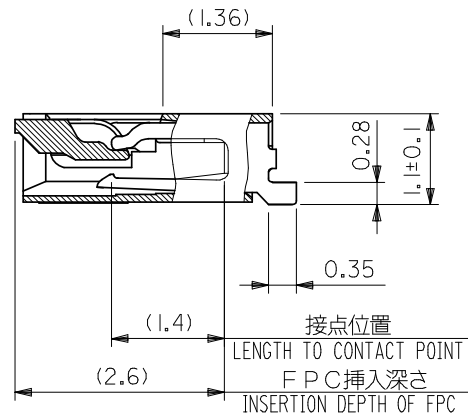
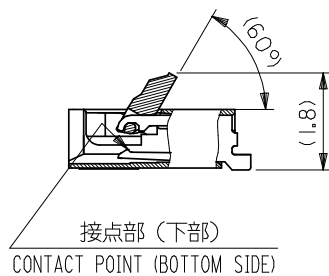
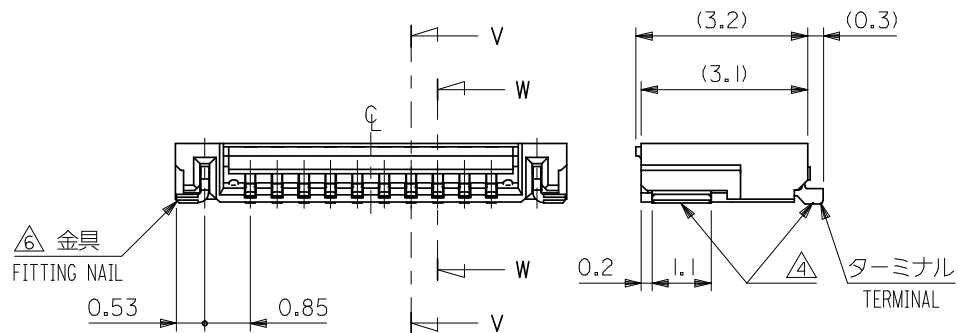


断面 V-V 奇数極  
SECT. V-V (Scale 15:1) (ODD CIRCUIT)



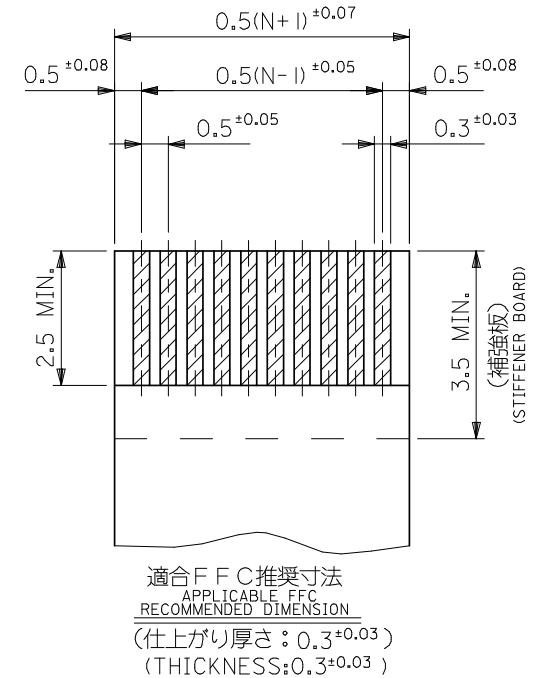
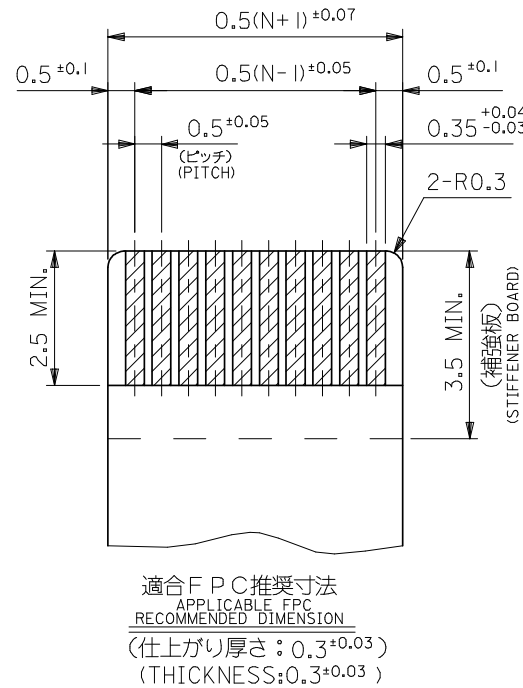
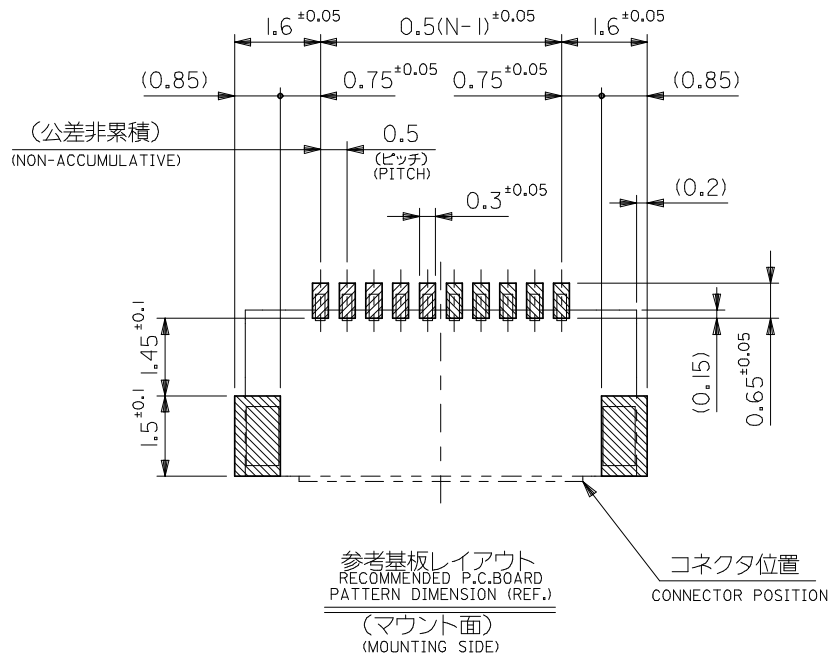
断面 W-W 偶数極  
SECT. W-W (Scale 15:1) (EVEN CIRCUIT)



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

|      |      |      |                  |              |         |
|------|------|------|------------------|--------------|---------|
| 12.3 | 11.5 | 14.3 | 51441-2493       | 51441-2441   | 24      |
| 11.3 | 10.5 | 13.3 | 51441-2293       | 51441-2241   | 22      |
| 10.3 | 9.5  | 12.3 | 51441-2093       | 51441-2041   | 20      |
| 9.3  | 8.5  | 11.3 | 51441-1893       | 51441-1841   | 18      |
| 8.8  | 8.0  | 10.8 | 51441-1793       | 51441-1741   | 17      |
| 8.3  | 7.5  | 10.3 | 51441-1693       | 51441-1641   | 16      |
| 6.8  | 6.0  | 8.8  | 51441-1393       | 51441-1341   | 13      |
| 6.3  | 5.5  | 8.3  | 51441-1293       | 51441-1241   | 12      |
| 5.8  | 5.0  | 7.8  | 51441-1193       | 51441-1141   | 11      |
| 5.3  | 4.5  | 7.3  | 51441-1093       | 51441-1041   | 10      |
| 4.8  | 4.0  | 6.8  | 51441-0993       | 51441-0941   | 9       |
| 4.3  | 3.5  | 6.3  | 51441-0893       | 51441-0841   | 8       |
| 3.8  | 3.0  | 5.8  | 51441-0793       | 51441-0741   | 7       |
| 3.3  | 2.5  | 5.3  | 51441-0693       | 51441-0641   | 6       |
| C    | B    | A    | EMBOSSED TAPE    | 製品番号         | 極数      |
|      |      |      | ORDER No. オーダー番号 | MATERIAL No. | CIRCUIT |
|      |      |      | 51441-***41      | MODEL NO.    |         |

|  |  |       |                            |                    |   |                        |                        |
|--|--|-------|----------------------------|--------------------|---|------------------------|------------------------|
| REVISED<br>EC NO: J2008-4048<br>DRWN:MNABEI 2008/06/13<br>CHKD:THARUYAMA 2008/06/16<br>APPR:NUKITA 2008/06/16                    | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>10:1   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |
|  | 10 UNDER   | ±0.2  | DRAWN BY<br>M. HAYASHI     | DATE<br>2003/12/22 | TITLE<br>0.5 FPC CONN. E/O<br>HSG ASSY BTM CONT(H=1.1)<br>-LEAD FREE- |                        |                        |
|  | 10 OVER 30 UNDER   | ±0.25 | CHECKED BY<br>K. TOJO      | DATE<br>2003/12/22 |   |                        |                        |
|  | 30 OVER  | ±0.3  | APPROVED BY<br>M. SASAO    | DATE<br>2003/12/22 | MOLEX INCORPORATED  |                        |                        |
|  | ANGULAR  | ±3°   | MATERIAL NO.               | DOCUMENT NO.       |   |                        |                        |
|  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | SEE TABLE                  |                    | SD-51441-007  | 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

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 : ポリフェニレンサルファイド ガラス充填, UL94V-0 (黒)  
ACTUATOR POLYPHENYLENE SULFIDE 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

2. メッキ仕様 PLATING

ターミナル TERMINAL  
ニッケル下地鍍ビスマスメッキ  
TIN-BISMUTH (LEAD FREE) OVER NICKEL PLATING

金具 FITTING NAIL  
ニッケル下地鍍メッキ  
PURE TIN (LEAD FREE) OVER NICKEL PLATING

3. インボステーブ梱包時は、アクチュエータが閉じた状態とする。  
IN THE PACKAGE, ACTUATOR OF PART NO.51441-\*\*\*II SHOULD BE CLOSED.
- △ソルダーテール及び金具の平坦度は、0.1以下。  
SOLDER TAIL AND FITTING NAIL COPLANARITY TO BE 0.1 MAXIMUM.
- △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.
7. この製品は 51441-\*\*\*II 及び 51441-\*\*\*3I の鉛フリー品です。  
THIS PRODUCT IS LEAD FREE ITEM OF 51441-\*\*\*II AND 51441-\*\*\*3I.

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いたします。  
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 FPC  
RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT

|  |  |          |                            |             |   |              |                        |           |
|--|--|----------|----------------------------|-------------|---|--------------|------------------------|-----------|
| REVISED<br>EC NO: J2008-4048<br>DRWN:WABEI 2008/06/13<br>CHKD:THARUYAMA 2008/06/16<br>APPR:NUKITA 2008/06/16<br>DESCRIPTION<br>REV | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |          | DIMENSION STYLE<br>MM ONLY |             | 51441-***41   |              | MODEL NO.              |           |
|  | 10 UNDER   | ±0.2     | DRAWN BY                   | DATE        | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION |           |
|  | 10 OVER 30 UNDER   | ±0.25    | M. HAYASHI                 | 2003/12/22  | 10:1  | METRIC       |                        |           |
|  | 30 OVER  | ±0.3     | CHECKED BY                 | DATE        | TITLE   |              |                        |           |
|  | ANGULAR  | ±3 °     | K. TOJO                    | 2003/12/22  | 0.5 FPC CONN. E/O<br>HSG ASSY BTM CONT(H=1.1)<br>-LEAD FREE-  |              |                        |           |
|  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |          | APPROVED BY                | DATE        | MOLEX INCORPORATED  |              |                        | SHEET NO. |
|  |  | M. SASAO | 2003/12/22                 | SEE SHEET 1 | SD-51441-007  | 2 OF 2       |                        |           |
|  |  |          |                            | SIZE        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              |                        |           |
|  |  |          |                            | A3          |   |              |                        |           |

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

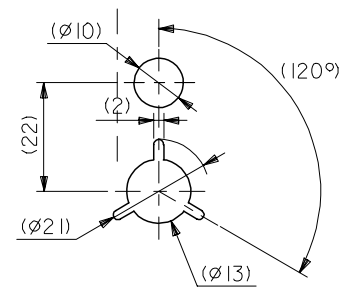
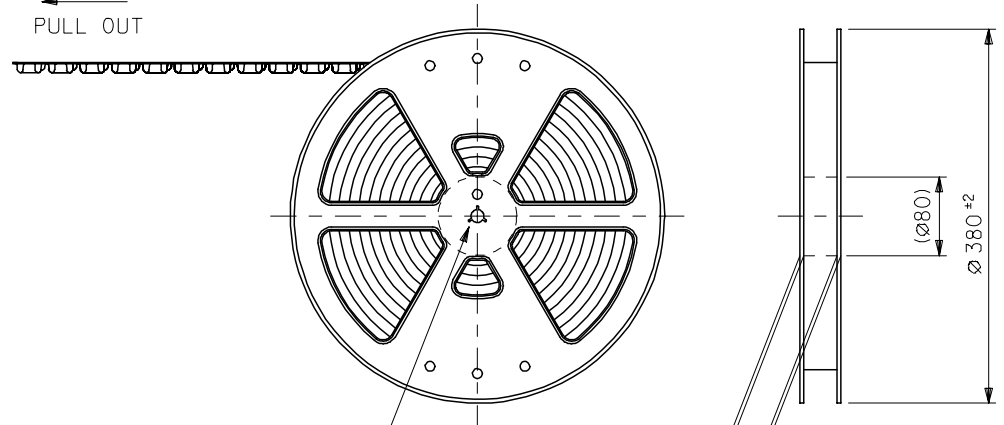
D

C

B

A

引き出し方向  
PULL OUT

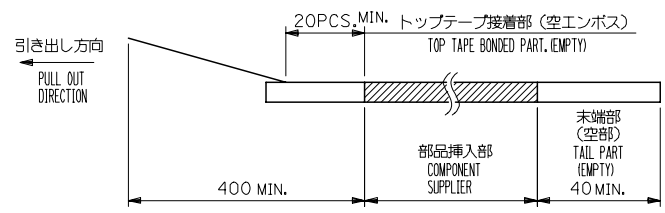


DETAIL "F"

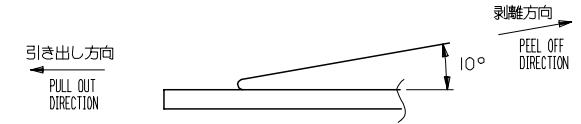
E ± 1  
G ± 1

注記 NOTES

- 製品詳細寸法については、図面SD-51441-007を参照下さい。  
RE DETAILED DIMENSION, SEE SD-51441-007.
- 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 {10.2gf~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 (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>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAINED>
- この製品は 51441-\*\*\*90 及び 51441-\*\*\*92 の鉛フリー品です。  
THIS PRODUCT IS LEAD FREE ITEM OF 51441-\*\*\*90 AND 51441-\*\*\*92.

51441-\*\*\*93 MODEL No.

|   |                                       |  |                            |                   |   |                        |                        |
|---|---------------------------------------|--|----------------------------|-------------------|---|------------------------|------------------------|
| REVISED<br>EC NO: J2006-0858<br>DRWN: NABEI 2005/09/09<br>CHKD: KTOYODA 2005/09/12<br>APPR: NUKITA 2005/09/15 | 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>'03/12/22 | TITLE<br>EMBSTP PKG FOR 0.5 FPC<br>CONN E/O BTM CONT H=1.1<br>-LEAD FREE- |                        |                        |
|   | 10 OVER 30 UNDER                      | ± 0.25   | CHECKED BY<br>K. TOJO      | DATE<br>'03/12/22 | MOLEX INCORPORATED  |                        |                        |
|   | 30 OVER                               | ± 0.3  | APPROVED BY<br>M. SASAO    | DATE<br>'03/12/22 | DOCUMENT NO.<br>SD-51441-008  | SHEET NO.<br>1 OF 3    |                        |
|   | ANGULAR                               | ± 3 °  | MATERIAL NO.<br>SEE CHART  |                   |   |                        |                        |
| 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 |                            |                   |   |                        |                        |

9 8 7 6 5 4 3 2

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

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F

E

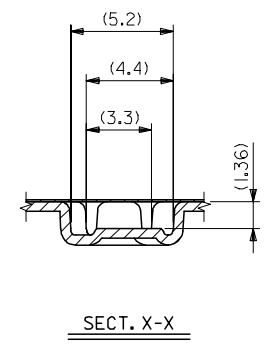
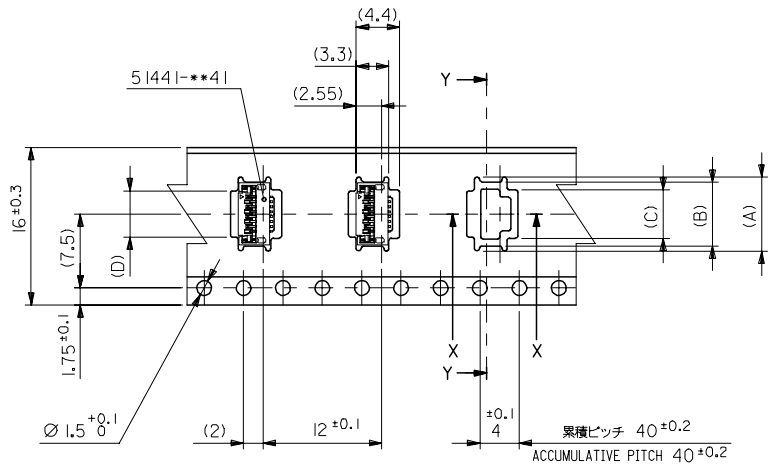
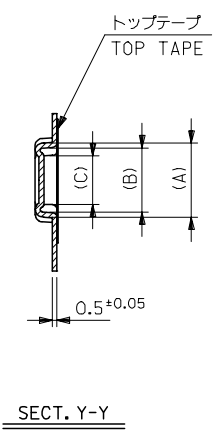
D

C

B

A

引き出し方向  
PULL OUT DIRECTION



1.6mm幅キャリアテープ  
1.6mm WIDTH CARRIER TAPE

|                                |      |      |     |      |     |     |              |            |
|--------------------------------|------|------|-----|------|-----|-----|--------------|------------|
| 16                             | 21.4 | 17.4 | 4.7 | 4.89 | 6.5 | 7.5 | 51441-0893   | 8          |
|                                |      |      | 4.2 | 4.39 | 6   | 7   | 51441-0793   | 7          |
|                                |      |      | 3.7 | 3.89 | 5.5 | 6.5 | 51441-0693   | 6          |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | G    | E    | (D) | (B)  | (A) |     | MATERIAL NO. | 数量<br>QTY. |

|                   |             |
|-------------------|-------------|
| REVISED           | DESCRIPTION |
| EC NO: J2006-0858 | 2005/09/15  |
| DRWN: NABE        | 2005/09/12  |
| CHKD: TOYODA      | 2005/09/12  |
| APPR: NUKITA      | 2005/09/15  |
| A                 | REV         |

|  |       |
|--|-------|
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |       |
| 10 UNDER   | ±0.2  |
| 10 OVER 30 UNDER   | ±0.25 |
| 30 OVER  | ±0.3  |
| ANGULAR  | ±3 °  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       |

|                            |                   |
|----------------------------|-------------------|
| DIMENSION STYLE<br>MM ONLY |                   |
| DRAWN BY<br>M. HAYASHI     | DATE<br>'03/12/22 |
| CHECKED BY<br>K. TOJO      | DATE<br>'03/12/22 |
| APPROVED BY<br>M. SASAO    | DATE<br>'03/12/22 |
| MATERIAL NO.<br>SEE CHART  |                   |
| SIZE<br>A3                 |                   |

|  |                        |                           |
|--|------------------------|---------------------------|
| SCALE<br>---   | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |
| TITLE<br>EMBSTP PKG FOR 0.5 FPC<br>CONN E/O BTM CONT H=1.1<br>-LEAD FREE-  |                        | MODEL No.<br>51441-**-93  |
| MOLEX INCORPORATED   |                        | SHEET No.<br>2 OF 3       |
| DOCUMENT NO.<br>SD-51441-008   |                        |                           |
| 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

F

E

D

C

B

A

F

E

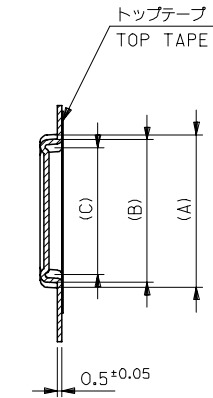
D

C

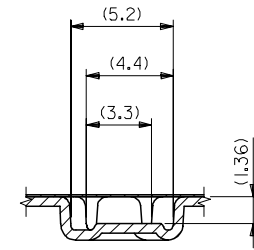
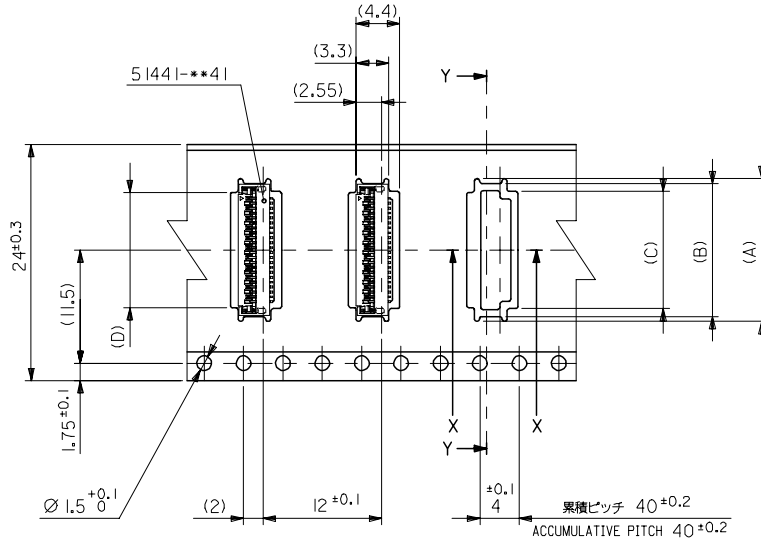
B

A

引き出し方向  
PULL OUT DIRECTION



SECT. Y-Y



SECT. X-X

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

|                                |      |      |      |            |      |              |            |    |
|--------------------------------|------|------|------|------------|------|--------------|------------|----|
| 24                             | 29.4 | 25.4 | 12.7 | 12.89      | 14.5 | 15.5         | 5144I-2493 | 24 |
|                                |      |      | 11.7 | 11.89      | 13.5 | 14.5         | 5144I-2293 | 22 |
|                                |      |      | 10.7 | 10.89      | 12.5 | 13.5         | 5144I-2093 | 20 |
|                                |      |      | 9.7  | 9.89       | 11.5 | 12.5         | 5144I-1893 | 18 |
|                                |      |      | 9.2  | 9.39       | 11   | 12           | 5144I-1793 | 17 |
|                                |      |      | 8.7  | 8.89       | 10.5 | 11.5         | 5144I-1693 | 16 |
|                                |      |      | 7.2  | 7.39       | 9    | 10           | 5144I-1393 | 13 |
|                                |      |      | 6.7  | 6.89       | 8.5  | 9.5          | 5144I-1293 | 12 |
|                                |      |      | 6.2  | 6.39       | 8    | 9            | 5144I-1193 | 11 |
|                                |      |      | 5.7  | 5.89       | 7.5  | 8.5          | 5144I-1093 | 10 |
| 5.2                            | 5.39 | 7    | 8    | 5144I-0993 | 9    |              |            |    |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | G    | E    | (D)  | (B)        | (A)  | MATERIAL NO. | 巻数<br>CKT. |    |

|  |   |   |         |  |                   |   |                              |                        |  |
|--|---|---|---------|--|-------------------|---|------------------------------|------------------------|--|
| REVISED<br>EC NO: J2006-0858<br>DRWN: NABE<br>CHKD: TOYODA<br>APPR: NUKITA | DESCRIPTION<br>2005/09/09<br>2005/09/12<br>2005/09/15 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |         | DIMENSION STYLE<br>MM ONLY                                 |                   | SCALE<br>---  | DESIGN UNITS<br>METRIC       | THIRD ANGLE PROJECTION |  |
|  |   | 10 UNDER  | ± ---   | DRAWN BY<br>M. HAYASHI                                     | DATE<br>'03/12/22 | TITLE<br>EMBSTP PKG FOR 0.5 FPC<br>CONN E/O BTM CONT H=1.1<br>-LEAD FREE- |                              |                        |  |
|  |   | 10 OVER 30 UNDER  | ± ---   | CHECKED BY<br>K. TOJO                                      | DATE<br>'03/12/22 | MOLEX INCORPORATED  |                              |                        |  |
|  |   | 30 OVER   | ± ---   | APPROVED BY<br>M. SASAO                                    | DATE<br>'03/12/22 |   |                              |                        |  |
|  |   | ANGULAR   | ± --- ° | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                   | MATERIAL NO.<br>SEE CHART   | DOCUMENT NO.<br>SD-51441-008 | SHEET NO.<br>3 OF 3    |  |
| A  | REV   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |         |  |                   |   |                              |                        |  |