

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

**Part Number:** [0522710479](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 4 Circuits, Lead-free, High Barrier Packaging

**Agency Certification**

CSA LR19980  
UL E29179

**General**

Product Family FFC/FPC Connectors  
Series [52271](#)  
Overview ffc\_fpc\_smt  
Product Name N/A

**Physical**

Circuits (Loaded) 4  
Color - Resin Natural  
Contact Position Bottom  
Durability (mating cycles max) 30  
Entry Angle 90° Angle  
Flammability 94V-0  
Mated Height (in) 0.118 In  
Mated Height (mm) 3.00 mm  
Material - Metal Phosphor Bronze  
Material - Plating Mating Tin-Bismuth  
Material - Plating Termination Tin-Bismuth  
Material - Resin Nylon  
Number of Rows 1  
Orientation Right Angle  
PCB Locator No  
PCB Retention Yes  
Packaging Type Embossed Tape on Reel  
Pitch - Mating Interface (in) 0.039 In  
Pitch - Mating Interface (mm) 1.00 mm  
Polarized to PCB Yes  
Stackable No  
Temperature Range - Operating -40°C to +85°C  
Termination Interface: Style Surface Mount  
Wire/Cable Type FFC/FPC

**Electrical**

Current - Maximum per Contact 0.5A  
Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Application Specification AS-52271-001  
Packaging Specification SPK-52271-001, SPK-52271-002  
Product Specification PS-52271-053, RPS-52271-041, RPS-52271-066,  
RPS-52271-067, RPS-52271-069, RPS-52271-070,  
RPS-52271-072, RPS-52271-073, RPS-52271-075,  
RPS-52271-080, RPS-52271-085, RPS-52271-087,  
RPS-52271-091  
Sales Drawing SD-52271-036, SD-52271-037

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**  
**Not Halogen-Free**

**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**  
[52271Series](#)

This document was generated on 06/04/2010

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



DWG. NO. SD-52271-036

E

D

1:MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING

A

8

7

6

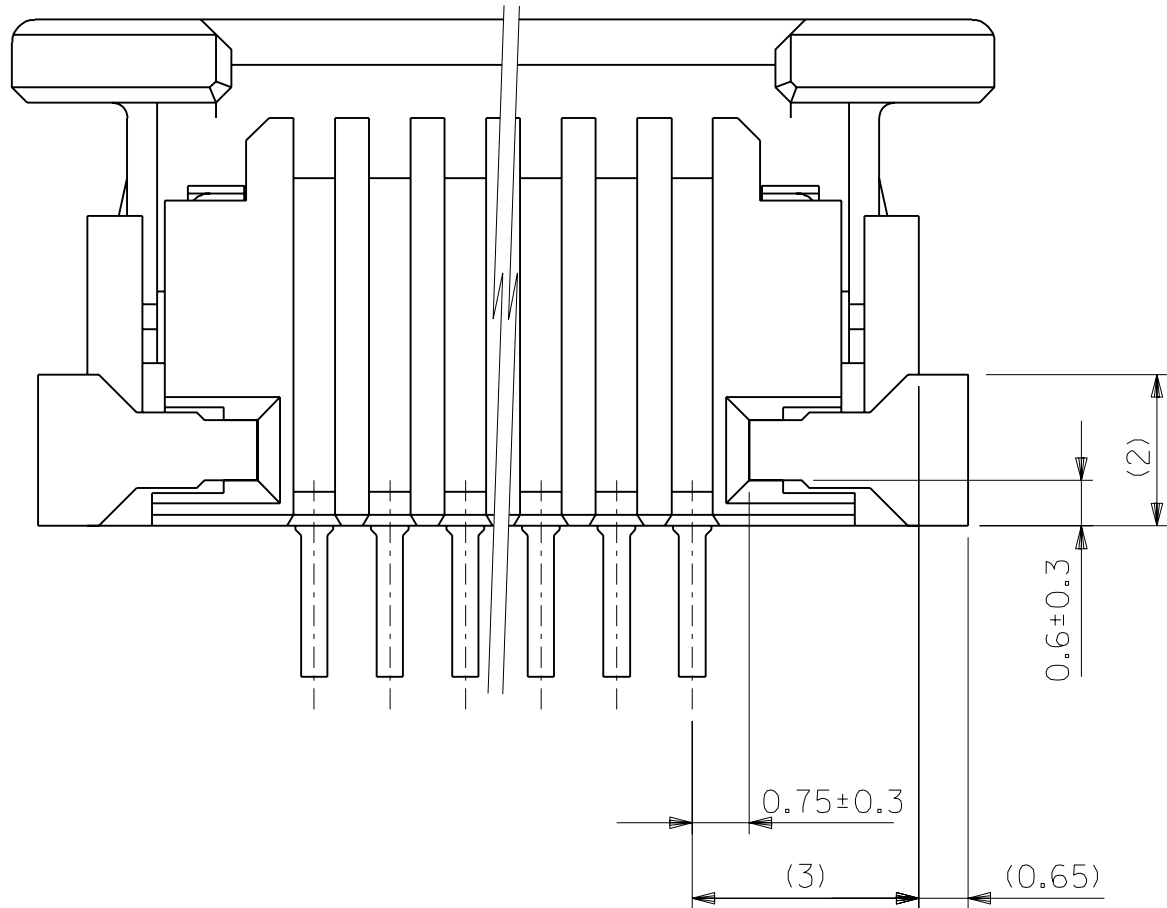
5

4

3

2

1



注記 NOTES

- ① 接点部までの嵌合長さ。  
LENGTH TO CONTACT POINT.
2. 使用材料 MATERIAL  
ハウジング : 46ナイロン, UL94V-0  
HOUSING : 46NYLON, UL94V-0  
アクチュエータ : PPS, UL94V-0  
ACTUATOR : PPS, UL94V-0  
ターミナル : リン青銅 (t=0.25)  
TERMINAL : PHOS-BRO.(t=0.25)  
メッキ : 錫ビスマスメッキ 1.0マイクロメートル以上  
PLATING : TIN-BISMUTH 1.0 MICROMETER MINIMUM  
: ニッケル下地 1.0マイクロメートル以上  
PLATING : NICKEL(UNDER PLATING)1.0 MICROMETER MINIMUM  
金具 : 銅合金 (t=0.25)  
FITTING NAIL : COPPER ALLOY (t=0.25)  
メッキ : 錫メッキ 1.0マイクロメートル以上  
PLATING : TIN 1.0 MICROMETER MINIMUM  
: ニッケル下地 1.0マイクロメートル以上  
PLATING : NICKEL(UNDER PLATING) 1.0 MICROMETER MINIMUM
- ③ パターンはくり止め用金具  
FITTING NAIL FOR PREVENTION OF PEELING OF P.C.B.PATTERN.
4. エンボステープ梱包時は、アクチュエータがロックした状態とする。  
WHEN CONNECTOR IS SHIPED, ACTUATOR SHOULD BE LOCKED.
- ⑤ FPC挿入深さ。  
INSERTION DEPTH OF FPC
- ⑥ パターン書き込み禁止エリア。  
NO FOOT PRINT AREA.
7. 本製品は52271-\*\*-17の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52271-\*\*-17.

FPCについて：  
打抜き方向は導体側から補強板側を推奨致します。  
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

|                            |  |        |   |                               |              |                   |                                  |                   |                              |                                                                                                                           |                                         |          |
|----------------------------|--|--------|---|-------------------------------|--------------|-------------------|----------------------------------|-------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------|
|                            |  |        |   |                               |              | MODEL NO.         |                                  | 52271-**19        |                              |                                                                                                                           |                                         |          |
|                            |  |        |   |                               |              | 材料 MATERIAL       |                                  | 注記参照<br>SEE NOTES |                              |  MOLEX-JAPAN CO.,LTD.<br>日本モレックス株式会社 |                                         |          |
|                            |  |        |   |                               |              | 仕上げ FINISH        |                                  | 注記参照<br>SEE NOTES |                              | REVISE ONLY ON CAD SYSTEM                                                                                                 |                                         |          |
| 角度 ANGLE                   |  | ±3°    |   |                               |              | 適用電線範囲 WIRE RANGE |                                  | —//—              |                              | TITLE 名称<br>1.0 FPC CONN. Z.I.F. SMT<br>(BOTTON CONTACT)<br>-LEAD FREE-                                                   |                                         |          |
| 30 以上 OVER                 |  | ±0.3   | B | 変更<br>REVISED (J2004-355)     | H.K.<br>K.T. | 04/04/02          | 被覆外径 INS. RANGE                  |                   | —//—                         |                                                                                                                           | DWG. NO. (SHEET 2 OF 2)<br>SD-52271-036 | REV<br>B |
| 10 以上 30 未満 OVER UNDER     |  | ±0.25  | A | 変更<br>REVISED (J2004-337)     | H.K.<br>K.T. | 04/03/25          | DRAWN BY '04/03/12<br>H.KAWABATA |                   | CHK'D BY '04/03/12<br>K.TOJO |                                                                                                                           |                                         |          |
| 10 未満 UNDER                |  | ±0.2   | O | 新規作成<br>RELEASED (J2004-3059) | H.K.<br>K.T. | 04/03/12          | APP'D BY '04/03/12<br>M.SASAO    |                   | 尺度 SCALE —//—                |                                                                                                                           |                                         |          |
| 一般公差<br>GENERAL TOLERANCES |  | 記号 LTR |   | 変更内容<br>REVISION RECORD       |              | DR.<br>CHK.       | 日付 DATE                          |                   |                              |                                                                                                                           |                                         |          |

8

7

6

5

4

3

2

1

10

9

8

7

6

5

4

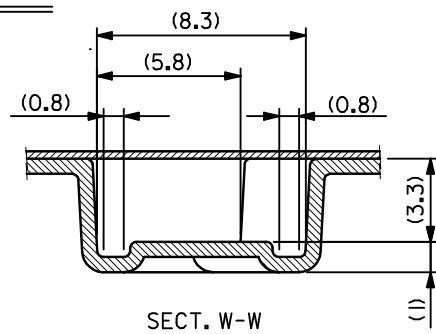
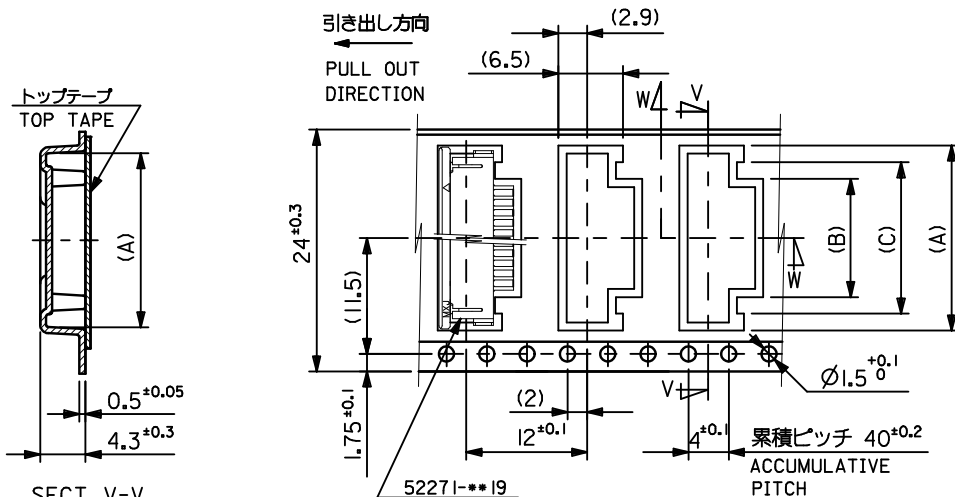
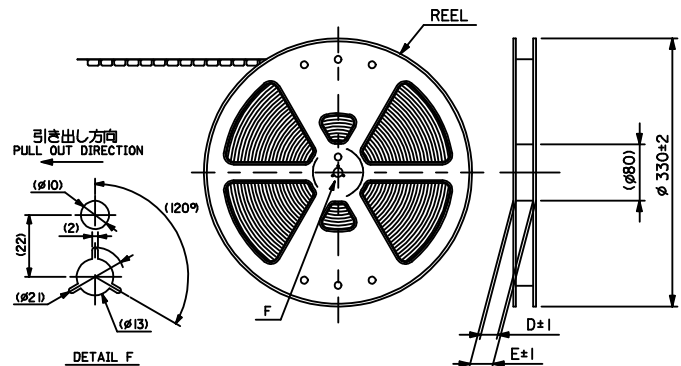
3

2

1

## NOTES

- 製品番号 52271-\*\*-19 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-52271-036 を参照下さい。  
IN THE PACKAGE, ACTUATOR OF PART NO. 52271-\*\*-19 SHOULD BE LOCKED  
RE DETAILED DIMENSIONS, SEE SD-52271-036.
- 梱包数量: 1000個/リール  
NUMBER OF CONNECTORS: 1000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH  
トップテープ リーダー部 TOP TAPE LEADER PART  
トップテープ 未接着部 TOP TAPE NON-BONDED PART  
引き出し方向 PULL OUT DIRECTION  
175 ±25 25 ±5
- トップテープの剥離強度: 0.1~1.3N {10~130gf} (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事。)  
PEELING OFF FORCE OF TOP TAPE: 0.1~1.3N {10~130gf}  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION  
引き出し方向 PULL OUT DIRECTION  
剥離方向 PEEL OFF DIRECTION  
10°
- 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>
- 本製品は52271-\*\*-19の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52271-\*\*-90.
- 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.



52271-\*\*-19

MODEL NO.

キャリアテープ幅  
CARRIER TAPE WIDTH

E

D

(C)

(B)

(A)

MATERIAL NO.

箱数  
CKT.

REVISED  
EC NO: J2009-2061  
DRWN:TKN  
CHKD:HMATSUMOTO  
APPR:NUK ITA  
2009/05/20  
2009/05/21  
2009/05/21

DESCRIPTION

GENERAL TOLERANCES  
(UNLESS SPECIFIED)

|                  |       |
|------------------|-------|
| 10 UNDER         | ±0.2  |
| 10 OVER 30 UNDER | ±0.25 |
| 30 OVER          | ±0.3  |
| ANGULAR          | ±3°   |

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
MM ONLY

|                         |                    |
|-------------------------|--------------------|
| DRAWN BY<br>H. KAWABATA | DATE<br>2004/03/12 |
| CHECKED BY<br>K. TOJO   | DATE<br>2004/03/12 |
| APPROVED BY<br>M. SASAO | DATE<br>2004/03/12 |
| MATERIAL NO.            |                    |

SIZE  
A3

SCALE  
---

DESIGN UNITS  
METRIC

THIRD ANGLE  
PROJECTION

EMBOSSED TAPE PACKAGE  
FOR 52271-\*\*-19  
-LEAD FREE-

MOLEX INCORPORATED

DOCUMENT NO.  
SD-52271-037

SHEET NO.  
1 OF 3

9

8

7

6

5

4

3

2

F

E

D

C

B

A

F

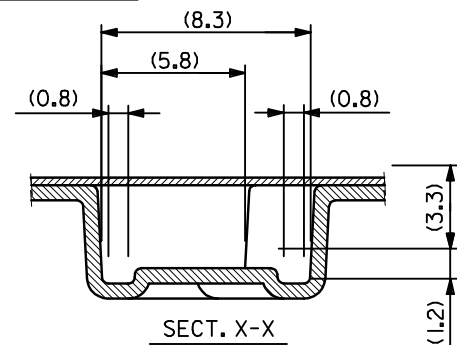
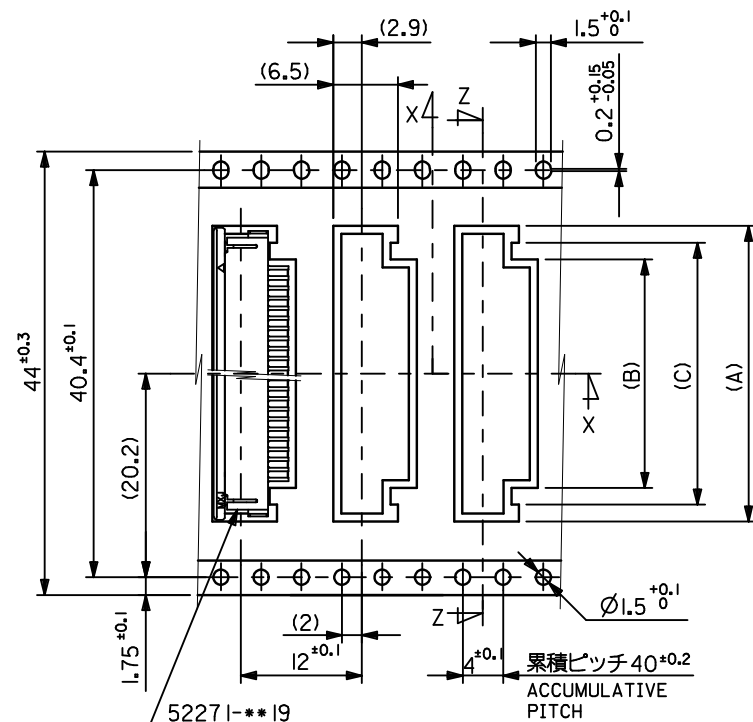
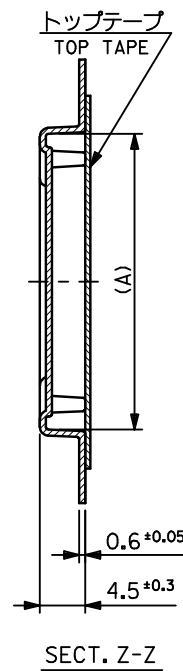
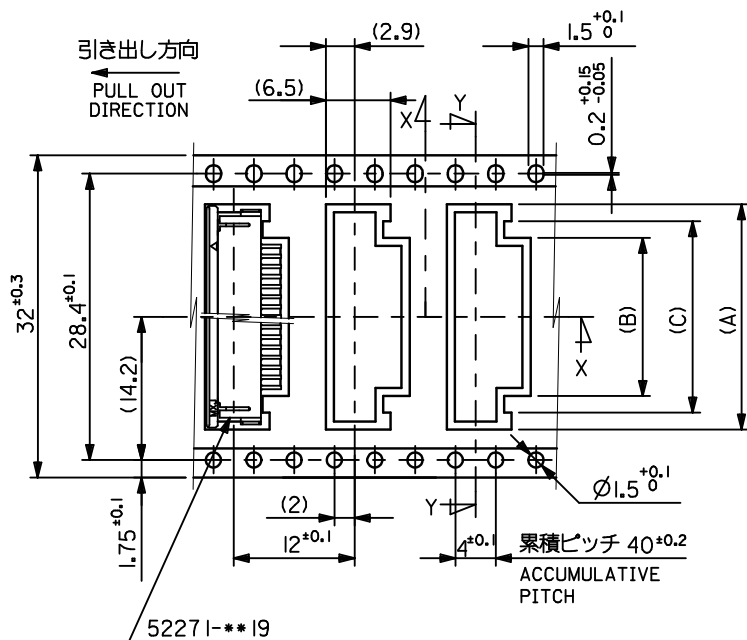
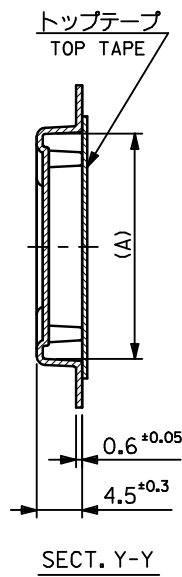
E

D

C

B

A



|    |      |      |    |      |       |            |    |
|----|------|------|----|------|-------|------------|----|
| 44 | 49.4 | 45.4 | 31 | 27.4 | 34.35 | 5227I-2779 | 27 |
|    |      |      | 30 | 26.4 | 33.35 | -2679      | 26 |
|    |      |      | 29 | 25.4 | 32.35 | -2579      | 25 |
|    |      |      | 28 | 24.4 | 31.35 | -2479      | 24 |
|    |      |      | 27 | 23.4 | 30.35 | -2379      | 23 |
|    |      |      | 26 | 22.4 | 29.35 | -2279      | 22 |
|    |      |      | 25 | 21.4 | 28.35 | -2179      | 21 |
|    |      |      | 24 | 20.4 | 27.35 | -2079      | 20 |
|    |      |      | 23 | 19.4 | 26.35 | -1979      | 19 |
|    |      |      | 22 | 18.4 | 25.35 | -1879      | 18 |
|    |      |      | 21 | 17.4 | 24.35 | -1779      | 17 |
|    |      |      | 20 | 16.4 | 23.35 | -1679      | 16 |
|    |      |      | 19 | 15.4 | 22.35 | -1579      | 15 |
|    |      |      | 18 | 14.4 | 21.35 | -1479      | 14 |

|    |      |      |     |      |       |              |       |
|----|------|------|-----|------|-------|--------------|-------|
| 32 | 37.4 | 33.4 | 17  | 13.4 | 20.35 | -1379        | 13    |
|    |      |      | 16  | 12.4 | 19.35 | 5227I-1279   | 12    |
|    |      |      | (C) | (B)  | (A)   | MATERIAL NO. |       |
|    |      |      | E   | D    |       |              | 電 装 部 |

キャリアテープ幅  
CARRIER TAPE WIDTH  
tb\_frame\_A3\_J\_ME\_S  
Rev. E 2006/04/15

|                                                                                                                                  |                                                            |                                          |           |                            |                    |                                                                                           |                        |                                                                                                                 |              |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|-----------|----------------------------|--------------------|-------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|--------------|
| REVISED<br>EC NO: J2009-2061<br>2009/05/20<br>DRWN:TKON<br>CHKD:MATSUMOTO<br>2009/05/21<br>APPR:NUKITA<br>2009/05/21<br>REV<br>A | 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>H.KAWABATA     | DATE<br>2004/03/12 | TITLE<br>EMBOSSED TAPE PACKAGE<br>FOR 52271-**19<br>-LEAD FREE-<br><br>MOLEX INCORPORATED |                        |                                                                                                                 |              |
|                                                                                                                                  |                                                            | 10 OVER 30 UNDER                         | ±0.25     | CHECKED BY<br>K. TOJO      | DATE<br>2004/03/12 |                                                                                           |                        |                                                                                                                 |              |
|                                                                                                                                  |                                                            | 30 OVER                                  | ±0.3      | APPROVED BY<br>M. SASAO    | DATE<br>2004/03/12 |                                                                                           |                        |                                                                                                                 |              |
|                                                                                                                                  |                                                            | <del>ANGULAR ±3°</del>                   |           | MATERIAL NO.               |                    |                                                                                           |                        |                                                                                                                 | DOCUMENT NO. |
|                                                                                                                                  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                          | SEE TABLE |                            | SD-52271-037       |                                                                                           | 2 OF 3                 |                                                                                                                 |              |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                            |                                          |           |                            |                    |                                                                                           |                        |                                                                                                                 |              |

F

E

D

C

B

A

F

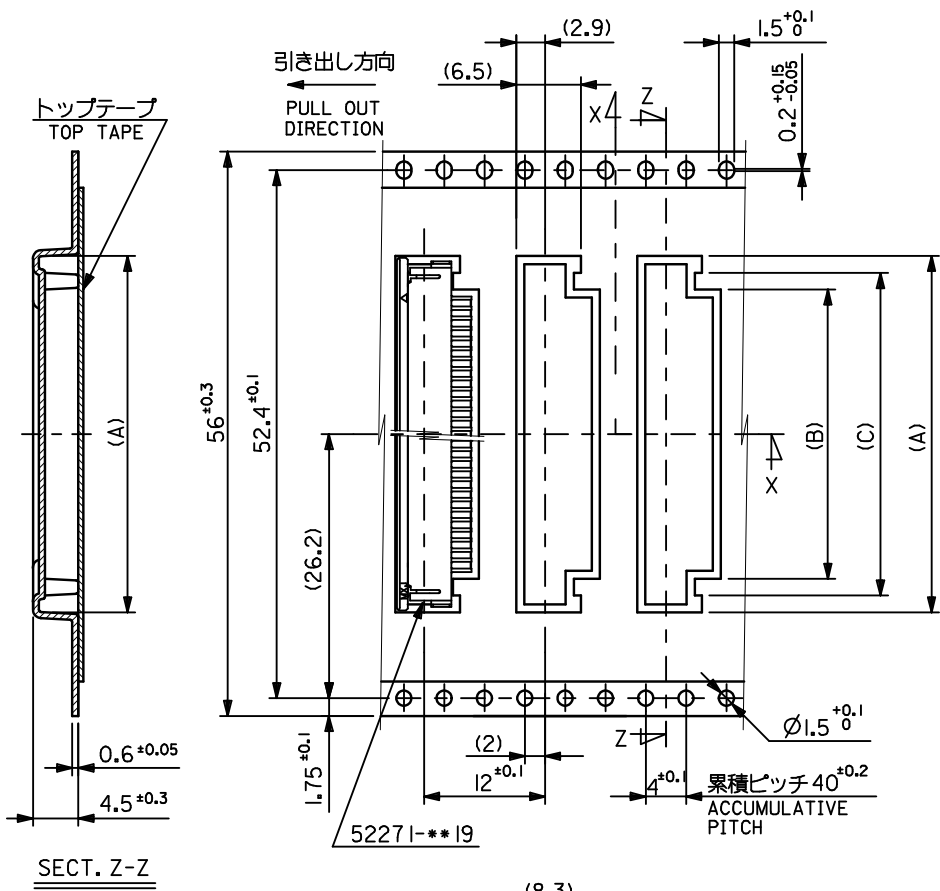
E

D

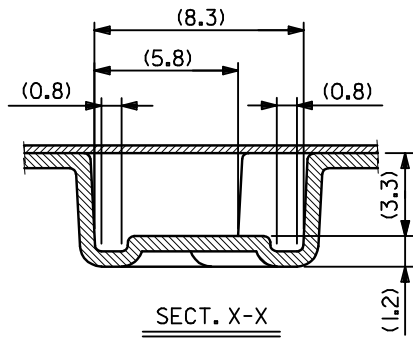
C

B

A



SECT. Z-Z



SECT. X-X

|                                |      |      |     |      |       |              |             |
|--------------------------------|------|------|-----|------|-------|--------------|-------------|
| 56                             | 61.4 | 57.4 | 34  | 30.4 | 37.35 | 52271-3079   | 30          |
|                                |      |      | 33  | 29.4 | 36.35 | 52271-2979   | 29          |
|                                |      |      | 32  | 28.4 | 35.35 | 52271-2879   | 28          |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | E    | D    | (C) | (B)  | (A)   | MATERIAL NO. | 標 数<br>CKT. |

|                                                                                                                                                           |                                                                       |       |                            |                    |                                                                |                        |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------|----------------------------|--------------------|----------------------------------------------------------------|------------------------|---------------------------|
| REVISED<br>EC NO.: J2009-2061<br>2009/05/20<br>DRWN:TKN<br>2009/05/21<br>CHKD:HMATSUMOTO<br>2009/05/21<br>APPR:NUKITA<br>2009/05/21<br>DESCRIPTION<br>REV | 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>H.KAWABATA     | DATE<br>2004/03/12 | TITLE<br>EMBOSSD TAPE PAKEGE<br>FOR 52271-**-19<br>-LEAD FREE- |                        |                           |
|                                                                                                                                                           | 10 OVER 30 UNDER                                                      | ±0.25 | CHECKED BY<br>K.TOJO       | DATE<br>2004/03/12 | MOLEX INCORPORATED                                             |                        |                           |
|                                                                                                                                                           | 30 OVER                                                               | ±0.3  | APPROVED BY<br>M.SASAO     | DATE<br>2004/03/12 | DOCUMENT NO.<br>SD-52271-037                                   |                        |                           |
|                                                                                                                                                           | ANGULAR<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | MATERIAL NO.<br>SEE TABLE  |                    | SHEET NO.<br>3 OF 3                                            |                        |                           |

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