

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0527461271

Status:

Active

Overview:

Description:

0.50mm (.020") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 12 Circuits, Lead-free, Gold Contact Plating, High Barrier Packaging

EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

China RoHS



Need more information on product environmental compliance?

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

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

Search Parts in this Series

52746Series

Agency Certification

|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

General

|                |                    |
|----------------|--------------------|
| Product Family | FFC/FPC Connectors |
| Series         | 52746              |
| Overview       | ffc_fpc_smt        |
| Product Name   | N/A                |

Physical

|                                |                       |
|--------------------------------|-----------------------|
| Circuits (Loaded)              | 12                    |
| Contact Position               | Bottom                |
| Durability (mating cycles max) | 20                    |
| Entry Angle                    | 90° Angle             |
| Flammability                   | 94V-0                 |
| Mated Height (in)              | 0.079 In              |
| Mated Height (mm)              | 2.00 mm               |
| Material - Metal               | Phosphor Bronze       |
| Material - Plating Mating      | Gold                  |
| Material - Plating Termination | Gold                  |
| Number of Rows                 | 1                     |
| Orientation                    | Right Angle           |
| PCB Locator                    | No                    |
| PCB Retention                  | Yes                   |
| Packaging Type                 | Embossed Tape on Reel |
| Pitch - Mating Interface (in)  | 0.020 In              |
| Pitch - Mating Interface (mm)  | 0.50 mm               |
| Polarized to PCB               | Yes                   |
| Stackable                      | No                    |
| Temperature Range - Operating  | -20°C to +85°C        |
| Termination Interface: Style   | Surface Mount         |
| Wire/Cable Type                | FFC/FPC               |

Electrical

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 0.5A |
| Voltage - Maximum             | 50V  |

Material Info

Reference - Drawing Numbers

|                         |                                                                                                                                                                                                                 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging Specification | SPK-52746-001, SPK-52746-002                                                                                                                                                                                    |
| Product Specification   | PS-52746-015, RPS-52746-017, RPS-52746-038, RPS-52746-041, RPS-52746-044, RPS-52746-045, RPS-52746-050, RPS-52746-051, RPS-52746-053, RPS-52746-054, RPS-52746-056, RPS-52746-057, RPS-52746-060, RPS-52746-062 |
| Sales Drawing           | SD-52746-024, SD-52746-025                                                                                                                                                                                      |

This document was generated on 06/05/2010

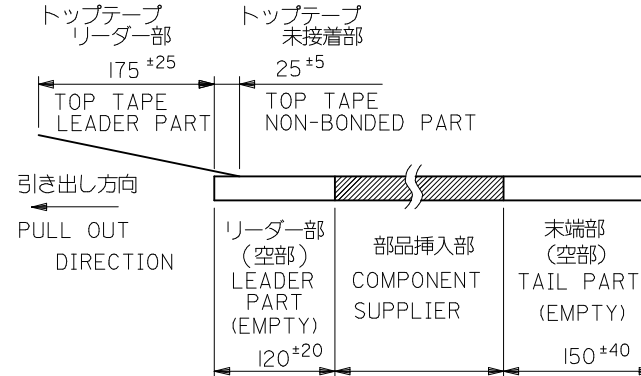
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

# 注記 NOTES

1. 製品番号 52746-\*\*\*39 の梱包状態はアクチュエータがロックした状態とする。  
詳細寸法については図面 SD-52746-025 を参照下さい。  
IN THE PACKAGE,ACTUATOR OF PART NO.52746-\*\*\*39 SHOULD BE LOCKED  
RE DETAILED DIMENSIONS,SEE SD-52746-025

2. 梱包数量：1000個/リール  
NUMBER OF CONNECTORS:1000PCS/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：(剥離方向は下図参照)

0.1N ~ 1.3N { 10gf ~ 130gf }

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事。)

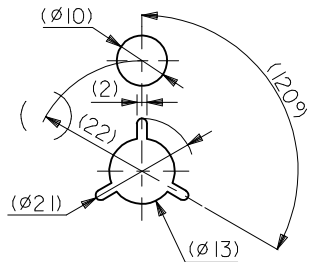
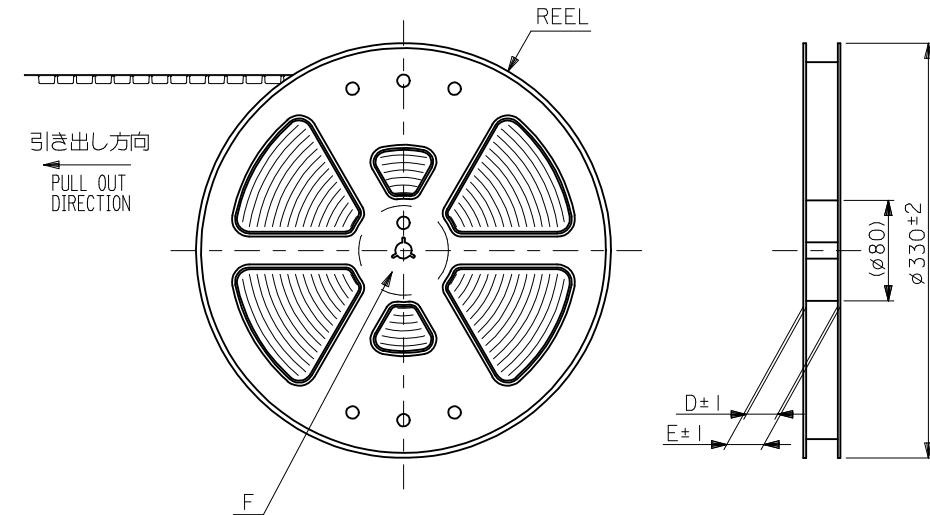
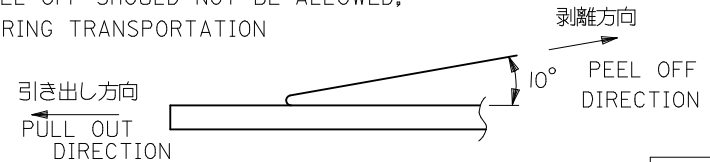
PEELING OFF FORCE OF TOP TAPE

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



DETAIL F

5. 材料 キャリアテープ:ポリプロピレン (PP)  
トップテープ:PET, PE, PEF  
リール:ポリスチレン (PS) <リサイクル材を含む>

MATERIAL CARRIER TAPE:POLYPROPYLENE  
TOP TAPE:PET,PE,PEF  
REEL:POLYSTYRENE(PS)  
<RECYCLE MATERIAL CONTAINED>

6. 本製品は 52746-\*\*\*81 の鉛フリー品です

THIS PRODUCT IS LEAD FREE OF 52746-\*\*\*81

7. 本製品は乾燥剤入り、ハイバリア梱包仕様である。

THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

MODEL No.52746-\*\*\*71

|         |                                                                 |                                        |             |                                                            |        |                               |                                                                                                                                  |                                                                      |                        |                           |                    |
|---------|-----------------------------------------------------------------|----------------------------------------|-------------|------------------------------------------------------------|--------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------|---------------------------|--------------------|
| REVISED | EC NO: J2009-2061<br>DRWN:TKON<br>CHKD:HATSUMOTO<br>APPR:NUKITA | 2009/05/20<br>2009/05/21<br>2009/05/21 | 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>HSHIMABUKURO      | DATE<br>'04/01/30                                                                                                                | TITLE<br>0.5 FPC CONN ZIF SMT RA<br>B/CONT EMBSTP PKG<br>-LEAD FREE- |                        | MOLEX                     | MOLEX INCORPORATED |
|         |                                                                 |                                        |             | 10 OVER 30 UNDER                                           | ± 0.25 | CHECKED BY<br>KTOJO           | DATE<br>'04/01/30                                                                                                                |                                                                      |                        |                           |                    |
|         |                                                                 |                                        |             | 30 OVER                                                    | ± 0.3  | APPROVED BY<br>MSASAO         | DATE<br>'04/01/30                                                                                                                | DOCUMENT NO.<br>SD-52746-024                                         |                        | SHEET NO.<br>1 OF 3       |                    |
|         |                                                                 |                                        |             | ANGULAR ±3 °                                               |        | MATERIAL NO.<br>SEE SHEET 2.3 |                                                                                                                                  |                                                                      |                        |                           |                    |
|         |                                                                 |                                        |             | 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 |                                                                      |                        |                           |                    |

F

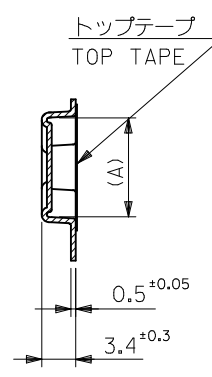
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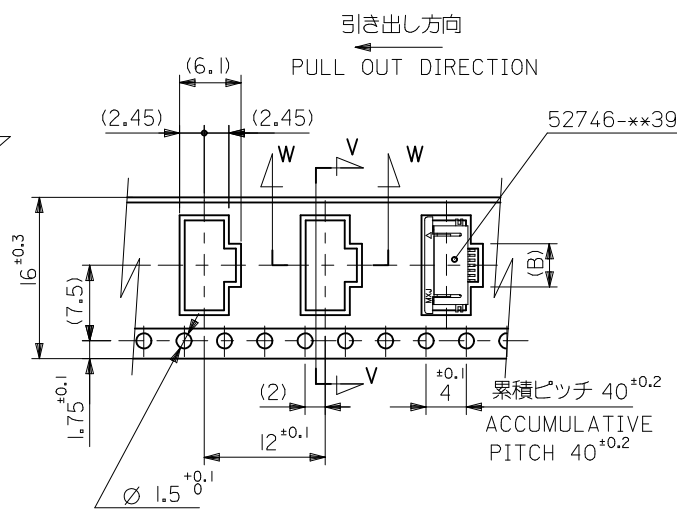
C

B

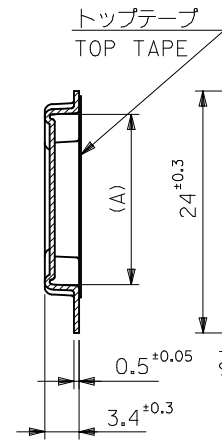
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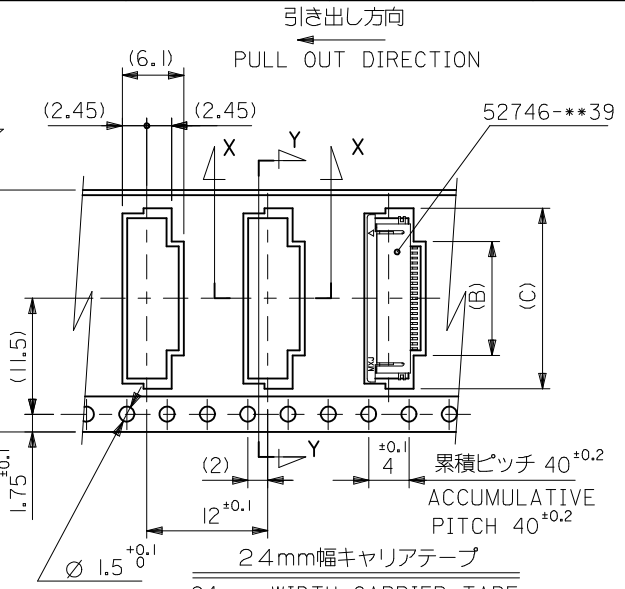
SECT.V-V



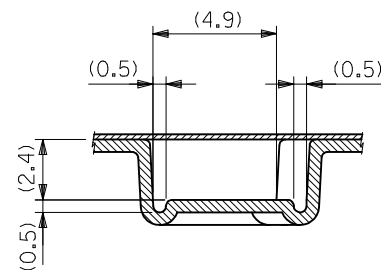
16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE



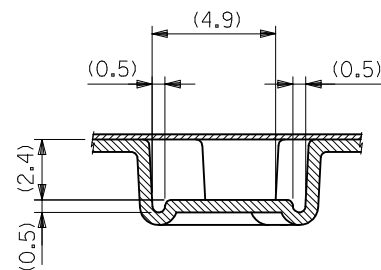
SECT.Y-Y



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



SECT. W-W



SECT.X-X

MODEL No.52746-\*\*\*71

|                                                                            |             |                                                            |                                                                                                                                  |                 |              |                                                                      |              |                           |  |  |
|----------------------------------------------------------------------------|-------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|----------------------------------------------------------------------|--------------|---------------------------|--|--|
| REVISED<br>EC NO: J2009-2061<br>DRWN:TKN<br>CHKD:HMATSUMOTO<br>APPR:NUKITA | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |                                                                                                                                  | DIMENSION STYLE |              | SCALE                                                                | DESIGN UNITS | THIRD ANGLE<br>PROJECTION |  |  |
|                                                                            |             |                                                            |                                                                                                                                  | MM ONLY         |              | ---                                                                  | METRIC       |                           |  |  |
|                                                                            |             | 10 UNDER                                                   | ±0.2                                                                                                                             | DRAWN BY        | DATE         | TITLE<br>0.5 FPC CONN ZIF SMT RA<br>B/CONT EMBSTP PKG<br>-LEAD FREE- |              |                           |  |  |
|                                                                            |             | 10 OVER 30 UNDER                                           | ±0.25                                                                                                                            | CHECKED BY      | DATE         |                                                                      |              |                           |  |  |
|                                                                            |             | 30 OVER                                                    | ±0.3                                                                                                                             | APPROVED BY     | DATE         | MOLEX INCORPORATED                                                   |              |                           |  |  |
|                                                                            |             | ANGULAR ±3 °                                               | MSASAO                                                                                                                           | '04/01/30       |              |                                                                      |              |                           |  |  |
|                                                                            | REV         | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | MATERIAL NO.                                                                                                                     |                 | DOCUMENT NO. |                                                                      | SHEET NO.    |                           |  |  |
| SEE TABLE                                                                  |             |                                                            | SD-52746-024                                                                                                                     |                 | 2 OF 3       |                                                                      |              |                           |  |  |
|                                                                            |             | SIZE<br>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

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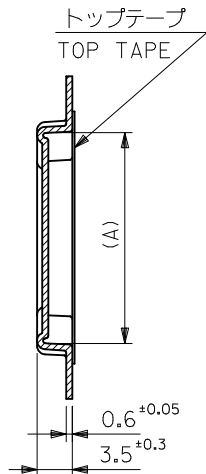
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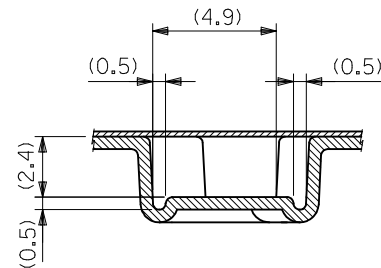
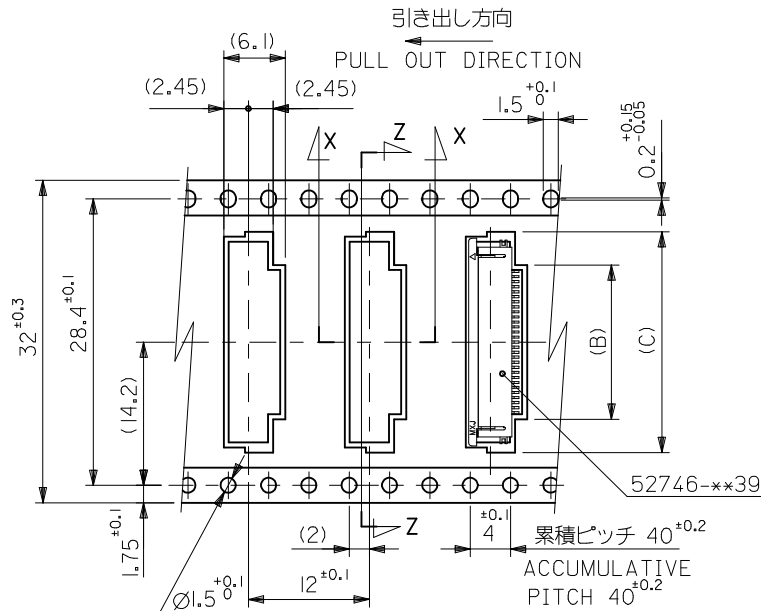
C

B

A



SECT.Z-Z



SECT.X-X

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

|                                |      |      |      |      |      |              |               |
|--------------------------------|------|------|------|------|------|--------------|---------------|
| 32                             | 37.4 | 33.4 | 22.4 | 15.8 | 21.4 | 52746-3071   | 30            |
|                                |      |      | 21.4 | 14.8 | 20.4 | 52746-2871   | 28            |
|                                |      |      | 20.9 | 14.3 | 19.9 | 52746-2771   | 27            |
|                                |      |      | 19.9 | 13.3 | 18.9 | 52746-2571   | 25            |
|                                |      |      | 19.4 | 12.8 | 18.4 | 52746-2471   | 24            |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | E    | D    | (C)  | (B)  | (A)  | MATERIAL NO. | 極数<br>CIRCUIT |

|                                                                  |                                        |                     |                                         |                                          |                                                                            |                                                                                                                     |                                                          |                                                                                                                            |                     |                        |  |                           |  |
|------------------------------------------------------------------|----------------------------------------|---------------------|-----------------------------------------|------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|--|---------------------------|--|
| REVISED                                                          |                                        | MODEL No.52746-**71 |                                         | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |                                                                            | DIMENSION STYLE<br>MM ONLY                                                                                          |                                                          | SCALE<br>---                                                                                                               |                     | DESIGN UNITS<br>METRIC |  | THIRD ANGLE<br>PROJECTION |  |
| EC NO: J2009-2061<br>DRWN:TKON<br>CHKD:HMATSUMOTO<br>APPR:NUKITA | 2009/05/20<br>2009/05/21<br>2009/05/21 | DESCRIPTION<br>REV  | 10 UNDER<br>10 OVER 30 UNDER<br>30 OVER | ±0.2<br>±0.25<br>±0.3                    | ANGULAR ±3 °<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | DRAWN BY<br>HSHIMABUKURO<br>CHECKED BY<br>KTOJO<br>APPROVED BY<br>MSASAO<br>MATERIAL NO.<br>SEE TABLE<br>SIZE<br>A3 | DATE<br>'04/01/30<br>'04/01/30<br>'04/01/30<br>'04/01/30 | TITLE<br>0.5 FPC CONN ZIF SMT RA<br>B/CONT EMBSTP PKG<br>-LEAD FREE-<br>MOLEX INCORPORATED<br>DOCUMENT NO.<br>SD-52746-024 | SHEET NO.<br>3 OF 3 |                        |  |                           |  |
|                                                                  |                                        |                     |                                         |                                          |                                                                            |                                                                                                                     |                                                          |                                                                                                                            |                     |                        |  |                           |  |
|                                                                  |                                        |                     |                                         |                                          |                                                                            |                                                                                                                     |                                                          |                                                                                                                            |                     |                        |  |                           |  |
|                                                                  |                                        |                     |                                         |                                          |                                                                            |                                                                                                                     |                                                          |                                                                                                                            |                     |                        |  |                           |  |
|                                                                  |                                        |                     |                                         |                                          |                                                                            |                                                                                                                     |                                                          |                                                                                                                            |                     |                        |  |                           |  |

F

E

D

C

B

A

F

E

D

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B

A

注記 NOTES

1. 使用材料 MATERIAL

ハウジング HOUSING : 46ナイロン、UL94V-0  
46NYLON

アクチュエータ ACTUATOR : PPS、UL94V-0

ターミナル TERMINAL : リン青銅 (≒0.2)、ニッケル下地 金メッキ  
PHOSPHOR BRONZE, GOLD OVER NICKEL PLATING

金具 FITTING NAIL : リン青銅 (≒0.2)、ニッケル下地 金メッキ  
PHOSPHOR BRONZE, TIN OVER NICKEL PLATING

2. エンボステープ組付け時は、アクチュエータがロックした状態とする。  
IN THE PACKAGE, ACTUATOR OF PART NO.52746-\*\*39 SHOULD BE LOCKED.

△ ソルダーテール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 H に対し上下方向 0.1MAX、下方 0.15MAX、とする。  
MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM H  
UPPER DIRECTION: 0.1 MAX., LOWER DIRECTION: 0.15 MAX.

△ 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 P.C.B. PATTERN.

6. 本製品は 52746-\*\*38の鉛フリー品です。  
THIS PRODUCT IS LEAD FREE OF 52746-\*\*38

|      |      |       |      |            |            |    |
|------|------|-------|------|------------|------------|----|
| 21.1 | 19.3 | 15.65 | 14.5 | 52746-3071 | 52746-3039 | 30 |
| 20.6 | 18.8 | 15.15 | 14.0 | 52746-2971 | 52746-2939 | 29 |
| 20.1 | 18.3 | 14.65 | 13.5 | 52746-2871 | 52746-2839 | 28 |
| 19.6 | 17.8 | 14.15 | 13.0 | 52746-2771 | 52746-2739 | 27 |
| 19.1 | 17.3 | 13.65 | 12.5 | 52746-2671 | 52746-2639 | 26 |
| 18.6 | 16.8 | 13.15 | 12.0 | 52746-2571 | 52746-2539 | 25 |
| 18.1 | 16.3 | 12.65 | 11.5 | 52746-2471 | 52746-2439 | 24 |
| 17.6 | 15.8 | 12.15 | 11.0 | 52746-2371 | 52746-2339 | 23 |
| 17.1 | 15.3 | 11.65 | 10.5 | 52746-2271 | 52746-2239 | 22 |
| 16.6 | 14.8 | 11.15 | 10.0 | 52746-2171 | 52746-2139 | 21 |
| 16.1 | 14.3 | 10.65 | 9.5  | 52746-2071 | 52746-2039 | 20 |
| 15.6 | 13.8 | 10.15 | 9.0  | 52746-1971 | 52746-1939 | 19 |
| 15.1 | 13.3 | 9.65  | 8.5  | 52746-1871 | 52746-1839 | 18 |
| 14.6 | 12.8 | 9.15  | 8.0  | 52746-1771 | 52746-1739 | 17 |
| 14.1 | 12.3 | 8.65  | 7.5  | 52746-1671 | 52746-1639 | 16 |
| 13.6 | 11.8 | 8.15  | 7.0  | 52746-1571 | 52746-1539 | 15 |
| 13.1 | 11.3 | 7.65  | 6.5  | 52746-1471 | 52746-1439 | 14 |
| 12.6 | 10.8 | 7.15  | 6.0  | 52746-1371 | 52746-1339 | 13 |
| 12.1 | 10.3 | 6.65  | 5.5  | 52746-1271 | 52746-1239 | 12 |
| 11.6 | 9.8  | 6.15  | 5.0  | 52746-1171 | 52746-1139 | 11 |
| 11.1 | 9.3  | 5.65  | 4.5  | 52746-1071 | 52746-1039 | 10 |
| 10.6 | 8.8  | 5.15  | 4.0  | 52746-0971 | 52746-0939 | 9  |
| 10.1 | 8.3  | 4.65  | 3.5  | 52746-0871 | 52746-0839 | 8  |
| 9.6  | 7.8  | 4.15  | 3.0  | 52746-0771 | 52746-0739 | 7  |
| 9.1  | 7.3  | 3.65  | 2.5  | 52746-0671 | 52746-0639 | 6  |
| 8.1  | 6.3  | 2.65  | 1.5  | 52746-0471 | 52746-0439 | 4  |

|   |   |   |     |                                  |              |                |
|---|---|---|-----|----------------------------------|--------------|----------------|
| D | C | B | (A) | EMBOSSD TAPE<br>ORDER No. オーダー番号 | MATERIAL NO. | 極数<br>CIRCUITS |
|---|---|---|-----|----------------------------------|--------------|----------------|

52746-\*\*39

MODEL NO.

DESIGN UNITS  
METRIC

THIRD ANGLE  
PROJECTION

0.5 FPC CONN ZIF FOR SMT  
R/A (BOTTOM CONTACT)  
-LEAD FREE-

MOLEX INCORPORATED

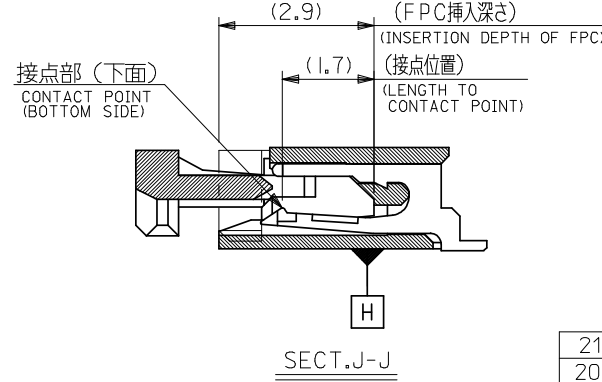
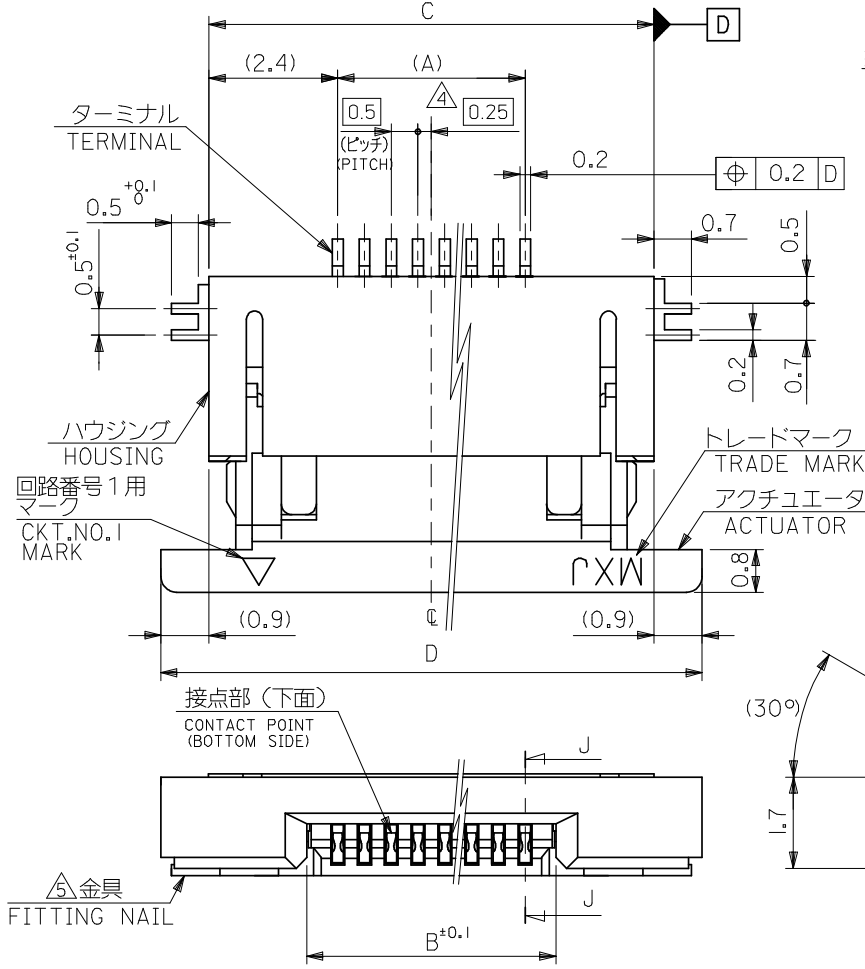
SD-52746-025

SHEET NO.  
1 OF 2

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX  
INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|                                                                                    |                                        |             |                                                            |        |
|------------------------------------------------------------------------------------|----------------------------------------|-------------|------------------------------------------------------------|--------|
| REVISED<br>EC NO: J2008-4308<br>DRWN:WABEI<br>CHKD:THARUYAMA<br>APPR:NUKITA<br>REV | 2008/06/27<br>2008/06/30<br>2008/06/30 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |        |
|                                                                                    |                                        |             | 10 <sup>UNDER</sup>                                        | ± 0.2  |
|                                                                                    |                                        |             | 10 <sup>OVER</sup> 30 <sup>UNDER</sup>                     | ± 0.25 |
|                                                                                    |                                        |             | 30 <sup>OVER</sup>                                         | ± 0.3  |
|                                                                                    |                                        |             | ANGULAR                                                    | ±3 °   |
|                                                                                    |                                        |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        |

SIZE  
A3



F

E

D

C

B

A

F

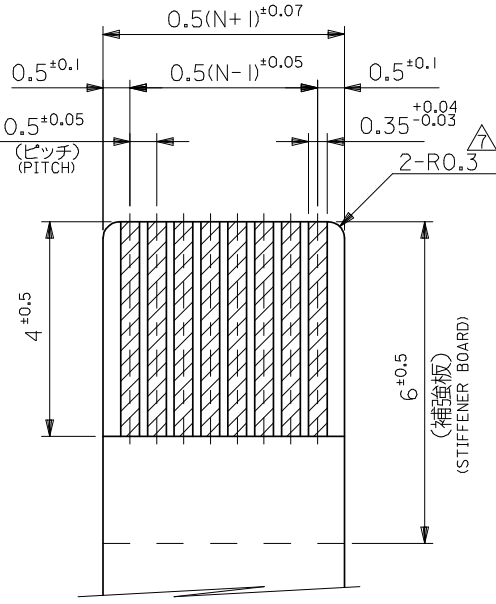
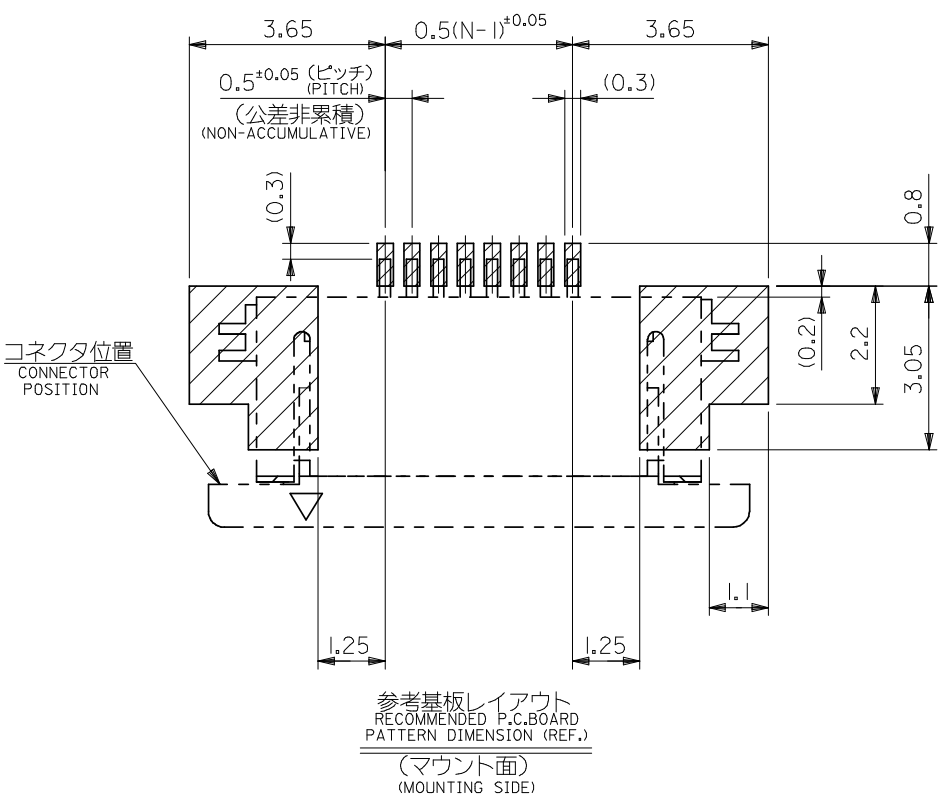
E

D

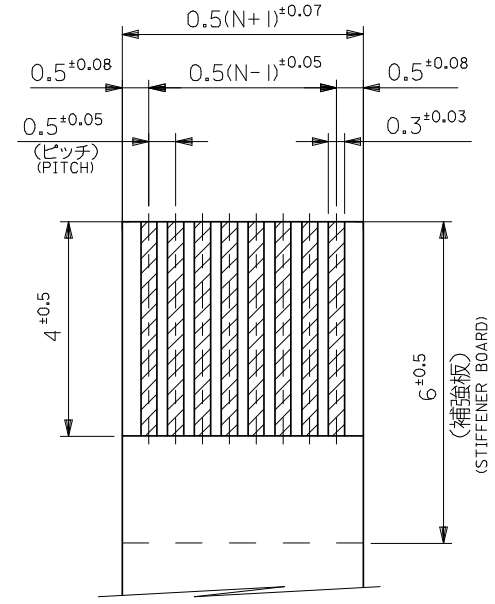
C

B

A



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

FPCについて:  
打抜き方向は導体側から補強板を推奨致します。  
補強フィルム材質はポリイミドを推奨致します。  
接着剤は熱硬化接着剤を推奨致します。

ABOUT FPC:  
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE.  
RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT

注記 NOTES

△ R0.3は、FPCの導体側にかからないこと。  
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

|                                                                             |  |                           |                    |                                                            |  |                                                                                                                                             |                   |                                                                                                          |                        |                                                                                       |           |  |
|-----------------------------------------------------------------------------|--|---------------------------|--------------------|------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|-----------|--|
| REVISED<br>EC NO: J2008-4308<br>DRWN:WABEI<br>CHKD:THARUYAMA<br>APPR:NUKITA |  |                           | DESCRIPTION<br>REV | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |  | DIMENSION STYLE<br>MM ONLY                                                                                                                  |                   | SCALE<br>---                                                                                             | DESIGN UNITS<br>METRIC |  | MODEL NO. |  |
|                                                                             |  |                           |                    | 10 UNDER ±0.2                                              |  | DRAWN BY<br>HSHIMABUKURO                                                                                                                    | DATE<br>'04/01/30 | TITLE<br>0.5 FPC CONN ZIF FOR SMT<br>R/A (BOTTOM CONTACT)<br>-LEAD FREE-                                 |                        |                                                                                       |           |  |
|                                                                             |  |                           |                    | 10 OVER 30 UNDER ±0.25                                     |  | CHECKED BY<br>KTOJO                                                                                                                         | DATE<br>'04/01/30 |                                                                                                          |                        |                                                                                       |           |  |
|                                                                             |  |                           |                    | 30 OVER ±0.3                                               |  | APPROVED BY<br>MSASAO                                                                                                                       | DATE<br>'04/01/30 |  MOLEX INCORPORATED |                        |                                                                                       |           |  |
| ANGULAR ±3 °                                                                |  | MATERIAL NO.<br>SEE TABLE |                    | DOCUMENT NO.<br>SD-52746-025                               |  | SHEET NO.<br>2 OF 2                                                                                                                         |                   |                                                                                                          |                        |                                                                                       |           |  |
| I                                                                           |  |                           |                    | 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 |                   |                                                                                                          |                        |                                                                                       |           |  |