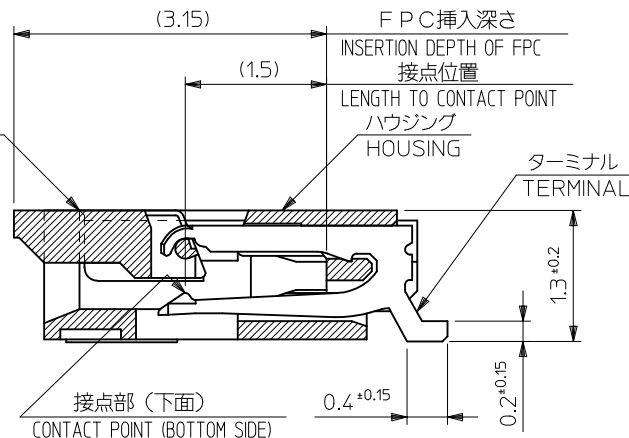
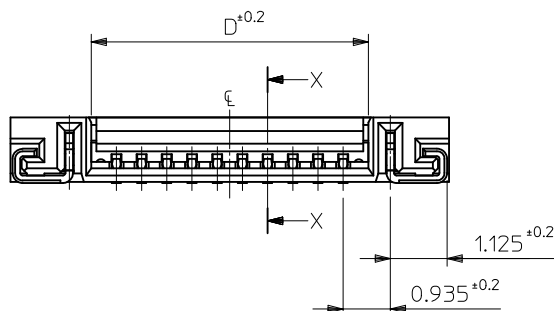
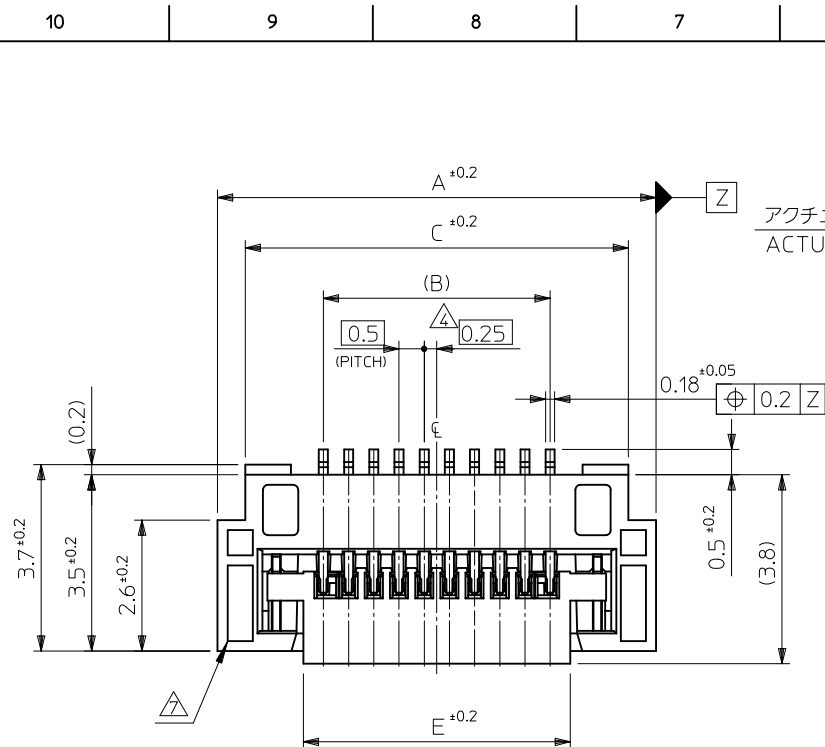
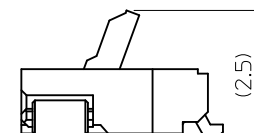
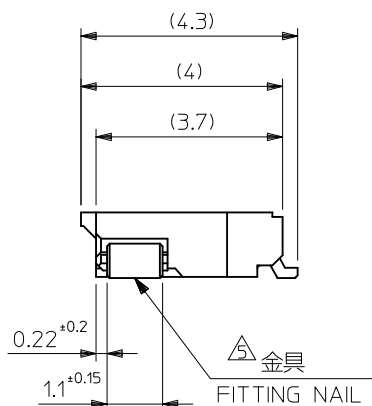




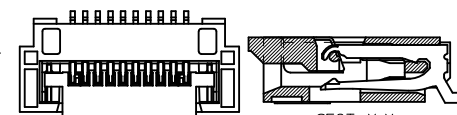
△ SECT. X-X



(アクチュエータが開いた状態)  
(WHEN ACTUATOR IS OPENED)

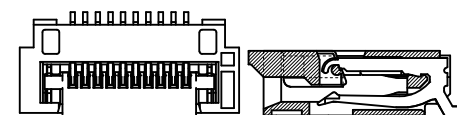


△ 金具  
FITTING NAIL



△ SECT. X-X

-30 極以上-  
30 Ckt. OR MORE



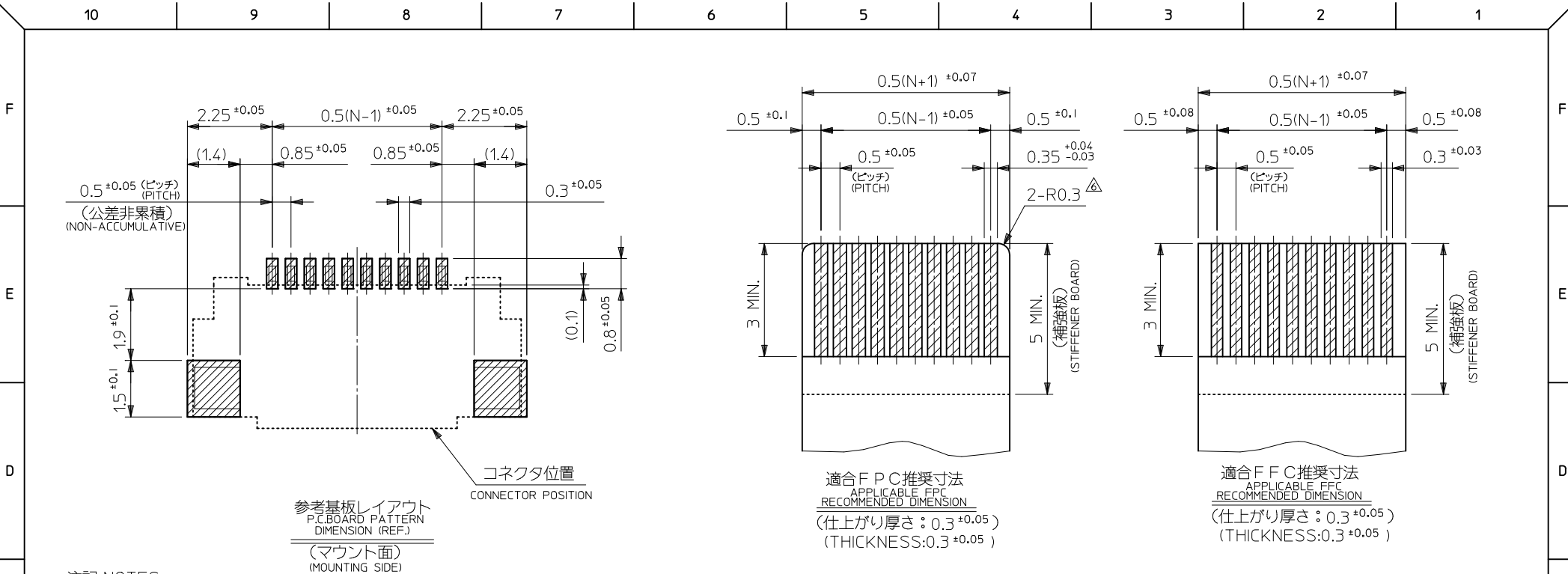
△ SECT. X-X

-29 極以下-  
29 Ckt. OR LESS

△ 外形形状  
APPEARANCE FORM

|      |      |      |      |      |                  |                        |           |
|------|------|------|------|------|------------------|------------------------|-----------|
| 30.3 | 30.5 | 32.6 | 29.5 | 33.7 | 51296-6094       | 51296-6051             | 60        |
| 27.3 | 27.5 | 29.6 | 26.5 | 30.7 | 51296-5494       | 51296-5451             | 54        |
| 25.3 | 25.5 | 27.6 | 24.5 | 28.7 | 51296-5094       | 51296-5051             | 50        |
| 22.8 | 23.0 | 25.1 | 22.0 | 26.2 | 51296-4594       | 51296-4551             | 45        |
| 20.3 | 20.5 | 22.6 | 19.5 | 23.7 | 51296-4094       | 51296-4051             | 40        |
| 17.3 | 17.5 | 19.6 | 16.5 | 20.7 | 51296-3494       | 51296-3451             | 34        |
| 9.3  | 9.5  | 11.6 | 8.5  | 12.7 | 51296-1894       | 51296-1851             | 18        |
| 7.3  | 7.5  | 9.6  | 6.5  | 10.7 | 51296-1494       | 51296-1451             | 14        |
| 6.3  | 6.5  | 8.6  | 5.5  | 9.7  | 51296-1294       | 51296-1251             | 12        |
| 4.3  | 4.5  | 6.6  | 3.5  | 7.7  | 51296-0894       | 51296-0851             | 8         |
| E    | D    | C    | B    | A    | EMBOSSD TAPE     | 製品番号<br>MATERIAL No.   | 極数<br>Ckt |
|      |      |      |      |      | ORDER No. オーダー番号 | MODEL No. 151296-***51 |           |

|                                                                                                             |             |                                                            |        |                            |                    |                                                                                                                                  |                        |                                                                                                                 |                              |
|-------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|--------|----------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------|
| REVISED<br>EC NO: J2011-0996<br>DRWN: KIMURAKAMI 2010/11/01<br>CHKD:<br>APPR: KIMORI KAWA 2011/02/15<br>REV | 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>M.UMEDA        | DATE<br>2005/02/22 | TITLE<br>0.5 FPC CONN ZIF E/O<br>HSG ASSY (HGT=1.3)<br>-LEAD FREE-                                                               |                        |                                                                                                                 |                              |
|                                                                                                             |             | 10 OVER 30 UNDER                                           | ± 0.25 | CHECKED BY<br>KEN. SUZUKI  | DATE<br>2005/02/22 |                                                                                                                                  |                        |                                                                                                                 |                              |
|                                                                                                             |             | 30 OVER                                                    | ± 0.3  | APPROVED BY<br>N. UKITA    | DATE<br>2005/02/22 |  MOLEX INCORPORATED                         |                        |                                                                                                                 |                              |
|                                                                                                             |             | ANGULAR ±1 °                                               |        | MATERIAL NO.<br>SEE TABLE  |                    |                                                                                                                                  |                        |                                                                                                                 | DOCUMENT NO.<br>SD-51296-011 |
|                                                                                                             |             | 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 |                        |                                                                                                                 |                              |



注記 NOTES

1. 使用材料 MATERIAL

ハウジング : 液晶ポリマー ガラス充填, UL94V-0 (ベージュ)  
HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (BEIGE)  
アクチュエータ : ポリアミド 9T ガラス充填, UL94V-0 (黒)  
ACTUATOR : POLYAMIDE 9T GLASS FILLED, UL94V-0 (BLACK)  
ターミナル : リン青銅 (t=0.18)  
TERMINAL : PHOSPOR BRONZE  
金具 : リン青銅 (t=0.15)  
FITTING NAIL : PHOSPOR BRONZE

3. エンボステープ梱包時は、アクチュエータが閉じた状態とする。  
IN THE PACKAGE, ACTUATOR OF PART NO.51296-\*\*51 SHOULD BE CLOSED.
- △ 偶数極に適用。  
APPLY FOR EVEN CIRCUIT.
- △ パターンはくり止め用金具  
FITTING NAIL FOR PREVENTION OF PEELING OF PCB PATTERN.
- △ R0.3は、FPC 導体部にかからないこと。  
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.
- △ 極数によりハウジング形状が異なるので注意のこと。  
THE HOUSING SHAPE IS DIFFERENT ACCORDING TO THE CIRCUIT.

2. メッキ仕様 PLATING

ターミナル TERMINAL  
コンタクト部: 金メッキ 0.1マイクロメートル以上  
CONTACT AREA : GOLD 0.1 MICROMETER MINIMUM  
テール部: 金メッキ 0.05マイクロメートル以上  
TAIL AREA : GOLD 0.05 MICROMETER MINIMUM  
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  
銅メッキ 1.0マイクロメートル以上  
TIN 1.0 MICROMETER MINIMUM  
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

FPC/FFC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。

ABOUT FPC/FFC  
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER

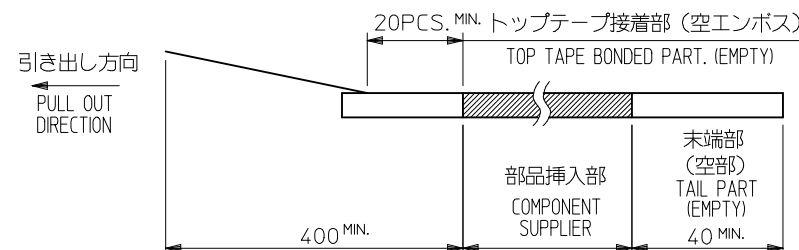
FPCについて:  
補強フィルム材質はポリイミドを推奨します。  
接着剤は熱硬化接着剤を推奨します。

ABOUT FFC  
RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT

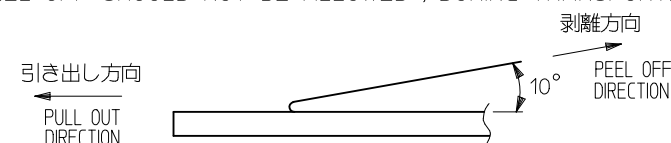
|   |                                                                                                                                                   |  |                                          |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|--|----------------------------|--|--------------|--------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---|
| A | 金具 FITTING NAIL<br>錫メッキ 1.0マイクロメートル以上<br>TIN 1.0 MICROMETER MINIMUM<br>下地メッキ：ニッケルメッキ 1.0マイクロメートル以上<br>UNDER PLATING：NICKEL 1.0 MICROMETER MINIMUM |  |                                          | REVISED<br>EC NO: J2011-0996<br>DRWN:KOMURAKAMI 2010/11/01<br>CHKD:<br>APPR:KMORI KAWA 2011/02/15<br>REV | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |  | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>--- | 51296-**51<br>DESIGN UNITS<br>METRIC | MODEL No.<br>THIRD ANGLE<br>PROJECTION | 0.5 FPC CONN ZIF E/O<br>HSG ASSY (HGT=1.3)<br>-LEAD FREE-<br><br>MOLEX MOLEX INCORPORATED<br><br>SD-51296-011<br><br>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | SHEET NO.<br>2 OF 2 | A |
|   | 10 UNDER ± 0.2                                                                                                                                    |  | DRAWN BY DATE<br>M.UMEDA 2005/02/22      |                                                                                                          |             | TITLE                                    |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   | 10 OVER 30 UNDER ± 0.25                                                                                                                           |  | CHECKED BY DATE<br>KEN.SUZUKI 2005/02/22 |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   | 30 OVER ± 0.3                                                                                                                                     |  | APPROVED BY DATE<br>N.UKITA 2005/02/22   |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   | ANGULAR ±1 °                                                                                                                                      |  | MATERIAL NO.                             |                                                                                                          |             | DOCUMENT NO.                             |  | EN-02JA(021)               |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                        |  | SEE TABLE                                |                                                                                                          |             | SD-51296-011                             |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   |                                                                                                                                                   |  | SIZE<br>A3                               |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   |                                                                                                                                                   |  |                                          |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   |                                                                                                                                                   |  |                                          |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   |                                                                                                                                                   |  |                                          |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |
|   |                                                                                                                                                   |  |                                          |                                                                                                          |             |                                          |  |                            |  |              |                                      |                                        |                                                                                                                                                                                                                                                       |                     |   |

## 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

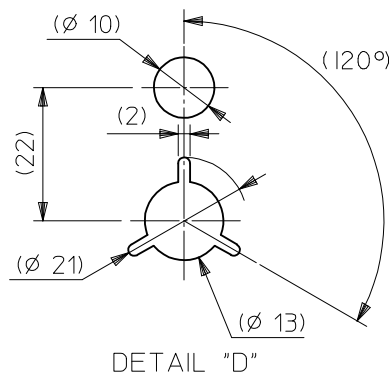
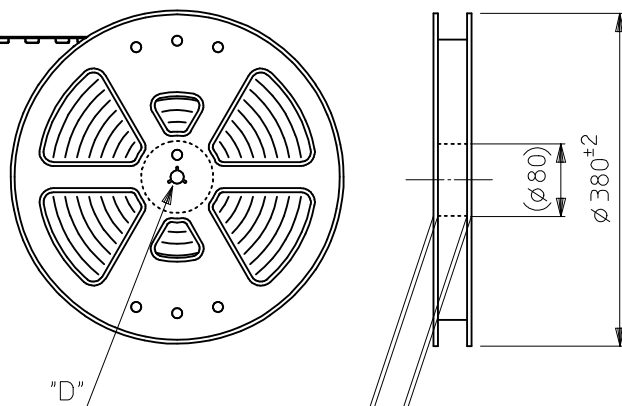


- トップテープの剥離強度 : 0.1N ~ 1.3N (10gf ~ 130gf)  
(剥離方向は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 0.1N ~ 1.3N (10gf ~ 130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



- 材料(MATERIAL)  
キャリアテープ (CARRIER TAPE) : ポリプロピレン (POLYPROPYLENE)  
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>  
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>

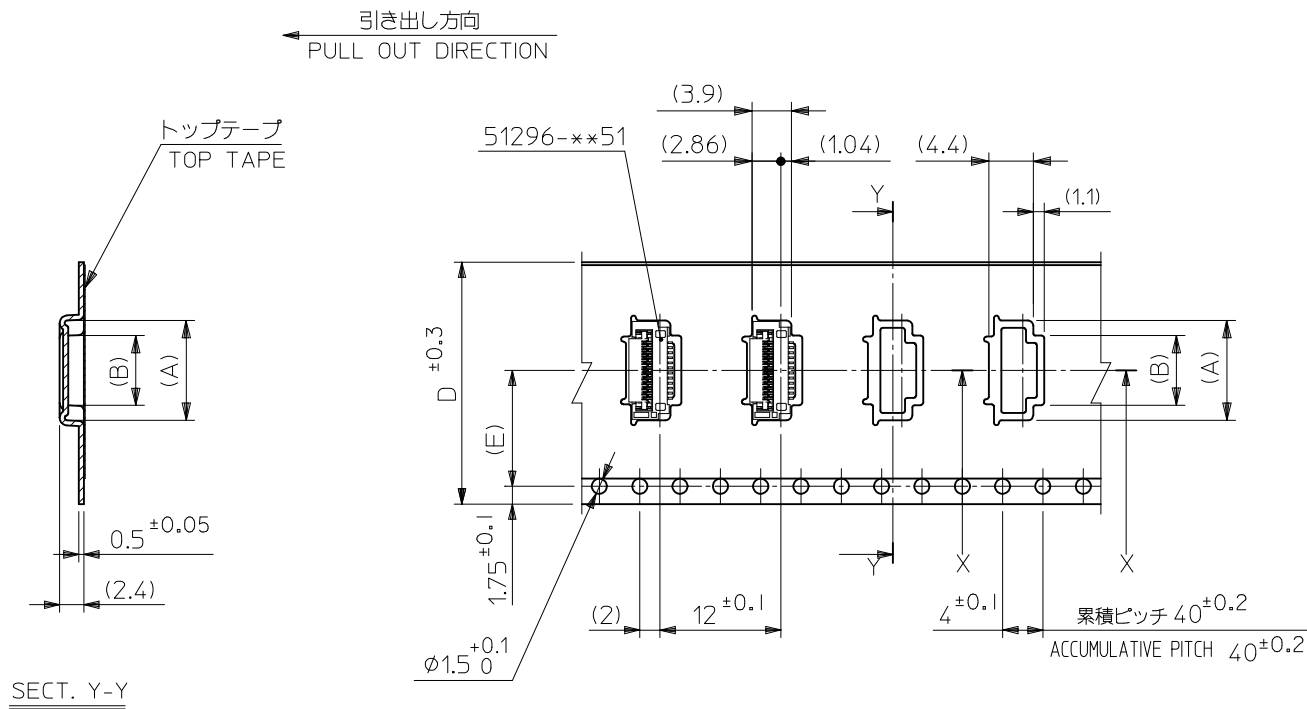
引き出し方向  
PULL OUT  
DIRECTION



C±1  
G±1

|                                                                                                                    |                                                            |                                          |            |                                                                                                                                  |              |                                                       |                                                                                                          |                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| REVISED<br>EC NO: J2009-0892<br>DRWN:MTAKAHASHI032008/10/14<br>CHKD:THARUYAMA 2008/10/14<br>APPR:NUKITA 2008/10/14 | 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      | M. UEDA                                                                                                                          | 2005/02/23   | TITLE<br>0.5 FPC CONN EASY ON<br>HGT=1.3MM EMBSTP PKG |  MOLEX INCORPORATED | SHEET NO.<br>1 OF 3                                                                                             |
|                                                                                                                    |                                                            | 10 OVER 30 UNDER                         | ± 0.25     | KEN. SUZUKI                                                                                                                      | 2005/02/23   |                                                       |                                                                                                          |                                                                                                                 |
|                                                                                                                    |                                                            | 30 OVER                                  | ± 0.3      |                                                                                                                                  |              |                                                       |                                                                                                          |                                                                                                                 |
|                                                                                                                    |                                                            | ANGULAR ±1 °                             |            | MATERIAL NO.                                                                                                                     |              | DOCUMENT NO.                                          |                                                                                                          |                                                                                                                 |
|                                                                                                                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                          | SEE CHART  |                                                                                                                                  | SD-51296-012 |                                                       |                                                                                                          |                                                                                                                 |
|                                                                                                                    | REV                                                        |                                          | SIZE<br>A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                                                       |                                                                                                          |                                                                                                                 |

CONFIDENTIAL



|      |    |      |      |      |                     |           |
|------|----|------|------|------|---------------------|-----------|
| 11.5 | 24 | 25.4 | 9.89 | 12.9 | 51296-1894          | 18        |
|      |    |      | 7.89 | 10.9 | 51296-1494          | 14        |
|      |    |      | 6.89 | 9.9  | 51296-1294          | 12        |
| 7.5  | 16 | 17.4 | 4.89 | 7.9  | 51296-0894          | 8         |
| (E)  | D  | C    | (B)  | (A)  | 製品番号<br>MATERIAL No | 極数<br>Ckt |

|                                                                                                                    |                                                            |                                                                                                                                          |              |                            |                    |                                                       |                        |                           |  |  |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------|--------------------|-------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2009-0892<br>DRWN:MTAKASHI 03/2008/10/14<br>CHKD:THARUYAMA 2008/10/14<br>APPR:NUKITA 2008/10/14 | 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>M. UEDA        | DATE<br>2005/02/23 | TITLE<br>0.5 FPC CONN EASY ON<br>HGT=1.3MM EMBSTP PKG |                        |                           |  |  |
|                                                                                                                    |                                                            | 10 OVER 30 UNDER                                                                                                                         | ± 0.25       | CHECKED BY<br>KEN. SUZUKI  | DATE<br>2005/02/23 |                                                       |                        |                           |  |  |
|                                                                                                                    |                                                            | 30 OVER                                                                                                                                  | ± 0.3        | APPROVED BY<br>N. UKITA    | DATE<br>2005/02/23 |                                                       |                        |                           |  |  |
|                                                                                                                    | ANGULAR ±1 °                                               |                                                                                                                                          | MATERIAL NO. |                            | DOCUMENT NO.       |                                                       | SHEET NO.              |                           |  |  |
|                                                                                                                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                          | SEE CHART    |                            | SD-51296-012       |                                                       | 2 OF 3                 |                           |  |  |
| REV                                                                                                                |                                                            | SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                            |                    |                                                       |                        |                           |  |  |



|                                          |                                                                                                                                  |                                                       |                                             |                     |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------|---------------------|
| DIMENSION STYLE<br><b>MM ONLY</b>        |                                                                                                                                  | SCALE<br>---                                          | 51296-**94<br>DESIGN UNITS<br><b>METRIC</b> | MODEL NO.           |
| DRAWN BY DATE<br>M.UMEDA 2005/02/23      |                                                                                                                                  | TITLE<br>0.5 FPC CONN EASY ON<br>HGT=1.3MM EMBSTP PKG |                                             |                     |
| CHECKED BY DATE<br>KEN.SUZUKI 2005/02/23 |                                                                                                                                  | THIRD ANGLE<br>PROJECTION                             |                                             |                     |
| APPROVED BY DATE<br>N.UKITA 2005/02/23   |                                                                                                                                  | MOLEX INCORPORATED                                    |                                             |                     |
| MATERIAL NO.<br><b>SEE CHART</b>         |                                                                                                                                  | DOCUMENT NO.<br>SD-51296-012                          |                                             | SHEET NO.<br>3 OF 3 |
| SIZE<br><b>A3</b>                        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                       |                                             |                     |

EN-02JA(021)