

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

**Part Number:** [5019124790](#)  
**Status:** **Active**  
**Description:** 0.30mm (.012") Pitch Easy-On™ FPC Connector, Right Angle, SMT, Bottom Contact Style, 1.80mm (.071") Mated Height, 47 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-501912-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [501912](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 47  
 Circuits (maximum) 47  
 Color - Resin Black, Natural  
 Contact Position Bottom  
 Durability (mating cycles max) 20  
 Entry Angle 90° Angle  
 Mated Height (in) 0.071 In  
 Mated Height (mm) 1.80 mm  
 Material - Metal Copper, Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.012 In  
 Pitch - Mating Interface (mm) 0.30 mm  
 Pitch - Term. Interface (in) 0.012 In  
 Pitch - Term. Interface (mm) 0.30 mm  
 Plating min: Mating (µin) 4  
 Plating min: Mating (µm) 0.1  
 Plating min: Termination (µin) 2  
 Plating min: Termination (µm) 0.05  
 Polarized to PCB No  
 Stackable No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FPC only

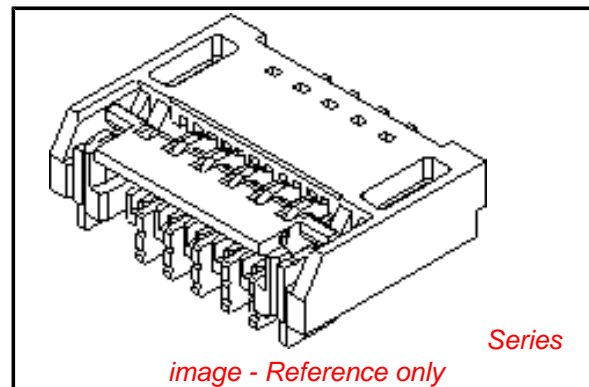
**Electrical**

Current - Maximum per Contact 0.2A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-501912-001, RPS-501912-001, RPS-501912-002, RPS-501912-003  
 Sales Drawing SD-501912-001, SD-501912-002



**EU RoHS**

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

**China RoHS**



**Not Reviewed**

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

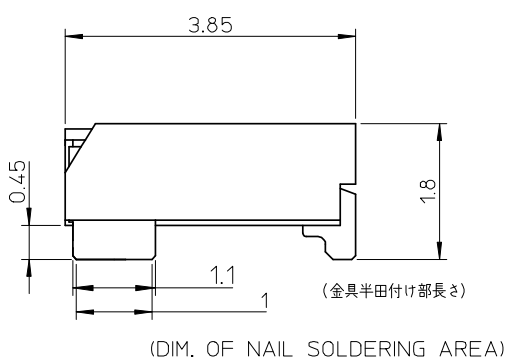
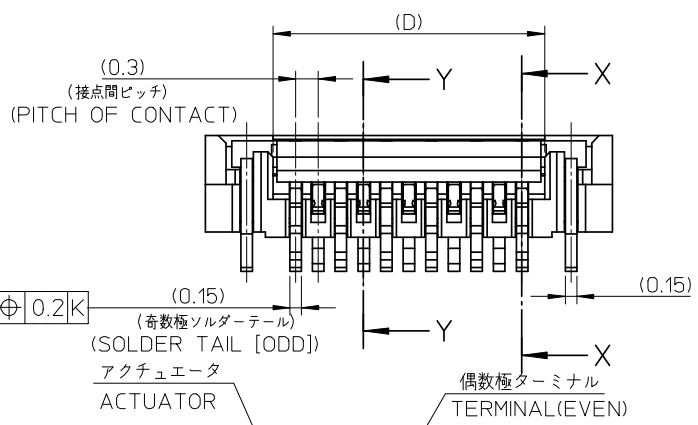
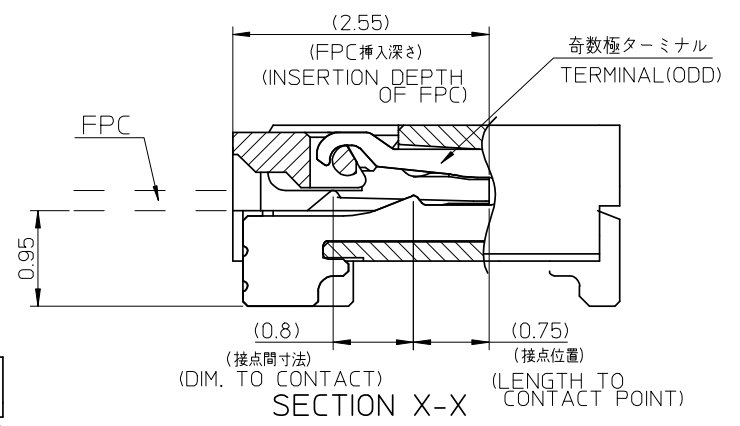
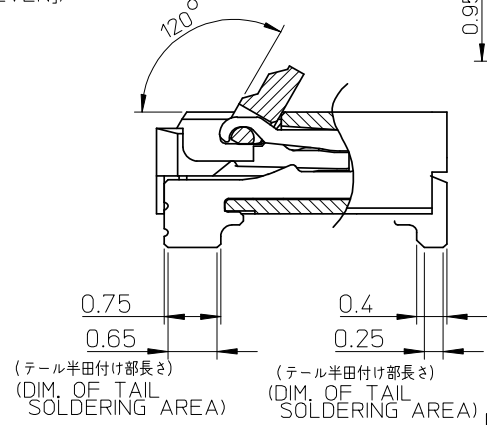
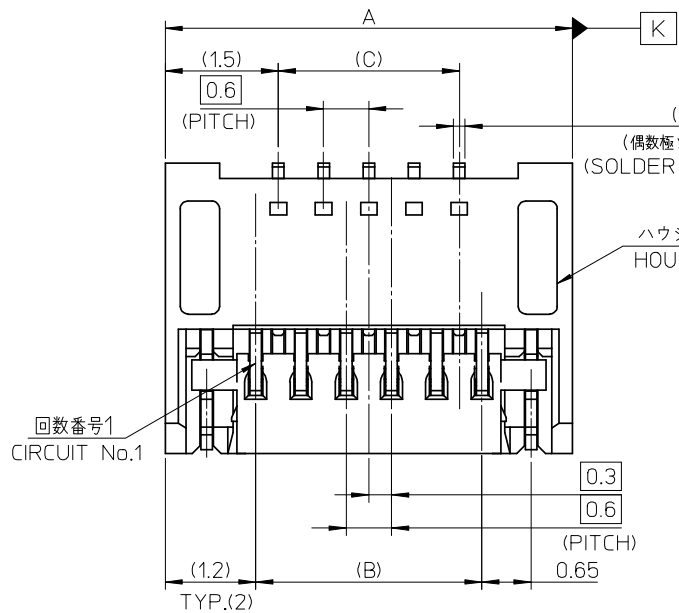
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

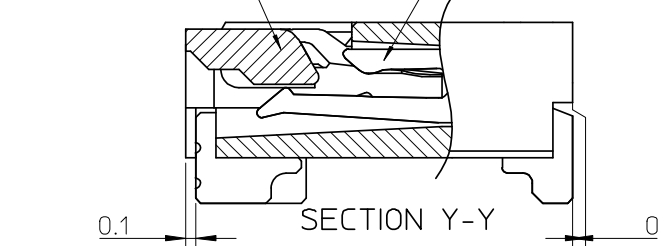
**Search Parts in this Series**  
[501912Series](#)

This document was generated on 04/07/2010

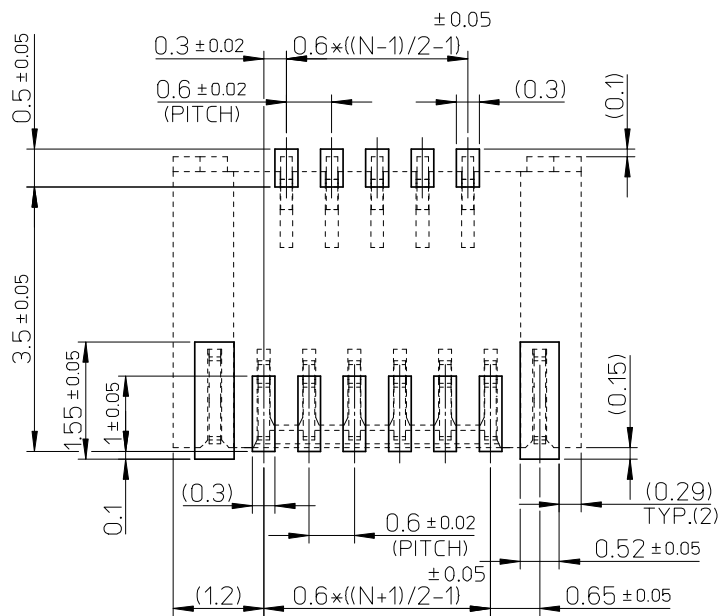
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|                       |      |      |      |                             |              |         |
|-----------------------|------|------|------|-----------------------------|--------------|---------|
| 15.6                  | 14.4 | 15.0 | 17.4 | 501912-5190                 | 501912-5110  | 51      |
| 14.4                  | 13.2 | 13.8 | 16.2 | 501912-4790                 | 501912-4710  | 47      |
| 13.8                  | 12.6 | 13.2 | 15.6 | 501912-4590                 | 501912-4510  | 45      |
| 12.6                  | 11.4 | 12.0 | 14.4 | 501912-4190                 | 501912-4110  | 41      |
| 12.0                  | 10.8 | 11.4 | 13.8 | 501912-3990                 | 501912-3910  | 39      |
| 11.4                  | 10.2 | 10.8 | 13.2 | 501912-3790                 | 501912-3710  | 37      |
| 10.8                  | 9.6  | 10.2 | 12.6 | 501912-3590                 | 501912-3510  | 35      |
| 10.2                  | 9.0  | 9.6  | 12.0 | 501912-3390                 | 501912-3310  | 33      |
| 8.4                   | 7.2  | 7.8  | 10.2 | 501912-2790                 | 501912-2710  | 27      |
| 7.8                   | 6.6  | 7.2  | 9.6  | 501912-2590                 | 501912-2510  | 25      |
| 7.2                   | 6.0  | 6.6  | 9.0  | 501912-2390                 | 501912-2310  | 23      |
| 6.6                   | 5.4  | 6.0  | 8.4  | 501912-2190                 | 501912-2110  | 21      |
| 4.8                   | 3.6  | 4.2  | 6.6  | 501912-1590                 | 501912-1510  | 15      |
| D                     | C    | B    | A    | EMBOSSED-TAPE PKG ORDER No. | MATERIAL No. | CIRCUIT |
| MODEL No. 501912-**10 |      |      |      |                             |              |         |



|   |                                       |             |                 |                    |   |                        |
|---|---------------------------------------|-------------|-----------------|--------------------|---|------------------------|
| REVISED<br>EC NO: J2008-3324<br>DRWN:HTAGAMI 2008/03/25<br>CHKD:KAKAHASHI 2008/04/07<br>APPR:KAKAHASHI 2008/04/07             | GENERAL TOLERANCES (UNLESS SPECIFIED) |             | DIMENSION STYLE | SCALE              | DESIGN UNITS                                      | THIRD ANGLE PROJECTION |
|   |                                       |             | MM ONLY         | 15:1               | METRIC  |                        |
|   | 10 UNDER                              | ± 0.2       | DRAWN BY        | DATE               | TITLE   |                        |
|   | 10 OVER 30 UNDER                      | ± 0.25      | M.HAYASHI       | 2005/07/28         | 0.3 FPC CONN E/O HSG ASSY (HGT=1.8MM) GOLDPLATING |                        |
|   | 30 OVER                               | ± 0.3       | H.HIRATA        | 2005/07/28         |   |                        |
| ANGULAR ±3 °  |                                       | APPROVED BY | DATE            | MOLEX INCORPORATED |   |                        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                                       | M.SASAO     | 2005/07/28      | MATERIAL NO.       | DOCUMENT NO.                                      | SHEET NO.              |
|   |                                       | SEE TABLE   |                 | SD-501912-001      | 1 OF 2  |                        |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                       |             |                 |                    |   |                        |

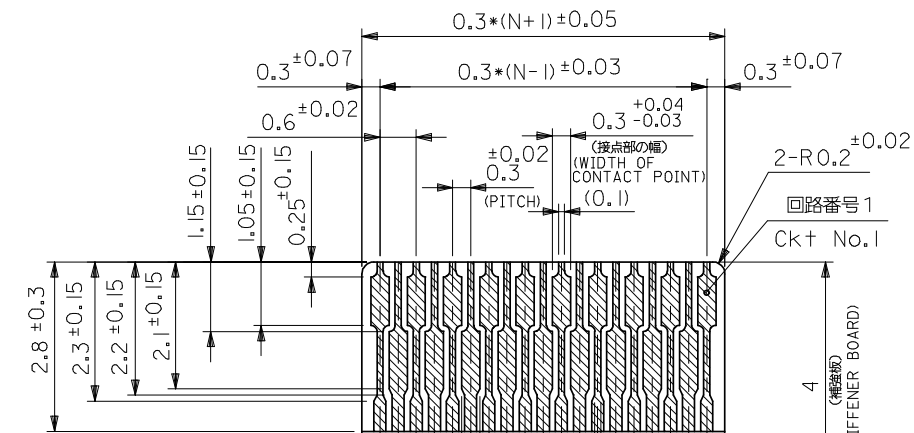


参考基板レイアウト図  
(マウント面)  
(MOUNTING SIDE)

注記 NOTES

- 使用材料 MATFRIAL  
 ハウジング : 耐熱性樹脂 ガラス充填 UL94V-0  
 HOUSING : HEAT RESISTANCE POLYMER (GLASS FILLED) UL94V-0  
 アクチュエータ : 耐熱性樹脂 ガラス充填 UL94V-0  
 ACTUATOR : HEAT RESISTANCE POLYMER (GLASS FILLED) UL94V-0  
 ターミナル : 銅合金 (t=0.15), ニッケル下地金メッキ  
 TERMINAL : COPPER ALLOY, GOLD OVER NICKEL PLATING.  
 金具 : 銅合金 (t=0.15), ニッケル下地スズメッキ  
 FITTING NAIL : COPPER ALLOY, TIN OVER NICKEL PLATING.  
 ハウジングに黒点がある場合が有りますが、問題はありません。

- ソルダーテール半田付け面、及び金具半田付け面の平坦度 : 0.1mm MAXIMUM.  
 COPLANARITY OF SOLDER TAILS AND FITTING NAILS  
 TO BE 0.1mm MAXIMUM.
- ELV AND RoHS COMPLIANT.



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.2 ± 0.03)  
(THICKNESS: 0.2 ± 0.03)

FPCについて:

打抜き方向は導体側から補強板側を推奨いたします。  
 導体部については軟銅箔35マイクロメートルまたは50マイクロメートルを  
 推奨致します。  
 補強フィルム材質はポリイミドを推奨します。  
 接着剤は熱硬化接着剤を推奨します。

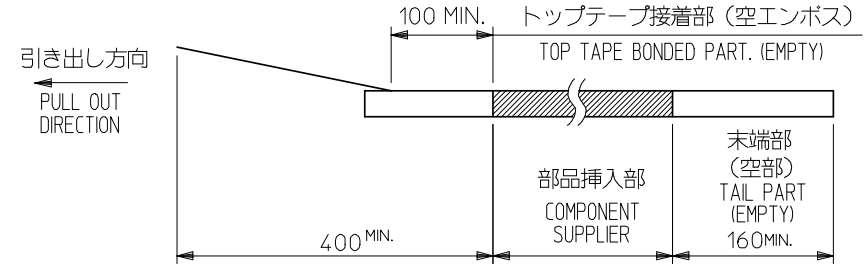
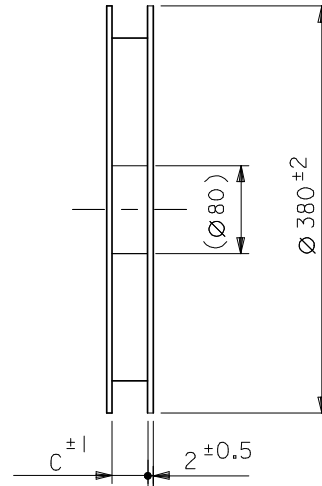
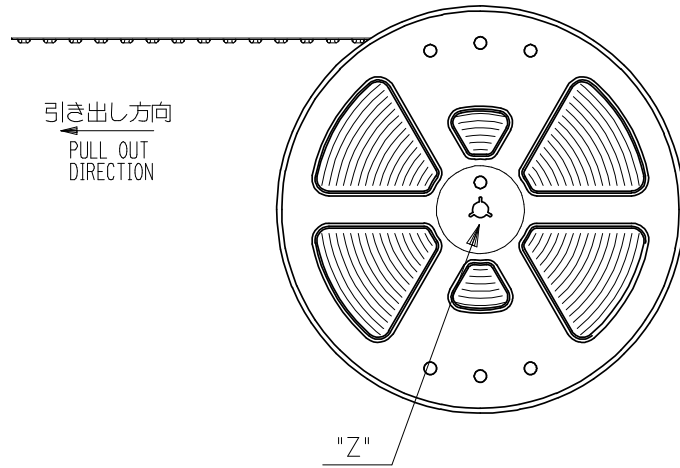
ABOUT FPC

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
 RECOMMENDED CONDUCTOR SPEC :  
 THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER  
 RECOMMENDED MATERIAL :  
 STIFFENER FILM : POLYIMIDE  
 BONDING AGENT : THERMOSETTING BONDING AGENT

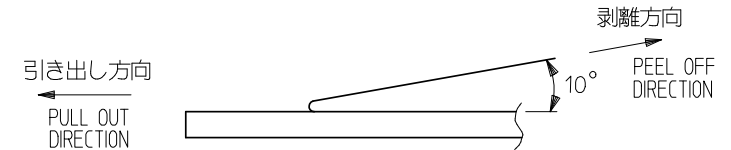
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|--|-------------|--|-------|-----------------------------|--------------------|--|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2008-3324<br>DRAWN: HTAGAMI 2008/03/25<br>CHKD: TAKAHASHI 2008/04/07<br>APPR: KAKAHASHI 2008/04/07                    | DESCRIPTION | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY  |                    | SCALE<br>----  | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |  |  |
|  |             | 10 UNDER   | ±0.2  | DRAWN BY<br>M. HAYASHI      | DATE<br>2005/07/28 | TITLE<br>0.3 FPC CONN E/O HSG<br>ASSY (HGT=1.8MM)<br>GOLDPLATING |                        |                           |  |  |
|  |             | 10 OVER 30 UNDER   | ±0.25 | CHECKED BY<br>H. HIRATA     | DATE<br>2005/07/28 | MOLEX INCORPORATED   |                        |                           |  |  |
|  |             | 30 OVER  | ±0.3  | APPROVED BY<br>M. SASAO     | DATE<br>2005/07/28 | DOCUMENT NO.<br>SD-501912-001                                    |                        |                           |  |  |
| ANGULAR ±3 °   |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | MATERIAL NO.<br>SEE SHEET 1 |                    | SHEET NO.<br>2 OF 2  |                        |                           |  |  |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |             |  |       |                             |                    |  |                        |                           |  |  |

NOTES

- 製品詳細寸法は製品単体図面を参照して下さい。  
FOR DETAIL OF CONNECTOR DIMENSIONS, PLEASE SEE THE DRAWING OF CONNECTOR ITSELF (NOT PACKAGED).
- 梱包数量：3000個/リール  
NUMBER OF CONNECTORS : 3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



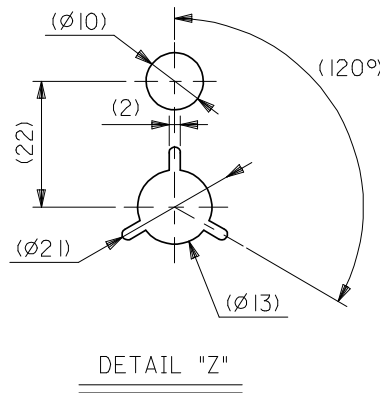
- トップテープの剥離強度：60±35gf (0.25N～0.93N) (剥離方向は下図参照) 尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 65gf±30gf (0.25N～0.93N) (PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.) THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT. PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



5. 材料(MATERIAL)

キャリアテープ (CARRIER TAPE) : ポリスチレン (POLYSTYREN)  
 トップテープ (TOP TAPE) : PET, PE, PEF  
 リール(REEL) : ポリスチレン(PS) <リサイクル材を含む>  
 POLYSTYREN(PS) <RECYCLE MATERIAL CONTAINED>

- C寸法は SHEET 2-4を参照下さい。  
SEE SHEET 2-4(DIMENSION C).
- ELV AND RoHS COMPLIANT.



DETAIL "Z"

|   |                                       |       |  |                    |  |                        |             |           |
|---|---------------------------------------|-------|--|--------------------|--|------------------------|-------------|-----------|
| REVISED<br>EC NO: J2008-3324<br>DRWN:HTAGAMI 2008/03/25<br>CHKD:KTAKAHASHI 2008/04/07<br>APPR:KTAKAHASHI 2008/04/07 | GENERAL TOLERANCES (UNLESS SPECIFIED) |       | DIMENSION STYLE<br>MM ONLY                                 |                    | SCALE<br>---   | DESIGN UNITS<br>METRIC | 501912-**90 | MODEL NO. |
|   | 10 UNDER                              | ±0.2  | DRAWN BY<br>M. HAYASHI                                     | DATE<br>2005/10/11 | TITLE<br>EMBSTP PKG FOR 0.3 FPC<br>CONN (HGT=1.8MM)<br>GOLD PLATING  |                        |             |           |
|   | 10 OVER 30 UNDER                      | ±0.25 | CHECKED BY<br>H. HIRATA                                    | DATE<br>2005/10/11 | MATERIAL NO.<br>SD-501912-002  |                        |             |           |
|   | 30 OVER                               | ±0.3  | APPROVED BY<br>M. SASAO                                    | DATE<br>2005/10/11 | SHEET NO.<br>1 OF 4  |                        |             |           |
|   | ANGULAR                               | ±3 °  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |             |           |
|   |                                       |       | SEE TABLE  |                    | MOLEX INCORPORATED   |                        |             |           |

F

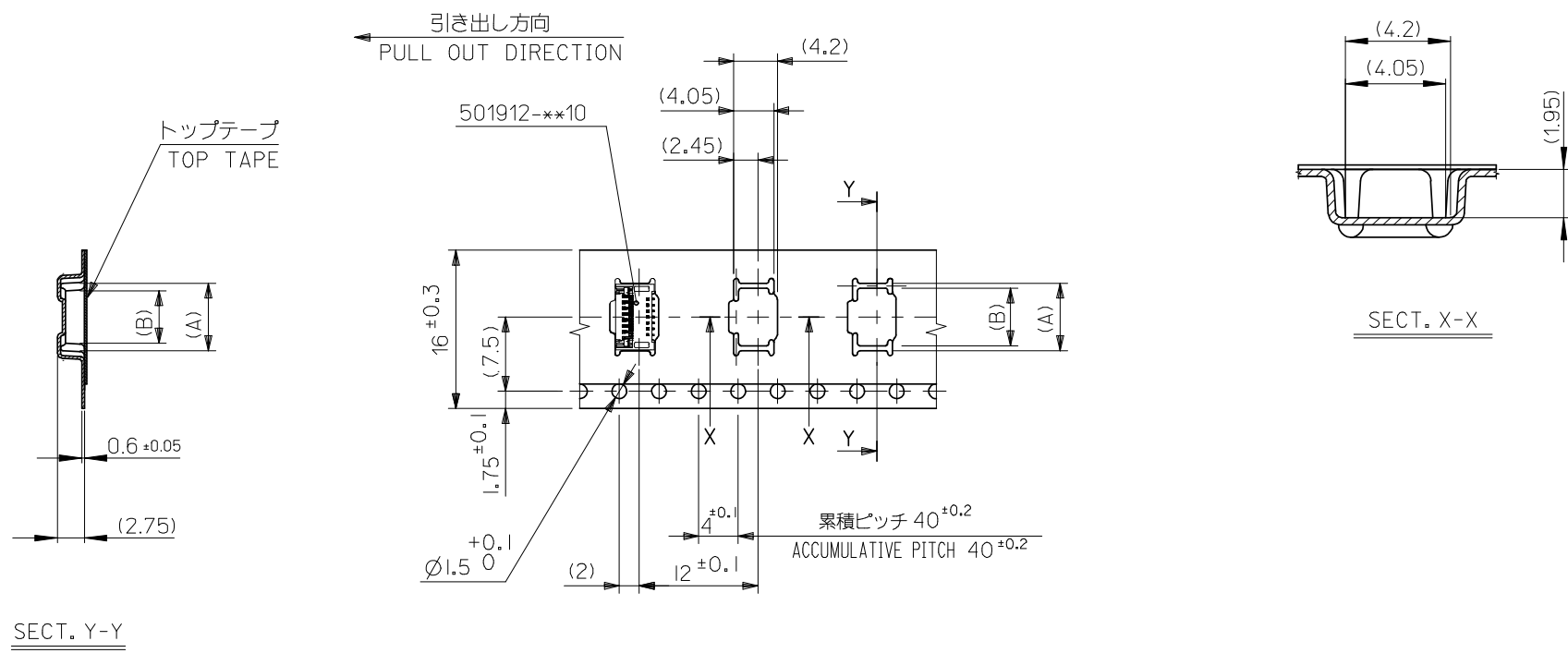
E

D

C

B

A



16 mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

|                                |      |     |     |                      |           |
|--------------------------------|------|-----|-----|----------------------|-----------|
| 16                             | 17.5 | 4.6 | 6.8 | 501912-1590          | 15        |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | C    | (B) | (A) | 製品番号<br>MATERIAL No. | 極数<br>CK+ |
|                                |      |     |     | 501912-**-90         | MODEL No. |

|  |                                       |           |                            |                    |   |                        |                        |
|--|---------------------------------------|-----------|----------------------------|--------------------|---|------------------------|------------------------|
| REVISED<br>EC NO: J2008-3324<br>DRWN:HTAGAMI 2008/03/25<br>CHK:KOTAKAHASHI 2008/04/07<br>APPR:KTAKAHASHI 2008/04/07<br>T<br>REV          | 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>M. HAYASHI     | DATE<br>2005/10/11 | TITLE<br>EMBSTP PKG FOR 0.3 FPC<br>CONN (HGT=1.8MM)<br>GOLD PLATING |                        |                        |
|  | 10 OVER 30 UNDER                      | ± 0.25    | CHECKED BY<br>H. HIRATA    | DATE<br>2005/10/11 |   |                        |                        |
|  | 30 OVER                               | ± 0.3     | APPROVED BY<br>M. SASAO    | DATE<br>2005/10/11 | MOLEX INCORPORATED  |                        |                        |
|  | ANGULAR ± 3 °                         |           | MATERIAL NO.               | DOCUMENT NO.       |   |                        |                        |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |                                       | SEE TABLE |                            | SD-501912-002      |   | 2 OF 4                 |                        |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                       |           |                            |                    |   |                        |                        |

F

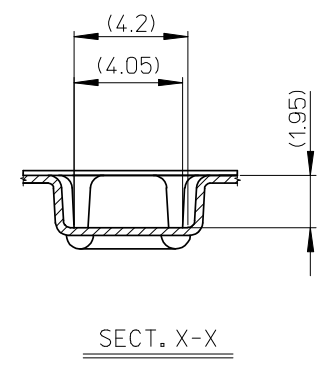
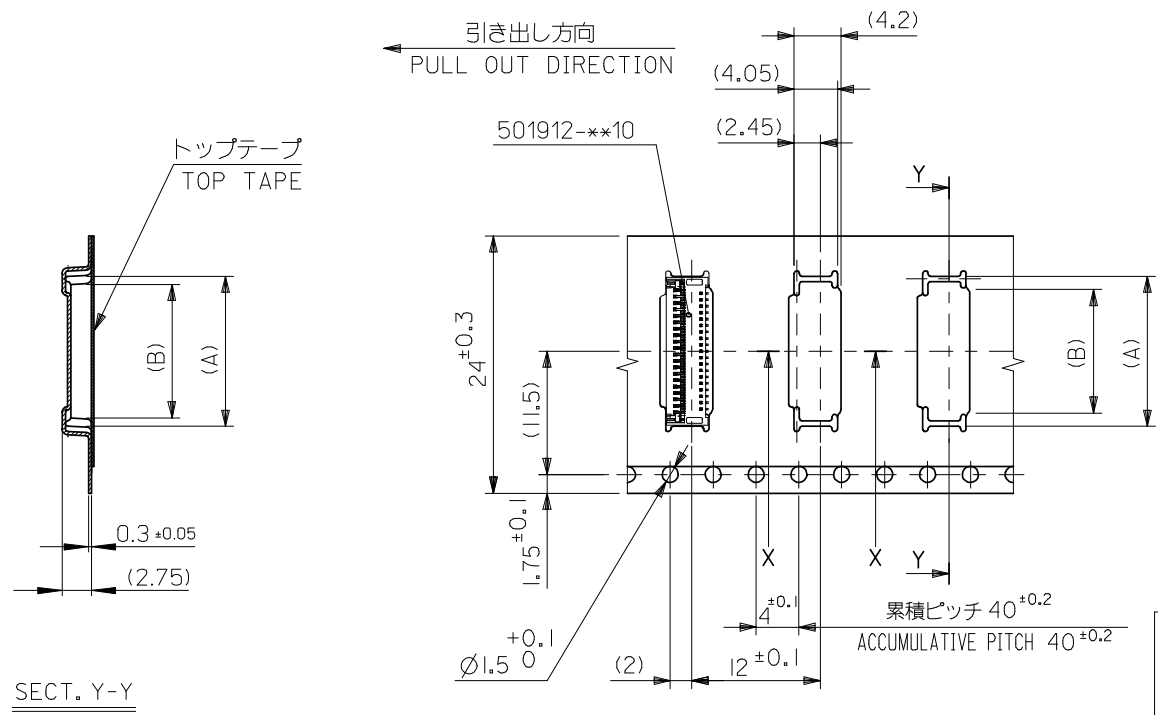
E

D

C

B

A



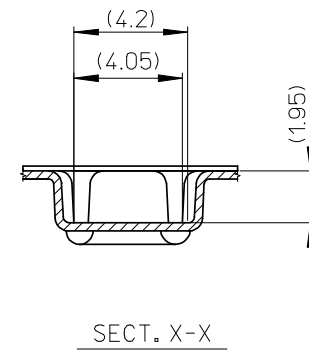
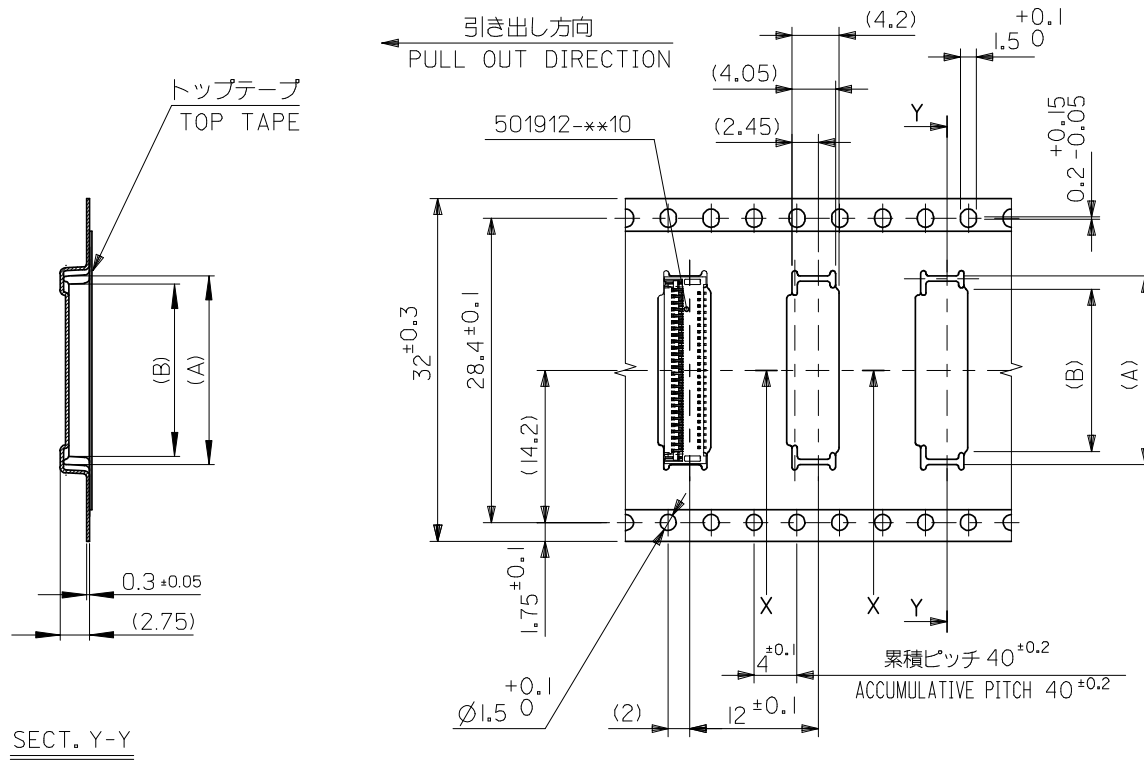
SECT. Y-Y

SECT. X-X

24mm幅キャリアテープ  
24mm WIDTH CARRIER TAPE

|                                |      |      |      |             |                      |           |
|--------------------------------|------|------|------|-------------|----------------------|-----------|
| 24                             | 25.5 | 12.4 | 14.6 | 501912-4190 | 41                   |           |
|                                |      | 11.8 | 14.0 | 501912-3990 | 39                   |           |
|                                |      | 11.2 | 13.4 | 501912-3790 | 37                   |           |
|                                |      | 10.6 | 12.8 | 501912-3590 | 35                   |           |
|                                |      | 10.0 | 12.2 | 501912-3390 | 33                   |           |
|                                |      | 8.2  | 10.4 | 501912-2790 | 27                   |           |
|                                |      | 7.6  | 9.8  | 501912-2590 | 25                   |           |
|                                |      | 7.0  | 9.2  | 501912-2390 | 23                   |           |
|                                |      | 6.4  | 8.6  | 501912-2190 | 21                   |           |
| キャリアテープ幅<br>CARRIER TAPE WIDTH |      | C    | (B)  | (A)         | 製品番号<br>MATERIAL No. | 極数<br>CK+ |
|                                |      |      |      | 501912-**90 | MODEL No.            |           |

|   |                                       |           |                            |                    |   |                        |                        |  |
|---|---------------------------------------|-----------|----------------------------|--------------------|---|------------------------|------------------------|--|
| REVISED<br>EC NO: J2008-3324<br>DRWN:HTAGAMI 2008/03/25<br>CHKD:KTAKAHASHI 2008/04/07<br>APPR:KTAKAHASHI 2008/04/07 | 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>M. HAYASHI     | DATE<br>2005/10/11 | TITLE<br>EMBSTP PKG FOR 0.3 FPC<br>CONN (HGT=1.8MM)<br>GOLD PLATING |                        |                        |  |
|   | 10 OVER 30 UNDER                      | ±0.25     | CHECKED BY<br>H. HIRATA    | DATE<br>2005/10/11 |   |                        |                        |  |
|   | 30 OVER                               | ±0.3      | APPROVED BY<br>M. SASAO    | DATE<br>2005/10/11 | MOLEX INCORPORATED  |                        |                        |  |
|   | ANGULAR                               | ±3 °      | MATERIAL NO.               | DOCUMENT NO.       |   |                        |                        |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  |                                       | SEE TABLE |                            | SD-501912-002      |   | 3 OF 4                 |                        |  |



32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE

|                                |      |      |      |                      |           |
|--------------------------------|------|------|------|----------------------|-----------|
| 32                             | 33.5 | 15.4 | 17.6 | 501912-5190          | 51        |
|                                |      | 14.2 | 16.4 | 501912-4790          | 47        |
|                                |      | 13.6 | 15.8 | 501912-4590          | 45        |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | C    | (B)  | (A)  | 製品番号<br>MATERIAL No. | 極数<br>CK+ |
|                                |      |      |      | 501912-**90          | MODEL No. |

|  |                                       |           |                            |                    |   |                        |                        |  |
|--|---------------------------------------|-----------|----------------------------|--------------------|---|------------------------|------------------------|--|
| REVISED<br>EC NO: J2008-3324<br>T DRWN: H. TAGAMI 2008/03/25<br>CH'KD: K. TAKAHASHI 2008/04/07<br>APPR: K. TAKAHASHI 2008/04/07<br>REV DESCRIPTION | 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>M. HAYASHI     | DATE<br>2005/10/11 | TITLE<br>EMBSTP PKG FOR 0.3 FPC<br>CONN (HGT=1.8MM)<br>GOLD PLATING |                        |                        |  |
|  | 10 OVER 30 UNDER                      | ±0.25     | CHECKED BY<br>H. HIRATA    | DATE<br>2005/10/11 |   |                        |                        |  |
|  | 30 OVER                               | ±0.3      | APPROVED BY<br>M. SASAO    | DATE<br>2005/10/11 | MOLEX INCORPORATED  |                        |                        |  |
|  | ANGULAR                               | ±3 °      | MATERIAL NO.               | DOCUMENT NO.       |   |                        |                        |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   |                                       | SEE TABLE |                            | SD-501912-002      |   | 4 OF 4                 |                        |  |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION           |                                       |           |                            |                    |   |                        |                        |  |