

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

**Part Number:** [0525591652](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, Vertical, SMT, ZIF, 16 Circuits, Lead-free, Gold Contact Plating, High Barrier Packaging

**Agency Certification**

UL E29179

**General**

Product Family FFC/FPC Connectors  
Series 52559  
Overview ffc\_fpc\_smt  
Product Name N/A

**Physical**

Circuits (Loaded) 16  
Contact Position N/A  
Durability (mating cycles max) 20  
Entry Angle Vertical  
Flammability 94V-0  
Mated Height (in) 0.154 In  
Mated Height (mm) 3.90 mm  
Material - Metal Phosphor Bronze  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin Nylon  
Number of Rows 1  
Orientation Vertical  
PCB Locator No  
PCB Retention Yes  
Packaging Type Embossed Tape on Reel  
Pitch - Mating Interface (in) 0.020 In  
Pitch - Mating Interface (mm) 0.50 mm  
Polarized to PCB No  
Stackable No  
Temperature Range - Operating -20°C to +85°C  
Termination Interface: Style Surface Mount  
Wire/Cable Type FFC/FPC

**Electrical**

Current - Maximum per Contact 0.5A  
Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Application Specification AS-52559-001  
Packaging Specification SPK-52559-001, SPK-52559-003  
Product Specification PS-52559-013, RPS-52559-062, RPS-52559-064, RPS-52559-068, RPS-52559-070, RPS-52559-072  
Sales Drawing SD-52559-048, SD-52559-049

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**  
**Not Halogen-Free**

**China RoHS**



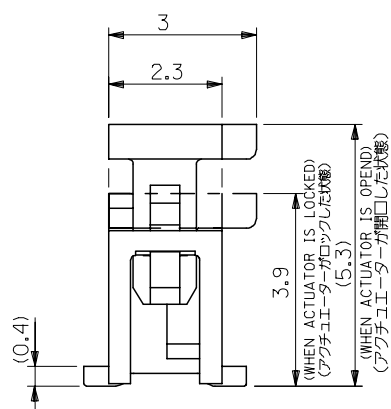
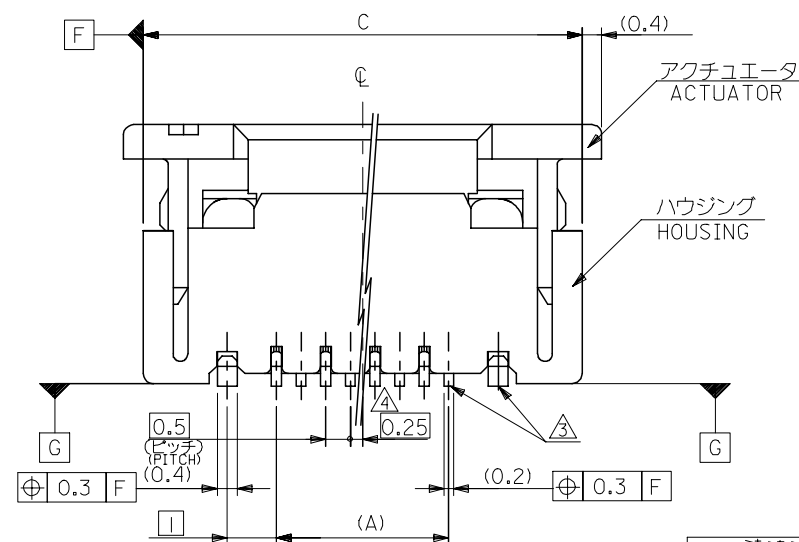
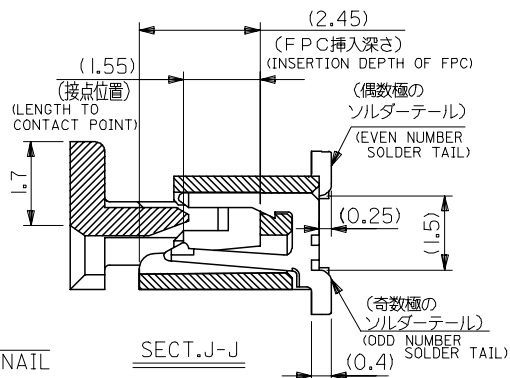
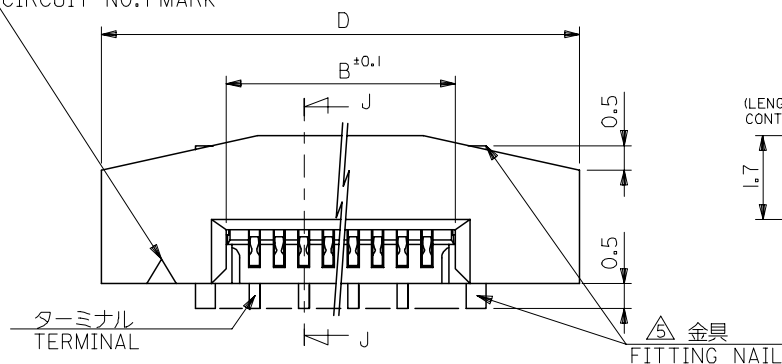
**Need more information on product environmental compliance?**

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.

**Search Parts in this Series**  
[52559Series](#)

10 9 8 7 6 5 4 3 2 1

回路番号1用マーク  
CIRCUIT NO.1 MARK

## 注記 NOTES

## I. 使用材料 : MATERIAL

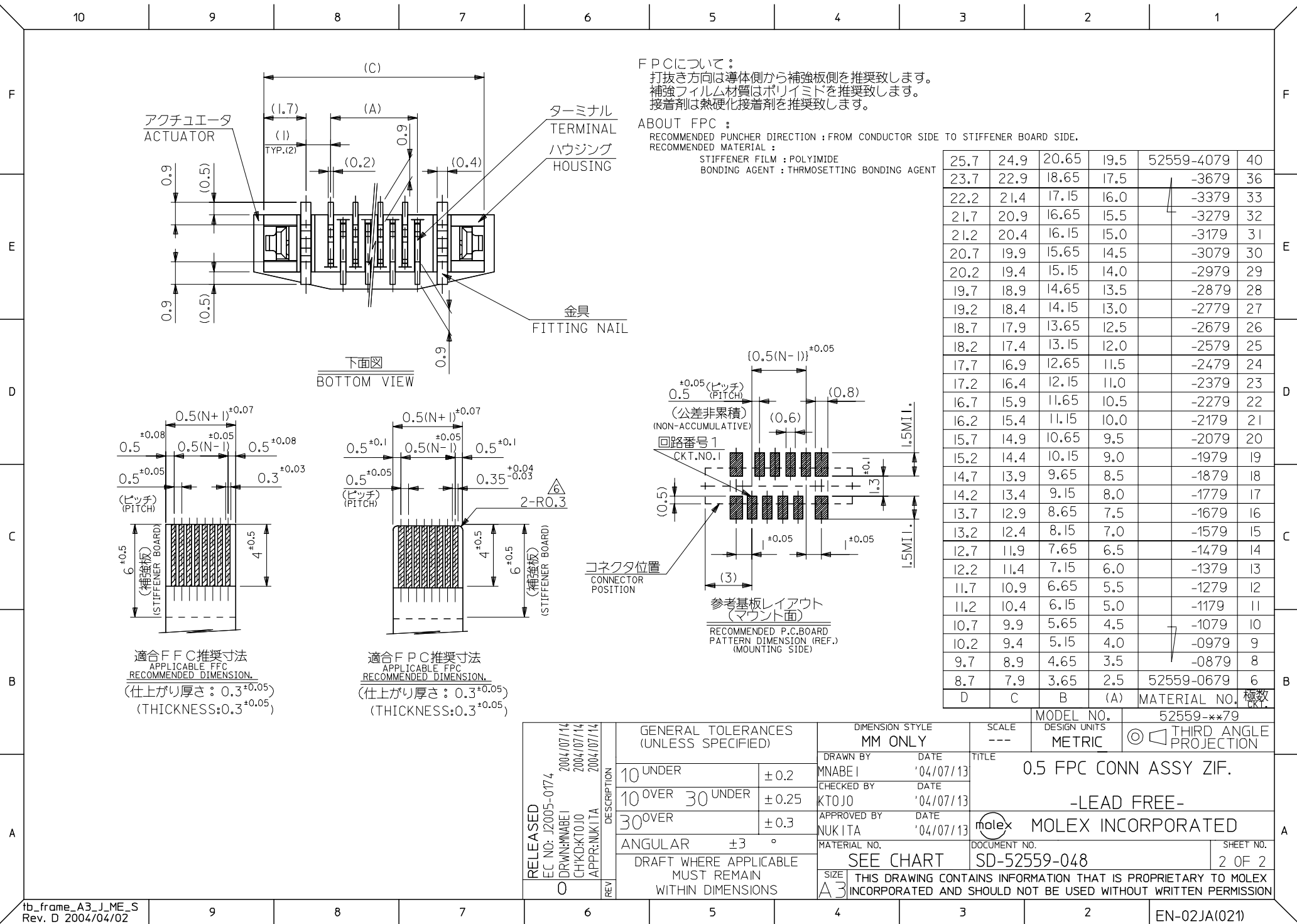
ハウジング : 46NYLON UL94V-0  
HOUSINGアクチュエータ : PPS UL94V-0  
ACTUATORターミナル : リン青銅 (t=0.2)  
TERMINAL PHOS-BRO: 接点部 金メッキ 0.1マイクロメートル以上  
CONTACT GOLD 0.1 MICROMETER MINIMUM: 半田付け部 錫メッキ 1.0マイクロメートル以上  
TAIL TIN 1.0 MICROMETER MINIMUM: ニッケル下地 1.0マイクロメートル以上  
NICKEL (UNDER PLATING) 1.0 MICROMETER MINIMUM

: リン青銅 (t=0.4)

金具  
FITTING NAIL: 錫メッキ 1.0マイクロメートル以上  
TIN 1.0 MICROMETER MINIMUM: ニッケル下地 1.0マイクロメートル以上  
NICKEL (UNDER PLATING) 1.0 MICROMETER MINIMUM2. エンボステープ梱包時は、アクチュエータがロックした状態とする。  
IN THE PACKAGE, ACTUATOR OF PART NO. 52559-\*\*79 SHOULD BE LOCKED.△3 ソルダータール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 [G] に対し上方向 0.05 MAX.、下方向 0.15 MAX. とする。  
MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM [G] UPPER DIRECTION: 0.05 MAX., LOWER DIRECTION: 0.15 MAX.△4 偶数極に適用。  
APPLY FOR EVEN CIRCUIT.△5 パターンはくり止め用金具。  
FITTING NAIL FOR PREVENTION OF PEELING OF P.C.B. PATTERN.△6 R.O. 3は、FPCの導体部にかからないこと。  
R.O.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

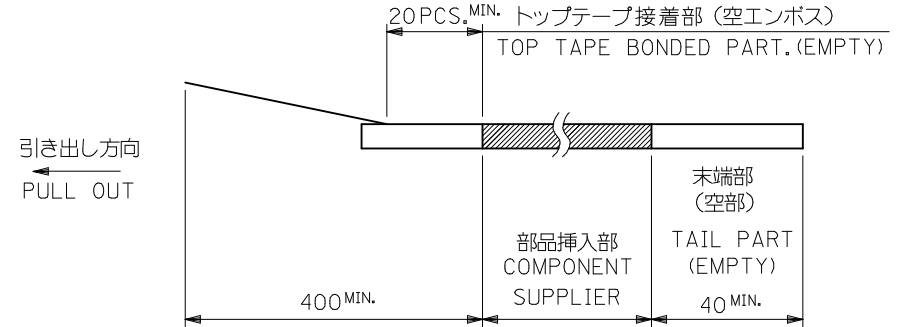
MODEL NO. 52559-\*\*79

|                                                                                         |                                                       |                                                                                                                                  |       |                            |                   |                                                                                                                         |                        |                                                                                                                 |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|
| RELEASED<br>EC NO: J2005-0174<br>DRWN: MNABE<br>CHKD: KTOJO<br>APPR: NUKITA<br>REV<br>0 | DESCRIPTION<br>2004/07/14<br>2004/07/14<br>2004/07/14 | 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>MNABE          | DATE<br>'04/07/13 | TITLE<br>0.5 FPC CONN ASSY ZIF.                                                                                         |                        |                                                                                                                 |
|                                                                                         |                                                       | 10 OVER 30 UNDER                                                                                                                 | ±0.25 | CHECKED BY<br>KTOJO        | DATE<br>'04/07/13 |                                                                                                                         |                        |                                                                                                                 |
|                                                                                         |                                                       | 30 OVER                                                                                                                          | ±0.3  | APPROVED BY<br>NUKITA      | DATE<br>'04/07/13 | -LEAD FREE-<br> MOLEX INCORPORATED |                        |                                                                                                                 |
|                                                                                         |                                                       | ANGULAR ±3 °                                                                                                                     |       | MATERIAL NO.<br>SEE CHART  |                   |                                                                                                                         |                        |                                                                                                                 |
|                                                                                         |                                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                       |       | SIZE<br>A3                 |                   | SHEET NO.<br>1 OF 2                                                                                                     |                        |                                                                                                                 |
|                                                                                         |                                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |       |                            |                   |                                                                                                                         |                        |                                                                                                                 |



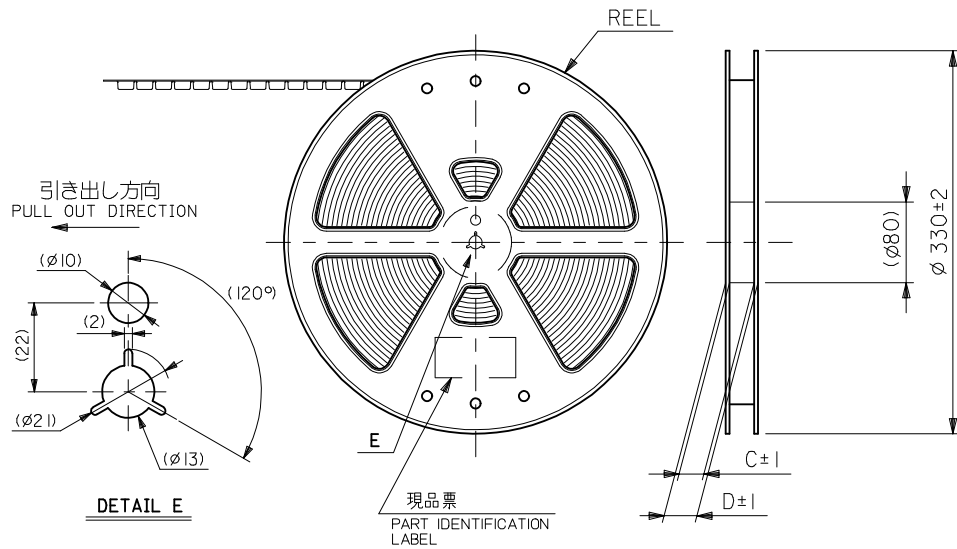
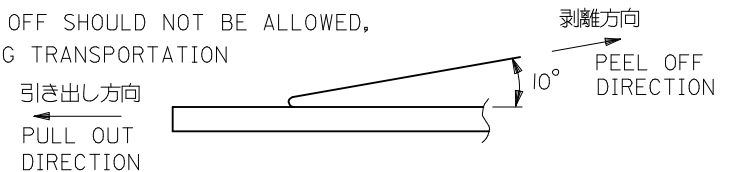
# 注記 NOTES

- 製品番号 52559-\*\*79 の梱包状態はアクチュエータがロックした状態とする。  
詳細寸法については 製品単体図面を参照下さい。  
IN THE PACKAGE,ACTUATOR OF PART NO.52559-\*\*79 SHOULD BE LOCKED  
RE DETAILED DIMENSIONS,SEE ASSY DRAWING
- 梱包数量：1000個／リール  
NUMBER OF CONNECTORS:1000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- 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

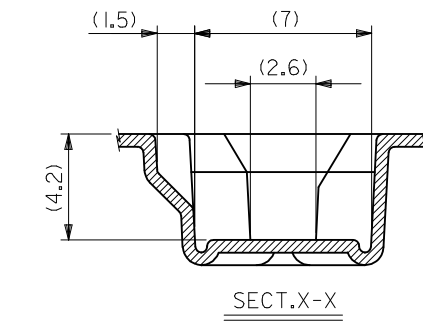
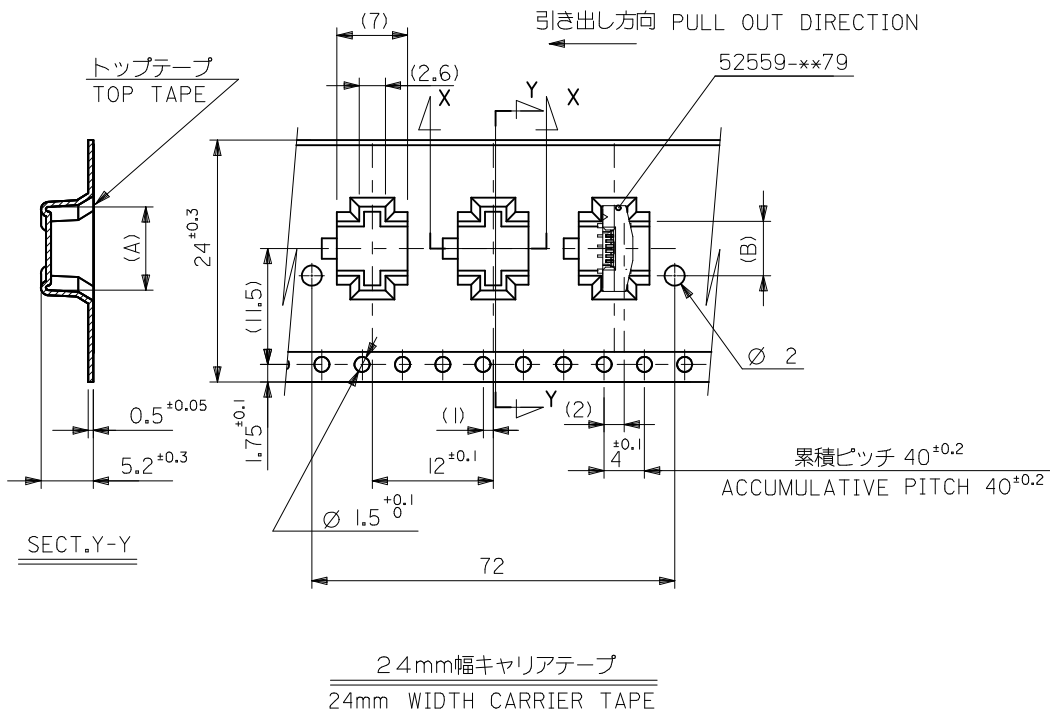


- 材料  
キャリアテープ：ポリプロピレン (PP)  
トップテープ：PET, PE, PEF  
リール：ポリスチレン (PS) <リサイクル材を含む>

MATERIAL CARRIER TAPE:POLYPROPYLENE  
TOP TAPE:PET,PE,PEF  
REEL:POLYSTYRENE (PS)  
<RECYCLE MATERIAL CONTAINED>

- 本製品は 52559-\*\*53 のエンボステープ違い品である。  
THIS PRODUCT IS EMBOSSED TAPE DIFFERENCE ARTICLE OF 52559-\*\*53.
- 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

|         |                   |                        |                               |                           |                                                            |                                                                                                                                  |                            |                   |                                                                     |                        |                           |  |  |
|---------|-------------------|------------------------|-------------------------------|---------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|---------------------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED | EC NO: J2009-2061 | DRWN:TKN<br>2009/05/20 | CHKD:HMATSUMOTO<br>2009/05/21 | APPR:NUKITA<br>2009/05/21 | 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>MNABEI         | DATE<br>'04/07/13 | TITLE<br>0.5 FPC CONN ASSY ZIF<br>FOR SMT EMBSTP PKG<br>-LEAD FREE- |                        |                           |  |  |
|         |                   |                        |                               |                           | 10 OVER 30 UNDER                                           | ±0.25                                                                                                                            | CHECKED BY<br>KTOJO        | DATE<br>'04/07/13 |                                                                     |                        |                           |  |  |
|         |                   |                        |                               |                           | 30 OVER                                                    | ±0.3                                                                                                                             | APPROVED BY<br>NUKITA      | DATE<br>'04/07/13 | MOLEX INCORPORATED                                                  |                        |                           |  |  |
|         |                   |                        |                               |                           | ANGULAR ±3 °                                               |                                                                                                                                  | MATERIAL NO.               |                   | DOCUMENT NO.                                                        |                        | SHEET NO.                 |  |  |
|         |                   |                        |                               |                           | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                  | SEE SHEET 2-4              |                   | SD-52559-049                                                        |                        | 1 OF 4                    |  |  |
| G       | REV               |                        |                               |                           |                                                            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                            |                   |                                                                     |                        |                           |  |  |



|                                |      |      |      |      |              |             |   |
|--------------------------------|------|------|------|------|--------------|-------------|---|
| 24                             | 29.4 | 25.4 | 14.4 | 17.3 | 52559-2452   | 24          | C |
|                                |      |      | 13.9 | 16.8 | 52559-2352   | 23          |   |
|                                |      |      | 12.9 | 15.8 | 52559-2152   | 21          |   |
|                                |      |      | 12.4 | 15.3 | 52559-2052   | 20          |   |
|                                |      |      | 10.9 | 13.8 | 52559-1752   | 17          |   |
|                                |      |      | 10.4 | 13.3 | 52559-1652   | 16          |   |
|                                |      |      | 9.9  | 12.8 | 52559-1552   | 15          |   |
|                                |      |      | 9.4  | 12.3 | 52559-1452   | 14          |   |
|                                |      |      | 8.4  | 11.3 | 52559-1252   | 12          |   |
|                                |      |      | 7.4  | 10.3 | 52559-1052   | 10          |   |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | D    | C    | 6.9  | 9.8  | 52559-0952   | 9           | B |
|                                |      |      | 5.4  | 8.3  | 52559-0652   | 6           |   |
|                                |      |      | (B)  | (A)  | MATERIAL NO. | CIRCUIT NO. |   |

|                                                                            |                    |                                                            |            |                                                                                                                                  |                   |                                                                     |                        |                           |  |  |
|----------------------------------------------------------------------------|--------------------|------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2009-2061<br>DRWN:TKN<br>CHKD:HMATSUMOTO<br>APPR:NUKITA | DESCRIPTION<br>REV | 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>MNABEI                                                                                                               | DATE<br>'04/07/13 | TITLE<br>0.5 FPC CONN ASSY ZIF<br>FOR SMT EMBSTP PKG<br>-LEAD FREE- |                        |                           |  |  |
|                                                                            |                    | 10 OVER 30 UNDER                                           | ± 0.25     | CHECKED BY<br>KTOJO                                                                                                              | DATE<br>'04/07/13 |                                                                     |                        |                           |  |  |
|                                                                            |                    | 30 OVER                                                    | ± 0.3      | APPROVED BY<br>NUKITA                                                                                                            | DATE<br>'04/07/13 | MOLEX INCORPORATED                                                  |                        |                           |  |  |
|                                                                            |                    | ANGULAR                                                    | ± 3 °      | MATERIAL NO.                                                                                                                     |                   |                                                                     |                        |                           |  |  |
|                                                                            |                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |            | SEE TABLE                                                                                                                        |                   | SD-52559-049                                                        |                        | 2 OF 4                    |  |  |
|                                                                            |                    |                                                            | SIZE<br>A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                   |                                                                     |                        |                           |  |  |

10 9 8 7 6 5 4 3 2 1

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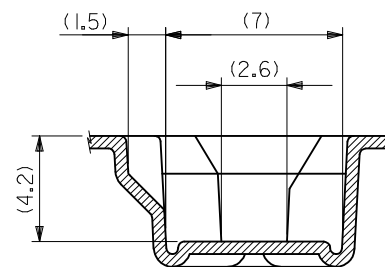
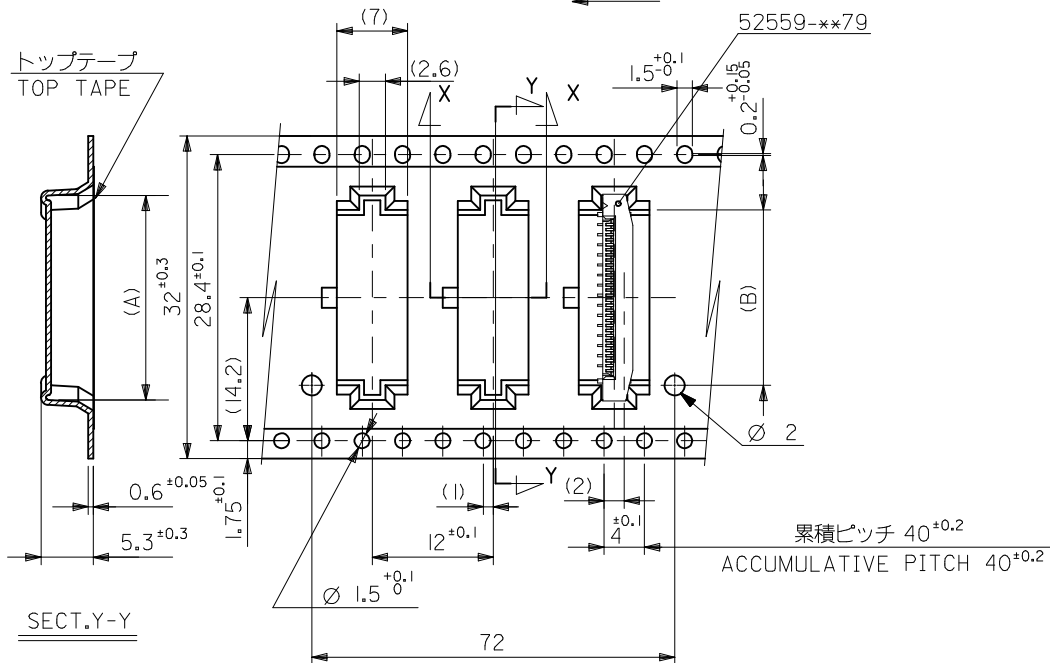
D

C

B

A

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 | 18.4 | 21.3 | 52559-3252   | 32          |
|                                |      |      | 17.4 | 20.3 | 52559-3052   | 30          |
|                                |      |      | 16.4 | 19.3 | 52559-2852   | 28          |
|                                |      |      | 15.9 | 18.8 | 52559-2752   | 27          |
|                                |      |      | 15.4 | 18.3 | 52559-2652   | 26          |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | D    | C    | (B)  | (A)  | MATERIAL NO. | CIRCUIT NO. |

|                                                                                                                       |                                                            |                                          |            |                            |                                                                                                                                  |                                                                                           |                        |                           |  |  |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2009-2061<br>2009/05/20<br>DRWN:TKGN<br>CHKD:HMATSUMOTO<br>2009/05/21<br>APPR:NUKITA<br>2009/05/21 | 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<br>MNABEI         | DATE<br>'04/07/13                                                                                                                | TITLE<br>0.5 FPC CONN ASSY ZIF<br>FOR SMT EMBSTP PKG<br>-LEAD FREE-<br>MOLEX INCORPORATED |                        |                           |  |  |
|                                                                                                                       |                                                            | 10 OVER 30 UNDER                         | ±0.25      | CHECKED BY<br>KTOJO        | DATE<br>'04/07/13                                                                                                                |                                                                                           |                        |                           |  |  |
|                                                                                                                       |                                                            | 30 OVER                                  | ±0.3       | APPROVED BY<br>NUKITA      | DATE<br>'04/07/13                                                                                                                |                                                                                           |                        |                           |  |  |
|                                                                                                                       |                                                            | ANGULAR ±3 °                             |            | MATERIAL NO.               |                                                                                                                                  |                                                                                           |                        |                           |  |  |
|                                                                                                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                          | SEE TABLE  |                            | SD-52559-049                                                                                                                     |                                                                                           | 3 OF 4                 |                           |  |  |
| REV                                                                                                                   |                                                            |                                          | SIZE<br>A3 |                            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                                           |                        |                           |  |  |

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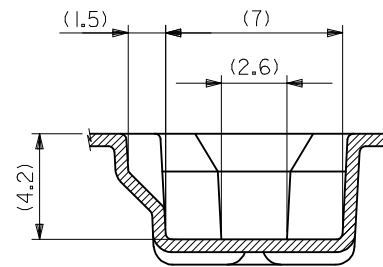
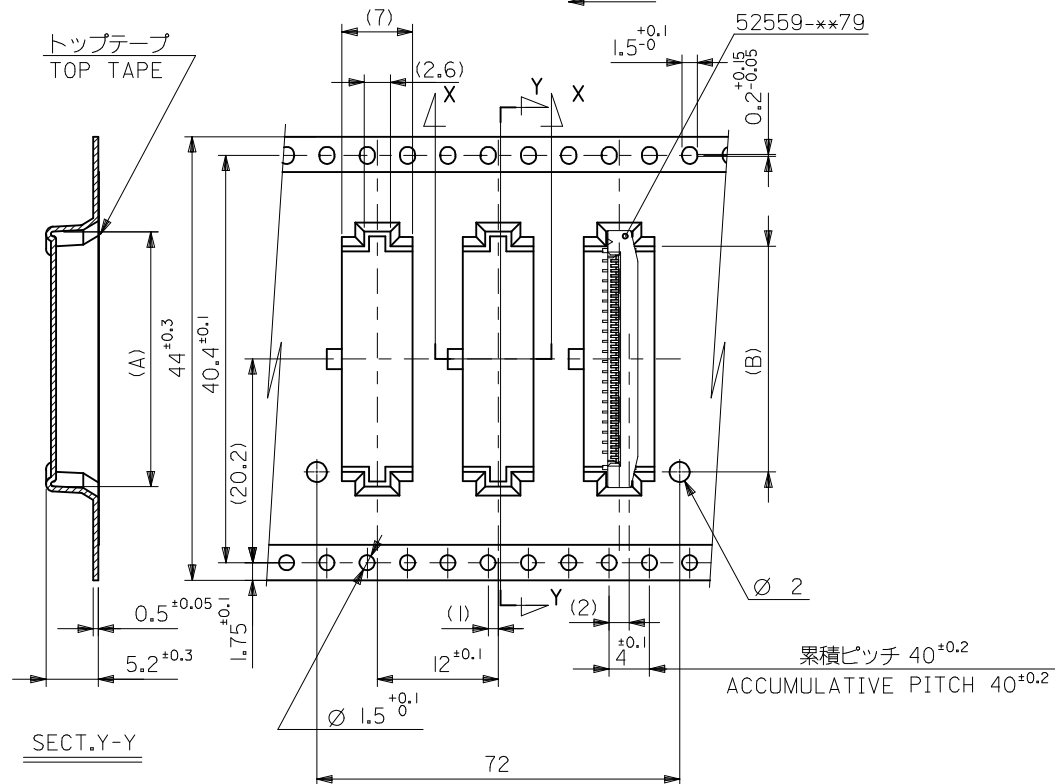
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1

引き出し方向 PULL OUT DIRECTION



SECT.X-X

44mm幅キャリアテープ  
44mm WIDTH CARRIER TAPE

|                                |      |      |      |      |              |             |
|--------------------------------|------|------|------|------|--------------|-------------|
| 44                             | 49.4 | 45.4 | 22.4 | 25.3 | 52559-4052   | 40          |
|                                |      |      | 20.4 | 23.3 | 52559-3652   | 36          |
| キャリアテープ幅<br>CARRIER TAPE WIDTH |      |      | (B)  | (A)  | MATERIAL NO. | CIRCUIT NO. |

|                                                                                                                       |                                                            |                                                                                                                                  |           |                            |                   |                                                                     |              |                        |  |                           |        |           |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------|-------------------|---------------------------------------------------------------------|--------------|------------------------|--|---------------------------|--------|-----------|
| REVISED<br>EC NO: J2009-2061<br>DRWN:TKON<br>CHKD:HMATSUMOTO<br>APPR:NUKITA<br>2009/05/20<br>2009/05/21<br>2009/05/21 | 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<br>MNABEI         | DATE<br>'04/07/13 | TITLE<br>0.5 FPC CONN ASSY ZIF<br>FOR SMT EMBSTP PKG<br>-LEAD FREE- |              |                        |  |                           |        |           |
|                                                                                                                       |                                                            | 10 OVER 30 UNDER                                                                                                                 | ±0.25     | CHECKED BY<br>KTOJO        | DATE<br>'04/07/13 |                                                                     |              |                        |  |                           |        |           |
|                                                                                                                       |                                                            | 30 OVER                                                                                                                          | ±0.3      | APPROVED BY<br>NUKITA      | DATE<br>'04/07/13 | MOLEX INCORPORATED                                                  |              |                        |  |                           |        |           |
|                                                                                                                       |                                                            | ANGULAR ±3 °                                                                                                                     |           | MATERIAL NO.               |                   |                                                                     | DOCUMENT NO. |                        |  |                           |        | SHEET NO. |
|                                                                                                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                  | SEE TABLE |                            |                   | SD-52559-049                                                        |              |                        |  |                           | 4 OF 4 |           |
| G                                                                                                                     | REV                                                        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |           |                            |                   |                                                                     |              |                        |  |                           |        |           |

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## 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

### Офис по работе с юридическими лицами:

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Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

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