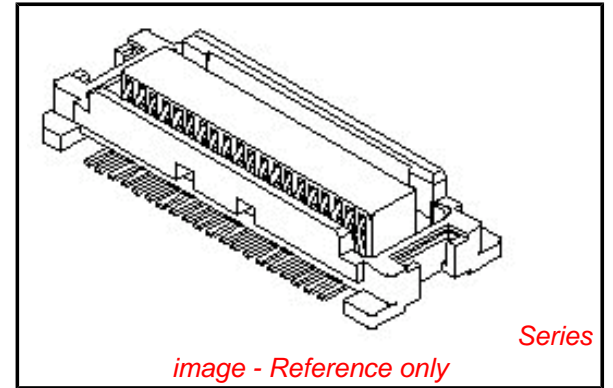


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0529910208](#)
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, 20 Circuits

Documents:

[3D Model](#) [Product Specification PS-54167-002 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-52991-003 \(PDF\)](#)



General

Product Family	PCB Receptacles
Series	52991
Application	Board-to-Board
Product Name	SlimStack™

Physical

Circuits (Loaded)	20
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-54167-002, RPS-52991-009, RPS-52991-012, RPS-52991-013, RPS-52991-014, 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.

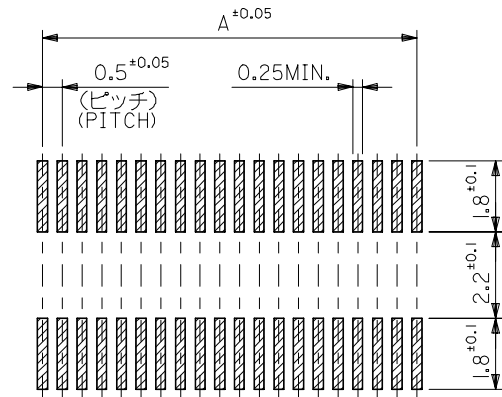
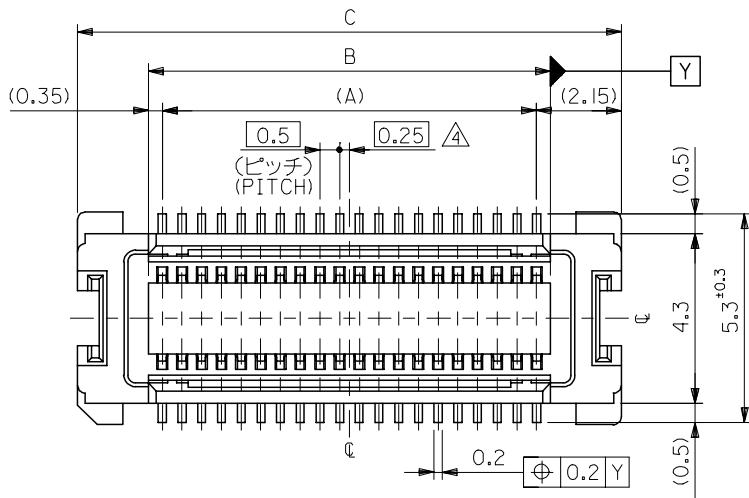
Search Parts in this Series

[52991Series](#)

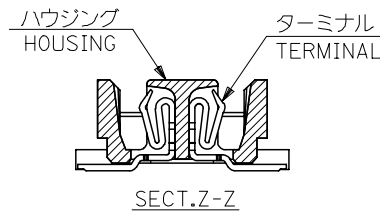
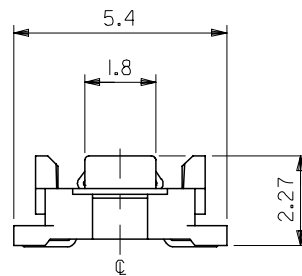
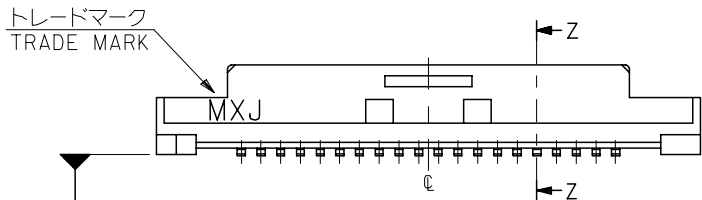
Mates With

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

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.

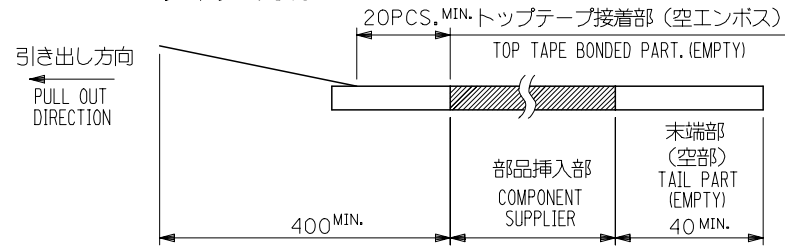
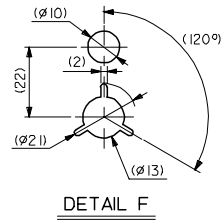
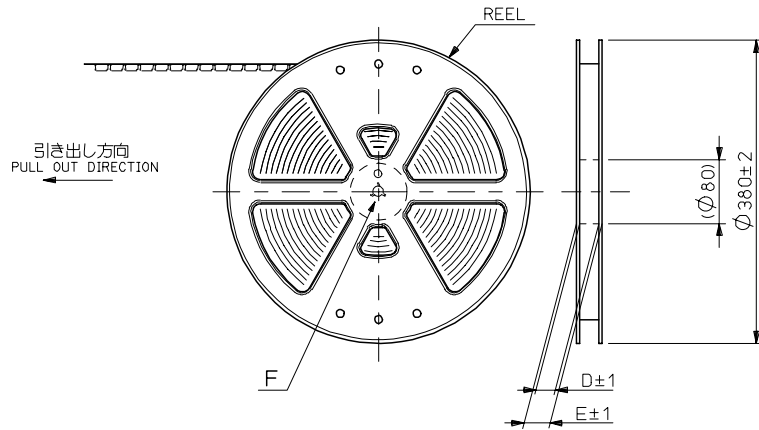
- 5 嵌合相手: 53748 シリーズ 53916 シリーズ 502280 シリーズ
MATE WITH: 53748 SERIES, 53916 SERIES, 502280 SERIES.
- 6 テール平坦度は、0.1MAX.
TAIL COPLANARITY TO BE 0.1MAX.

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.

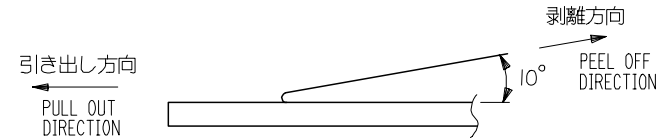
REVISED EC NO: J2007-0273 DRWN: TENAGASE 2006/07/28 CHKD: THARUYAMA 2006/08/03 APPR: NUKITA 2006/08/07	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 8:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY S. AIHARA	DATE '96/02/27	TITLE 0.5 B/B CONN REC HOUSING 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	MOLEX INCORPORATED			
ANGULAR	±3 °	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-52991-004	SHEET NO. 1 OF 1				
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					

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				
	30 OVER	± 0.3	APPROVED BY M. FUKUSHIMA	DATE '01/01/31	MOLEX INCORPORATED			
	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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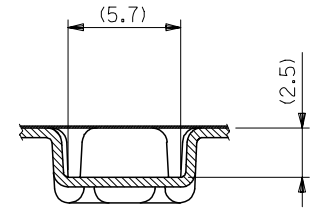
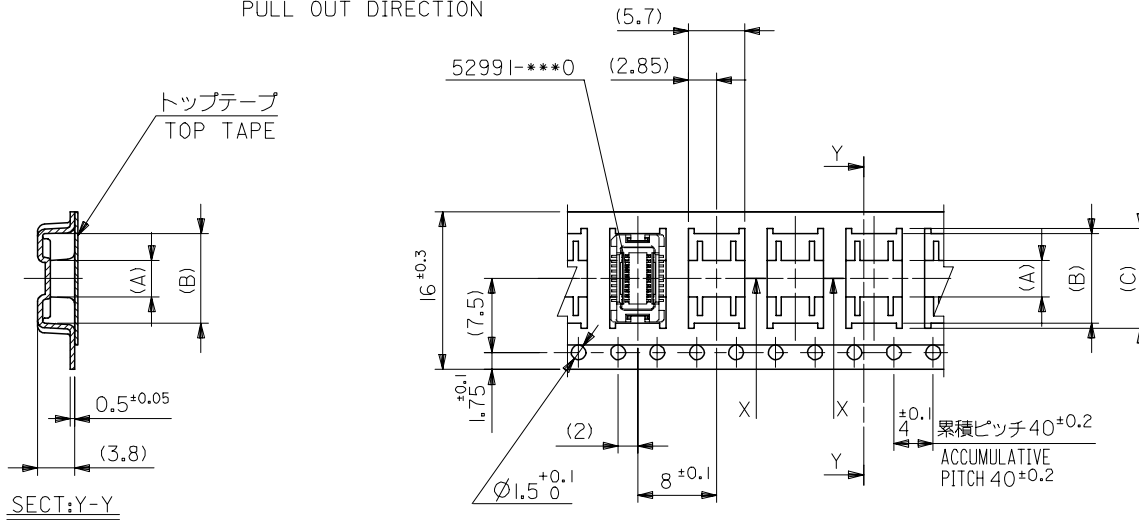
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引き出し方向
PULL OUT DIRECTION



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		2005/09/01		2005/09/09		52991-***8		MODEL NO.		16		21.4		17.4		10.1		9.1		3.7		52991-0208		20	
DRWN:NAIDA		CHKD:TOYODA		APPR:NUKITA		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION		E		D		(C)		(B)		(A)		MATERIAL NO.		極数	
10 UNDER		± ---		DRAWN BY		DATE		T.NIITSU		'95/10/17		TITLE		0.5 B/B CONN REC HSG		ASSY EMBSTP PKG		-LEAD FREE-											
10 OVER 30 UNDER		± ---		CHECKED BY		DATE		T.ITO		'01/01/31		APPROVED BY		DATE		M.FUKUSHIMA		'01/01/31		moLEX		MOLEX INCORPORATED							
30 OVER		± ---		ANGULAR		± --- °		MATERIAL NO.		SEE CHART		DOCUMENT NO.		SD-52991-005		SHEET NO.		2 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																					

10 9 8 7 6 5 4 3 2 1

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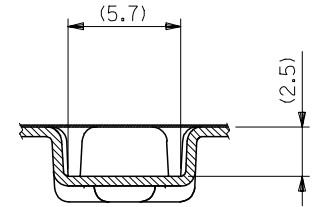
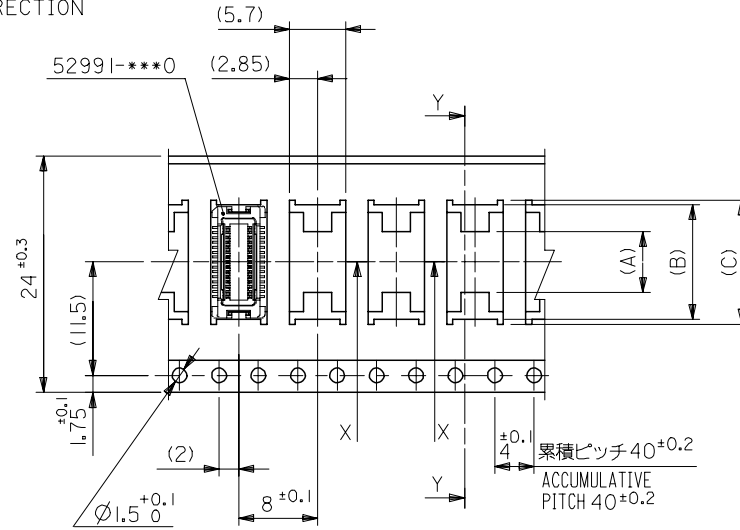
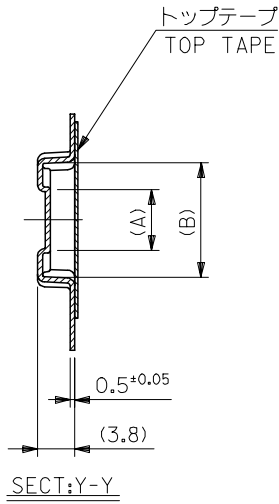
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引き出し方向
PULL OUT DIRECTION



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 CHKDK:TOYODA 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	MOLEX INCORPORATED	
	30 OVER	±	---	CHECKED BY	DATE		SD-52991-005
ANGULAR	±	---	T. ITO	'01/01/31	SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			APPROVED BY	DATE	3 OF 6		
			M. FUKUSHIMA	'01/01/31			
			MATERIAL NO.	DOCUMENT NO.			
			SEE CHART				
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			A3				

10 9 8 7 6 5 4 3 2 1

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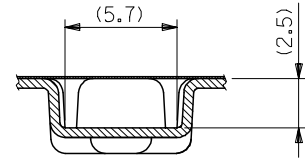
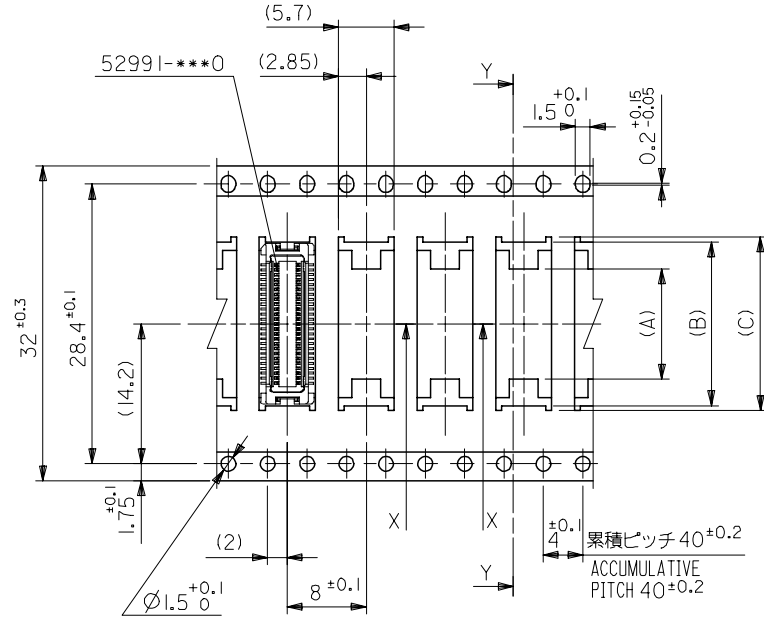
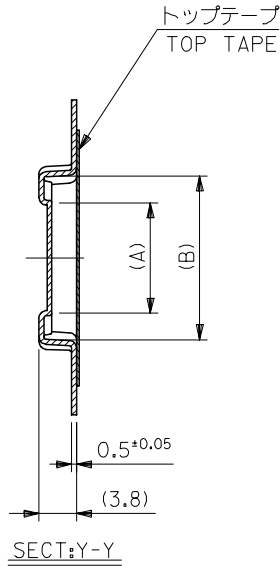
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引き出し方向
PULL OUT DIRECTION



32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

REVISED		EC NO: J2006-0604		2005/08/31		2005/09/01		2005/09/09		52991-***8		MODEL NO.		32		37.4		33.4		17.6		16.6		11.2		52991-0508		50													
DRWN:NAIDA		CHKD:TOYODA		APPR:NUKITA		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION		DRAWN BY		DATE		TITLE		MATERIAL NO.		極数		CARRIER TAPE WIDTH		E		D		(C)		(B)		(A)		MATERIAL NO.		極数	
10 UNDER		± ---		10 OVER		30 UNDER		± ---		30 OVER		± ---		ANGULAR		± --- °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-52991-005		4 OF 6		0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-		MOLEX INCORPORATED		MATERIAL NO.		DOCUMENT NO.		SHEET NO.							
T.YASUI		'96/04/15		T.ITO		'01/01/31		M.FUKUSHIMA		'01/01/31		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		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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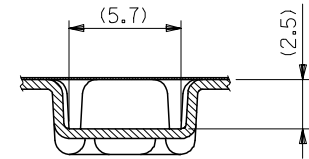
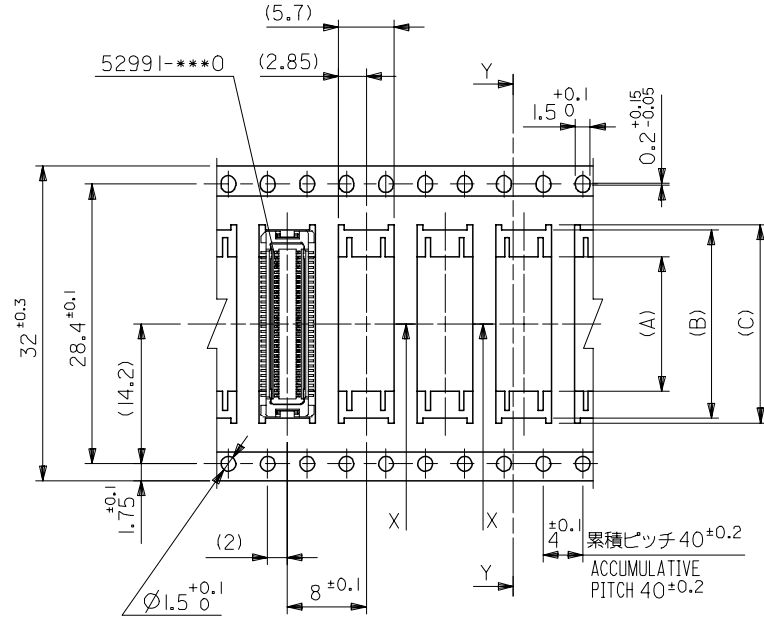
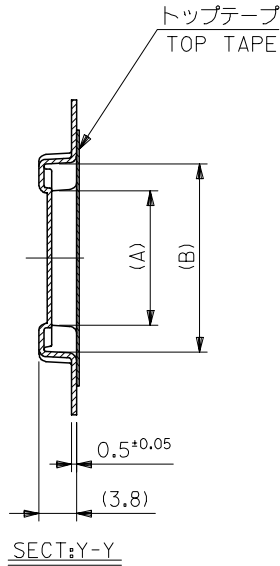
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引き出し方向
PULL OUT DIRECTION



32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

REVISED EC NO: J2006-0604 DRW:NAIDA 2005/08/31 CHKD:TOYODA 2005/09/01 APPR:NUKITA 2005/09/09	52991-***8 MODEL NO.		32	37.4	33.4	20.1	19.1	13.7	52991-0608	60
	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 S. AIHARA '96/04/01		TITLE 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-					
30 OVER ± ---		CHECKED BY DATE T. ITO '01/01/31		MOLEX INCORPORATED						
ANGULAR ± --- °		APPROVED BY DATE M. FUKUSHIMA '01/01/31		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-52991-005		5 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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10 9 8 7 6 5 4 3 2 1

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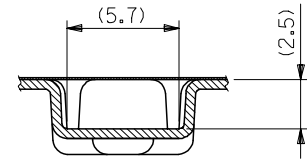
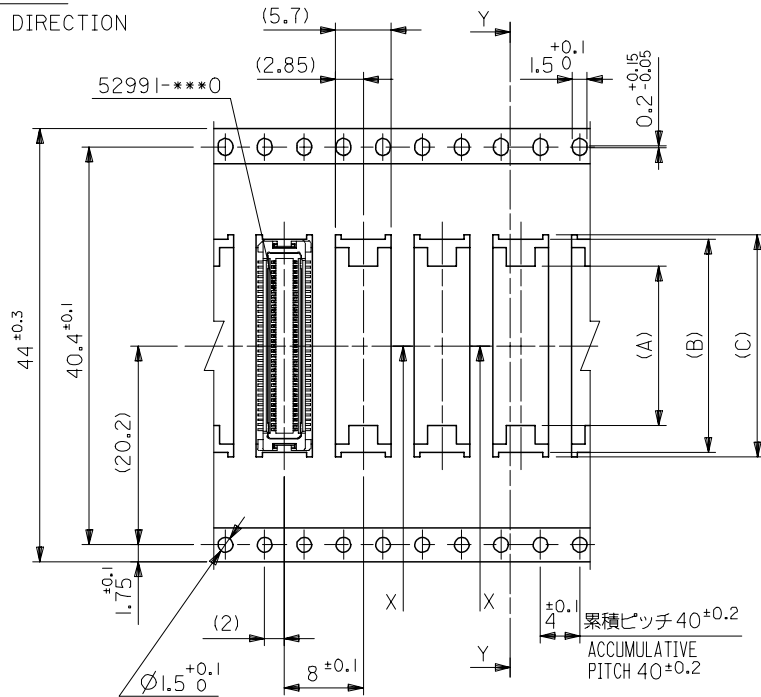
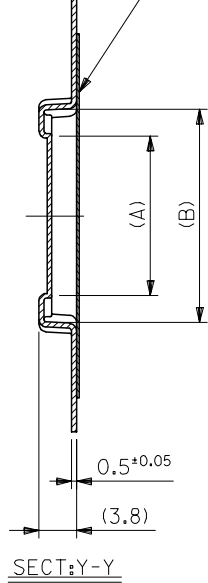
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引き出し方向
PULL OUT DIRECTION

トップテープ
TOP TAPE



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 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	
	10 OVER 30 UNDER ± ---			T. YASUI	'96/04/15	0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-	
30 OVER ± ---			CHECKED BY	DATE	MOLEX INCORPORATED		
ANGULAR ± --- °			T. ITO	'01/01/31	MATERIAL NO.		SHEET NO.
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			APPROVED BY	DATE	DOCUMENT NO.		6 OF 6
			M. FUKUSHIMA	'01/01/31	SEE CHART		SD-52991-005
			SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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