

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0522712379](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 23 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) 23  
 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-52271-066, 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 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](#)

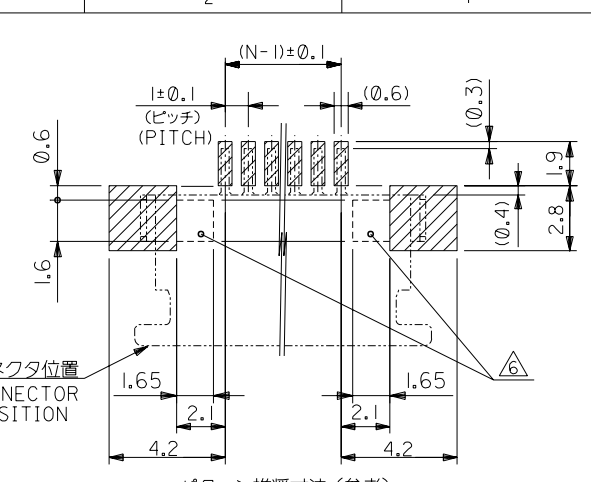
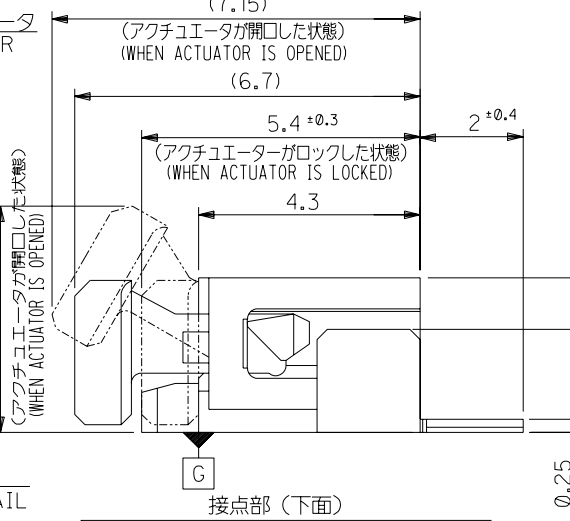
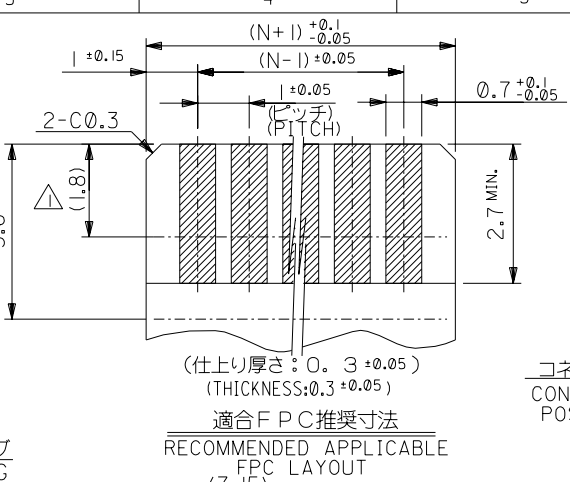
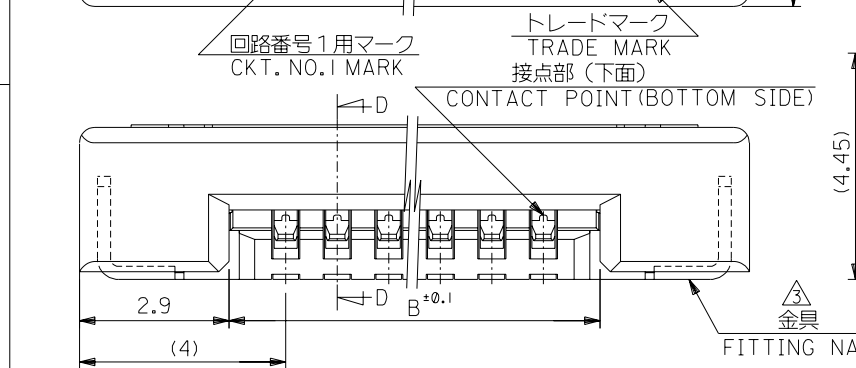
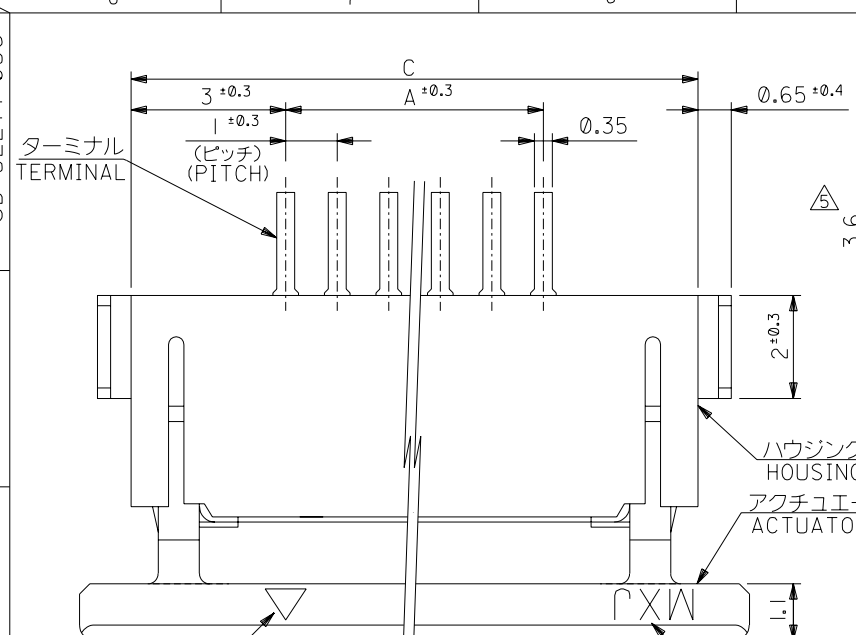
Please visit the [Contact Us](#) section for any  
 non-product compliance questions.

**Search Parts in this Series**

52271Series

This document was generated on 06/04/2010

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



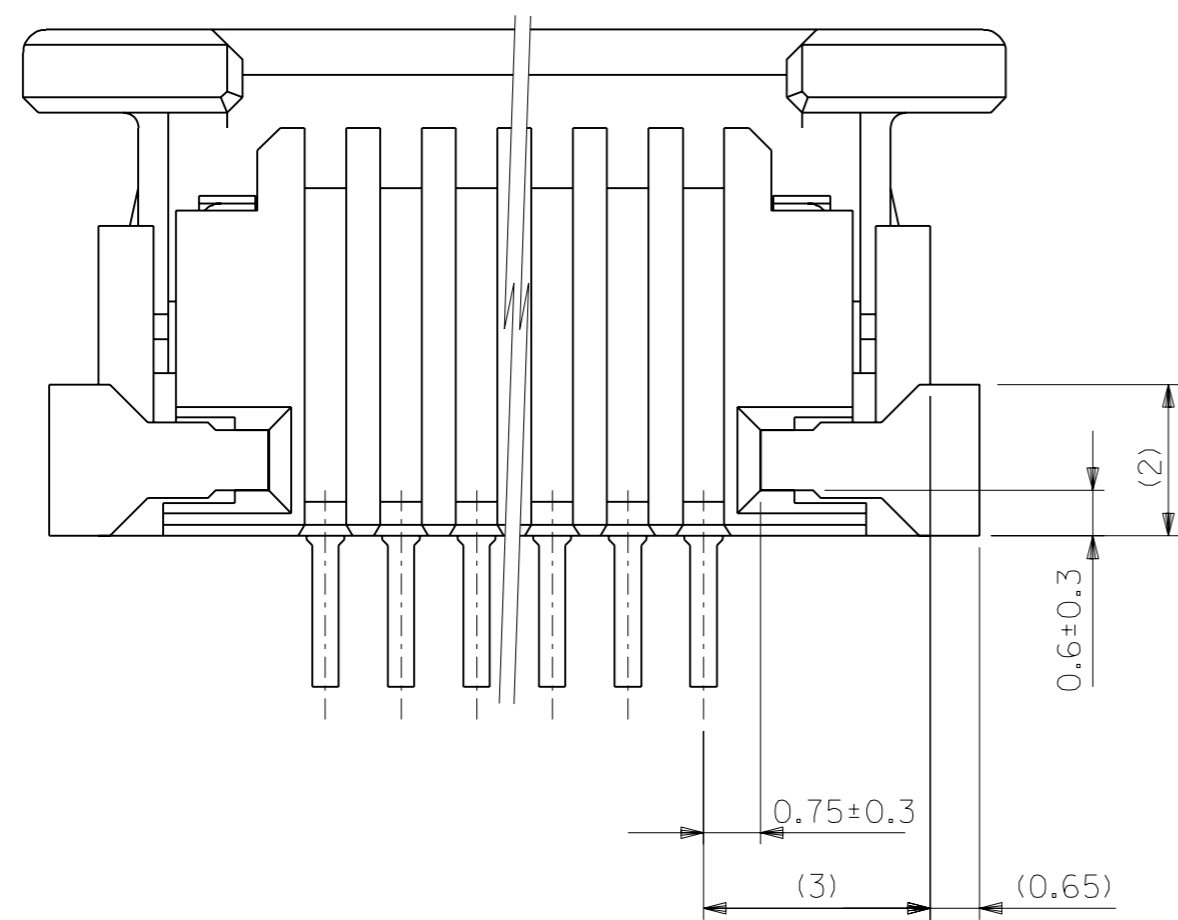
|    |      |    |            |    |
|----|------|----|------------|----|
| 35 | 31.2 | 29 | 52271-3019 | 30 |
| 34 | 30.2 | 28 | -2919      | 29 |
| 33 | 29.2 | 27 | -2819      | 28 |
| 32 | 28.2 | 26 | -2719      | 27 |
| 31 | 27.2 | 25 | -2619      | 26 |
| 30 | 26.2 | 24 | -2519      | 25 |
| 29 | 25.2 | 23 | -2419      | 24 |
| 28 | 24.2 | 22 | -2319      | 23 |
| 27 | 23.2 | 21 | -2219      | 22 |
| 26 | 22.2 | 20 | -2119      | 21 |
| 25 | 21.2 | 19 | -2019      | 20 |
| 24 | 20.2 | 18 | -1919      | 19 |
| 23 | 19.2 | 17 | -1819      | 18 |
| 22 | 18.2 | 16 | -1719      | 17 |
| 21 | 17.2 | 15 | -1619      | 16 |
| 20 | 16.2 | 14 | -1519      | 15 |
| 19 | 15.2 | 13 | -1419      | 14 |
| 18 | 14.2 | 12 | -1319      | 13 |
| 17 | 13.2 | 11 | -1219      | 12 |
| 16 | 12.2 | 10 | -1119      | 11 |
| 15 | 11.2 | 9  | -1019      | 10 |
| 14 | 10.2 | 8  | -0919      | 9  |
| 13 | 9.2  | 7  | -0819      | 8  |
| 12 | 8.2  | 6  | -0719      | 7  |
| 11 | 7.2  | 5  | -0619      | 6  |
| 10 | 6.2  | 4  | -0519      | 5  |
| 9  | 5.2  | 3  | 52271-0419 | 4  |

|             |   |   |   |              |         |
|-------------|---|---|---|--------------|---------|
| 52271-**-19 | C | B | A | 52271-0419   | 極数 CKT. |
| MODEL NO.   |   |   |   | MATERIAL NO. |         |

|                         |               |        |                      |             |                    |
|-------------------------|---------------|--------|----------------------|-------------|--------------------|
| 角度 ANGLE                | $\pm 3^\circ$ |        |                      |             |                    |
| 30以上 OVER               | $+0.3$        | B      | 変更 REVISIED          | (2004-3551) | H.K. K.S. 04/04/02 |
| 10以上 OVER 30未満 UNDER    | $+0.25$       | A      | 変更 REVISIED          | (2004-3371) | H.K. K.S. 04/03/29 |
| 10未満 UNDER              | $+0.2$        | ①      | 新規作成 RELEASED        | (2004-3059) | H.K. K.S. 04/03/12 |
| 一般公差 GENERAL TOLERANCES |               | 記号 LTR | 変更内容 REVISION RECORD |             | DR. CHK. 日付 DATE   |

|                               |                           |
|-------------------------------|---------------------------|
| 材料 MATERIAL                   | 注記参照 SEE NOTES            |
| 仕上げ FINISH                    | 注記参照 SEE NOTES            |
| 適用電線範囲 WIRE RANGE             | ---                       |
| 被覆外径 INS. RANGE               | ---                       |
| DRAWN BY '04/03/12 H.KAWABATA | CHK'D BY '04/03/12 K.TOJO |
| APP'D BY '04/03/12 M.SASAO    | 尺度 SCALE ---              |

|  |                      |
|--|----------------------|
| molex MOLEX-JAPAN CO.,LTD. 日本モレックス株式会社             |                      |
| REVISE ONLY ON CAD SYSTEM                          |                      |
| TITLE 名称 1.0 FPC CONN. Z.I.F. SMT (BOTTOM CONTACT) |                      |
| -LEAD FREE-  |                      |
| DWG. NO. SD-52271-036                              | (SHEET 1 OF 2) REV B |



下面図

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

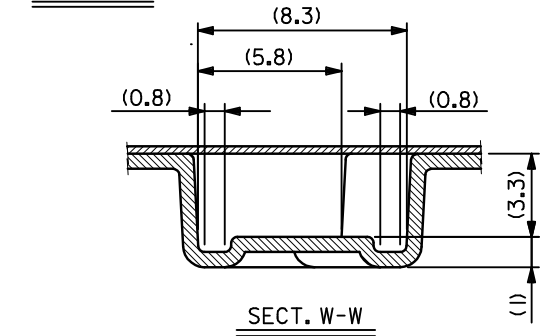
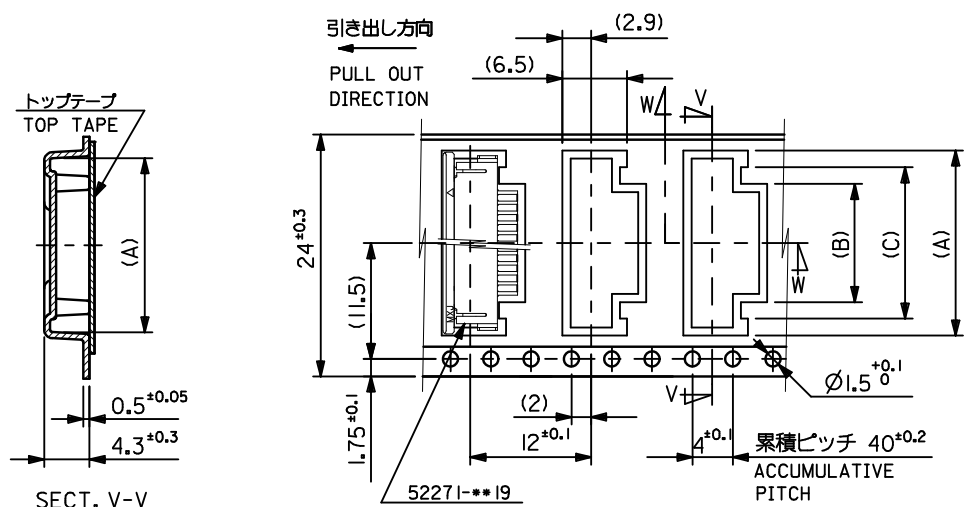
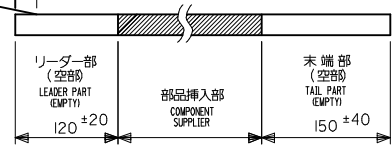
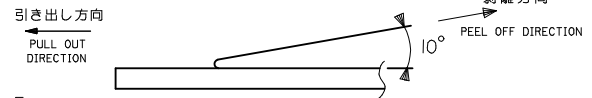
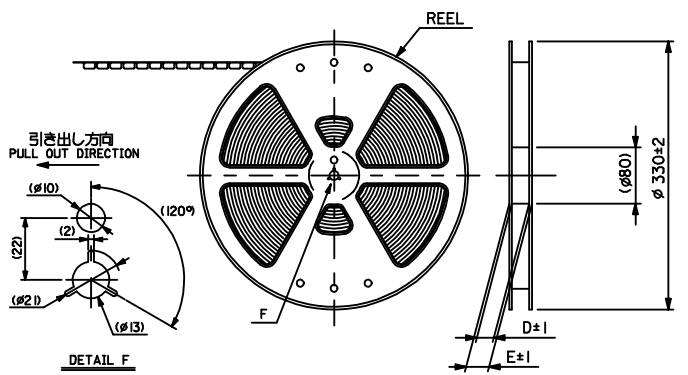
MODEL NO. 52271-\*\*-19

|                         |  |                            |  |   |  |
|-------------------------|--|----------------------------|--|---|--|
| 材料 MATERIAL             |  | 注記参照 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 SEE NOTES             |  | REVISE ONLY ON CAD SYSTEM   |  |
| 適用電線範囲 WIRE RANGE       |  | —//—                       |  | TITLE 名称<br>I.O FPC CONN. Z.I.F. SMT<br>(BOTTON CONTACT)<br>-LEAD FREE- |  |
| 被覆外径 INS. RANGE         |  | —//—                       |  | DRAWN BY '04/03/12 H.KAWABATA<br>CHK'D BY '04/03/12 K.TOJO              |  |
| 角度 ANGLE                |  | ±3°                        |  | DWG. NO. (SHEET 2 OF 2) REV B   |  |
| 30 以上 OVER              |  | ±0.3                       |  | SD-52271-036  |  |
| 10 以上 30 未満 OVER UNDER  |  | ±0.25                      |  |   |  |
| 10 未満 UNDER             |  | ±0.2                       |  |   |  |
| 一般公差 GENERAL TOLERANCES |  | 記号 LTR                     |  | 変更内容 REVISION RECORD  |  |
|                         |  | DR. / CHK.                 |  | 日付 DATE   |  |
|                         |  | APP'D BY '04/03/12 M.SASAO |  | 尺度 SCALE —//—   |  |

NOTES

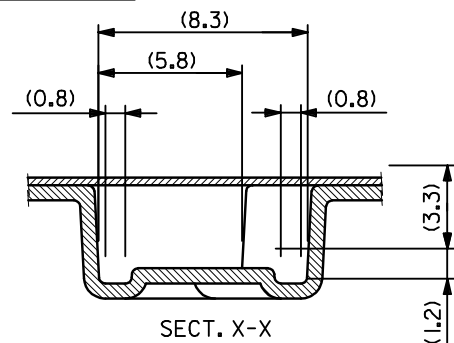
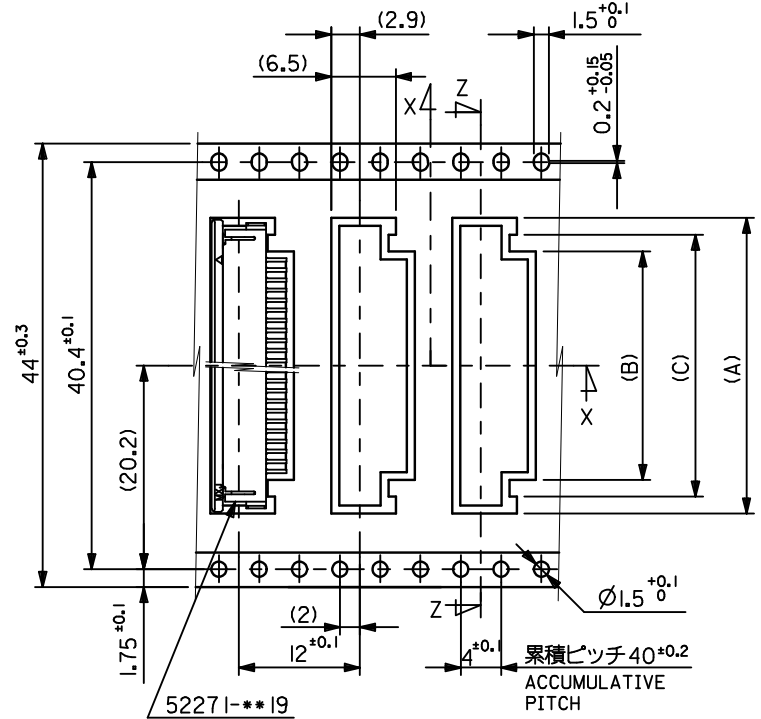
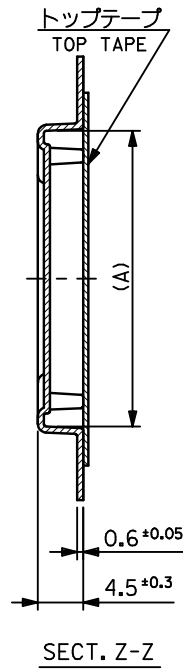
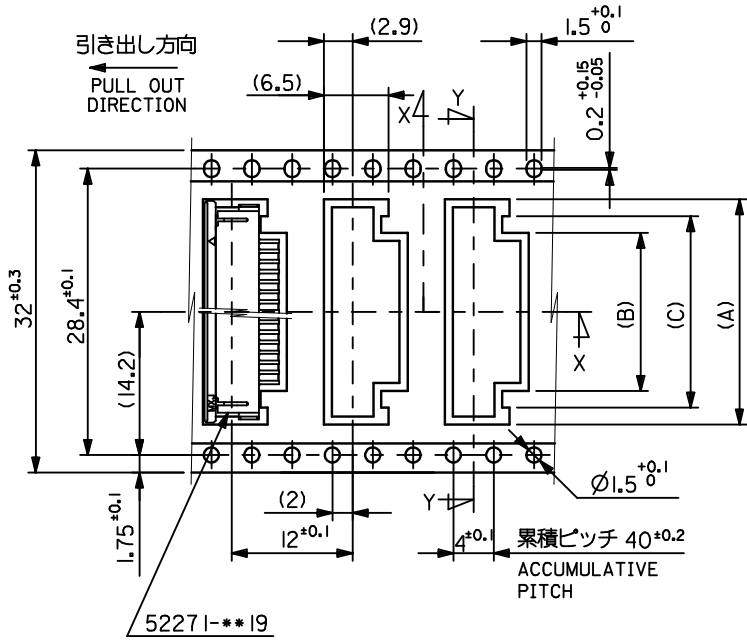
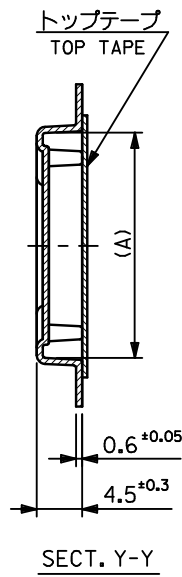
- 製品番号 52271-\*\*-19 の梱包状態はアクチュエータがロックした状態とする。  
IN THE PACKAGE, ACTUATOR OF PART NO. 52271-\*\*-19 SHOULD BE LOCKED RE DETAILED DIMENSIONS, SEE SD-52271-036.
- 梱包数量: 1000個/リール  
NUMBER OF CONNECTORS: 1000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH  

|   |  |
|---|--|
| トップテープ<br>リーダー部<br>TOP TAPE LEADER PART | トップテープ<br>未接着部<br>TOP TAPE NON-BONDED PART |
| 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
- 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-\*\*-19.
- 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.



|    |      |      |     |      |      |            |    |
|----|------|------|-----|------|------|------------|----|
| 24 | 29.4 | 25.4 | 15  | 11.4 | 18.3 | 52271-1179 | 11 |
|    |      |      | 14  | 10.4 | 17.3 | -1079      | 10 |
|    |      |      | 13  | 9.4  | 16.3 | -0979      | 9  |
|    |      |      | 12  | 8.4  | 15.3 | -0879      | 8  |
|    |      |      | 11  | 7.4  | 14.3 | -0779      | 7  |
|    |      |      | 10  | 6.4  | 13.3 | -0679      | 6  |
|    |      |      | 9   | 5.4  | 12.3 | -0579      | 5  |
|    |      |      | 8   | 4.4  | 11.3 | 52271-0479 | 4  |
|    |      |      | (C) | (B)  | (A)  | 52271-0479 | 4  |

|  |             |                                       |   |                    |  |                        |
|--|-------------|---------------------------------------|---|--------------------|--|------------------------|
| REVISED<br>EC NO: J2009-2061<br>DRWN:TKON 2009/05/20<br>CHKD:HMATSUMOTO 2009/05/21<br>APPR:NIKI ITA 2009/05/21 | DESCRIPTION | 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>H. KAWABATA   | DATE<br>2004/03/12 | TITLE<br>EMBOSSED TAPE PACKAGE FOR 52271-**-19 -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                               |                        |
| A  | REV         | ANGULAR ±3                            | MATERIAL NO.<br>SEE TABLE   | SIZE<br>A3         | SHEET NO.<br>1 OF 3  |                        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |             |                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |  |                        |

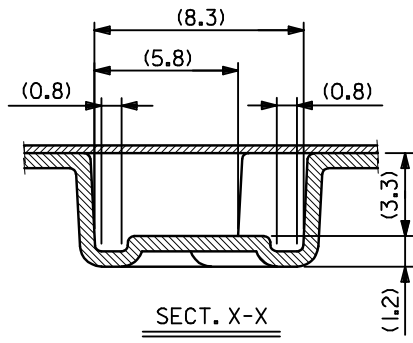
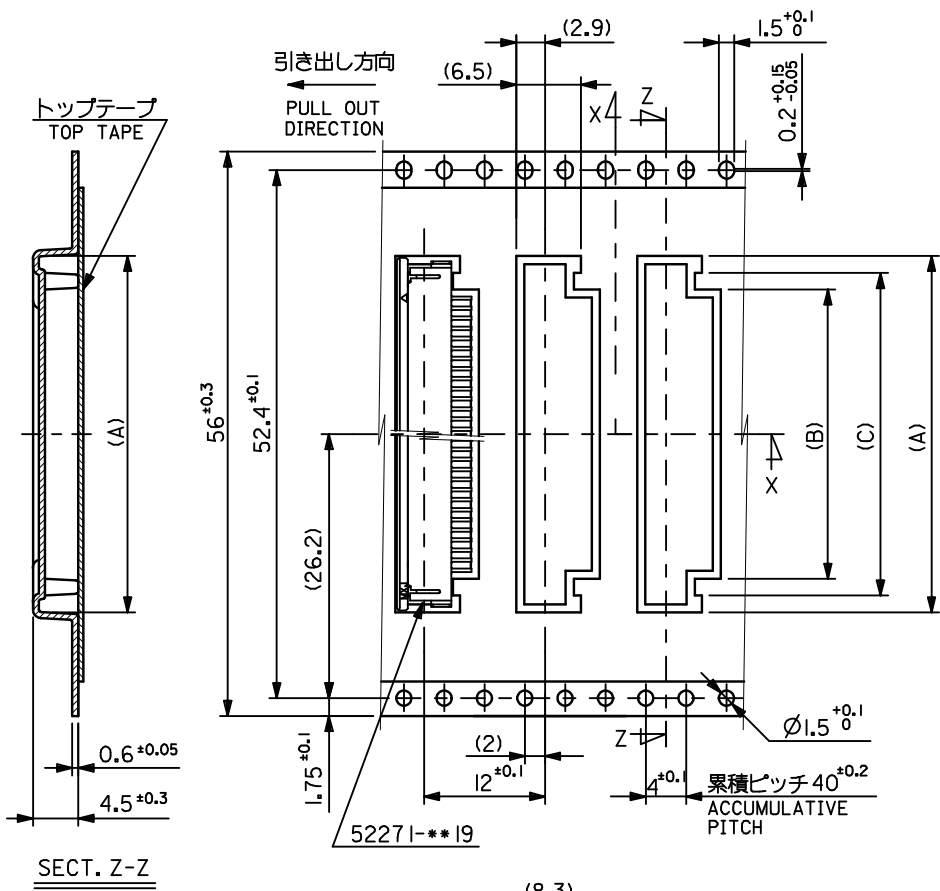


|    |      |       |     |      |       |              |             |       |       |    |
|----|------|-------|-----|------|-------|--------------|-------------|-------|-------|----|
| 44 | 49.4 | 45.4  | 31  | 27.4 | 34.35 | 52271-2779   | 27          |       |       |    |
|    |      |       | 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          |       |       |    |
|    |      |       | 32  | 37.4 | 33.4  | 19           | 15.4        | 22.35 | -1579 | 15 |
|    |      |       |     |      |       | 18           | 14.4        | 21.35 | -1479 | 14 |
| 17 | 13.4 | 20.35 |     |      |       | -1379        | 13          |       |       |    |
| 16 | 12.4 | 19.35 |     |      |       | 52271-1279   | 12          |       |       |    |
|    |      |       | (C) | (B)  | (A)   | MATERIAL NO. | 標 数<br>CKT. |       |       |    |

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

|  |   |                            |                    |  |                           |                              |
|--|---|----------------------------|--------------------|--|---------------------------|------------------------------|
| REVISED<br>EC NO.: J2009-2061<br>DRWN:TKON 2009/05/20<br>CHKD:HATSUMOTO 2009/05/21<br>APPR:NIKI ITA 2009/05/21<br>REV: A         | DESCRIPTION<br>GENERAL TOLERANCES<br>(UNLESS SPECIFIED)<br>10 UNDER ±0.2<br>10 OVER 30 UNDER ±0.25<br>30 OVER ±0.3<br>ANGULAR ±3°<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | DIMENSION STYLE<br>MM ONLY | SCALE<br>---       | DESIGN UNITS<br>METRIC   | THIRD ANGLE<br>PROJECTION |                              |
|  |   | DRAWN BY<br>H. KAWABATA    | DATE<br>2004/03/12 | TITLE<br>EMBOSSED TAPE PACKAGE<br>FOR 52271-**-19<br>-LEAD FREE- |                           |                              |
|  |   | CHECKED BY<br>K. TOJO      | DATE<br>2004/03/12 | MOLEX INCORPORATED   |                           |                              |
|  |   | APPROVED BY<br>M. SASAO    | DATE<br>2004/03/12 | MATERIAL NO.<br>SEE TABLE  |                           | DOCUMENT NO.<br>SD-52271-037 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                            |                    |  |                           |                              |

52271-\*\*-79  
MODEL NO.



|                                |      |      |     |      |       |              |             |
|--------------------------------|------|------|-----|------|-------|--------------|-------------|
| 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. | 種 数<br>CKT. |

|  |   |                         |                            |                    |                           |  |                              |  |                     |
|--|---|-------------------------|----------------------------|--------------------|---------------------------|--|------------------------------|--|---------------------|
| REVISED<br>EC NO.: J2009-2061<br>DRWN:TKON<br>CHKD:HMATSUMOTO<br>APPR:NIKI ITA<br>2009/05/20<br>2009/05/21<br>2009/05/21 | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                  |                         | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>---              | DESIGN UNITS<br>METRIC   | THIRD ANGLE<br>PROJECTION    |  |                     |
|  | 10 UNDER ±0.2<br>10 OVER 30 UNDER ±0.25<br>30 OVER ±0.3                   | DRAWN BY<br>H. KAWABATA |                            | DATE<br>2004/03/12 |                           | TITLE<br>EMBOSSED TAPE PACKAGE<br>FOR 52271-**-19<br>-LEAD FREE- |                              |  |                     |
|  | ANGULAR ±3°<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                         | CHECKED BY<br>K. TOJO      |                    | DATE<br>2004/03/12        |  | MOLEX INCORPORATED           |  |                     |
|  | APPROVED BY<br>M. SASAO   |                         | DATE<br>2004/03/12         |                    | MATERIAL NO.<br>SEE TABLE |  | DOCUMENT NO.<br>SD-52271-037 |  | SHEET NO.<br>3 OF 3 |

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



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.