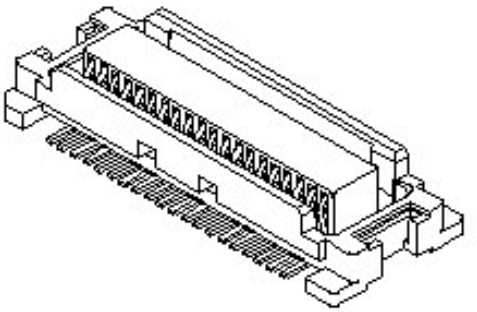
This document was generated on 04/15/2010

**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



*Series image - Reference only*

**Documents:**

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

**China RoHS**

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

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, click here

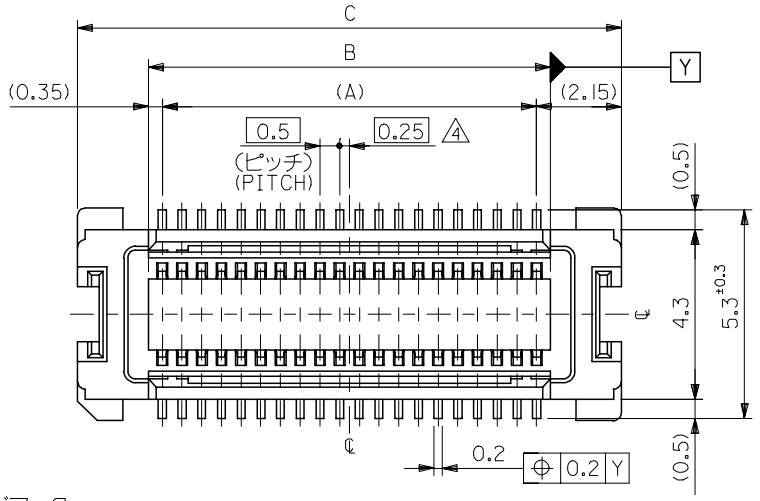
Please visit the Contact Us section for any non-product compliance questions.

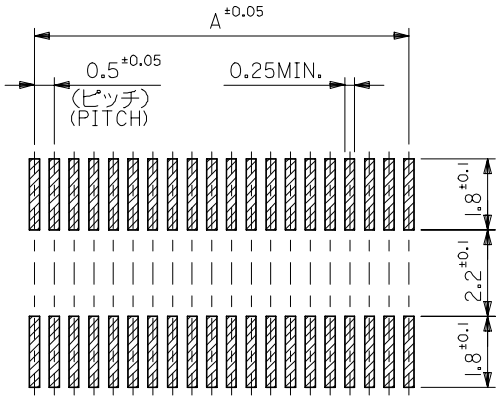
**Search Parts in this Series**
52991Series

**Mates With**
53916 , 53748

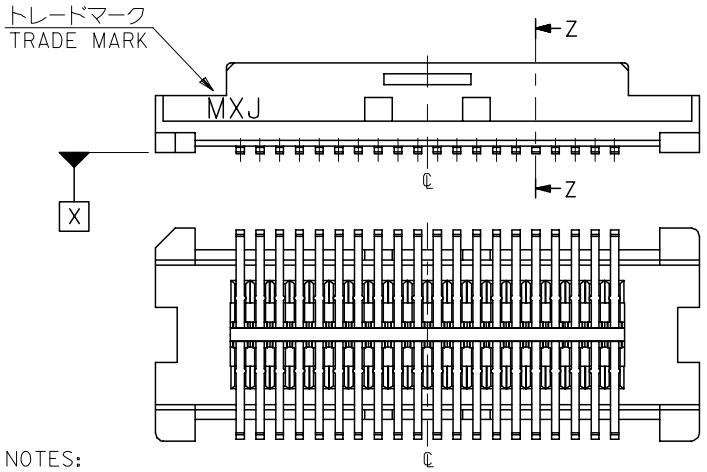
This document was generated on 04/15/2010

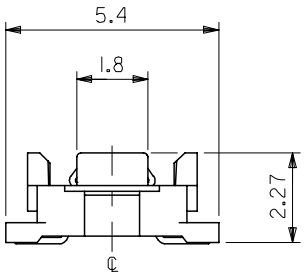
**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

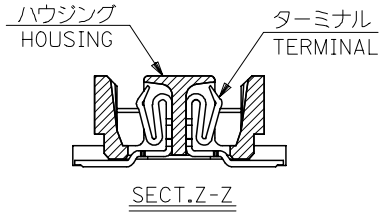



参考基板レイアウト（マウント面）
P.C.BOARD PATTERN
DIMENSION.(REF.)
(MOUNTING AREA)




SECT.Z-Z

| C | B | A | MATERIAL NO. | 極数 CIRCUIT |
|---|---|---|---|---|
| 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 |

MODEL NO. 52991-×××0

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. メッキ仕様 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.
4. (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.

REVISED
EC NO: J2007-0273 2006/07/28
DRWN:TENAGASE 2006/08/03
CHKD:THARUYAMA
APPR:NUKITA 2006/08/07
DESCRIPTION
REV D

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | |
|---|---|
| 10 UNDER | ±0.2 |
| 10 OVER 30 UNDER | ±0.25 |
| 30 OVER | ±0.3 |
| ANGULAR | ±3 ° |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 8:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: S.AIHARA DATE: '96/02/27
CHECKED BY: M.SASAO DATE: '01/12/26
APPROVED BY: M.SASAO DATE: '01/12/26
MATERIAL NO.: SEE CHART

TITLE: 0.5 B/B CONN REC HOUSING ASSY(W/O BOSS, W/O NAIL) -LEAD FREE-

molex MOLEX INCORPORATED

DOCUMENT NO.: SD-52991-004
SHEET NO.: 1 OF 1
SIZE: A3

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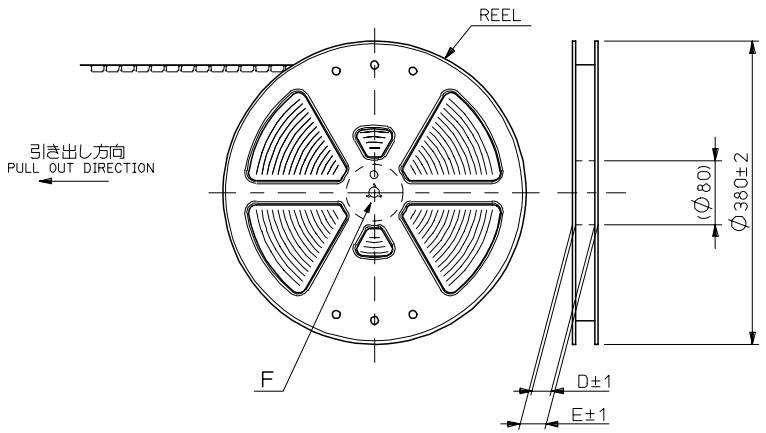
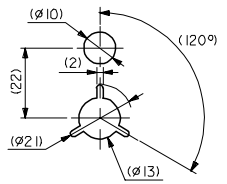
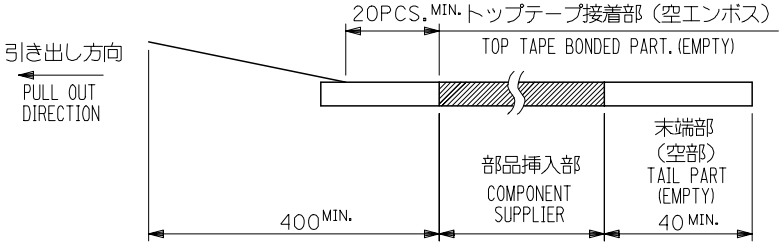


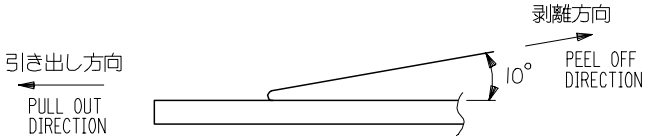

DETAIL F

NOTES

1. 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
2. 梱包数量：3000個／リール
   NUMBER OF CONNECTORS : 3000PCS/REEL
3. リードテープ長さ LEAD TAPE LENGTH




4. 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.




5. 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>

| | |
|---|---|
| MODEL NO. | 52991-***8 |
| DIMENSION STYLE | MM ONLY |
| SCALE | --- |
| DESIGN UNITS | METRIC |
| | THIRD ANGLE PROJECTION |
| DRAWN BY / DATE | T.NIITSU '95/10/17 |
| CHECKED BY / DATE | T.ITO '01/01/31 |
| APPROVED BY / DATE | M.FUKUSHIMA '01/01/31 |
| TITLE | 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE- |
| | MOLEX INCORPORATED |
| MATERIAL NO. | SEE CHART |
| DOCUMENT NO. | SD-52991-005 |
| SHEET NO. | 1 OF 6 |
| SIZE | A3 |

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | |
|---|---|
| 10 UNDER | ±0.2 |
| 10 OVER 30 UNDER | ±0.25 |
| 30 OVER | ±0.3 |
| ANGULAR ±3 ° | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

| REV | DESCRIPTION | |
|---|---|---|
| D | REVISED | 2005/09/09 |
| | CHKD:KTOYODA | 2005/09/01 |
| | DRWN:NAIDA | 2005/08/31 |
| | EC NO: J2006-0604 | |

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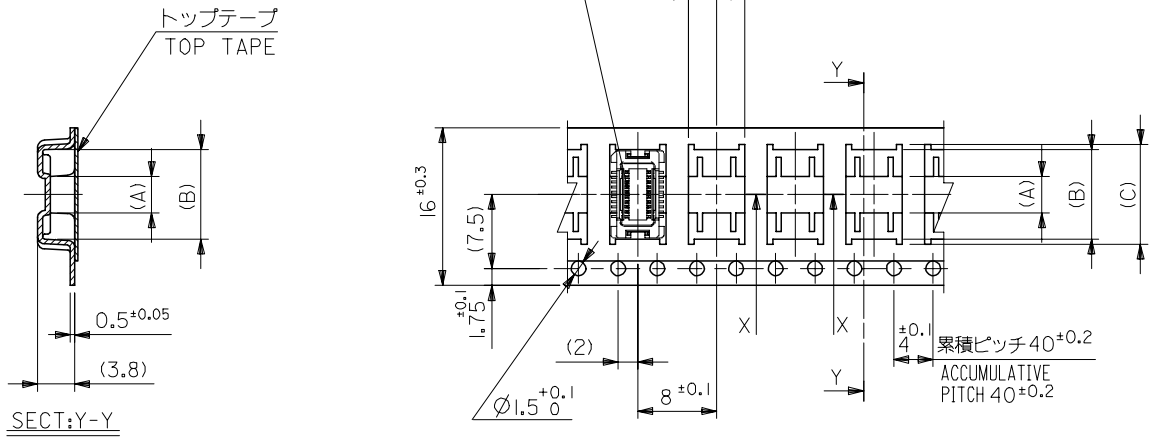
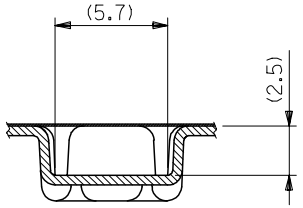
引き出し方向
PULL OUT DIRECTION




SECT:X-X
(SCALE 4:1)

16mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

| 16 | 21.4 | 17.4 | 10.1 | 9.1 | 3.7 | 52991-0208 | 20 |
|---|---|---|---|---|---|---|---|
| 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
EC NO: J2006-0604 2005/08/31
DRWN:NAIDA 2005/09/01
CHKD:KTOYODA 2005/09/09
APPR:NUKITA
DESCRIPTION
REV 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
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: T.NIITSU DATE: '95/10/17
CHECKED BY: T.ITO DATE: '01/01/31
APPROVED BY: M.FUKUSHIMA DATE: '01/01/31
MATERIAL NO.: SEE CHART

TITLE: 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-

molex MOLEX INCORPORATED

DOCUMENT NO.: SD-52991-005
SHEET NO.: 2 OF 6

SIZE A3

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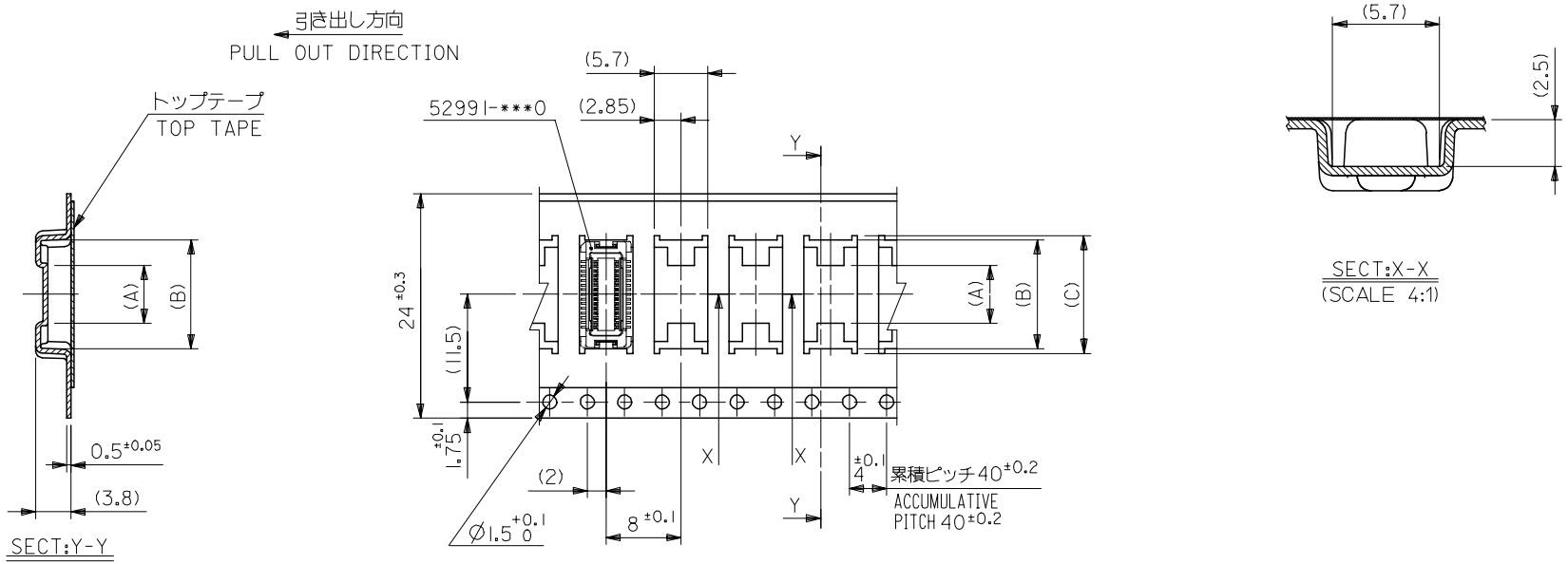


24mm幅キャリアテープ

24mm WIDTH CARRIER TAPE

| キャリアテープ幅 CARRIER TAPE WIDTH | E | D | (C) | (B) | (A) | MATERIAL NO. | 極数 CKT. |
|---|---|---|---|---|---|---|---|
| 24 | 29.4 | 25.4 | 15.1 | 14.1 | 7.4 | 52991-0408 | 40 |
| | | | 12.6 | 11.6 | 4.9 | 52991-0308 | 30 |

52991-***8 MODEL NO.

REVISED
EC NO: J2006-0604 2005/08/31
DRWN:NAIDA 2005/09/01
CHKD:KTOYODA 2005/09/09
APPR:NUKITA
DESCRIPTION
REV 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
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: S.AIHARA DATE: '96/04/01
CHECKED BY: T.ITO DATE: '01/01/31
APPROVED BY: M.FUKUSHIMA DATE: '01/01/31

TITLE: 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-52991-005
SHEET NO.: 3 OF 6

SIZE A3

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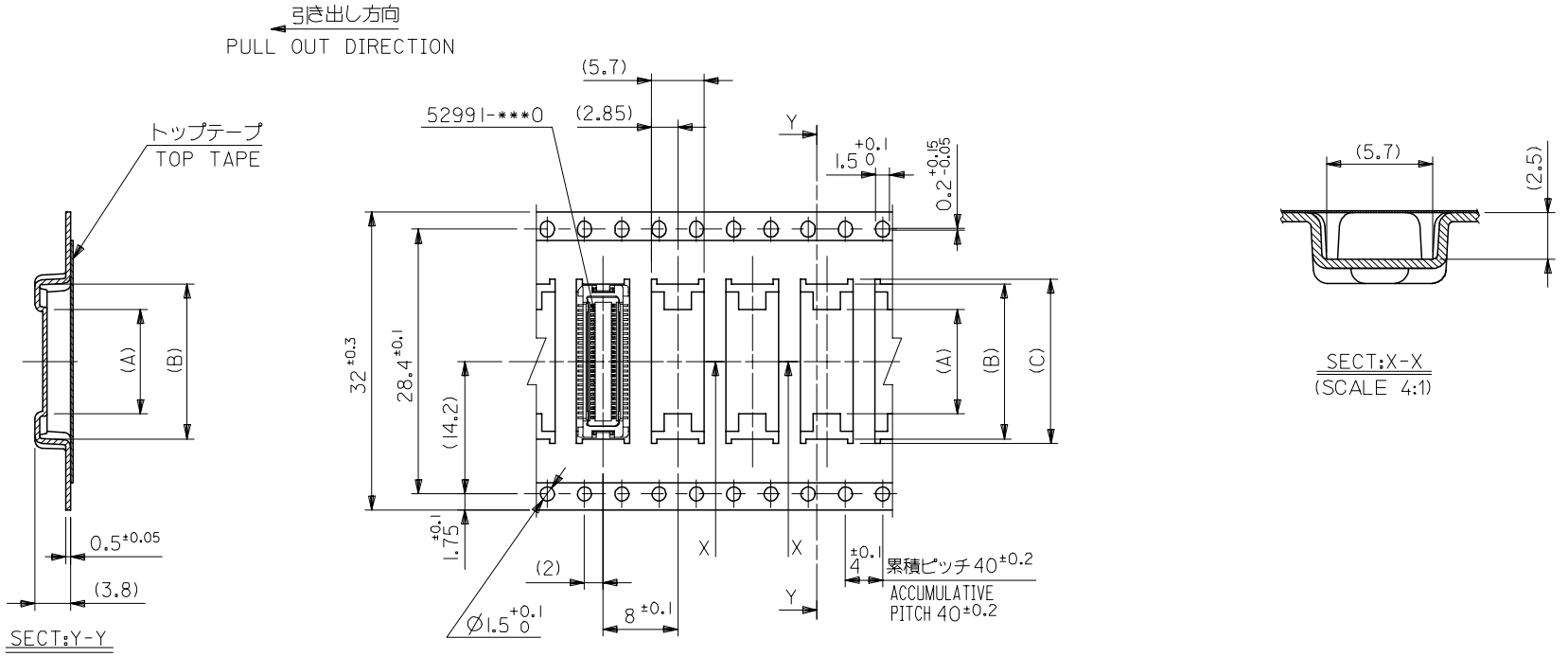


32mm幅キャリアテープ

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. |

52991-***8 MODEL NO.

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

| REV | DESCRIPTION |
|---|---|
| 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 | SCALE: --- | DESIGN UNITS: METRIC | THIRD ANGLE PROJECTION

DRAWN BY: T.YASUI DATE: '96/04/15
CHECKED BY: T.ITO DATE: '01/01/31
APPROVED BY: M.FUKUSHIMA DATE: '01/01/31

TITLE: 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-52991-005
SHEET NO.: 4 OF 6

SIZE A3

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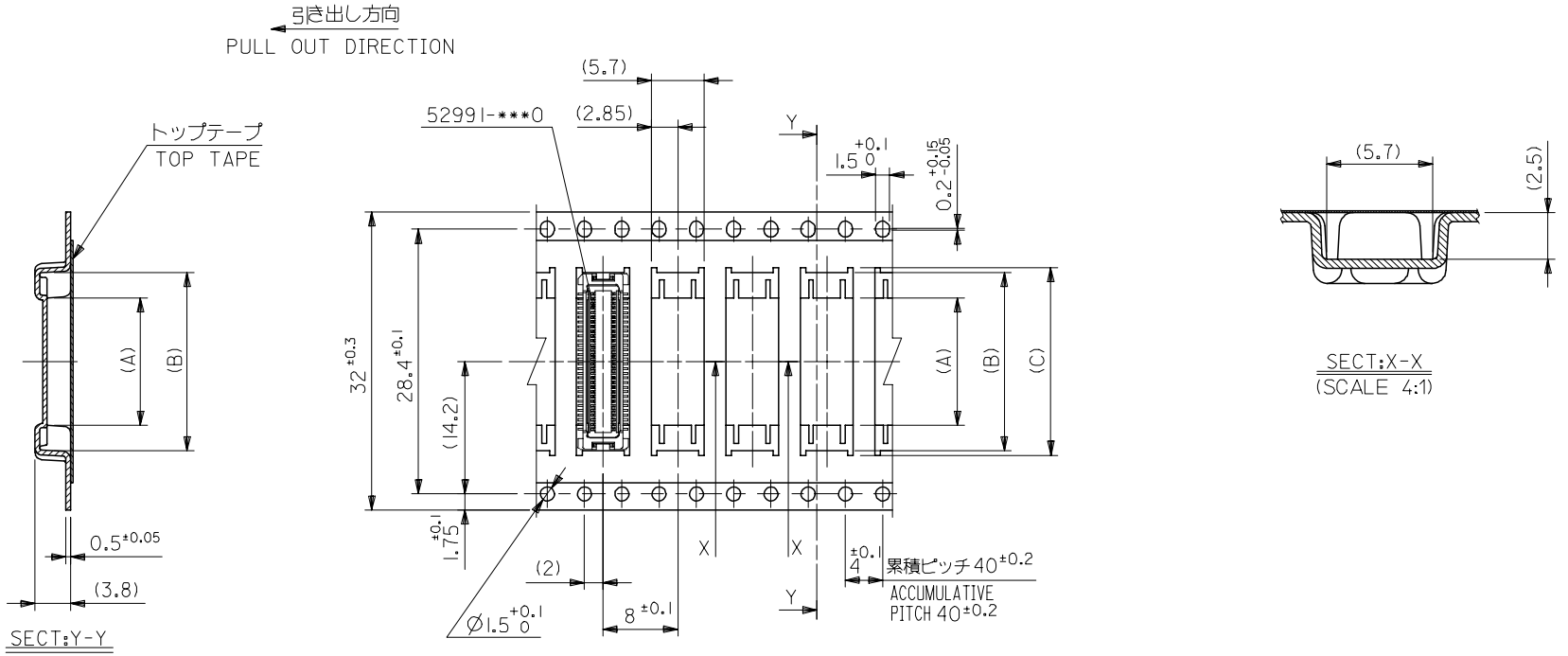


32mm幅キャリアテープ

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.

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | |
|---|---|
| 10 UNDER | ±--- |
| 10 OVER 30 UNDER | ±--- |
| 30 OVER | ±--- |
| ANGULAR | ±--- ° |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DIMENSION STYLE: MM ONLY
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: S.AIHARA DATE: '96/04/01
CHECKED BY: T.ITO DATE: '01/01/31
APPROVED BY: M.FUKUSHIMA DATE: '01/01/31

TITLE: 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-52991-005
SHEET NO.: 5 OF 6

SIZE A3

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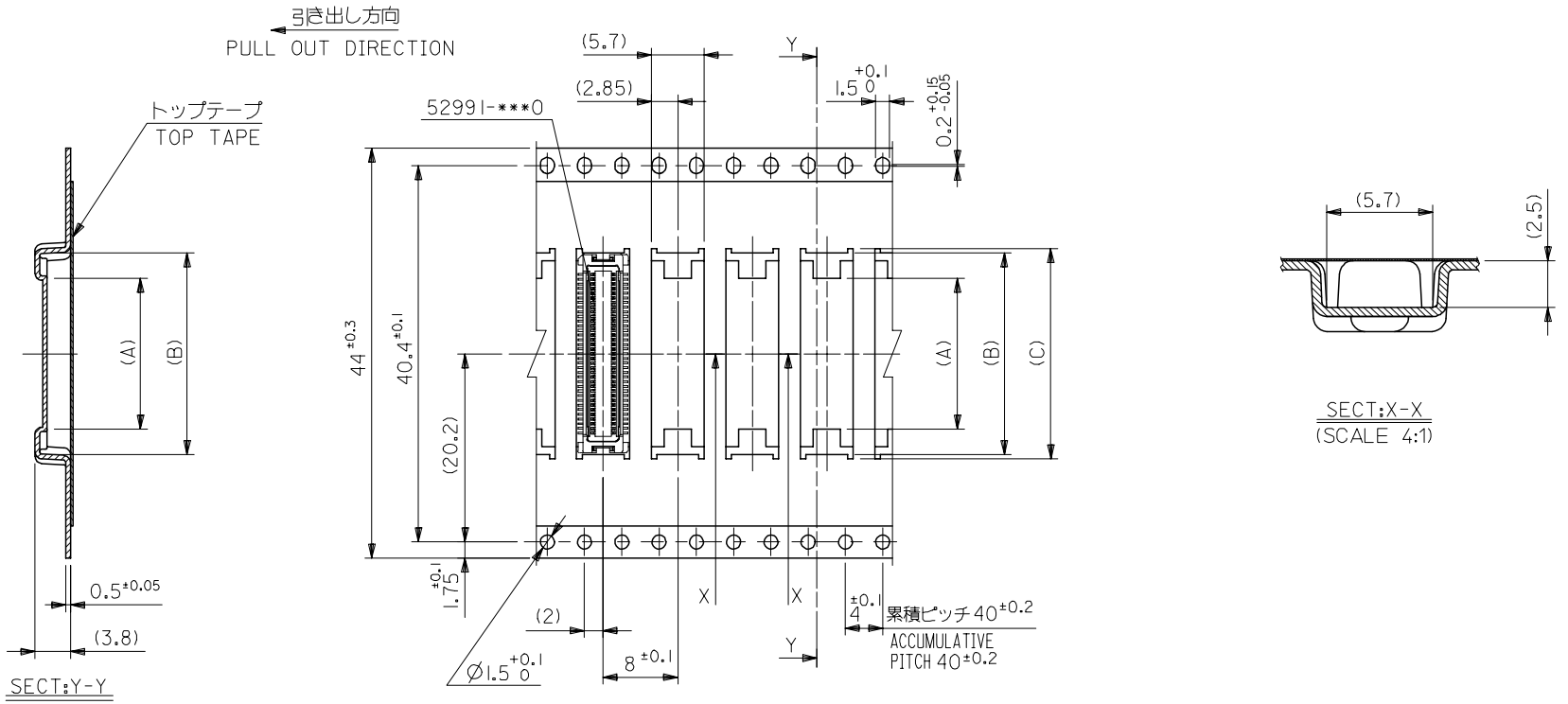


44mm幅キャリアテープ

44mm WIDTH CARRIER TAPE

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

52991-***8 MODEL NO.

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

REV D

DESCRIPTION

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
CHECKED BY: T.ITO DATE: '01/01/31
APPROVED BY: M.FUKUSHIMA DATE: '01/01/31
MATERIAL NO.: SEE CHART

TITLE: 0.5 B/B CONN REC HSG ASSY EMBSTP PKG -LEAD FREE-

molex MOLEX INCORPORATED

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

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

**Данный компонент на территории Российской Федерации**

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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