

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0522712979

Status:

Active

Overview:

Description:

1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 29 Circuits, Lead-free, 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

52271Series

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)              | 29                    |
| 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

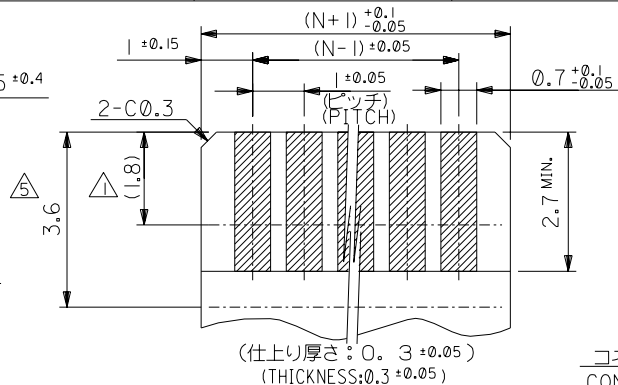
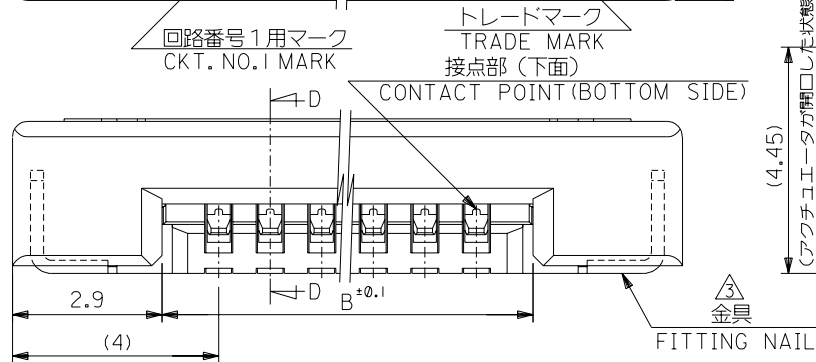
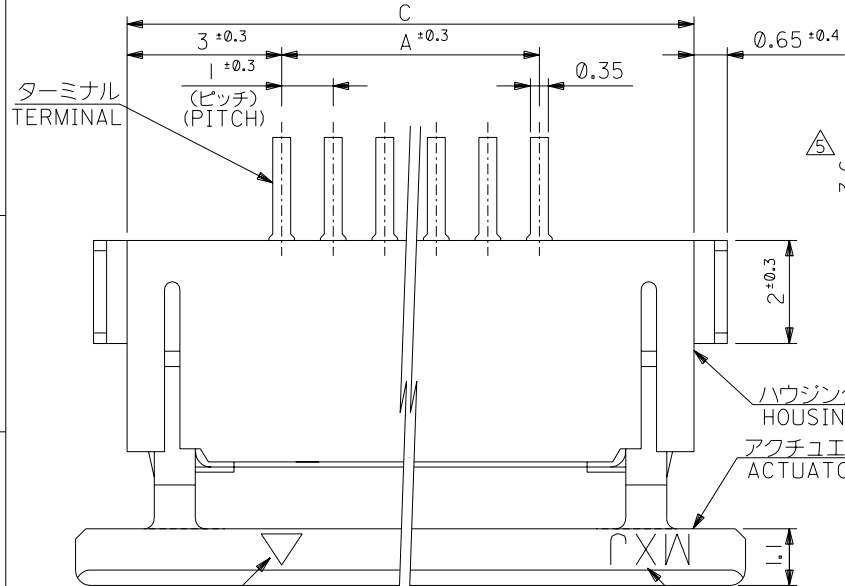
Reference - Drawing Numbers

|                           |                                                                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                        |

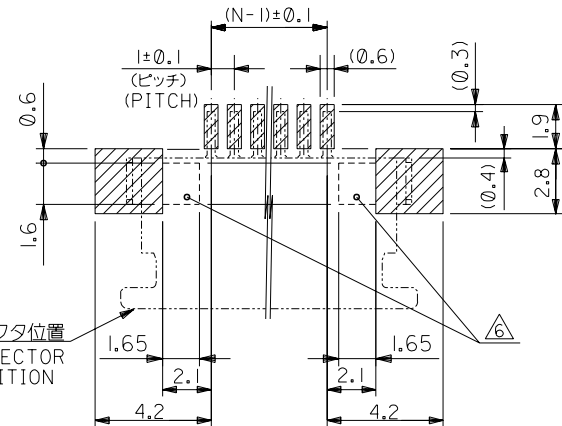
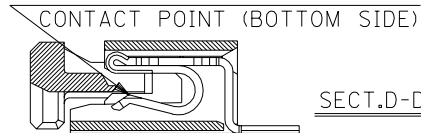
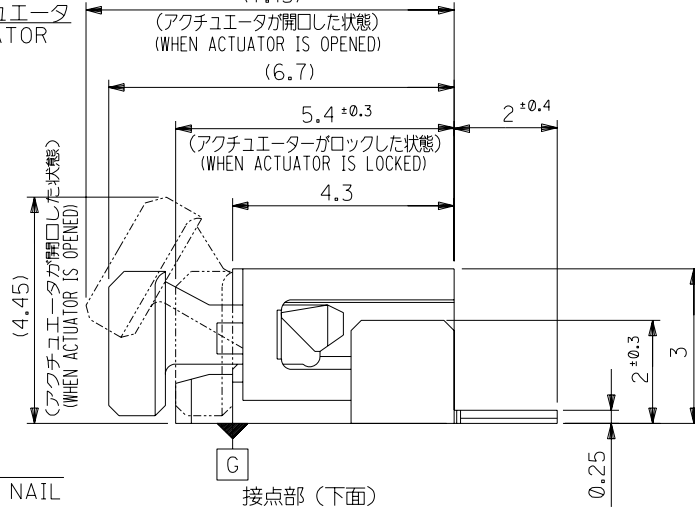
This document was generated on 06/04/2010

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

ターミナル  
TERMINAL



適合FPC推奨寸法  
RECOMMENDED APPLICABLE  
FPC LAYOUT  
(7.15)



|             |      |    |            |         |
|-------------|------|----|------------|---------|
| 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 |      |    |            |         |
| MODEL NO.   | C    | B  | A          | 極数 CKT. |

|                            |           |                         |                               |      |            |                                 |                             |                                                                                                                           |                                                          |
|----------------------------|-----------|-------------------------|-------------------------------|------|------------|---------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
|                            |           |                         |                               |      |            | 材料<br>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<br>FINISH                   | 注記参照<br>SEE NOTES           |                                                                                                                           | REVISE ONLY ON CAD SYSTEM                                |
| 角度 ANGLE                   | ±3°       |                         |                               |      |            | 適用電線範囲<br>WIRE RANGE            | —                           |                                                                                                                           | TITLE 名称<br>1.0 FPC CONN. Z.I.F. SMT<br>(BOTTOM CONTACT) |
| 30 以上<br>OVER              | ±0.3      | B                       | 変更<br>REVISED (J2004-3551)    | H.K. | 04/04/08   | 被覆外径<br>INS. RANGE              | —                           |                                                                                                                           | -LEAD FREE-                                              |
| 10 以上 30 未満<br>OVER UNDER  | ±0.25     | A                       | 変更<br>REVISED (J2004-3371)    | H.K. | 04/03/25   | DRAWN BY 04/03/12<br>H.KAWABATA | CHK'D BY 04/03/12<br>K.TOJO | DWG. NO. (SHEET 1 OF 2) REV                                                                                               |                                                          |
| 10 未満<br>UNDER             | ±0.2      | 0                       | 新規作成<br>RELEASED (J2004-3059) | H.K. | 04/03/12   | APP'D BY 04/03/12<br>M.SASAO    | 尺度<br>SCALE —               | SD-52271-036 B                                                                                                            |                                                          |
| 一般公差<br>GENERAL TOLERANCES | 記号<br>LTR | 変更内容<br>REVISION RECORD | DR.                           | CHK. | 日付<br>DATE |                                 |                             |                                                                                                                           |                                                          |

DWG. NO. SD-52271-036

E

D

1:MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING

A

8

7

6

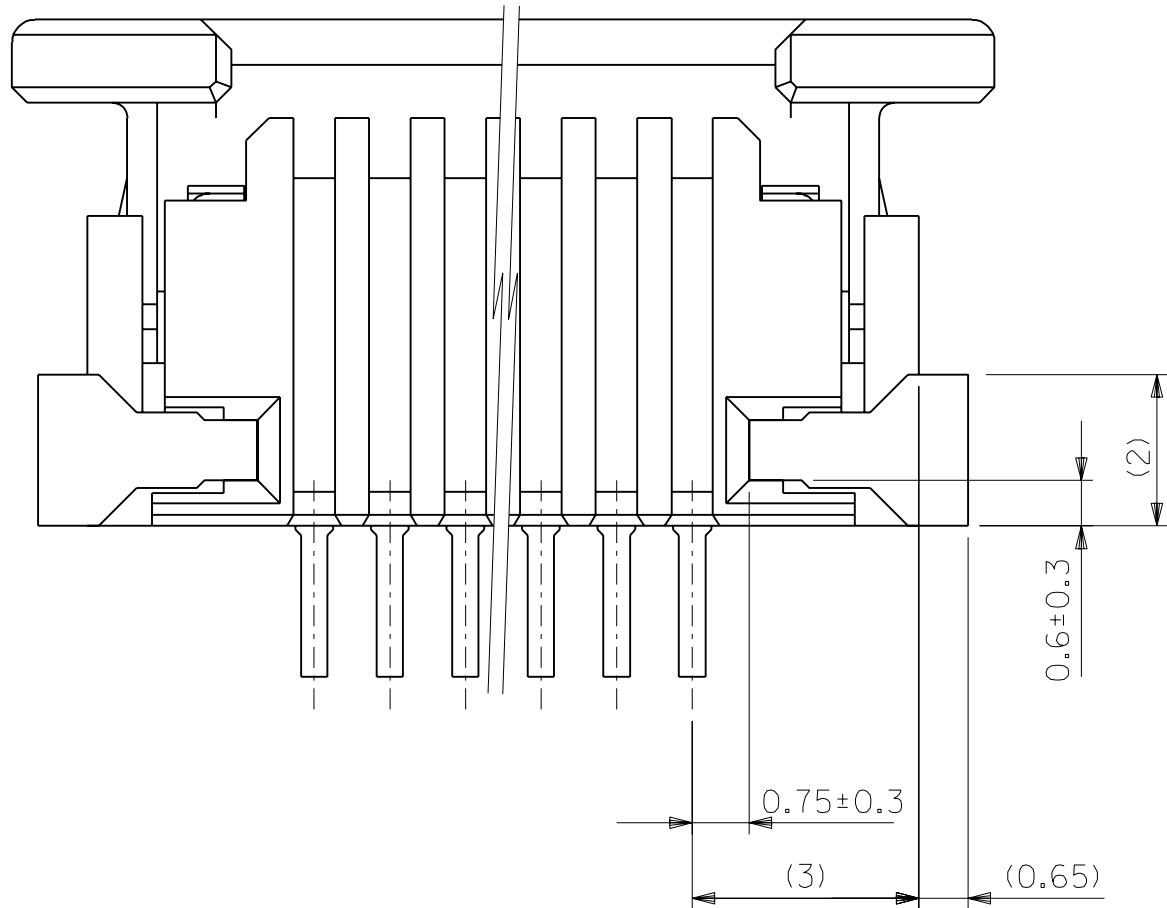
5

4

3

2

1



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. エンボステーブル梱包時は、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                   |                              | MOLEX-JAPAN CO.,LTD.<br>日本モレックス株式会社                                     |          |
|                         |  | 仕上げ FINISH                    |                              | REVISE ONLY ON CAD SYSTEM                                               |          |
|                         |  | 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- |          |
|                         |  | 被覆外径 INS. RANGE               |                              | DWG. NO. (SHEET 2 OF 2) REV<br>SD-52271-036 B                           |          |
|                         |  | 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                                                                |          |
| 角度 ANGLE                |  | ±3°                           |                              |                                                                         |          |
| 30 以上 OVER              |  | ±0.3                          | B 変更 (J2004-355)             | H.K. K.T.                                                               | 04/04/02 |
| 10 以上 30 未満 OVER UNDER  |  | ±0.25                         | A 変更 (J2004-337)             | H.K. K.T.                                                               | 04/03/25 |
| 10 未満 UNDER             |  | ±0.2                          | O 新規作成 RELEASED (J2004-3059) | H.K. K.T.                                                               | 04/03/12 |
| 一般公差 GENERAL TOLERANCES |  | 記号 LTR                        | 変更内容 REVISION RECORD         | DR. CHK.                                                                | 日付 DATE  |

10

9

8

7

6

5

4

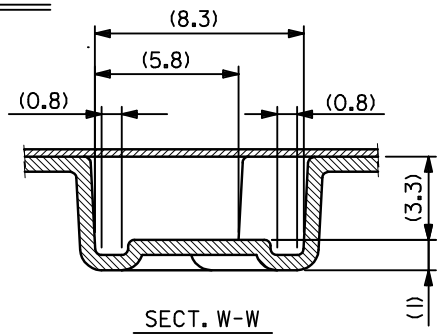
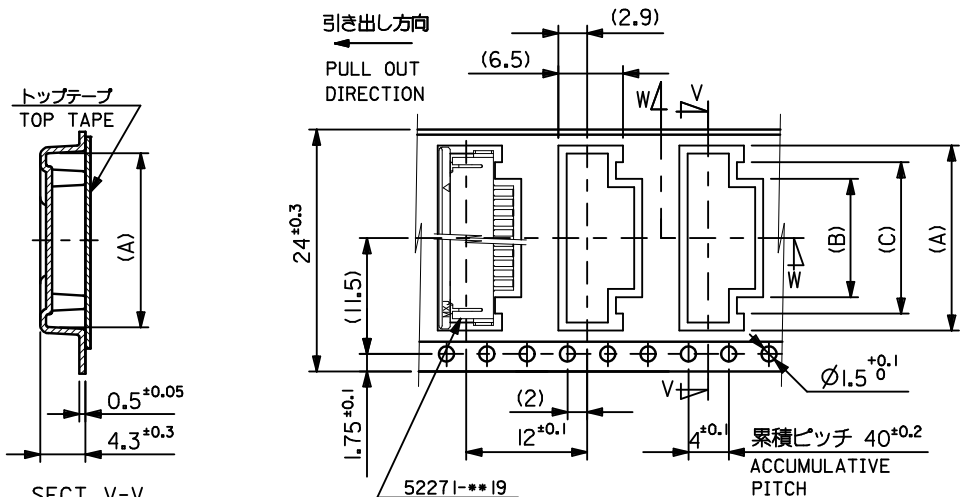
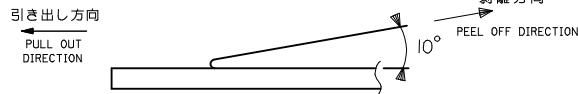
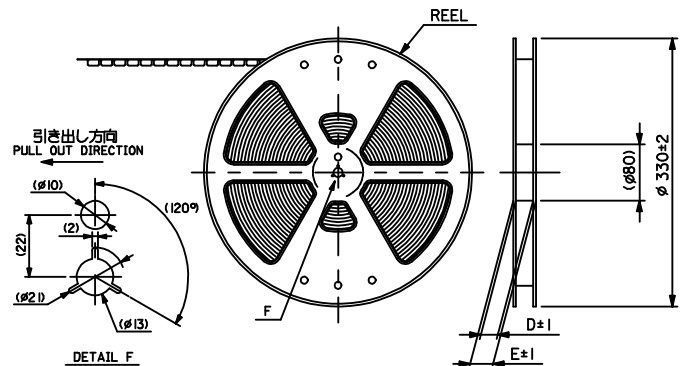
3

2

1

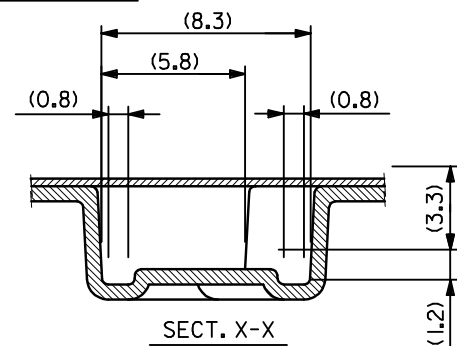
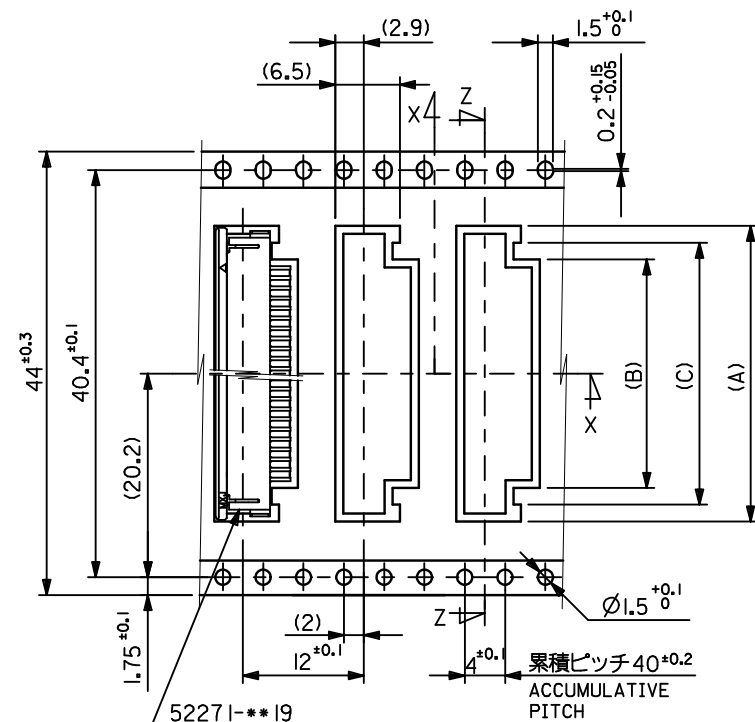
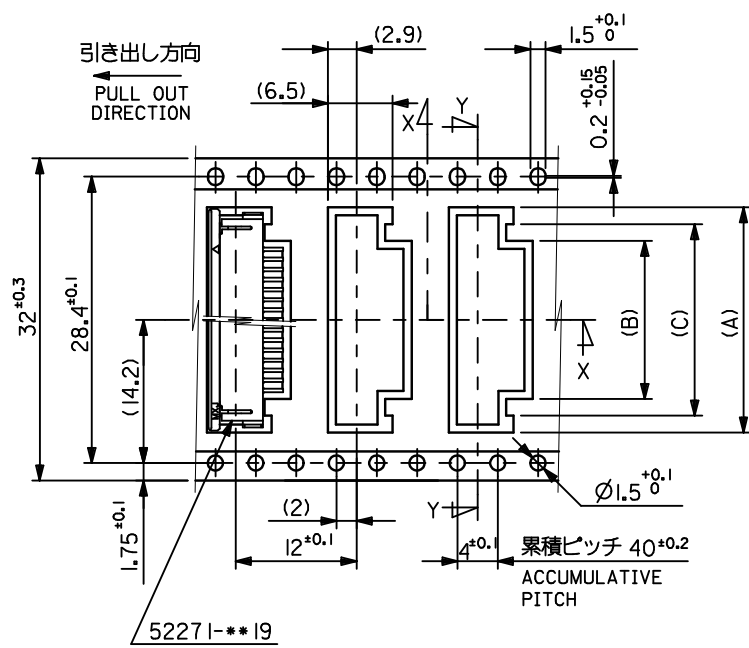
## NOTES

- 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 175 ±25  
トップテープ 未接着部 TOP TAPE NON-BONDED PART 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-\*\*-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. | CARRIER TAPE WIDTH | E | D | 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  |

| REVISED                    |  | GENERAL TOLERANCES (UNLESS SPECIFIED) |  | DIMENSION STYLE |  | SCALE                                                                                                                         |  | DESIGN UNITS       |  | THIRD ANGLE PROJECTION |  |
|----------------------------|--|---------------------------------------|--|-----------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|--------------------|--|------------------------|--|
| EC NO. J2009-2061          |  | 10 UNDER                              |  | MM ONLY         |  | ---                                                                                                                           |  | METRIC             |  | ◎ □                    |  |
| DRWN:TKN 2009/05/20        |  | 10 OVER 30 UNDER                      |  | DRAWN BY        |  | DATE                                                                                                                          |  | TITLE              |  | EMBOSSED TAPE PACKAGE  |  |
| CHKD:HMATSUMOTO 2009/05/21 |  | 30 OVER                               |  | CHECKED BY      |  | DATE                                                                                                                          |  | MOLEX INCORPORATED |  | FOR 52271-**-19        |  |
| APPR:NUK ITA 2009/05/21    |  | ANGULAR                               |  | APPROVED BY     |  | DATE                                                                                                                          |  | SD-52271-037       |  | -LEAD FREE-            |  |
| REV                        |  | DRAFT WHERE APPLICABLE                |  | MATERIAL NO.    |  | DOCUMENT NO.                                                                                                                  |  | SHEET NO.          |  | 1 OF 3                 |  |
| A                          |  | MUST REMAIN WITHIN DIMENSIONS         |  | SIZE            |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                    |  |                        |  |



|                                                                                                                                      |                                                            |  |                                          |  |                                         |  |                                                                                                                                  |                        |                           |  |              |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|------------------------------------------|--|-----------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|--|--------------|
| REVISED<br>EC NO.: J2009-2061<br>2009/05/20<br>DRWN:TKON<br>2009/05/21<br>CHKD:HMATSUMOTO<br>2009/05/21<br>APPR:NUKITA<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 |  |              |
|                                                                                                                                      |                                                            |  |                                          |  | DRAWN BY DATE<br>H.KAWABATA 2004/03/12  |  | TITLE<br>EMBOSSD TAPE PACKAGE<br>FOR 52271-***19<br>-LEAD FREE-                                                                  |                        |                           |  |              |
|                                                                                                                                      | 10 UNDER                                                   |  | $\pm 0.2$                                |  | CHECKED BY DATE<br>K. TOJO 2004/03/12   |  |                                                                                                                                  |                        |                           |  |              |
|                                                                                                                                      | 10 OVER 30 UNDER                                           |  | $\pm 0.25$                               |  | APPROVED BY DATE<br>M. SASAO 2004/03/12 |  | MOLEX MOLEX INCORPORATED                                                                                                         |                        |                           |  |              |
|                                                                                                                                      | 30 OVER                                                    |  | $\pm 0.3$                                |  | MATERIAL NO.                            |  |                                                                                                                                  |                        |                           |  | DOCUMENT NO. |
|                                                                                                                                      | ANGULAR                                                    |  | $\pm 3$                                  |  | SEE TABLE                               |  | SD-52271-037                                                                                                                     |                        | 2 OF 3                    |  |              |
|                                                                                                                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  |                                          |  |                                         |  |                                                                                                                                  |                        |                           |  |              |
| REV                                                                                                                                  |                                                            |  |                                          |  | SIZE<br>A3                              |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                           |  |              |
| A                                                                                                                                    |                                                            |  |                                          |  |                                         |  |                                                                                                                                  |                        |                           |  |              |

F

E

D

C

B

A

F

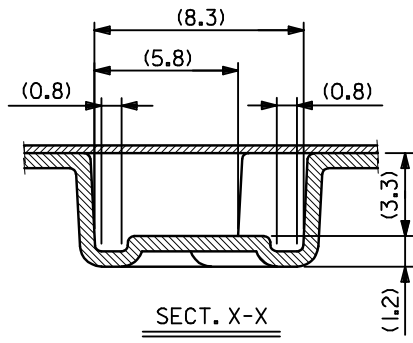
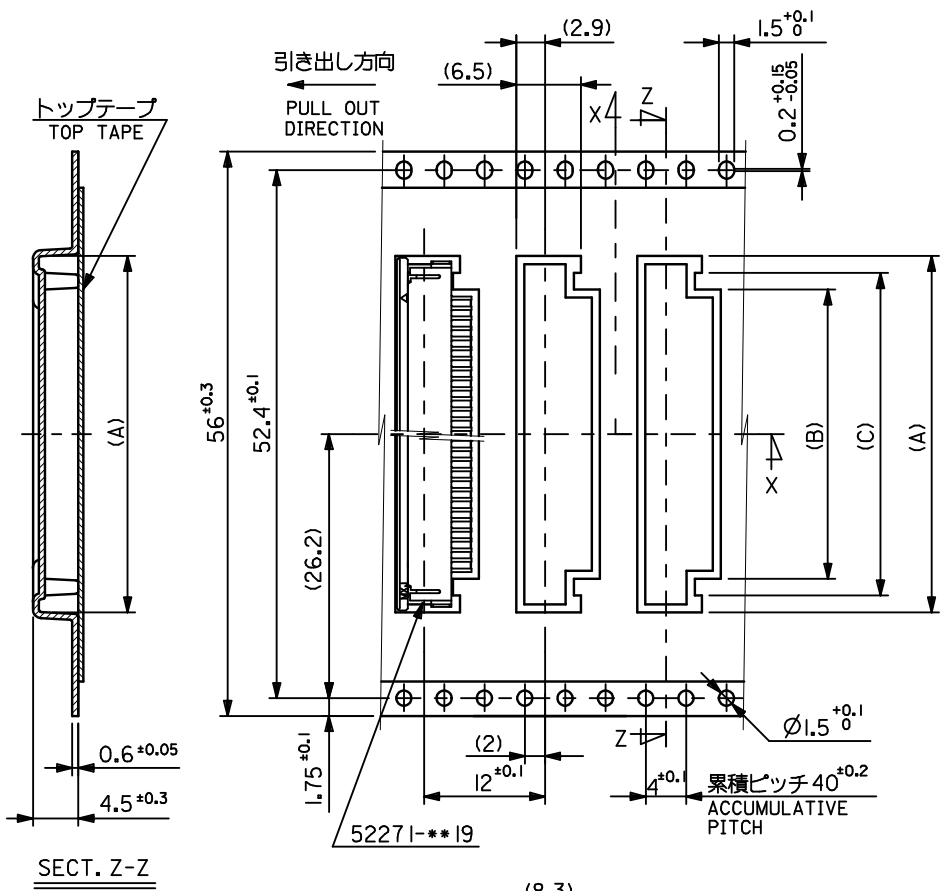
E

D

C

B

A



|                                |      |      |     |      |       |              |             |
|--------------------------------|------|------|-----|------|-------|--------------|-------------|
| 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. |

tb\_frame\_A3\_J\_ME\_S  
Rev. E 2006/04/15

9

8

7

6

5

4

3

2

EN-02JA(021)

|                                                                                                                                           |                                                                       |       |                            |                     |                                                                |                        |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------|----------------------------|---------------------|----------------------------------------------------------------|------------------------|---------------------------|
| REVISED<br>EC NO.: J2009-2061<br>2009/05/20<br>DRWN:TKN<br>CH'KD:HMATSUMOTO<br>2009/05/21<br>APPR:NUKITA<br>2009/05/21<br>REV 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>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 | ±3°   | MATERIAL NO.               | 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.