

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

5015915411

Status:

Active

Overview:

slimstack\_mm016\_pitch

Description:

0.40mm (.016") Pitch SlimStack™ Board-to-Board Receptacle, SMT, Dual Row, Vertical Stacking, 0.90mm (.035") Stacking Height, With Solder Tabs, 54 Circuits

Documents:

3D Model

Drawing (PDF)

Product Specification PS-501591-002 (PDF)

RoHS Certificate of Compliance (PDF)

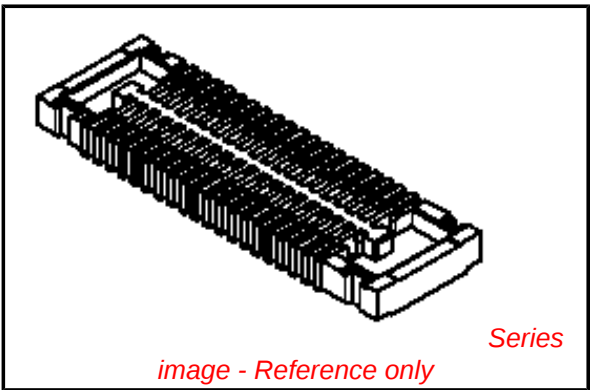
|                                |                       |
|--------------------------------|-----------------------|
| General                        |                       |
| Product Family                 | PCB Receptacles       |
| Series                         | 501591                |
| Application                    | Board-to-Board        |
| Overview                       | slimstack_mm016_pitch |
| Product Name                   | SlimStack™            |
| Physical                       |                       |
| Circuits (Loaded)              | 54                    |
| Color - Resin                  | Black                 |
| Durability (mating cycles max) | 20                    |
| Glow-Wire Compliant            | No                    |
| Lock to Mating Part            | Yes                   |
| Mated Height (in)              | 0.035 In              |
| Mated Height (mm)              | 0.90 mm               |
| Material - Metal               | Phosphor Bronze       |
| Material - Plating Mating      | Gold                  |
| Number of Rows                 | 2                     |
| Orientation                    | Vertical              |
| PCB Locator                    | No                    |
| PCB Retention                  | Yes                   |
| Packaging Type                 | Embossed Tape on Reel |
| Pitch - Mating Interface (in)  | 0.016 In              |
| Pitch - Mating Interface (mm)  | 0.40 mm               |
| Polarized to Mating Part       | No                    |
| Polarized to PCB               | No                    |
| Stackable                      | No                    |
| Surface Mount Compatible (SMC) | Yes                   |
| Temperature Range - Operating  | -25°C to +85°C        |
| Termination Interface: Style   | Surface Mount         |

|                               |                 |
|-------------------------------|-----------------|
| Electrical                    |                 |
| Current - Maximum per Contact | 0.3A            |
| Voltage - Maximum             | 50V AC (RMS)/DC |

Material Info

Reference - Drawing Numbers

|                         |                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging Specification | SPK-501591-001                                                                                                                                                                |
| Product Specification   | PS-501591-002, RPS-501591-007, RPS-501591-010, RPS-501591-011, RPS-501591-012, RPS-501591-013, RPS-501591-014, RPS-501591-016, RPS-501591-017, RPS-501591-019, RPS-501591-020 |
| Sales Drawing           | SD-501591-005, SD-501591-006                                                                                                                                                  |



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](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

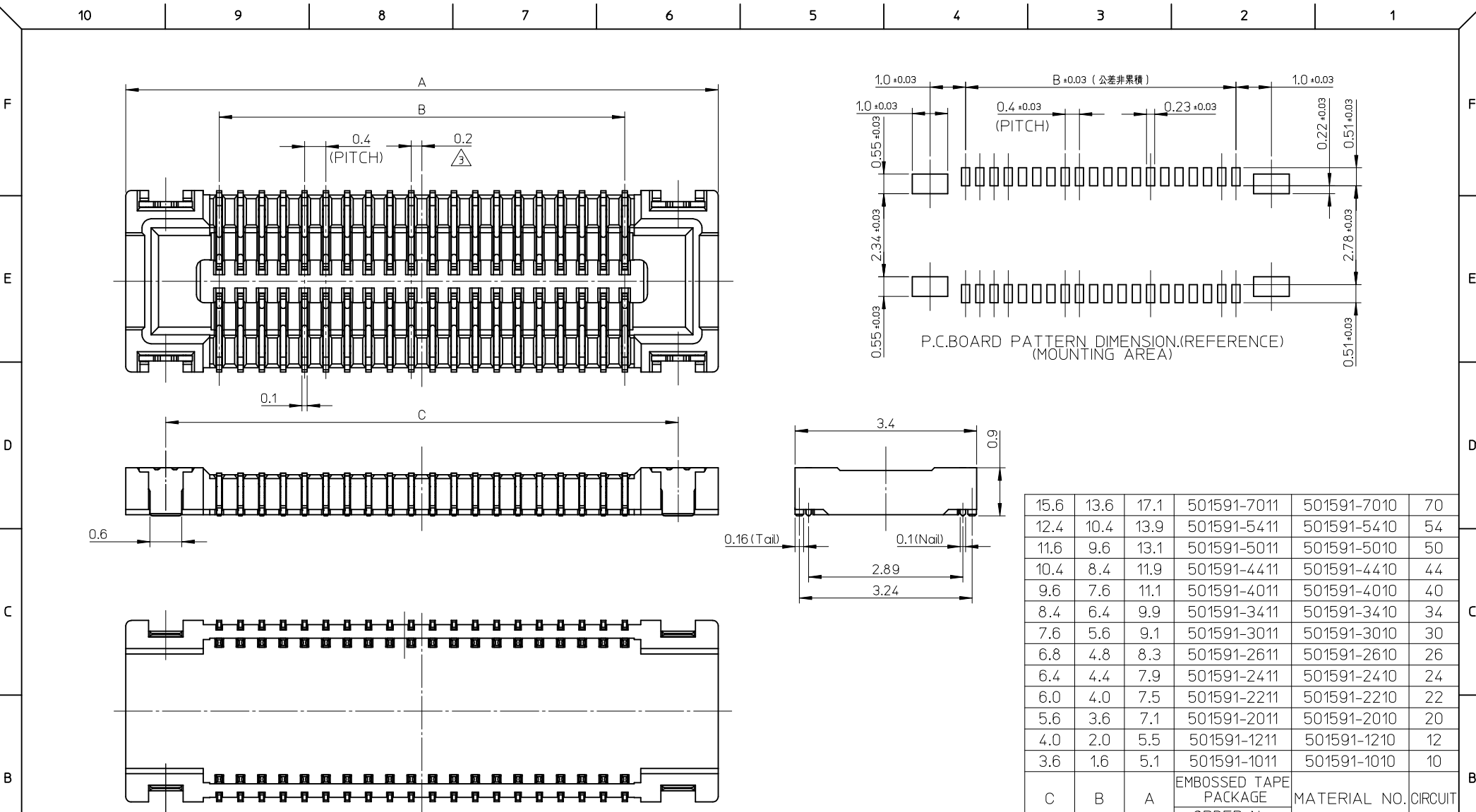
501591Series

Mates With

501594 PCB Header

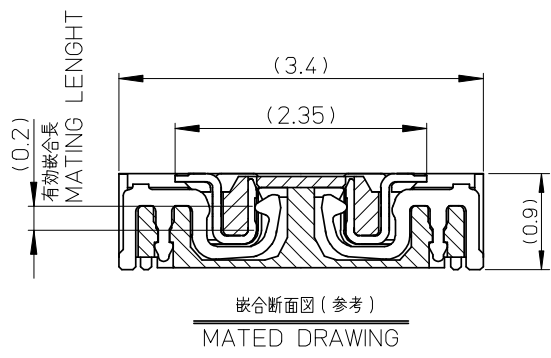
This document was generated on 05/24/2010

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|      |      |      |                       |              |         |
|------|------|------|-----------------------|--------------|---------|
| 15.6 | 13.6 | 17.1 | 501591-7011           | 501591-7010  | 70      |
| 12.4 | 10.4 | 13.9 | 501591-5411           | 501591-5410  | 54      |
| 11.6 | 9.6  | 13.1 | 501591-5011           | 501591-5010  | 50      |
| 10.4 | 8.4  | 11.9 | 501591-4411           | 501591-4410  | 44      |
| 9.6  | 7.6  | 11.1 | 501591-4011           | 501591-4010  | 40      |
| 8.4  | 6.4  | 9.9  | 501591-3411           | 501591-3410  | 34      |
| 7.6  | 5.6  | 9.1  | 501591-3011           | 501591-3010  | 30      |
| 6.8  | 4.8  | 8.3  | 501591-2611           | 501591-2610  | 26      |
| 6.4  | 4.4  | 7.9  | 501591-2411           | 501591-2410  | 24      |
| 6.0  | 4.0  | 7.5  | 501591-2211           | 501591-2210  | 22      |
| 5.6  | 3.6  | 7.1  | 501591-2011           | 501591-2010  | 20      |
| 4.0  | 2.0  | 5.5  | 501591-1211           | 501591-1210  | 12      |
| 3.6  | 1.6  | 5.1  | 501591-1011           | 501591-1010  | 10      |
| C    | B    | A    | EMBOSSED TAPE PACKAGE | MATERIAL NO. | CIRCUIT |
|      |      |      | ORDER No.             |              |         |

|                                                                                                                 |             |                                                            |        |                                                                                                                                  |                    |                                                        |                        |                           |  |  |
|-----------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2008-3370<br>2008/06/17<br>DRWK:SETO<br>2008/06/17<br>CHKD:MSASO<br>2008/06/25<br>APPR:MSASO | 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>TASAKAWA                                                                                                             | DATE<br>2006/07/10 | TITLE<br>0.4MM PITCH B/B CONN.<br>H=0.9 W=3.4 REC ASSY |                        |                           |  |  |
|                                                                                                                 |             | 10 OVER 30 UNDER                                           | ± 0.25 | CHECKED BY<br>MSASO                                                                                                              | DATE<br>2006/07/10 |                                                        |                        |                           |  |  |
|                                                                                                                 |             | 30 OVER                                                    | ± 0.3  | APPROVED BY<br>MSASO                                                                                                             | DATE<br>2006/07/10 |                                                        |                        |                           |  |  |
|                                                                                                                 |             | ANGULAR ±3 °                                               |        | MATERIAL NO.                                                                                                                     |                    | DOCUMENT NO.                                           |                        | SHEET NO.                 |  |  |
|                                                                                                                 |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | SEE TABLE                                                                                                                        |                    | SD-501591-005                                          |                        | 1 OF 2                    |  |  |
|                                                                                                                 |             | REV                                                        |        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                                                        |                        |                           |  |  |



注記 NOTES

1.使用材料  
MATERIAL

ハウジング : 液晶ポリマー (LCP) ガラス充填 UL-94V-0 (黒)  
HOUSING : LIQUID CRYSTAL POLYMER (GLASS FILLED) UL94V-0 (COLOR:BLACK)

ターミナル : りん青銅 (t=0.1)  
TERMINAL : PHOSHOR BRONZE (t=0.1)

金具 : りん青銅 (t=0.1)  
FITTING NAIL : PHOSHOR BRONZE (t=0.1)

2.メッキ仕様  
PLATING

ターミナル  
TERMINAL

金メッキ 0.1マイクロメートル以上 (コンタクト部)  
GOLD 0.1 MICROMETER MINIMUM (CONTACT AERA)

金メッキ 0.05マイクロメートル以上 (テール部)  
GOLD 0.05 MICROMETER MINIMUM (TAIL AERA)

下地メッキ : ニッケルメッキ 1.0 マイクロメートル以上  
UNDER PLATING : NICKEL 1.0 MICROMETER MINIMUM

金具  
FITTING NAIL

錫メッキ : 1.0マイクロメートル以上  
TIN PLATING : 1.0 MICROMETER MINIMUM

下地メッキ : ニッケル 1.0マイクロメートル以上  
UNDER PLATING : NICKEL 1.0 MICROMETER MINIMUM

3 (全極数/2)=偶数の場合に適用  
APPLY FOR (CIRCUIT/2)=EVEN

4.嵌合相手 : 501594-\*\*10シリーズ  
WITH MATE : 501594-\*\*10SERIES

5.テール及び金具の平坦度は、0.1以下  
TAIL AND FITTING NAIL COPLANARITY TO BE 0.1 MAXIMUM

6.ELV AND RoHS COMPLIANT.

|                                                                                                                   |             |                                                            |        |                             |                                                                                                                                  |                                                        |                        |                           |                     |  |  |
|-------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|--------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------|---------------------------|---------------------|--|--|
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|                                                                                                                   |             | 10 UNDER                                                   | ± 0.2  | DRAWN BY<br>TASAKAWA        | DATE<br>2006/07/10                                                                                                               | TITLE<br>0.4MM PITCH B/B CONN.<br>H=0.9 W=3.4 REC ASSY |                        |                           |                     |  |  |
|                                                                                                                   |             | 10 OVER 30 UNDER                                           | ± 0.25 | CHECKED BY<br>MSASAO        | DATE<br>2006/07/10                                                                                                               |                                                        |                        |                           |                     |  |  |
|                                                                                                                   |             | 30 OVER                                                    | ± 0.3  | APPROVED BY<br>MSASAO       | DATE<br>2006/07/10                                                                                                               | MOLEX MOLEX INCORPORATED                               |                        |                           |                     |  |  |
|                                                                                                                   |             | ANGULAR ±3 °                                               |        | MATERIAL NO.<br>SEE SHEET 1 |                                                                                                                                  | DOCUMENT NO.<br>SD-501591-005                          |                        |                           | SHEET NO.<br>2 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 |                                                        |                        |                           |                     |  |  |
|                                                                                                                   |             |                                                            |        |                             |                                                                                                                                  |                                                        |                        |                           |                     |  |  |

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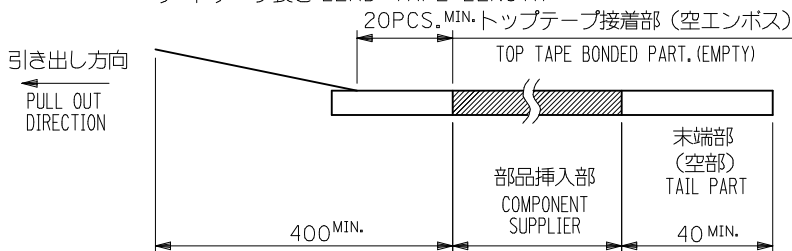
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## NOTES

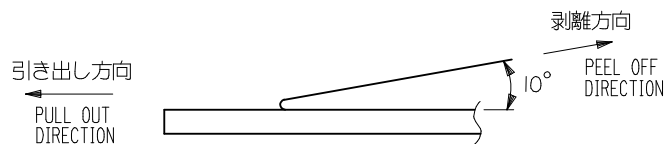
- 製品詳細寸法については製品単体図面を参照下さい。  
RE DETAILED DIMENSION, SEE PRODUCT DRAWING.
- 梱包数量： 3000 個／リール  
NUMBER OF CONNECTORS : 3000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- トップテープの剥離強度：JES-59 参照

剥離方向は下図参照。

PEELING OFF STRENGTH OF TOP TAPE : REFER TO JES-59  
PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE.



- 材料 MATERIAL

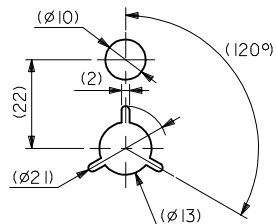
キャリアテープ (CARRIER TAPE)：ポリスチレン (POLYSTYLENE)

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>  
POLYSTYLENE (PS) <RECYCLE MATERIAL CONTAINED>

6.ELV AND RoHS COMPLIANT.

引き出し方向  
PULL OUT DIRECTION



DETAIL D

|                                                                                                                   |                    |                                                            |       |                             |                                                                                                                                  |                                                                                                          |                        |                                                                                                                 |  |
|-------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------|-------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|--|
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|                                                                                                                   |                    | 10 UNDER                                                   | ±0.2  | DRAWN BY<br>TASAKAWA        | DATE<br>2006/07/10                                                                                                               | TITLE<br>0.4 B-TO-B CONN.<br>REC ASSY (HGT=0.9)<br>EMBSTP PKG                                            |                        |                                                                                                                 |  |
|                                                                                                                   |                    | 10 OVER 30 UNDER                                           | ±0.25 | CHECKED BY<br>MSASAO        | DATE<br>2006/07/10                                                                                                               |                                                                                                          |                        |                                                                                                                 |  |
|                                                                                                                   |                    | 30 OVER                                                    | ±0.3  | APPROVED BY<br>MSASAO       | DATE<br>2006/07/10                                                                                                               |  MOLEX INCORPORATED |                        |                                                                                                                 |  |
|                                                                                                                   |                    | ANGULAR ±3 °                                               |       | MATERIAL NO.<br>SEE SHEET 1 |                                                                                                                                  | DOCUMENT NO.<br>SD-501591-006                                                                            |                        | 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 |                                                                                                          |                        |                                                                                                                 |  |

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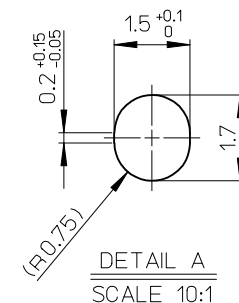
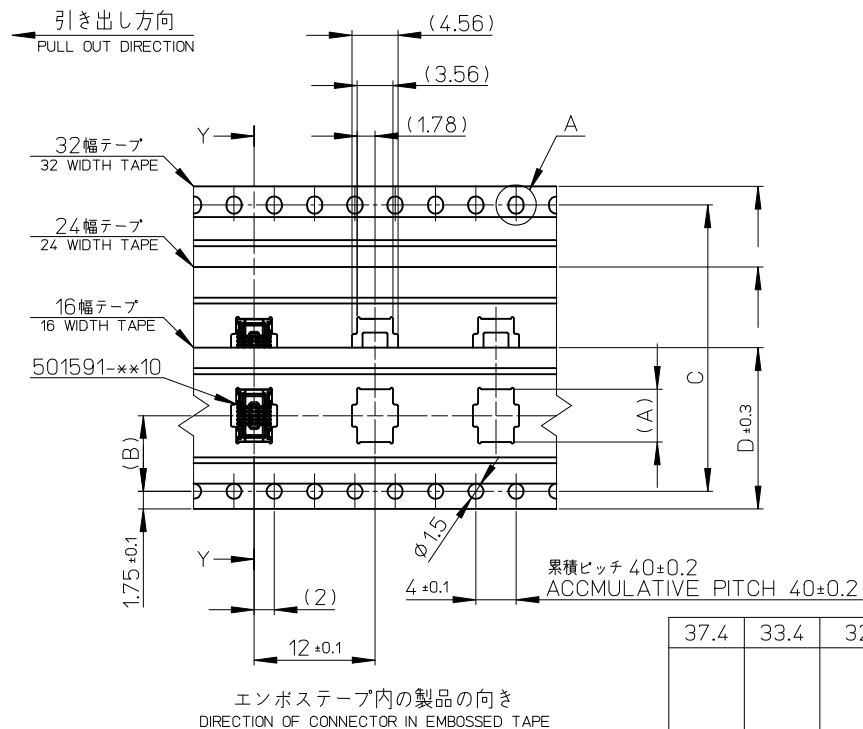
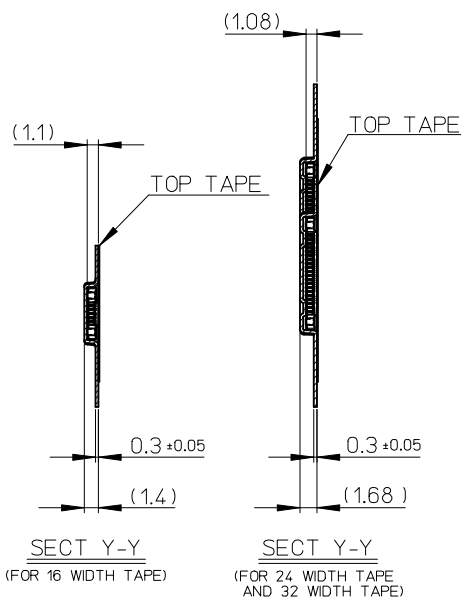
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10 9 8 7 6 5 4 3 2 1



|      |      |    |      |      |       |              |           |
|------|------|----|------|------|-------|--------------|-----------|
| 37.4 | 33.4 | 32 | 28.4 | 14.2 | 17.26 | 501591-7011  | 70        |
| 29.4 | 25.4 | 24 | —    | 11.5 | 14.06 | 501591-5411  | 54        |
|      |      |    |      |      | 13.26 | 501591-5011  | 50        |
|      |      |    |      |      | 12.06 | 501591-4411  | 44        |
|      |      |    |      |      | 11.26 | 501591-4011  | 40        |
|      |      |    |      |      | 10.06 | 501591-3411  | 34        |
|      |      |    |      |      | 9.26  | 501591-3011  | 30        |
|      |      |    |      |      | 8.46  | 501591-2611  | 26        |
|      |      |    |      |      | 8.06  | 501591-2411  | 24        |
|      |      |    |      |      | 7.66  | 501591-2211  | 22        |
| 21.4 | 17.4 | 16 | —    | 7.5  | 7.26  | 501591-2011  | 20        |
|      |      |    |      |      | 5.66  | 501591-1211  | 12        |
|      |      |    |      |      | 5.26  | 501591-1011  | 10        |
| F    | E    | D  | C    | (B)  | (A)   | MATERIAL No. | 極数<br>CKT |

|                                                                                                                   |             |                                                                                                                                  |        |                            |            |                                                               |                        |                           |  |  |
|-------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|------------|---------------------------------------------------------------|------------------------|---------------------------|--|--|
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|                                                                                                                   |             | 10 UNDER                                                                                                                         | ± 0.2  | TASAKAWA                   | 2006/07/10 | TITLE<br>0.4 B-TO-B CONN.<br>REC ASSY (HGT=0.9)<br>EMBSTP PKG |                        |                           |  |  |
|                                                                                                                   |             | 10 OVER 30 UNDER                                                                                                                 | ± 0.25 | CHECKED BY<br>MSASAO       | 2006/07/10 |                                                               |                        |                           |  |  |
|                                                                                                                   |             | 30 OVER                                                                                                                          | ± 0.3  | APPROVED BY<br>MSASAO      | 2006/07/10 | MOLEX INCORPORATED                                            |                        |                           |  |  |
|                                                                                                                   |             | ANGULAR ±3 °                                                                                                                     |        | MATERIAL NO.               |            | DOCUMENT NO.                                                  |                        | SHEET NO.                 |  |  |
|                                                                                                                   |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                       |        | SEE TABLE                  |            | SD-501591-006                                                 |                        | 2 OF 2                    |  |  |
| REV                                                                                                               |             | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |        |                            |            |                                                               |                        |                           |  |  |