

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION

**Part Number:** [0533071871](#)  
**Status:** **Active**  
**Description:** 0.80mm (.031") Pitch Header, Surface Mount, Dual Row, Vertical Stacking, 4.50 and 5.50mm (.177 and .217") Stacking Heights, Lead-free, 18 Circuits

**Documents:**  
[3D Model](#)  
[Drawing \(PDF\)](#)  
[Product Specification PS-52465-015 \(PDF\)](#)  
[Product Specification PS-52588-031 \(PDF\)](#)  
[Product Specification PS-52588-032 \(PDF\)](#)  
[RoHS Certificate of Compliance \(PDF\)](#)

**General**

|                |                       |
|----------------|-----------------------|
| Product Family | PCB Headers           |
| Series         | <a href="#">53307</a> |
| Application    | Board-to-Board        |
| Product Name   | N/A                   |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Breakaway                      | No                             |
| Circuits (Loaded)              | 18                             |
| Circuits (maximum)             | 18                             |
| Color - Resin                  | Natural                        |
| First Mate / Last Break        | No                             |
| Glow-Wire Compliant            | No                             |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | None                           |
| Lock to Mating Part            | None                           |
| Mated Height (in)              | 0.177 In, 0.217 In             |
| Mated Height (mm)              | 4.50 mm, 5.50 mm               |
| Material - Metal               | Phosphor Bronze                |
| Material - Plating Mating      | Tin                            |
| Material - Plating Termination | Tin                            |
| Material - Resin               | High Temperature Thermoplastic |
| Number of Rows                 | 2                              |
| Orientation                    | Vertical                       |
| 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)      | 120                            |
| Plating min: Mating (µm)       | 3                              |
| Plating min: Termination (µin) | 120                            |
| Plating min: Termination (µm)  | 3                              |
| Polarized to PCB               | No                             |
| Shrouded                       | Fully                          |
| Stackable                      | No                             |
| Temperature Range - Operating  | -20°C to +105°C                |
| Termination Interface: Style   | Surface Mount                  |

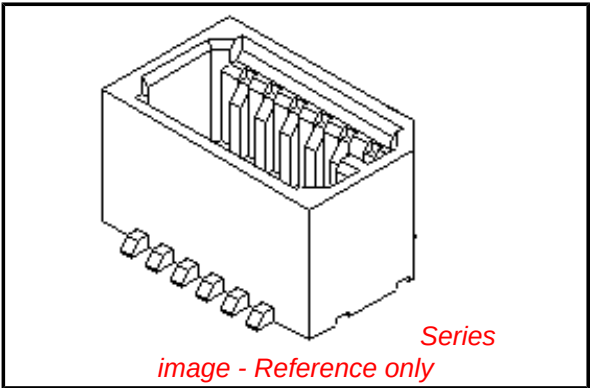
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

|                         |               |
|-------------------------|---------------|
| Packaging Specification | SPK-53307-001 |
|-------------------------|---------------|



**EU RoHS**

**ELV and RoHS  
Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**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.

**China RoHS**



**Search Parts in this Series**

[53307Series](#)

**Mates With**

Board-to-Board Receptacle [52465](#) , [52588](#)

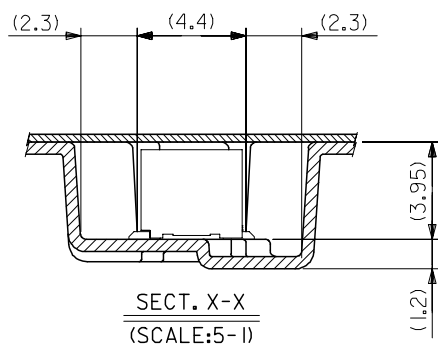
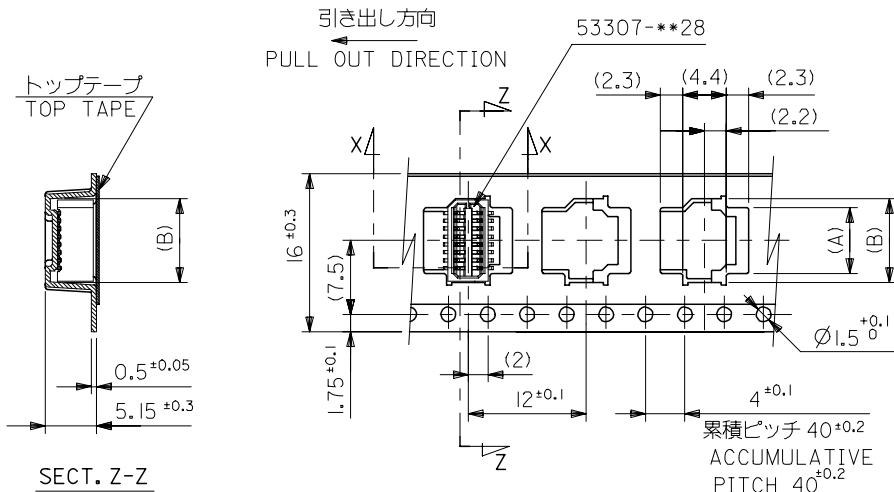
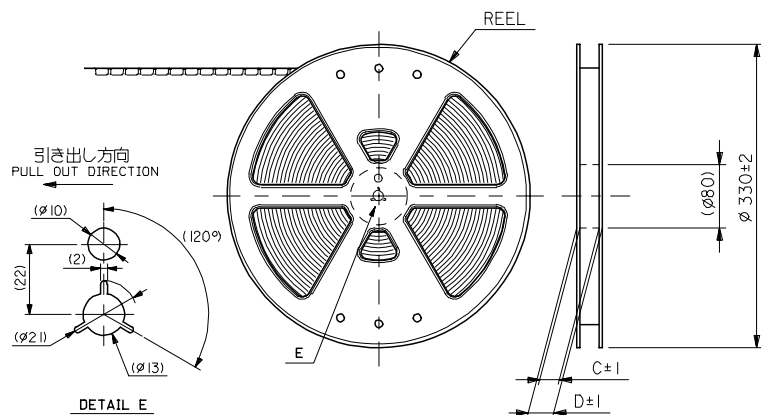
Product Specification

PS-52465-015, PS-52588-031, PS-52588-032,  
RPS-52465-042, RPS-52465-052, RPS-52588-039,  
RPS-52588-040, RPS-52588-041  
SD-53307-014, SD-53307-015

Sales Drawing

This document was generated on 06/07/2010

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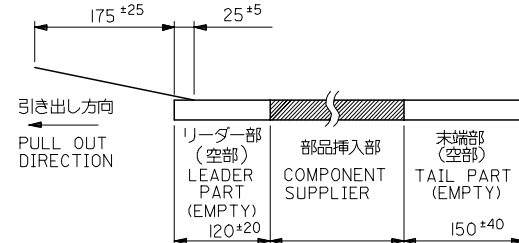


# 注記 NOTES

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

トップテープ リーダー部 TOP TAPE LEADER PART  
トップテープ 未接着部 TOP TAPE NON-BONDED PART



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

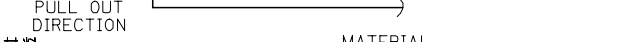
0.1N~1.3N {10gf~130gf}

(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)

THIS REQUIREMENT SHOULD BE APPLIED 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)

<リサイクル材を含む>

MATERIAL

CARRIER

TOP

TAPE:POLYPROPYLENE

TAPE:PET,PE,PEF

REEL:POLYSTYRENE(PS)

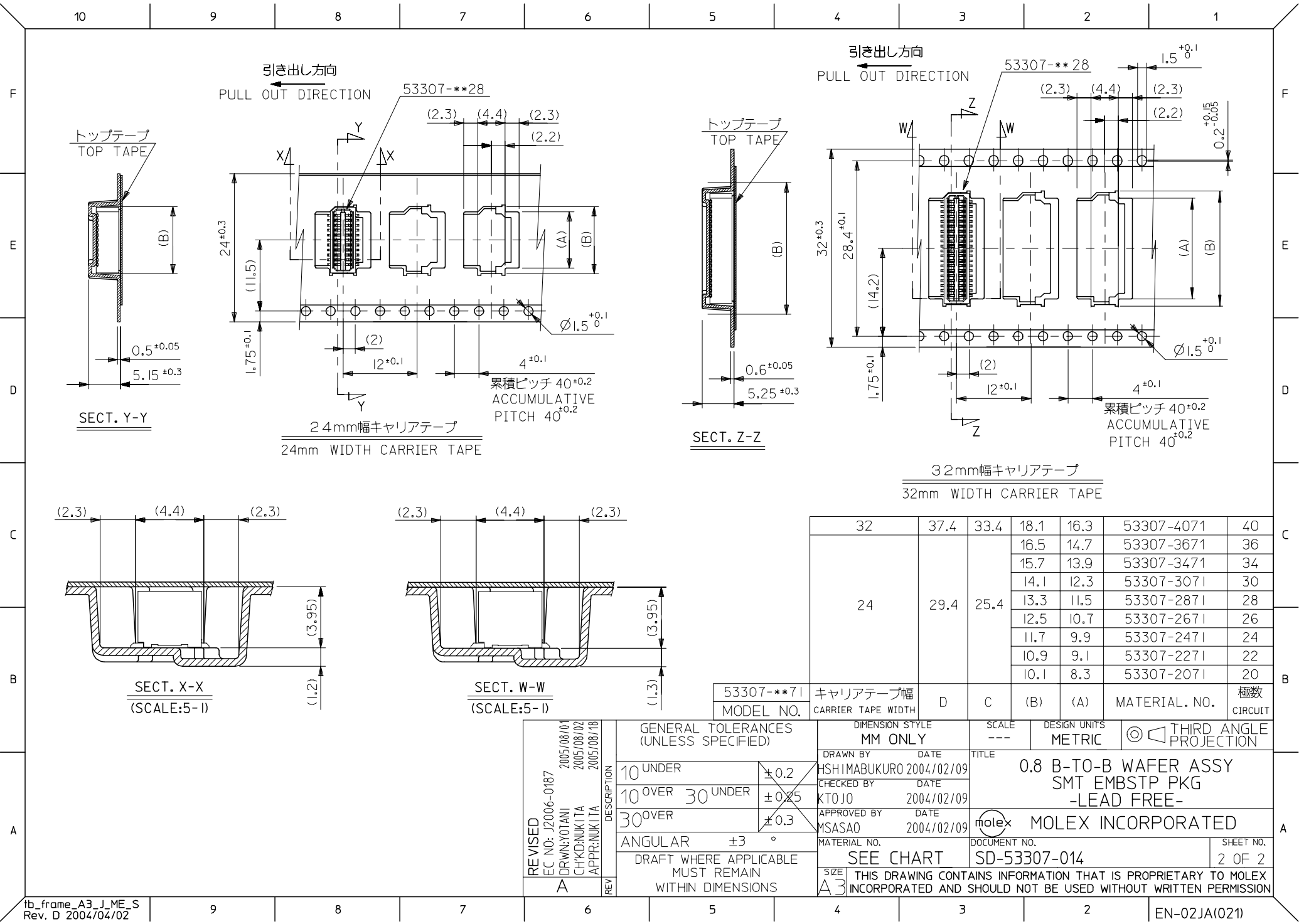
<RECYCLE MATERIAL

CONTAINED>

5. 本製品は 53307-\*\*\*91 の鉛フリー品である。

THIS PRODUCT IS LEAD FREE OF 53307-\*\*\*91

|                           |                                                  |                                |  |                                                                                                                                  |                                                                 |     |                        |               |                           |               |
|---------------------------|--------------------------------------------------|--------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----|------------------------|---------------|---------------------------|---------------|
| 53307-***71<br>MODEL.NO.  |                                                  | キャリアテープ幅<br>CARRIER TAPE WIDTH |  | D                                                                                                                                | C                                                               | (B) | (A)                    | MATERIAL. NO. |                           | 極数<br>CIRCUIT |
| TOLERANCES<br>(SPECIFIED) |                                                  | DIMENSION STYLE<br>MM ONLY     |  |                                                                                                                                  | SCALE<br>---                                                    |     | DESIGN UNITS<br>METRIC |               | THIRD ANGLE<br>PROJECTION |               |
|                           |                                                  | DRAWN BY<br>HSHIMABUKURO       |  | DATE<br>2004/02/09                                                                                                               | TITLE<br>0.8 B-TO-B WAFER ASSY<br>SMT EMBSTP PKG<br>-LEAD FREE- |     |                        |               |                           |               |
| UNDER                     | <div>±0.2</div> <div>±0.25</div> <div>±0.3</div> | CHECKED BY<br>KTOJO            |  | DATE<br>2004/02/09                                                                                                               |                                                                 |     |                        |               |                           |               |
|                           |                                                  | APPROVED BY<br>MSASAO          |  | DATE<br>2004/02/09                                                                                                               | molex                                                           |     | MOLEX INCORPORATED     |               |                           |               |
| ±3                        |                                                  | MATERIAL NO.                   |  |                                                                                                                                  | DOCUMENT NO.                                                    |     |                        |               | SHEET NO.                 |               |
| E APPLICABLE              |                                                  | SEE CHART                      |  |                                                                                                                                  | SD-53307-014                                                    |     |                        |               | 1 OF 2                    |               |
| REMAIN<br>DIMENSIONS      |                                                  | SIZE<br>A3                     |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                 |     |                        |               |                           |               |



| 53307-***71 | キャリアテープ幅           | D | C | (B) | (A) | MATERIAL. NO. | 極数      |
|-------------|--------------------|---|---|-----|-----|---------------|---------|
| MODEL NO.   | CARRIER TAPE WIDTH |   |   |     |     |               | CIRCUIT |

|    |      |      |      |      |            |    |
|----|------|------|------|------|------------|----|
| 32 | 37.4 | 33.4 | 18.1 | 16.3 | 53307-4071 | 40 |
| 24 | 29.4 | 25.4 | 16.5 | 14.7 | 53307-3671 | 36 |
|    |      |      | 15.7 | 13.9 | 53307-3471 | 34 |
|    |      |      | 14.1 | 12.3 | 53307-3071 | 30 |
|    |      |      | 13.3 | 11.5 | 53307-2871 | 28 |
|    |      |      | 12.5 | 10.7 | 53307-2671 | 26 |
|    |      |      | 11.7 | 9.9  | 53307-2471 | 24 |
|    |      |      | 10.9 | 9.1  | 53307-2271 | 22 |
|    |      |      | 10.1 | 8.3  | 53307-2071 | 20 |

|                                                                                                                          |             |                                                            |       |                                          |  |                                                                                                                                  |                        |                           |        |  |
|--------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|-------|------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|--------|--|
| REVISED<br>EC NO: J2006-0187<br>DRWN: YOTANI<br>CHKD: NUKI TA<br>APPR: NUKI TA<br>2005/08/01<br>2005/08/02<br>2005/08/18 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |       | DIMENSION STYLE<br>MM ONLY               |  | SCALE<br>---                                                                                                                     | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |        |  |
|                                                                                                                          |             | 10 UNDER                                                   | ±0.2  | DRAWN BY DATE<br>HSHIMABUKURO 2004/02/09 |  | TITLE<br>0.8 B-T0-B WAFER ASSY<br>SMT EMBSTP PKG<br>-LEAD FREE-                                                                  |                        |                           |        |  |
|                                                                                                                          |             | 10 OVER 30 UNDER                                           | ±0.25 | CHECKED BY DATE<br>KTOJO 2004/02/09      |  |                                                                                                                                  |                        |                           |        |  |
|                                                                                                                          |             | 30 OVER                                                    | ±0.3  | APPROVED BY DATE<br>MSASAO 2004/02/09    |  | MOLEX MOLEX INCORPORATED                                                                                                         |                        |                           |        |  |
|                                                                                                                          |             | ANGULAR ±3 °                                               |       | MATERIAL NO.                             |  |                                                                                                                                  |                        |                           |        |  |
|                                                                                                                          |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | SEE CHART                                |  | SD-53307-014                                                                                                                     |                        |                           | 2 OF 2 |  |
|                                                                                                                          |             |                                                            |       | SIZE<br>A3                               |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                           |        |  |
|                                                                                                                          |             | REV                                                        |       |                                          |  |                                                                                                                                  |                        |                           |        |  |

F

E

D

C

B

A

F

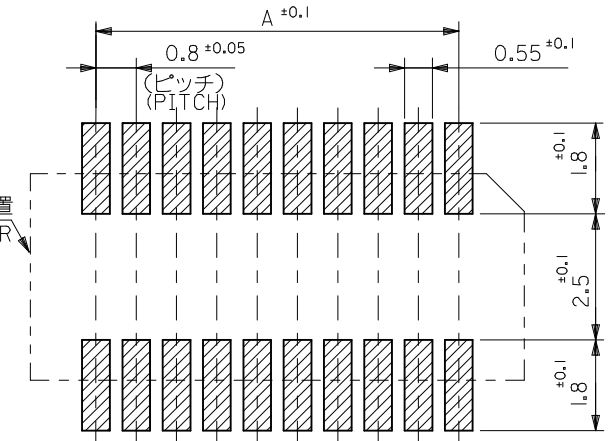
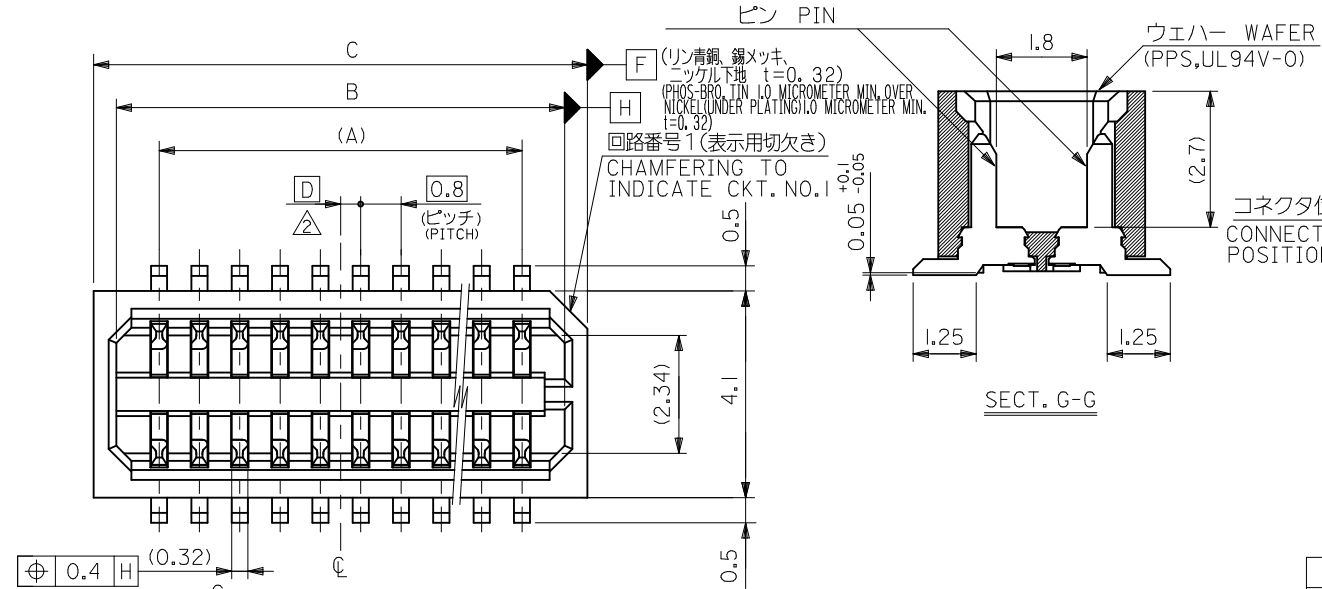
E

D

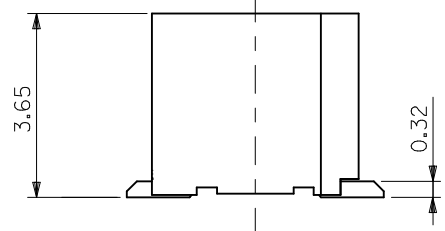
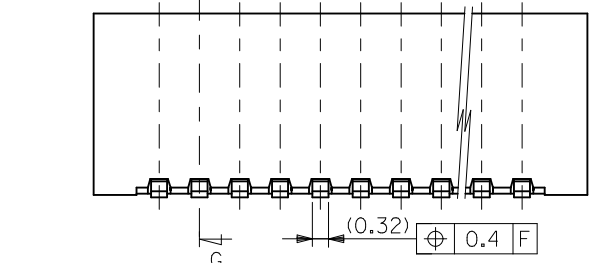
C

B

A



参考基板レイアウト (マウント面)  
P.C.B. PATTERN LAYOUT (REF.) (MOUNT AREA)

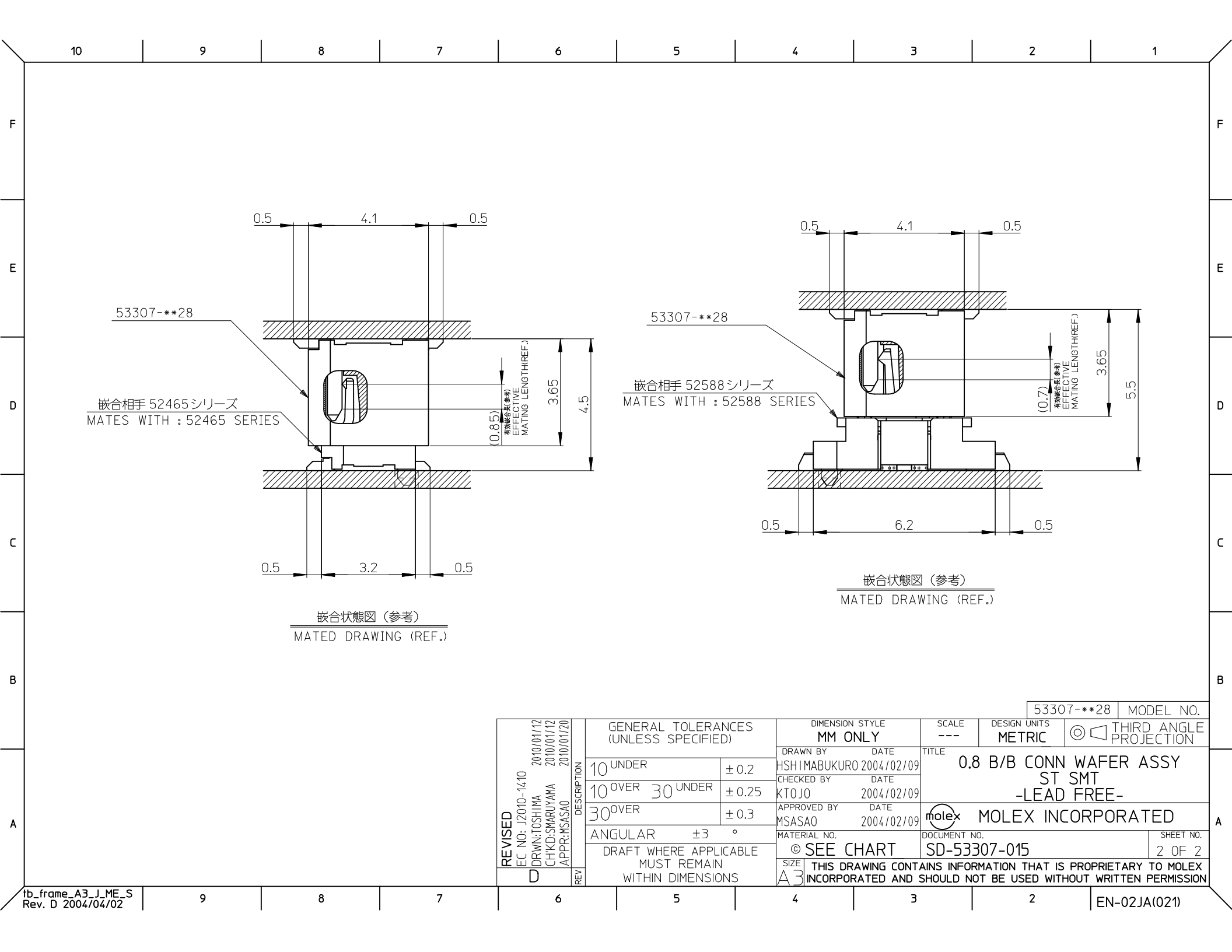


|     |      |      |      |            |    |
|-----|------|------|------|------------|----|
| 0.4 | 17.8 | 16.9 | 15.2 | 53307-4028 | 40 |
| 0.8 | 17.0 | 16.1 | 14.4 | -3828      | 38 |
| 0.4 | 16.2 | 15.3 | 13.6 | -3628      | 36 |
| 0.8 | 15.4 | 14.5 | 12.8 | -3428      | 34 |
| 0.4 | 14.6 | 13.7 | 12.0 | -3228      | 32 |
| 0.8 | 13.8 | 12.9 | 11.2 | -3028      | 30 |
| 0.4 | 13.0 | 12.1 | 10.4 | -2828      | 28 |
| 0.8 | 12.2 | 11.3 | 9.6  | -2628      | 26 |
| 0.4 | 11.4 | 10.5 | 8.8  | -2428      | 24 |
| 0.8 | 10.6 | 9.7  | 8.0  | -2228      | 22 |
| 0.4 | 9.8  | 8.9  | 7.2  | -2028      | 20 |
| 0.8 | 9.0  | 8.1  | 6.4  | -1828      | 18 |
| 0.4 | 8.2  | 7.3  | 5.6  | -1628      | 16 |
| 0.8 | 7.4  | 6.5  | 4.8  | -1428      | 14 |
| 0.4 | 6.6  | 5.7  | 4.0  | -1228      | 12 |
| 0.8 | 5.8  | 4.9  | 3.2  | 53307-1028 | 10 |

注記 NOTES

- 1 嵌合相手: 52465,52588  
MATE WITH: 52465,52588 SERIES
- 2 ウェハーの 〇 から隣接するピンの 〇 迄の位置を示す。  
SHOW POSITION FROM 〇 OF WAFER TO 〇 OF ADJACENT PINS.
- 3 本製品は 53307-\*\*-27 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53307-\*\*-27

|                                                                                          |                                                       |                                                            |       |                            |  |                                                                                                                                  |  |                                                           |  |                        |  |
|------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------|-------|----------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------|--|------------------------|--|
| REVISED<br>EC NO: J2010-1410<br>DRWN: TOSHIMA<br>CHKD: MARUYAMA<br>APPR: MSASAO<br>REV D | DESCRIPTION<br>2010/01/12<br>2010/01/12<br>2010/01/20 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>---                                                                                                                     |  | DESIGN UNITS<br>METRIC                                    |  | THIRD ANGLE PROJECTION |  |
|                                                                                          |                                                       | 10 UNDER                                                   | ±0.2  | DRAWN BY<br>HSHIMABUKURO   |  | DATE<br>2004/02/09                                                                                                               |  | TITLE<br>0.8 B/B CONN WAFER ASSY<br>ST SMT<br>-LEAD FREE- |  |                        |  |
|                                                                                          |                                                       | 10 OVER 30 UNDER                                           | ±0.25 | CHECKED BY<br>KTOJO        |  | DATE<br>2004/02/09                                                                                                               |  | MOLEX INCORPORATED                                        |  |                        |  |
|                                                                                          |                                                       | 30 OVER                                                    | ±0.3  | APPROVED BY<br>MSASAO      |  | DATE<br>2004/02/09                                                                                                               |  | DOCUMENT NO.<br>SD-53307-015                              |  |                        |  |
|                                                                                          |                                                       | ANGULAR ±3 °                                               |       | MATERIAL NO.               |  | SEE CHART                                                                                                                        |  | SHEET NO.<br>1 OF 2                                       |  |                        |  |
|                                                                                          |                                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | SIZE<br>A3                 |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                                                           |  |                        |  |



|                                                                                   |                                                            |                                                                                                                                  |             |                            |                    |                                                           |                        |                           |  |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|--------------------|-----------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2010-1410<br>DRAWN: TOSHIMA<br>CHKD: SMARUYAMA<br>APPR: MSASAO | DESCRIPTION<br>2010/01/12<br>2010/01/12<br>2010/01/20      | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                         |             | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>---                                              | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |  |  |
|                                                                                   |                                                            | 10 UNDER                                                                                                                         | ± 0.2       | DRAWN BY<br>HSHIMABUKURO   | DATE<br>2004/02/09 | TITLE<br>0.8 B/B CONN WAFER ASSY<br>ST SMT<br>-LEAD FREE- |                        |                           |  |  |
|                                                                                   |                                                            | 10 OVER 30 UNDER                                                                                                                 | ± 0.25      | CHECKED BY<br>KTOJO        | DATE<br>2004/02/09 |                                                           |                        |                           |  |  |
|                                                                                   |                                                            | 30 OVER                                                                                                                          | ± 0.3       | APPROVED BY<br>MSASAO      | DATE<br>2004/02/09 | MOLEX MOLEX INCORPORATED                                  |                        |                           |  |  |
|                                                                                   |                                                            | ANGULAR ±3 °                                                                                                                     |             | MATERIAL NO.               |                    | DOCUMENT NO.                                              |                        | SHEET NO.                 |  |  |
|                                                                                   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                  | © SEE CHART |                            | SD-53307-015       |                                                           | 2 OF 2                 |                           |  |  |
| D                                                                                 | REV                                                        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |             |                            |                    |                                                           |                        |                           |  |  |