

## Excellent Integrated System Limited

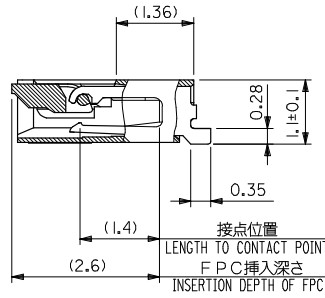
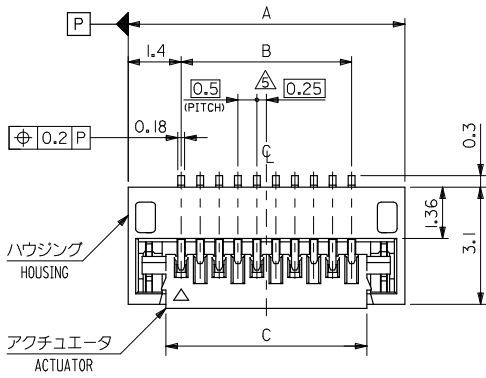
Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

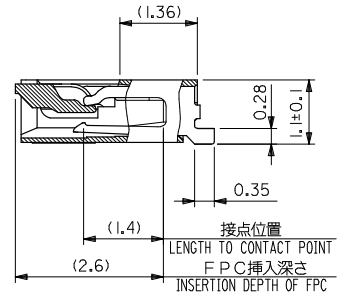
[Molex Connector Corporation](#)  
[0514411193](#)

For any questions, you can email us directly:

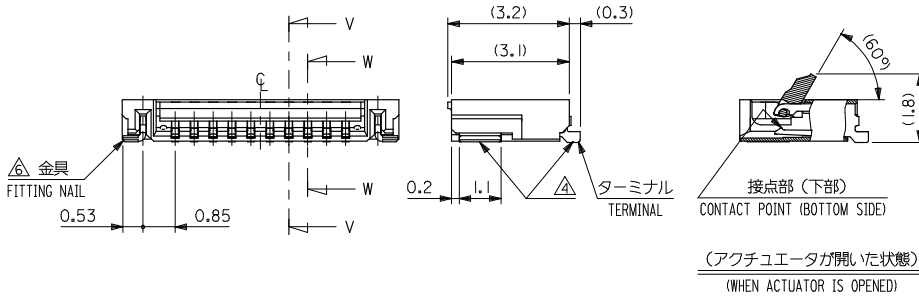
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



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

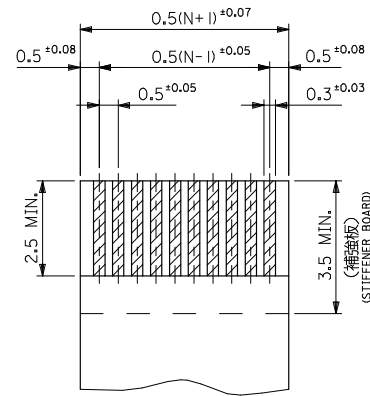
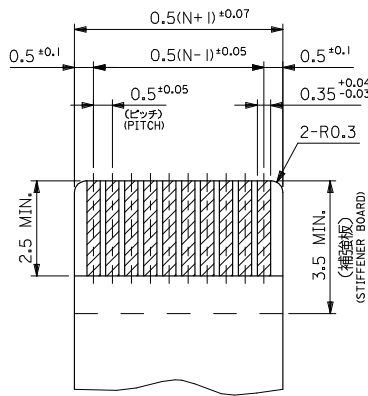
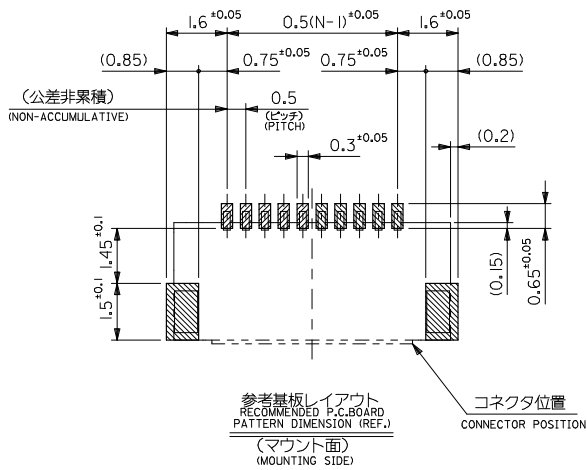


断面 W-W 偶数極  
SECT. W-W (Scale 15:1) (EVEN CIRCUIT)



|      |      |      |                                   |                      |               |
|------|------|------|-----------------------------------|----------------------|---------------|
| 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<br>ORDER No. オータ-番号 | 製品番号<br>MATERIAL No. | 極数<br>CIRCUIT |
|      |      |      | 51441-***41                       | MODEL NO.            |               |

|   |  |       |   |                    |   |                              |
|---|--|-------|---|--------------------|---|------------------------------|
| REVISED<br>EC NO.: J2008-4048<br>DRAWN BY: DRWNHABE<br>CHKD: HARUYAMA<br>APPR: NIKITA | 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 | MOLEX INCORPORATED  |                              |
|   | 30 OVER  | ±0.3  | APPROVED BY<br>M. SASAO   | DATE<br>2003/12/22 | MATERIAL NO.<br>SEE TABLE   | DOCUMENT NO.<br>SD-51441-007 |
| DESCRIPTION   | ANGULAR  | ±3 °  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |   |                              |
| REMARKS   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |       |   |                    |   |                              |



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3±0.03)  
(THICKNESS: 0.3±0.03)

適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3±0.03)  
(THICKNESS: 0.3±0.03)

注記 NOTES

1. 使用材料 MATERIAL

- ハウジング HOUSING: 液晶ポリマー ガラス充填, UL94V-0 (ベージュ)
  - ハウジング HOUSING: LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0(BEIGE)
  - アクチュエータ ACTUATOR: ポリフエニレンサルファイド ガラス充填, UL94V-0 (黒)
  - アクチュエータ ACTUATOR: POLYPHENYLENE SULFIDE GLASS FILLED, UL94V-0(BLACK)
  - ターミナル TERMINAL: リン青銅 (t=0.18)
  - ターミナル TERMINAL: PHOSPOR BRONZE
  - 金具 FITTING NAIL: リン青銅 (t=0.15)
  - 金具 FITTING NAIL: PHOSPOR BRONZE
2. メッキ仕様 PLATING
- ターミナル TERMINAL: ニッケル下地鍍ピスマスメッキ
  - ターミナル TERMINAL: TIN-BISMUTH (LEAD FREE) OVER NICKEL PLATING
  - 金具 FITTING NAIL: ニッケル下地鍍メッキ
  - 金具 FITTING NAIL: PURE TIN (LEAD FREE) OVER NICKEL PLATING

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.51441-\*\*\*11 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-\*\*\*11 及び 51441-\*\*\*31 の鉛フリー品です。  
THIS PRODUCT IS LEAD FREE ITEM OF 51441-\*\*\*11 AND 51441-\*\*\*31.

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。  
導体側については軟銅箔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

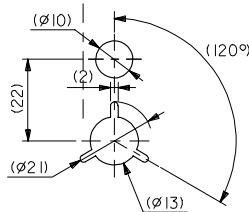
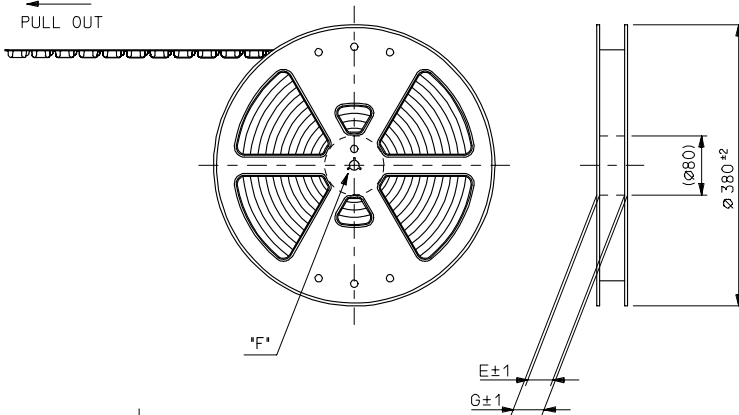
FPCについて:

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>DRAWN BY: HINABE<br>CHKD: HARUYAMA<br>APPR: NIKITA | DESCRIPTION | GENERAL TOLERANCES (UNLESS SPECIFIED)                |        | DIMENSION STYLE<br>MM ONLY  |                    | 51441-***41   |                        | MODEL NO.              |  |  |
|   |             |  |        |                             |                    | 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 | MOLEX INCORPORATED  |                        |                        |  |  |
|   |             | 30 OVER  | ± 0.3  | APPROVED BY<br>M. SASAO     | DATE<br>2003/12/22 | DOCUMENT NO.<br>SD-51441-007  |                        | SHEET NO.<br>2 OF 2    |  |  |
|   |             | ANGULAR  | ± 3 °  | MATERIAL NO.<br>SEE SHEET 1 |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                        |  |  |
|   |             | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        | SIZE<br>A3                  |                    |   |                        |                        |  |  |

10 9 8 7 6 5 4 3 2 1

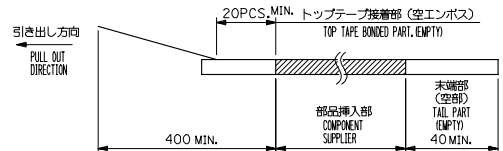
引き出し方向  
PULL OUT



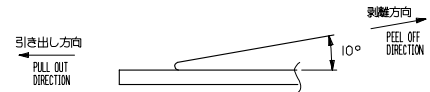
DETAIL "F"

**注記 NOTES**

1. 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.
2. 梱包数量: 3000個/リール  
NUMBER OF CONNECTORS: 3000PCS/REEL
3. リードテープ長さ LEAD TAPE LENGTH



4. トップテープの剥離強度: 0.1N~1.3N [10.2gf~130gf]  
(剥離方向は下記参照)  
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.

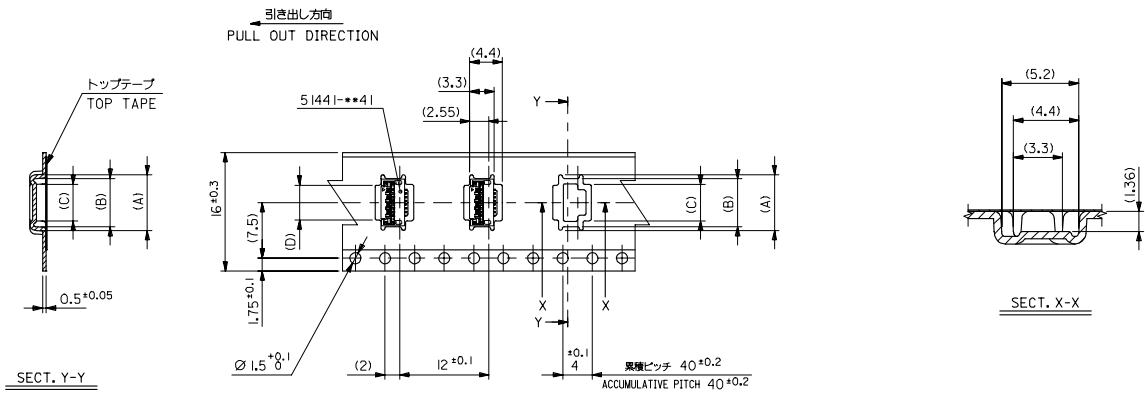


5. 材料 (MATERIAL)  
キャリアテープ (CARRIER TAPE): ポリプロピレン (POLYPROPYLENE)  
トップテープ (TOP TAPE): PET, PE, PEF  
リール (REEL): ポリスチレン (PS) <リサイクル材を含む>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAINED>
6. この製品は51441-0090及び51441-0092の鉛フリー品です。  
THIS PRODUCT IS LEAD FREE ITEM OF 51441-0090 AND 51441-0092.

|  |                  |  |       |                            |                              |   |                        |  |
|--|------------------|--|-------|----------------------------|------------------------------|---|------------------------|--|
| REVISED<br>EC NO: J2006-0858<br>DRAWN: MABEI 2005/09/12<br>CHKD: K. TOYODA 2005/09/12<br>APP: N. ITO 2005/09/15                          | DESCRIPTION<br>A | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |       | DIMENSION STYLE<br>MM ONLY | SCALE<br>---                 | 51441-0093  | MODEL No.              |  |
|  |                  | 10 UNDER   | ±0.2  | DRAWN BY<br>M. HAYASHI     | DATE<br>'03/12/22            | DESIGN UNITS<br>METRIC  | THIRD ANGLE PROJECTION |  |
|  |                  | 10 OVER 30 UNDER   | ±0.25 | CHECKED BY<br>K. TOJO      | 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- |                        |  |
|  |                  | 30 OVER  | ±0.3  | APPROVED BY<br>M. SASAO    | DATE<br>'03/12/22            | MOLEX INCORPORATED  |                        |  |
| ANGULAR ±3 °   |                  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | MATERIAL NO.<br>SEE CHART  | DOCUMENT NO.<br>SD-51441-008 | SHEET NO.<br>1 OF 3   |                        |  |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                  |  |       |                            |                              |   |                        |  |

10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A



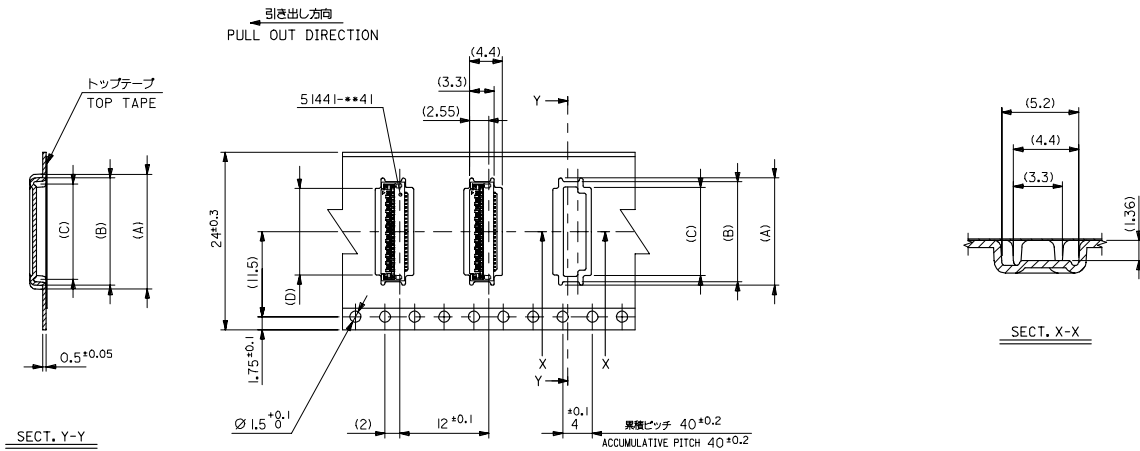
16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

|                                |      |      |     |      |     |     |            |     |
|--------------------------------|------|------|-----|------|-----|-----|------------|-----|
| 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   |
| キャリアテープ幅<br>CARRIER TAPE WIDTH |      |      | G   | E    | (D) | (C) | (B)        | (A) |

|  |                  |  |  |                   |   |  |
|--|------------------|--|--|-------------------|---|--|
| REVISED<br>EC NO: J2006-0858<br>DRAWN: MABEI<br>CHK: KIKUYODIA<br>APPR: NIKITA<br>2005/09/09<br>2005/09/12<br>2005/09/15 | DESCRIPTION      | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) | DIMENSION STYLE<br>MM ONLY                                 | SCALE<br>---      | DESIGN UNITS<br>METRIC  | MODEL No.<br>THIRD ANGLE<br>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 | MATERIAL NO. SEE CHART  |  |
|  | ANGULAR          | ±3°                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | MATERIAL NO.      | DOCUMENT NO.<br>SD-51441-008  | SHEET NO.<br>2 OF 3                    |

10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A



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 | 51441-2493 | 24  |              |            |
|                                |      |      | 11.7 | 11.89      | 13.5 | 14.5 | 51441-2293 | 22  |              |            |
|                                |      |      | 10.7 | 10.89      | 12.5 | 13.5 | 51441-2093 | 20  |              |            |
|                                |      |      | 9.7  | 9.89       | 11.5 | 12.5 | 51441-1893 | 18  |              |            |
|                                |      |      | 9.2  | 9.39       | 11   | 12   | 51441-1793 | 17  |              |            |
|                                |      |      | 8.7  | 8.89       | 10.5 | 11.5 | 51441-1693 | 16  |              |            |
|                                |      |      | 7.2  | 7.39       | 9    | 10   | 51441-1393 | 13  |              |            |
|                                |      |      | 6.7  | 6.89       | 8.5  | 9.5  | 51441-1293 | 12  |              |            |
|                                |      |      | 6.2  | 6.39       | 8    | 9    | 51441-1193 | 11  |              |            |
|                                |      |      | 5.7  | 5.89       | 7.5  | 8.5  | 51441-1093 | 10  |              |            |
| 5.2                            | 5.39 | 7    | 8    | 51441-0993 | 9    |      |            |     |              |            |
| キャリアテープ幅<br>CARRIER TAPE WIDTH |      |      | G    | E          | (D)  | (C)  | (B)        | (A) | MATERIAL NO. | 巻数<br>CKT. |

|   |   |                           |      |                              |                         |                     |                        |                           |   |
|---|---|---------------------------|------|------------------------------|-------------------------|---------------------|------------------------|---------------------------|---|
| REVISED<br>EC NO: J2006-0858<br>DRAWN: MABEI<br>CHKD: K. TOYODA<br>APP: R. NIKITA | DESCRIPTION<br>GENERAL TOLERANCES<br>(UNLESS SPECIFIED) | 10 UNDER                  | ±--- | DIMENSION STYLE<br>MM ONLY   | SCALE                   | ---                 | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |   |
|   |   | 10 OVER 30 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- |
|   |   | 30 OVER                   | ±--- |                              | CHECKED BY<br>K. TO JO  | DATE<br>'03/12/22   |                        |                           | MOLEX INCORPORATED  |
|   |   | ANGULAR                   | ±--- |                              | APPROVED BY<br>M. SASAO | DATE<br>'03/12/22   |                        |                           |   |
| 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 |                        |                           |   |