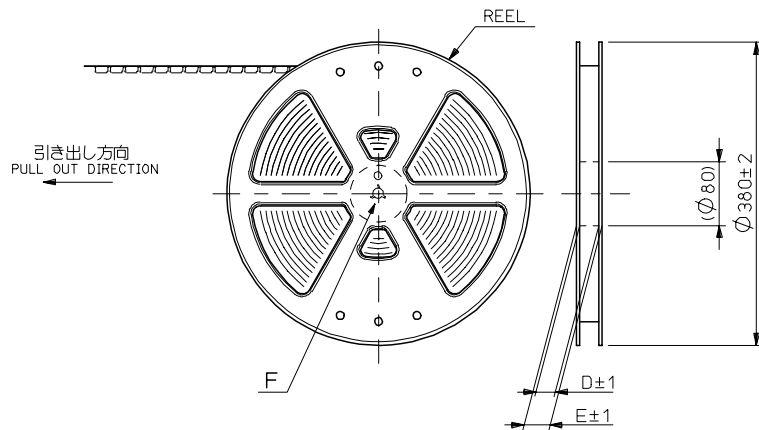


23.8	20.2	19.5	52991-0800	80
21.3	17.7	17.0	-0700	70
18.8	15.2	14.5	-0600	60
16.3	12.7	12.0	-0500	50
13.8	10.2	9.5	-0400	40
11.3	7.7	7.0	-0300	30
8.8	5.2	4.5	52991-0200	20
C	B	A	MATERIAL NO.	極数 CIRCUIT

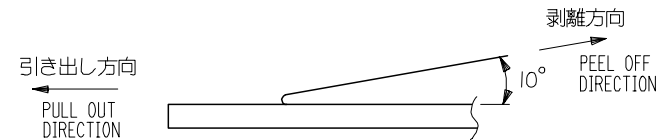
REVISED EC NO: J2007-0273 DRWN: TENAGASE 2006/07/28 CHKD: THARUYAMA 2006/08/03 APPR: NUKITA 2006/08/07	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 8:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY S. AIHARA	DATE '96/02/27	TITLE 0.5 B/B CONN 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 CHK: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					
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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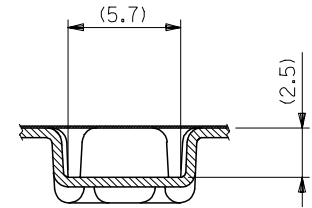
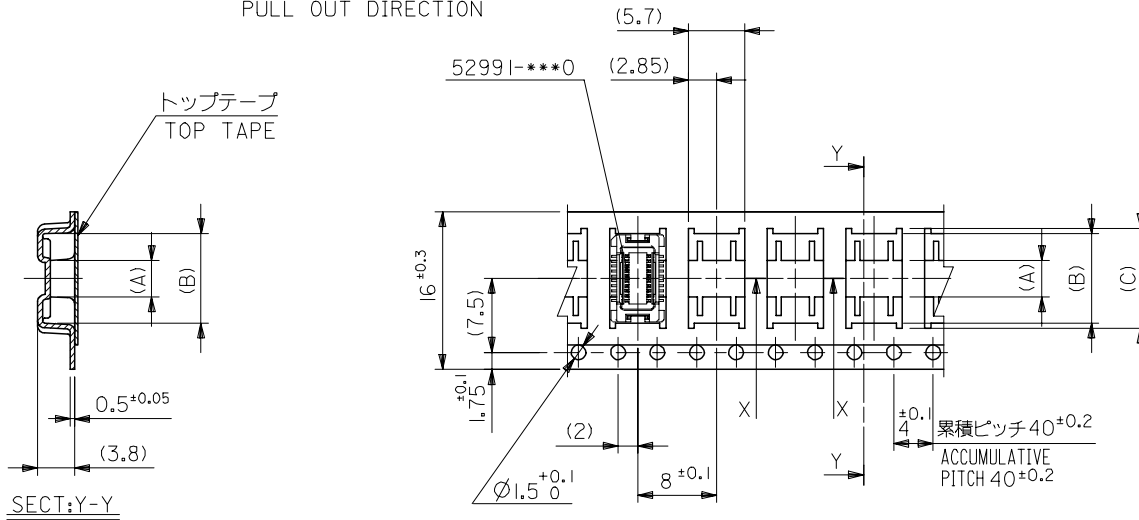
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引き出し方向
PULL OUT DIRECTION



SECT:X-X
(SCALE 4:1)

SECT:Y-Y

16mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

REVISED	EC NO: J2006-0604	2005/08/31	DRWN:NAIDA	2005/09/01	CHKD:KTOYODA	2005/09/09	APPR:NUKITA	DESCRIPTION	52991-***8	MODEL NO.	16	21.4	17.4	10.1	9.1	3.7	52991-0208	20										
D								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 T.NIITSU	DATE '95/10/17	TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-															
								30 OVER ± ---			CHECKED BY T.ITO	DATE '01/01/31	MOLEX INCORPORATED															
								ANGULAR ± --- °			APPROVED BY M.FUKUSHIMA	DATE '01/01/31	DOCUMENT NO. SD-52991-005		SHEET NO. 2 OF 6													
								DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART																	
											SIZE A3	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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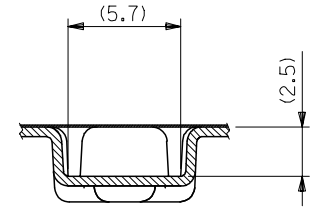
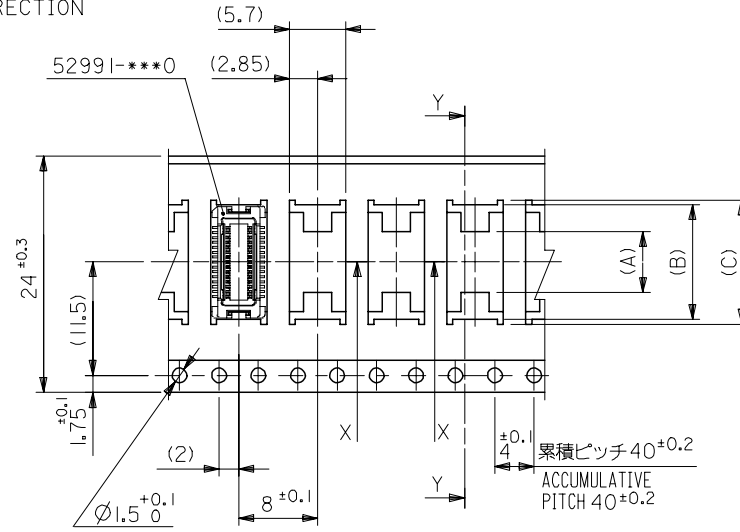
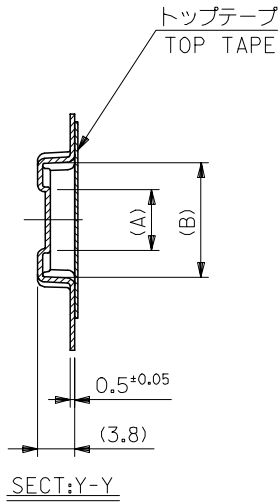
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引き出し方向
PULL OUT DIRECTION



24mm幅キャリアテープ
24mm WIDTH CARRIER TAPE

24	29.4	25.4	15.1	14.1	7.4	52991-0408	40
			12.6	11.6	4.9	52991-0308	30
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 DRWN:NAIDA 2005/08/31 CHKD:KTOYODA 2005/09/01 APPR:NUKITA 2005/09/09	DESCRIPTION	52991-***8	MODEL NO.	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	GENERAL TOLERANCES (UNLESS SPECIFIED)			MM ONLY	---	METRIC	
	10 UNDER	±	---	DRAWN BY	DATE	TITLE	0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-
	10 OVER 30 UNDER	±	---	S. AIHARA	'96/04/01		
30 OVER	±	---	APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
ANGULAR	±	---	M. FUKUSHIMA	'01/01/31	SEE CHART	SD-52991-005	3 OF 6
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
				A3			

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10 9 8 7 6 5 4 3 2 1

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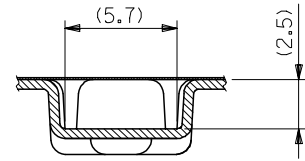
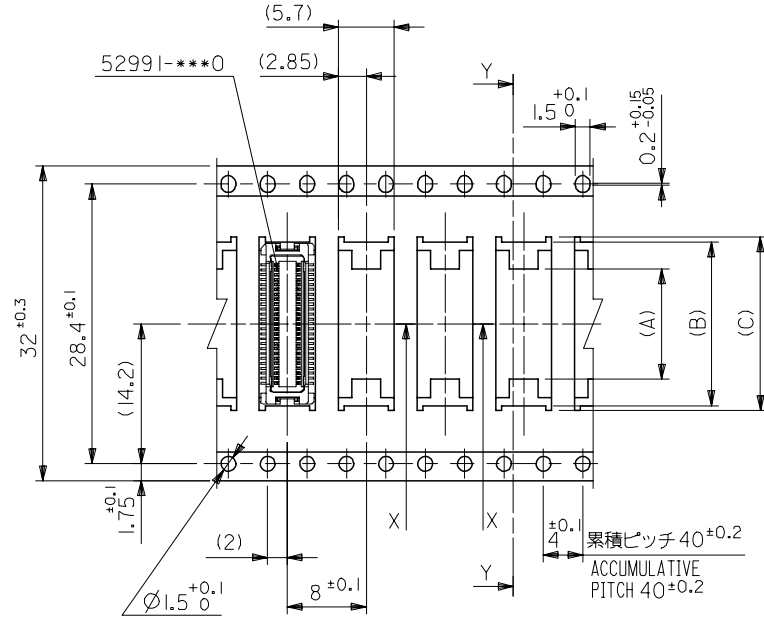
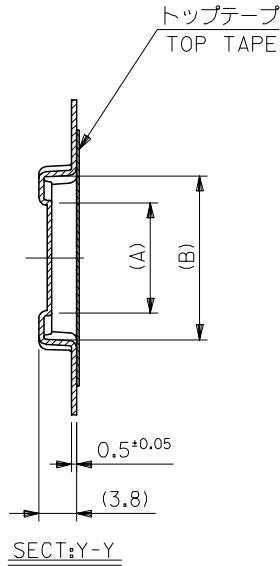
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引き出し方向
PULL OUT DIRECTION



32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

32	37.4	33.4	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		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	DOCUMENT NO. SD-52991-005	SHEET NO. 4 OF 6	
MATERIAL NO. SEE CHART		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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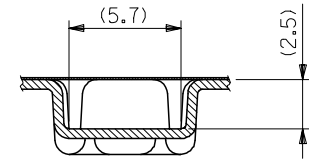
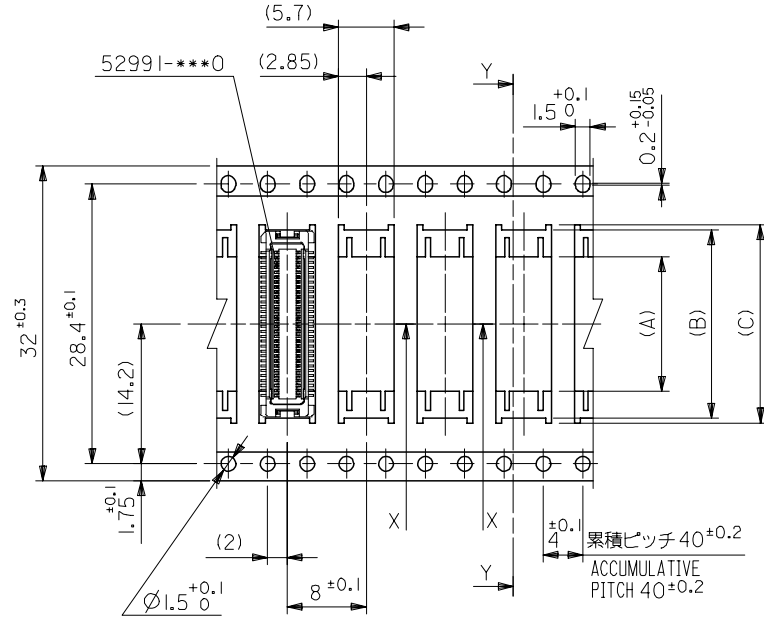
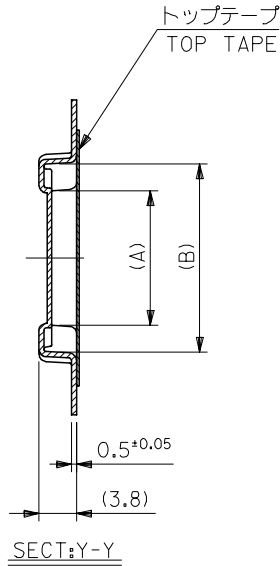
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引き出し方向
PULL OUT DIRECTION



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

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

DRAWN BY DATE	
S. AIHARA	'96/04/01
CHECKED BY DATE	
T. ITO	'01/01/31
APPROVED BY DATE	
M. FUKUSHIMA	'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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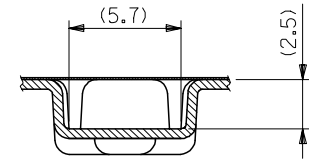
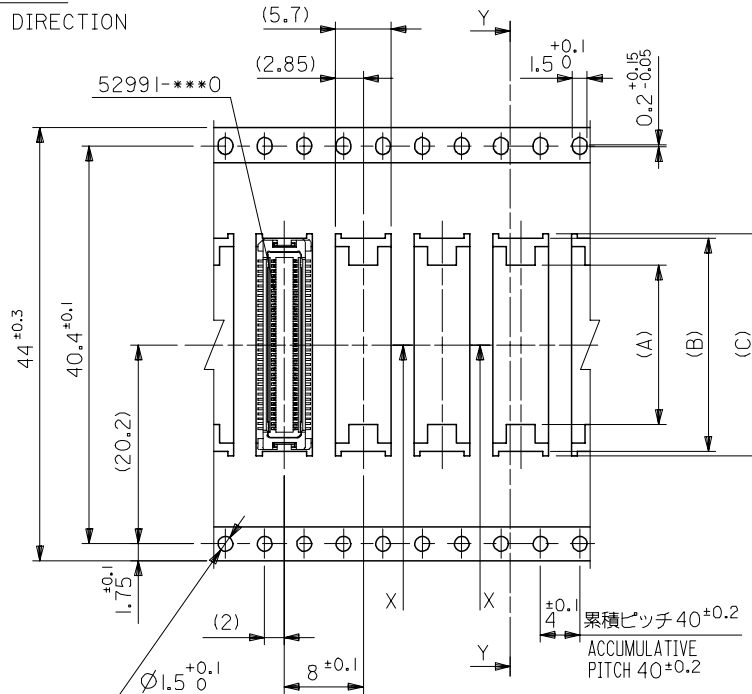
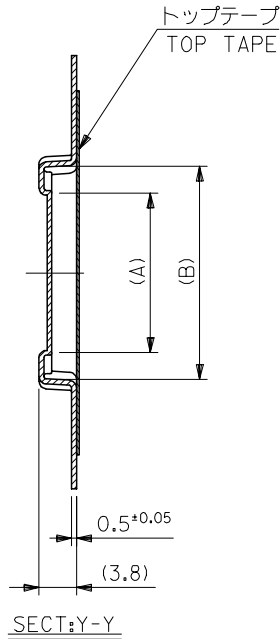
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引き出し方向
PULL OUT DIRECTION



SECT:X-X
(SCALE 4:1)

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 DRW:NAIDA 2005/08/31 CHK:KTOYODA 2005/09/01 APP:NUKITA 2005/09/09	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	± ---	DRAWN BY T. YASUI	DATE '96/04/15	TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-			
		10 OVER 30 UNDER	± ---	CHECKED BY T. ITO	DATE '01/01/31	MOLEX INCORPORATED			
		30 OVER	± ---	APPROVED BY M. FUKUSHIMA	DATE '01/01/31	DOCUMENT NO. SD-52991-005			
		ANGULAR	± --- °	MATERIAL NO.		SEE CHART		SHEET NO. 6 OF 6	
		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			

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