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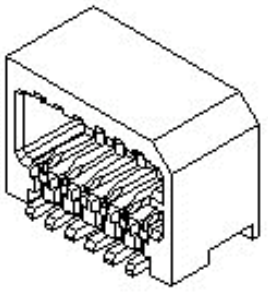
**Part Number:** 0533093670

**Status:** Active

**Description:** 0.80mm (.031") Pitch Board-to-Board Header, Surface Mount, Dual Row, Right Angle, Lead-free, 36 Circuits

**Documents:**

3D Model
Drawing (PDF)
Product Specification PS-52465-014 (PDF)
Product Specification PS-52588-031 (PDF)
RoHS Certificate of Compliance (PDF)



*Series image - Reference only*

| | |
|---|---|
| **General** | |
| Product Family | PCB Headers |
| Series | 53309 |
| Application | Board-to-Board |
| Product Name | N/A |
| **Physical** | |
| Breakaway | No |
| Circuits (Loaded) | 36 |
| Circuits (maximum) | 36 |
| Color - Resin | Natural |
| Durability (mating cycles max) | 30 |
| First Mate / Last Break | No |
| Glow-Wire Compliant | No |
| Guide to Mating Part | No |
| Keying to Mating Part | None |
| Lock to Mating Part | Yes |
| Mated Height (in) | 0.222 In |
| Mated Height (mm) | 5.65 mm |
| Material - Metal | Phosphor Bronze |
| Material - Plating Mating | Tin |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| Number of Rows | 2 |
| Orientation | Right Angle |
| PC Tail Length (in) | 0.016 In |
| PC Tail Length (in) | 0.020 In |
| PC Tail Length (mm) | 0.40 mm |
| PC Tail Length (mm) | 0.50 mm |
| PCB Locator | No |
| PCB Retention | None |
| Packaging Type | Embossed Tape on Reel |
| Pitch - Mating Interface (in) | 0.031 In |
| Pitch - Mating Interface (mm) | 0.80 mm |
| Plating min: Mating (µin) | 40 |
| Plating min: Mating (µm) | 1 |
| Plating min: Termination (µin) | 40 |
| Plating min: Termination (µm) | 1 |
| Polarized to PCB | No |
| Shrouded | Fully |
| Stackable | No |
| Temperature Range - Operating | -20°C to +105°C |
| Termination Interface: Style | Surface Mount |
| **Electrical** | |
| Current - Maximum | 0.5A |
| Voltage - Maximum | 50V |

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

**China RoHS**

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

Email productcompliance@molex.com
Please visit the Contact Us section for any non-product compliance questions.

**Search Parts in this Series**
53309 Series

**Mates With**
52465 Board-to-Board Receptacle

**Material Info**

**Reference - Drawing Numbers**

| | |
|---|---|
| Product Specification | PS-52465-014 |
| Product Specification | PS-52588-031 |
| Product Specification | RPS-52465-042 |
| Product Specification | RPS-52465-047 |
| Product Specification | RPS-52465-049 |
| Product Specification | RPS-52588-040 |
| Product Specification | RPS-52588-041 |
| Sales Drawing | SD-53309-011 |
| Sales Drawing | SD-53309-012 |

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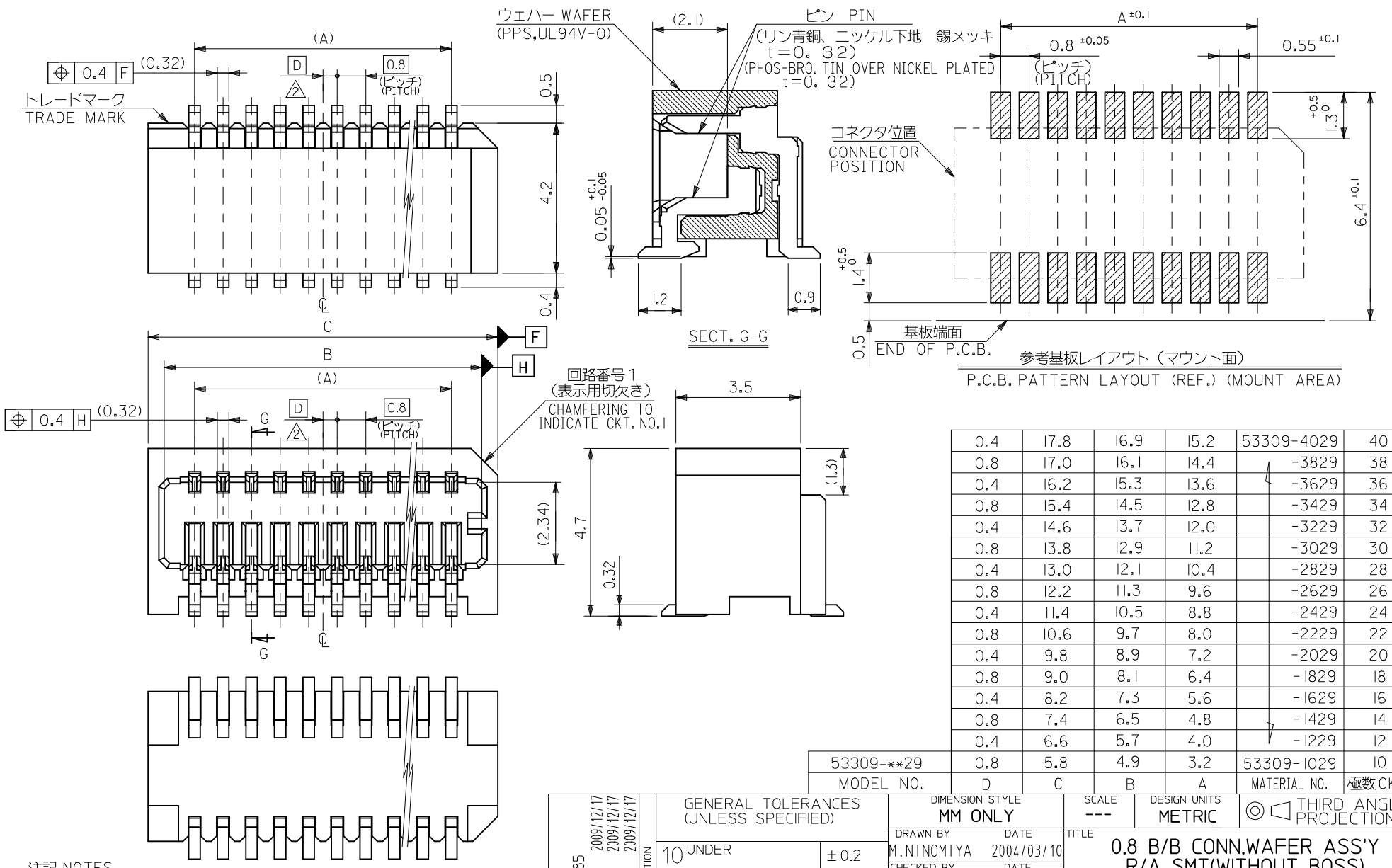


| MODEL NO. | D | C | B | A | MATERIAL NO. | 極数CKT. |
|---|---|---|---|---|---|---|
| 53309-**29 | 0.8 | 5.8 | 4.9 | 3.2 | 53309-1029 | 10 |
| | 0.4 | 6.6 | 5.7 | 4.0 | -1229 | 12 |
| | 0.8 | 7.4 | 6.5 | 4.8 | -1429 | 14 |
| | 0.4 | 8.2 | 7.3 | 5.6 | -1629 | 16 |
| | 0.8 | 9.0 | 8.1 | 6.4 | -1829 | 18 |
| | 0.4 | 9.8 | 8.9 | 7.2 | -2029 | 20 |
| | 0.8 | 10.6 | 9.7 | 8.0 | -2229 | 22 |
| | 0.4 | 11.4 | 10.5 | 8.8 | -2429 | 24 |
| | 0.8 | 12.2 | 11.3 | 9.6 | -2629 | 26 |
| | 0.4 | 13.0 | 12.1 | 10.4 | -2829 | 28 |
| | 0.8 | 13.8 | 12.9 | 11.2 | -3029 | 30 |
| | 0.4 | 14.6 | 13.7 | 12.0 | -3229 | 32 |
| | 0.8 | 15.4 | 14.5 | 12.8 | -3429 | 34 |
| | 0.4 | 16.2 | 15.3 | 13.6 | -3629 | 36 |
| | 0.8 | 17.0 | 16.1 | 14.4 | -3829 | 38 |
| | 0.4 | 17.8 | 16.9 | 15.2 | 53309-4029 | 40 |

注記 NOTES

1. 嵌合相手：52465,52588シリーズ
   MATE WITH : 52465,52588 SERIES
2. ウェハーの ℄ から隣接するピンの ℄ 迄の位置を示す。
   SHOW POSITION FROM ℄ OF WAFER TO ℄ OF ADJACENT PINS.
3. 本製品は 53309-**27 の鉛フリー品である。
   THIS PRODUCT IS LEAD FREE OF 53309-**27

REVISED
EC NO: J2010-1285 2009/12/17
DRWN:YONOO2 2009/12/17
CH'KD:SMARUYAMA 2009/12/17
APPR:SMARUYAMA 2009/12/17
DESCRIPTION
REV B

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 | --- |
| DESIGN UNITS | METRIC |
| | THIRD ANGLE PROJECTION |
| DRAWN BY / DATE | M.NINOMIYA 2004/03/10 |
| CHECKED BY / DATE | K.TOJO 2004/03/10 |
| APPROVED BY / DATE | M.SASAO 2004/03/10 |
| MATERIAL NO. | SEE TABLE |
| TITLE | 0.8 B/B CONN.WAFER ASS'Y R/A SMT(WITHOUT BOSS) |
| | MOLEX INCORPORATED |
| DOCUMENT NO. | SD-53309-011 |
| SHEET NO. | 1 OF 2 |
| SIZE | A3 |

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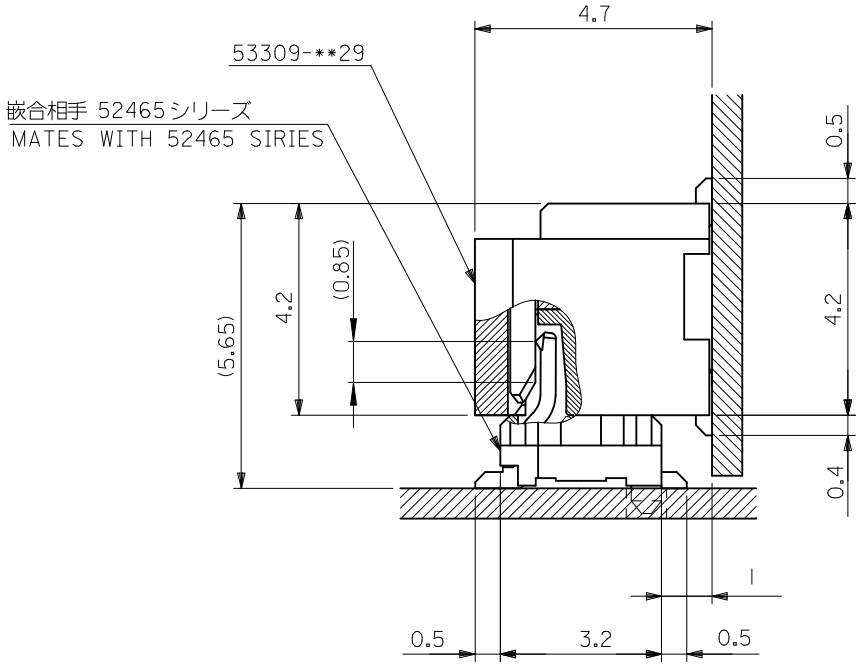
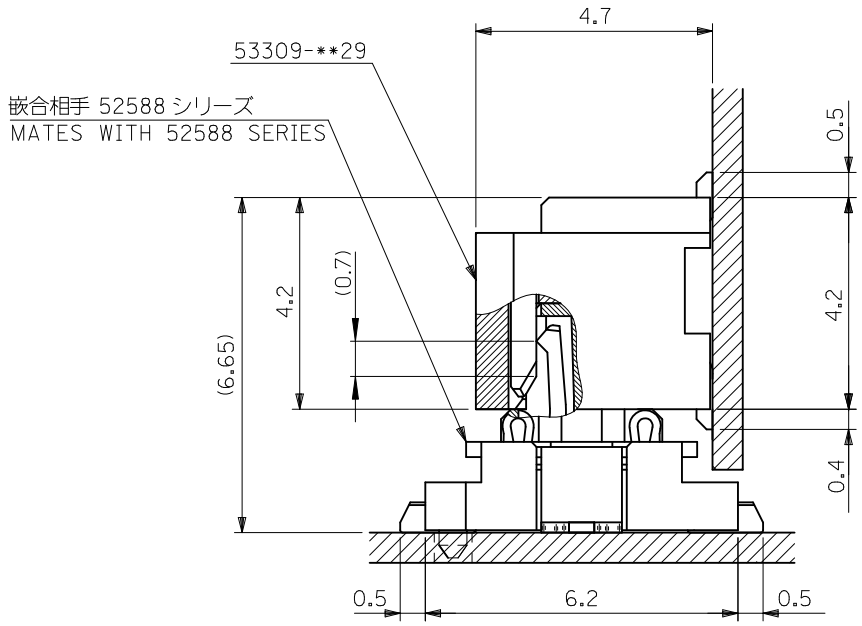



嵌合状態図（参考）
MATED DRAWING(REF.)




嵌合状態図（参考）
MATED DRAWING(REF.)

REVISED
EC NO: J2010-1285 2009/12/17
DRWN:YONOO2 2009/12/17
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DESCRIPTION
REV
B

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 | --- |
| DESIGN UNITS | METRIC |
| | THIRD ANGLE PROJECTION |
| DRAWN BY | M.NINOMIYA |
| DATE | 2004/03/10 |
| CHECKED BY | K.TOJO |
| DATE | 2004/03/10 |
| APPROVED BY | M.SASAO |
| DATE | 2004/03/10 |
| MATERIAL NO. | SEE SHEET 1 |
| TITLE | 0.8 B/B CONN.WAFER ASS'Y R/A SMT(WITHOUT BOSS) |
| | MOLEX INCORPORATED |
| DOCUMENT NO. | SD-53309-011 |
| SHEET NO. | 2 OF 2 |
| SIZE | A3 |

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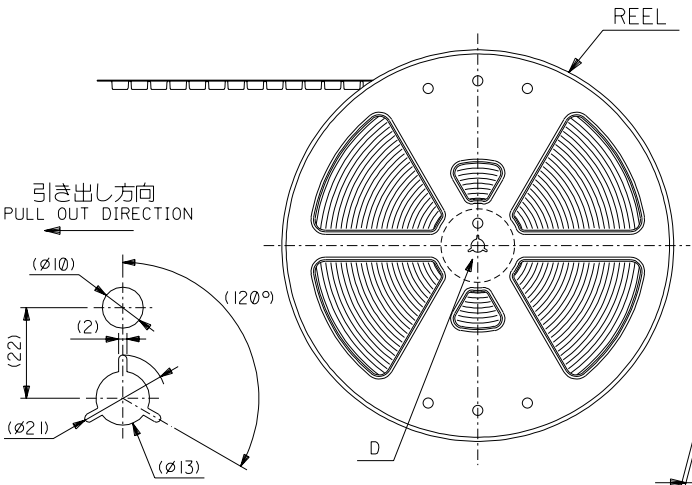
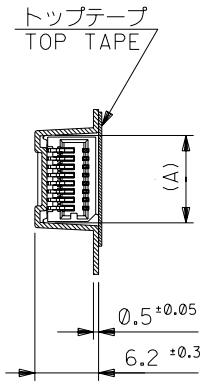
DWG. NO. SD-53309-012

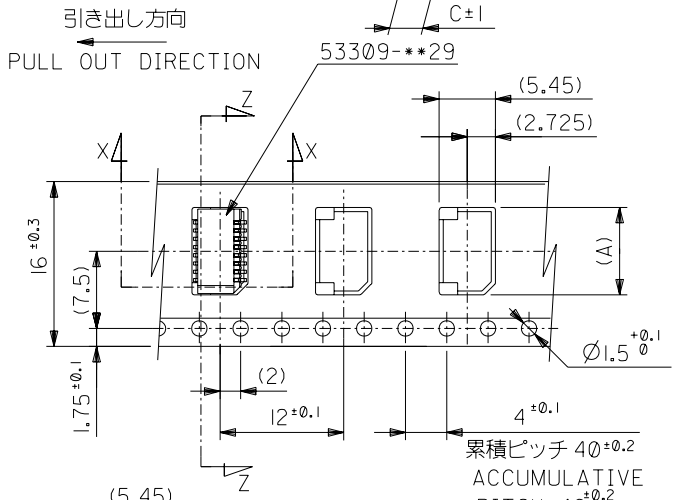
:MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING

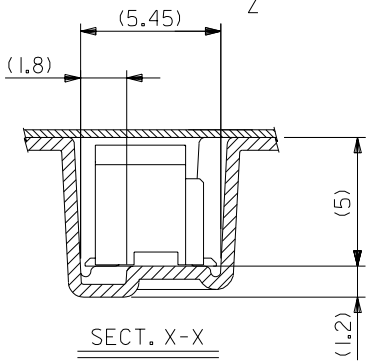



DETAIL D




SECT. Z-Z




SECT. X-X

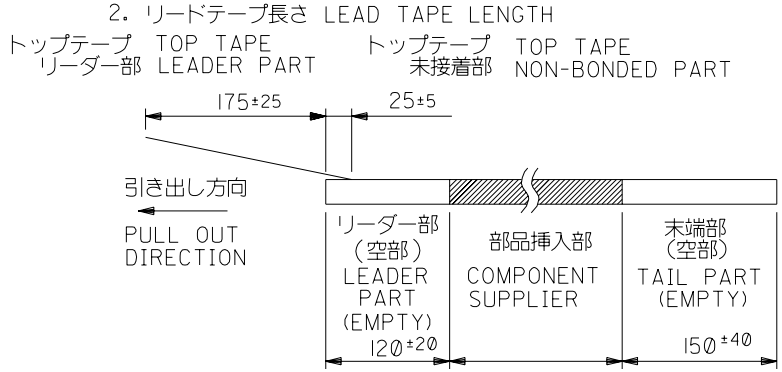
16mm幅キャリアテープ

16mm WIDTH CARRIER TAPE

注記 NOTES

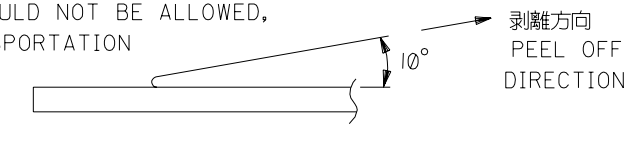
1. 梱包数量：1000個／リール NUMBER OF CONNECTORS:1000PCS/REEL

2. リードテープ長さ LEAD TAPE LENGTH




3. トップテープの剥離強度：（剥離方向は下図参照）
0.1N～1.3N {10gf～130gf} 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事。）

PEELING OFF FORCE OF TOP TAPE
0.1N～1.3N{10gf～130gf} (PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)
THIS REQUIREMENT SHOULD BE APPLITED AT SHIPMENT
PEEL OFF SHOULD NOT BE ALLOWED,
DURING TRANSPORTATION




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

5. 本製品は 53309-**91 の鉛フリー品である。
THIS PRODUCT IS LEAD FREE OF 53309-**91.

| キャリアテープ幅 CARRIER TAPE WIDTH | C | B | (A) | MATERIAL NO. | 極数 CIRCUIT |
|---|---|---|---|---|---|
| 16 | 21.4 | 17.4 | 9.3 | 53309-1870 | 18 |
| | | | 8.5 | 53309-1670 | 16 |
| | | | 7.7 | 53309-1470 | 14 |
| | | | 6.9 | 53309-1270 | 12 |
| | | | 6.1 | 53309-1070 | 10 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 53309-**70 | | | | | | | |
| MODEL NO. | | | | | | | |
| 角度 ANGLE | ±3° | | | | | | |
| 30 以上 OVER | ±0.3 | | | | | | |
| 10 以上 OVER 30 未満 UNDER | ±0.25 | | | | | | |
| 10 未満 UNDER | ±0.2 | 0 | 新規作成 RELEASED (J2004-2995) | M.N | K.T | 04/03/10 | |
| 一般公差 GENERAL TOLERANCES | | 記号 LTR | 変更内容 REVISION RECORD | DR. | CHK. | 日付 DATE | |

| | |
|---|---|
| 材料 MATERIAL | 注記参照 SEE NOTES |
| 仕上げ FINISH | // |
| 適用電線範囲 WIRE RANGE | // |
| 被覆外径 INS. RANGE | // |
| DRAWN BY '04/03/10 | M.NINOMIYA |
| CHK'D BY '04/03/10 | K.TOJO |
| APP'D BY '04/03/10 | M.SASAO |
| 尺度 SCALE | // |

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REVISE ONLY ON CAD SYSTEM

TITLE 名称
0.8 BtB Conn Wafer Assy
RA SMT Without Boss
Embstp Pkg
-LEAD FREE-

DWG. NO. (SHEET 1 OF 2) SD-53309-012 REV 0

SD-53309-012.S01

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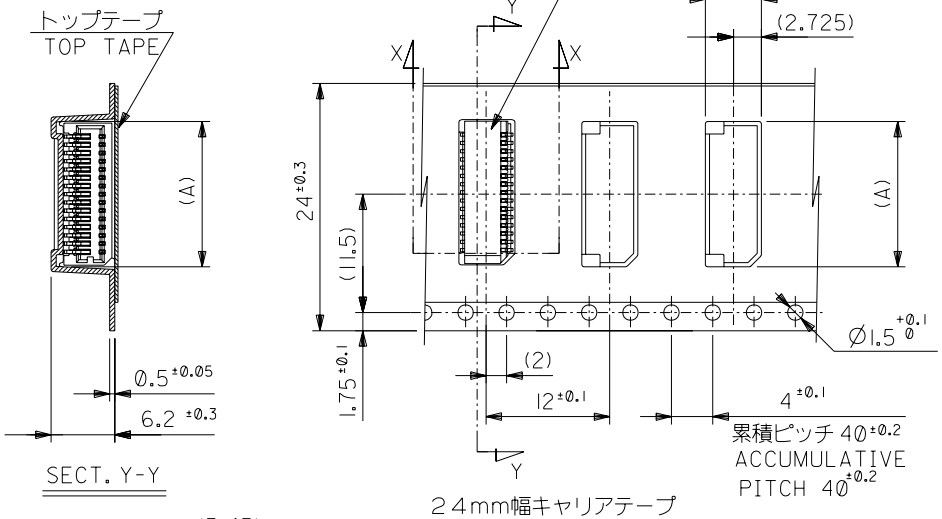
EN-01C(032)MXJ-32

DWG. NO. SD-53309-012

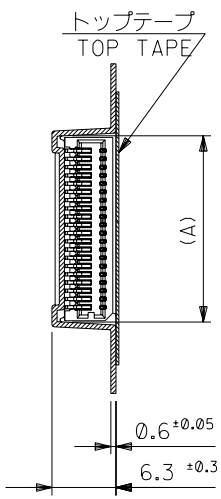
:MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING

引き出し方向
PULL OUT DIRECTION

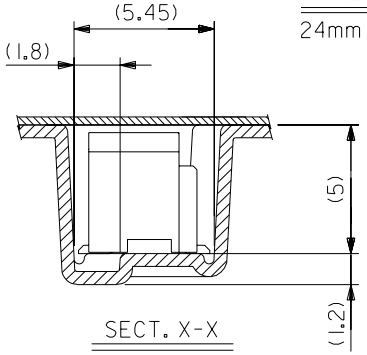



SECT. Y-Y

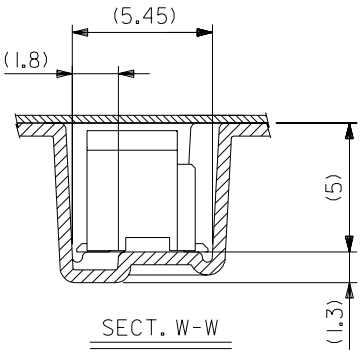
24mm幅キャリアテープ
24mm WIDTH CARRIER TAPE




SECT. Z-Z

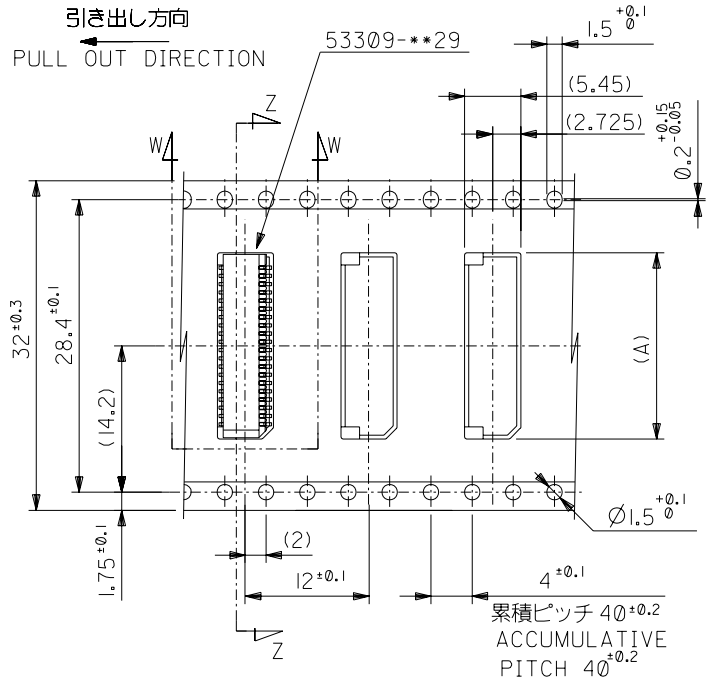



SECT. X-X




SECT. W-W

引き出し方向
PULL OUT DIRECTION




32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

| キャリアテープ幅 CARRIER TAPE WIDTH | C | B | (A) | MATERIAL NO. | 極数 CIRCUIT |
|---|---|---|---|---|---|
| 24 | 29.4 | 25.4 | 16.5 | 53309-3670 | 36 |
| | | | 15.7 | 53309-3470 | 34 |
| | | | 14.9 | 53309-3270 | 32 |
| | | | 14.1 | 53309-3070 | 30 |
| | | | 13.3 | 53309-2870 | 28 |
| | | | 12.5 | 53309-2670 | 26 |
| | | | 11.7 | 53309-2470 | 24 |
| | | | 10.9 | 53309-2270 | 22 |
| | | | 10.1 | 53309-2070 | 20 |
| 32 | 37.4 | 33.4 | 18.1 | 53309-4070 | 40 |
| | | | 17.3 | 53309-3870 | 38 |

| 53309-**70 MODEL NO. | | | | | | |
|---|---|---|---|---|---|---|
| 角度 ANGLE | ±3° | | | | | |
| 30以上 OVER | ±0.3 | | | | | |
| 10以上 OVER 30未満 UNDER | ±0.25 | | | | | |
| 10未満 UNDER | ±0.2 | Ø | 新規作成 RELEASED (J2004-2995) | M.N | '04/03/10 | |
| 一般公差 GENERAL TOLERANCES | | 記号 LTR | 変更内容 REVISION RECORD | DR. K.T | 日付 DATE | |

| | |
|---|---|
| 材料 MATERIAL | SHEET 1 OF 2参照 REFER TO SHEET 1 OF 2 |
| 仕上げ FINISH | // |
| 適用電線範囲 WIRE RANGE | // |
| 被覆外径 INS. RANGE | // |
| DRAWN BY '04/03/10 | M.NINOMIYA |
| CHK'D BY '04/03/10 | K.TOJO |
| APP'D BY '04/03/10 | M.SASAO |
| 尺度 SCALE | // |

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REVISE ONLY ON CAD SYSTEM

TITLE 名称
0.8 BtB Wafer Assy
RA SMT Without Boss
Embstp Pkg
-LEAD FREE-

DWG. NO.(SHEET 2 OF 2) SD-53309-012 REV 0

SD-53309-012.S02 A

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