

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0522712069](#)
Status: **Active**
Overview:
Description: 1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 20 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) | 20 |
| 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 | Gold |
| Material - Plating Termination | Tin |
| 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 | -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 AC (RMS)/DC |

Material Info

Reference - Drawing Numbers

| | |
|---------------------------|---|
| Application Specification | AS-52271-001 |
| Packaging Specification | SPK-52271-001, SPK-52271-002 |
| Product Specification | PS-52271-054, RPS-52271-076, RPS-52271-078, RPS-52271-079, RPS-52271-081, RPS-52271-082, RPS-52271-083, RPS-52271-084, RPS-52271-086, RPS-52271-088, RPS-52271-090 |
| Sales Drawing | SD-52271-038, SD-52271-039 |

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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

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

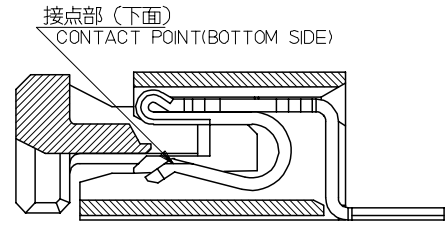
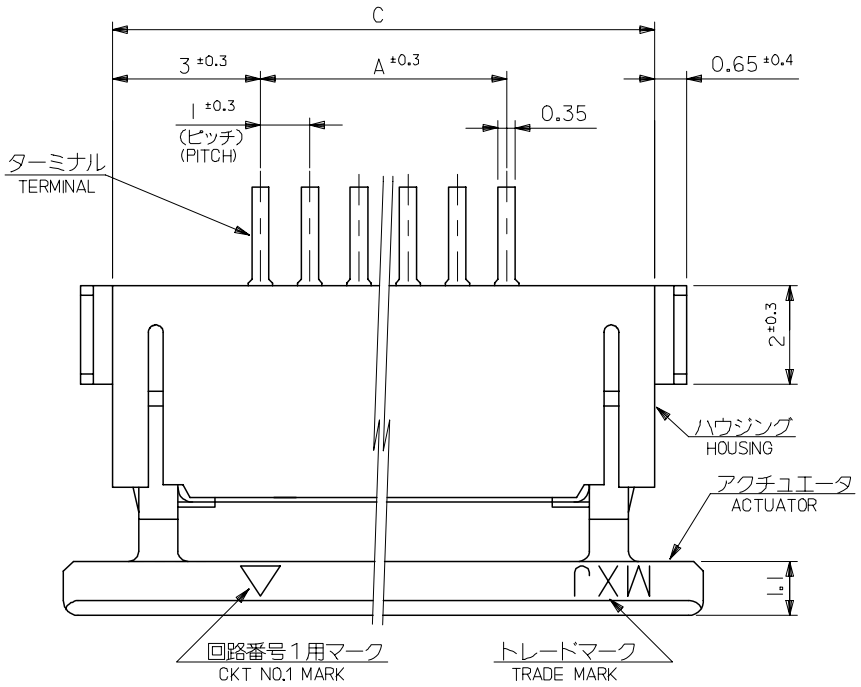
Search Parts in this Series
[52271Series](#)

This document was generated on 06/04/2010

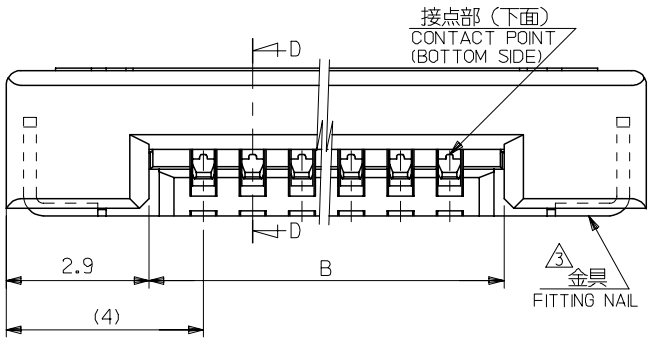
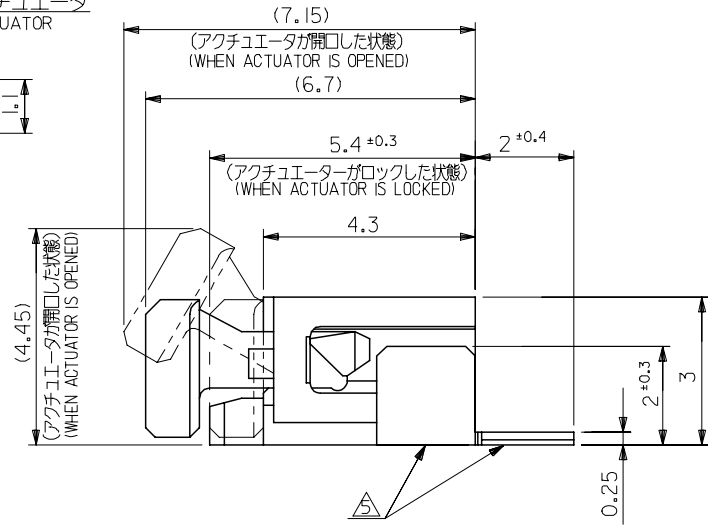
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10 9 8 7 6 5 4 3 2 1

F
E
D
C
B
A



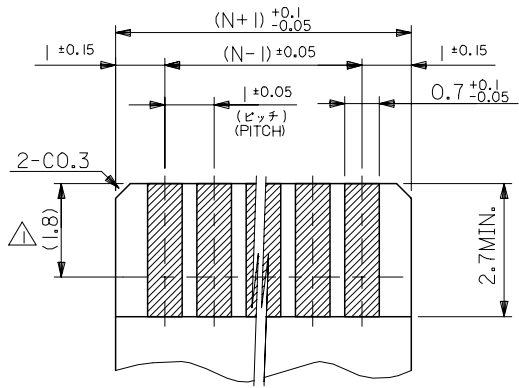
SECT. D-D



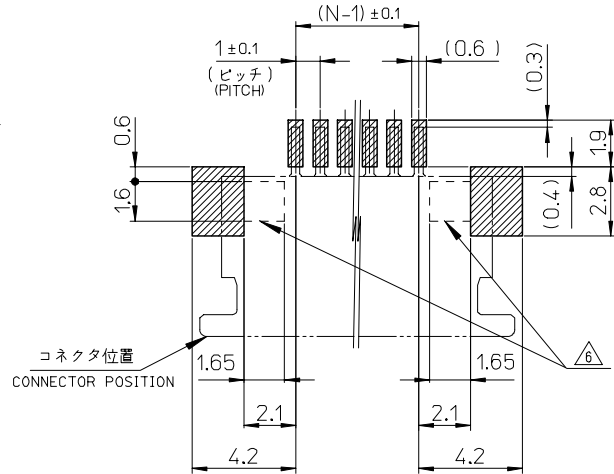
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|----|------|----|--------------|----------|
| 35 | 31.2 | 29 | 52271-3029 | 30 |
| 34 | 30.2 | 28 | 52271-2929 | 29 |
| 33 | 29.2 | 27 | 52271-2829 | 28 |
| 32 | 28.2 | 26 | 52271-2729 | 27 |
| 31 | 27.2 | 25 | 52271-2629 | 26 |
| 30 | 26.2 | 24 | 52271-2529 | 25 |
| 29 | 25.2 | 23 | 52271-2429 | 24 |
| 28 | 24.2 | 22 | 52271-2329 | 23 |
| 27 | 23.2 | 21 | 52271-2229 | 22 |
| 26 | 22.2 | 20 | 52271-2129 | 21 |
| 25 | 21.2 | 19 | 52271-2029 | 20 |
| 24 | 20.2 | 18 | 52271-1929 | 19 |
| 23 | 19.2 | 17 | 52271-1829 | 18 |
| 22 | 18.2 | 16 | 52271-1729 | 17 |
| 21 | 17.2 | 15 | 52271-1629 | 16 |
| 20 | 16.2 | 14 | 52271-1529 | 15 |
| 19 | 15.2 | 13 | 52271-1429 | 14 |
| 18 | 14.2 | 12 | 52271-1329 | 13 |
| 17 | 13.2 | 11 | 52271-1229 | 12 |
| 16 | 12.2 | 10 | 52271-1129 | 11 |
| 15 | 11.2 | 9 | 52271-1029 | 10 |
| 14 | 10.2 | 8 | 52271-0929 | 9 |
| 13 | 9.2 | 7 | 52271-0829 | 8 |
| 12 | 8.2 | 6 | 52271-0729 | 7 |
| 11 | 7.2 | 5 | 52271-0629 | 6 |
| 10 | 6.2 | 4 | 52271-0529 | 5 |
| 9 | 5.2 | 3 | 52271-0429 | 4 |
| C | B | A | MATERIAL NO. | CIRCUITS |

| | | |
|---|---------------------|------------------------|
| 52271-**29 | | MODEL NO. |
| SCALE 10:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| TITLE 1.0 FPC CONN ZIF SMT (BOTTOM CONTACT) -LEAD FREE- | | |
| MOLEX MOLEX INCORPORATED | | |
| DOCUMENT NO. SD-52271-038 | SHEET NO. 1 OF 2 | |

| | | | | | |
|---|---|---------------------------------------|---------------|-------------------------|---|
| REVISED EC NO: J2006-1261 DRWN:UMEDA CHKD:KTOYODA APPR:NUKITA | DESCRIPTION 2005/10/19 2005/10/19 2005/10/21 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | |
| | | 10 UNDER | ± 0.2 | DRAWN BY M.UMEDA | DATE 2005/03/08 |
| | | 10 OVER 30 UNDER | ± 0.25 | CHECKED BY K.TOYODA | DATE 2005/03/08 |
| | | 30 OVER | ± 0.3 | APPROVED BY N.UKITA | DATE 2005/03/08 |
| | | ANGULAR | $\pm 3^\circ$ | MATERIAL NO. | SEE CHART |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |



(仕上り厚さ: 0.3±0.05)
(THICKNESS: 0.3±0.05)
適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(SCALE 10:1)



適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(SCALE 5:1)

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 NYLON, UL94V-0
HOUSING
アクチュエータ : PPS, UL94V-0
ACTUATOR
ターミナル : リン青銅 (t=0.25)
TERMINAL PHOSPHOR BRONZE (t=0.25)
メッキ : 接点部: 金メッキ : 0.1 MICROMETER MIN.
PLATING CONTACT PORTION : GOLD PLATING : 0.1 MICROMETER MIN.
半田付部: 錫メッキ : 1.0 MICROMETER MIN.
SOLDERING PORTION : TIN PLATING : 1.0 MICROMETER MIN.
下地: ニッケルメッキ : 1.0 MICROMETER MIN.
UNDER PLATING : NICKEL PLATING : 1.0 MICROMETER MIN.
金具 : 銅合金 (t=0.25)
FITTING NAIL CUPPER ALLOY (t=0.25)
メッキ: 錫メッキ : 1.0 MICROMETER MIN.
PLATING : TIN PLATING : 1.0 MICROMETER MIN.
下地: ニッケルメッキ : 1.0 MICROMETER MIN.
UNDER PLATING : NICKEL PLATING : 1.0 MICROMETER MIN.
- △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。
IN THE PACKAGE, ACTUATOR OF PART NO.54550-***29 SHOULD BE LOCKED.
- △5 テール及び金具の平坦度は、0.15以下とする。
TAIL AND NAIL COPLANARITY TO BE 0.15 MAXIMUM.
- △6 パターン書き込み禁止エリア
NO FOOT PRINT AREA.

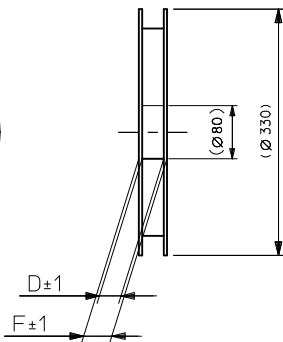
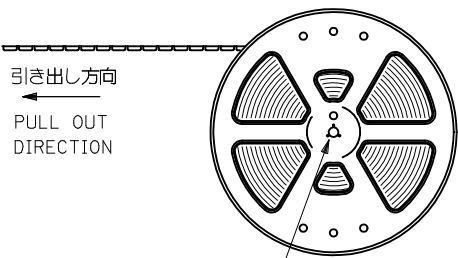
FPCについて:

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

| | | | | | | | | | | |
|---|--------------------|--|-------|-----------------------------|--------------------|--|------------------------|------------------------|--|--|
| REVISED EC NO: J2006-1261 DRW: NUKEDA CHK: KIKUYODA APP: NUKITA | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | 52271-**29 | | MODEL NO. | | |
| | | 10 UNDER | ±0.2 | DRAWN BY M.UMEDA | DATE 2005/03/08 | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | | |
| | | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K.TOYODA | DATE 2005/03/08 | TITLE 1.0 FPC CONN ZIF SMT (BOTTOM CONTACT) -LEAD FREE- | | | | |
| | | 30 OVER | ±0.3 | APPROVED BY N.UKITA | DATE 2005/03/08 | MOLEX INCORPORATED | | | | |
| ANGULAR ±3 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE SHEET 1 | | DOCUMENT NO. SD-52271-038 | | SHEET NO. 2 OF 2 | | |
| SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | |

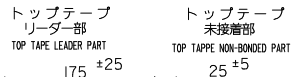


NOTES

1. 製品番号 52271-**29 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-52271-038 を参照下さい。
IN THE PACKAGE, ACTUATOR OF PART NO. 52271-**29 SHOULD BE LOCKED
RE DETAILED DIMENSIONS, SEE SD-52271-038.

2. 梱包数量：1000個/リール
NUMBER OF CONNECTORS : 1000 PCS/REEL

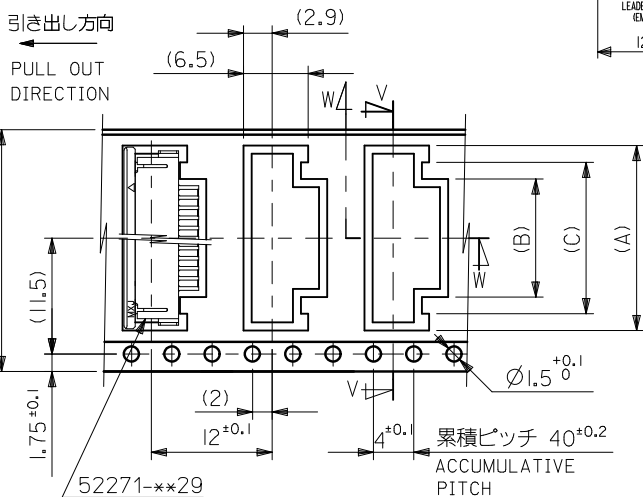
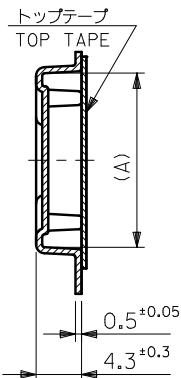
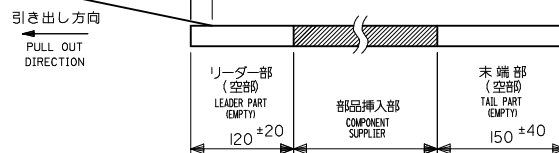
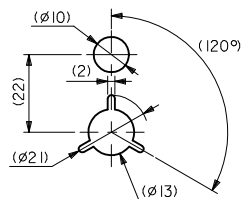
3. リードテープ長さ LEAD TAPE LENGTH



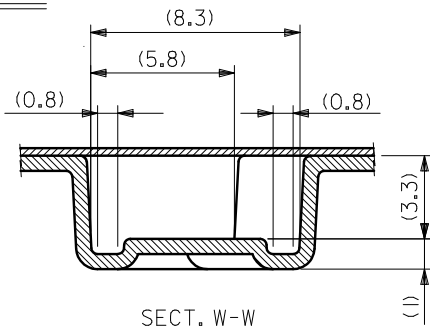
4. カバーテープの剥離強度については、IEC60286-3に準拠
COVER TAPE PEEL FORCE IS DEFINED
BY IEC60286-3

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

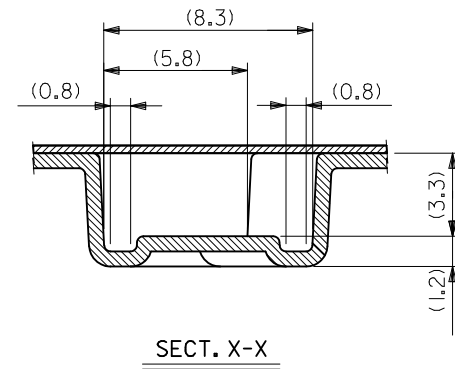
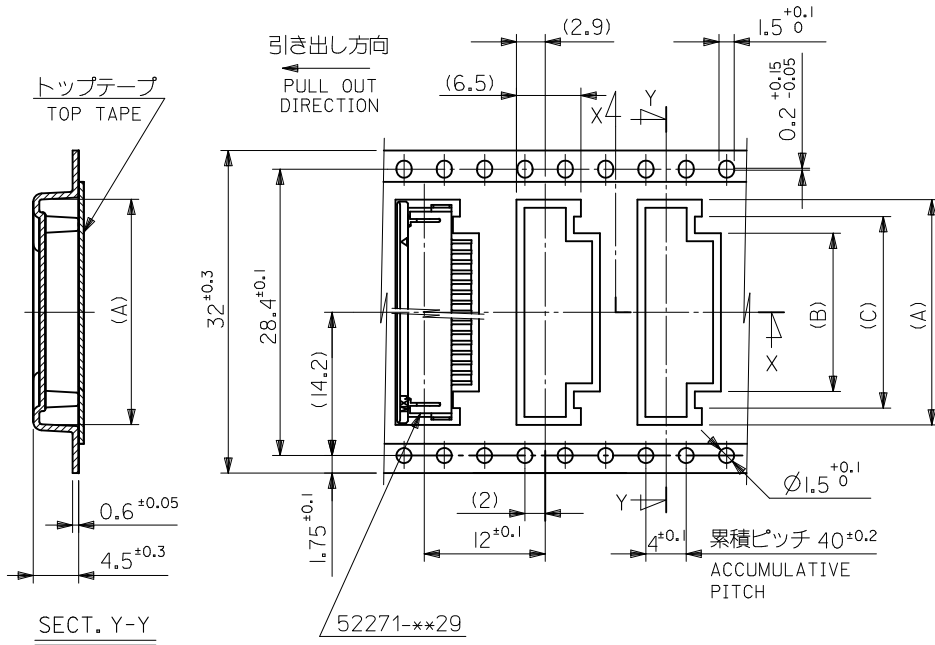
6. 本製品は乾燥剤入り、ハイバリア梱包仕様である。
THIS PRODUCT IS HIGH BARRIER PACKAGE
WITH DESICCANT.



| | | | | | | | | | |
|----|------|------|-----------------------------|------|------|------------|----|-----|-----|
| 24 | 29.4 | 25.4 | 15 | 11.4 | 18.3 | 52271-1169 | 11 | | |
| | | | 14 | 10.4 | 17.3 | 52271-1069 | 10 | | |
| | | | 12 | 8.4 | 15.3 | 52271-0869 | 8 | | |
| | | | 11 | 7.4 | 14.3 | 52271-0769 | 7 | | |
| | | | 10 | 6.4 | 13.3 | 52271-0669 | 6 | | |
| | | | 9 | 5.4 | 12.3 | 52271-0569 | 5 | | |
| | | | 8 | 4.4 | 11.3 | 52271-0469 | 4 | | |
| | | | キャリアテープ幅 CARRIER TAPE WIDTH | | | F | D | (C) | (B) |

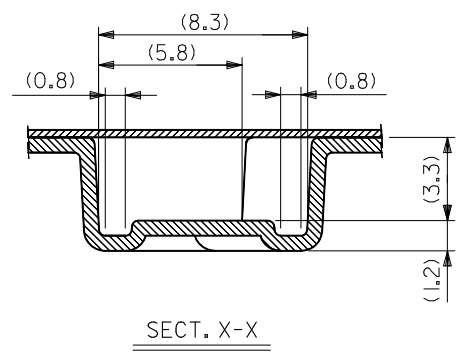
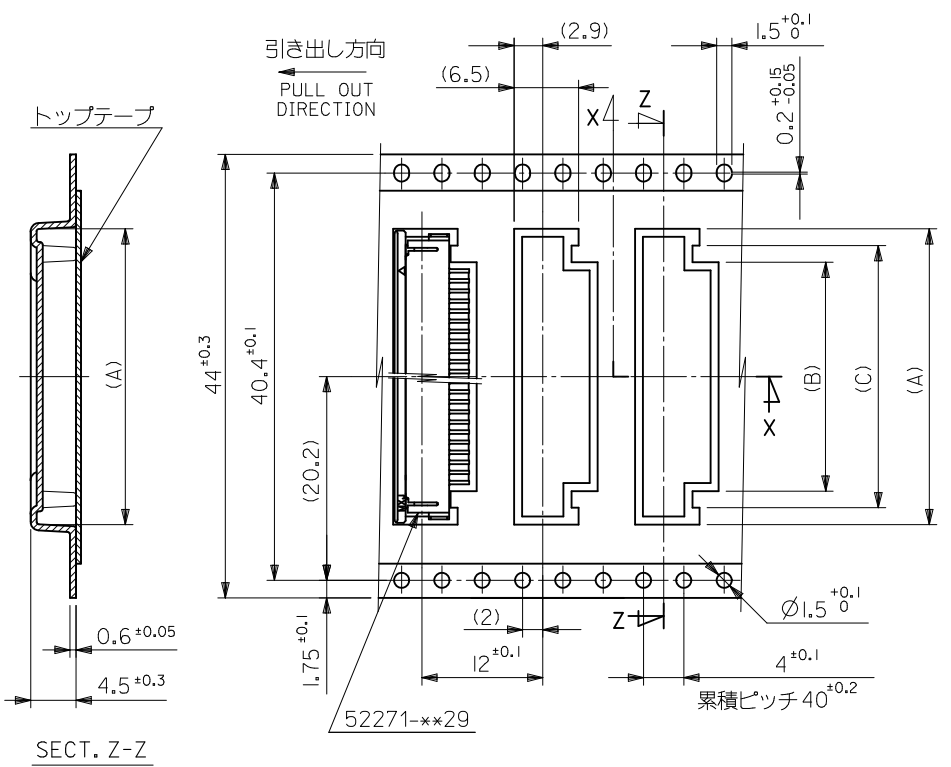


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|--|--------------------|--|-------|----------------------------|--------------------|---|--|------------------------|--|-------------------------|--|--|
| REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHKD: K. TOYODA 2010/06/08 APPR: KMORI KAWA 2010/06/09 | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | | DESIGN UNITS METRIC | | MODEL NO. 52271-**69 | | |
| | | 10 UNDER | ±0.2 | DRAWN BY M. UEDA | DATE 2005/03/08 | TITLE EMBOSSED TAPE PACKAGE FOR 52271-**29 -LEAD FREE- | | | | | | |
| | | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. TOYODA | DATE 2005/03/08 | MOLEX INCORPORATED DOCUMENT NO. SD-52271-039 SHEET NO. 1 OF 4 | | | | | | |
| | | 30 OVER | ±0.3 | APPROVED BY N. UKITA | DATE 2005/03/08 | | | | | | | |
| ANGULAR ±3 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE TABLE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |



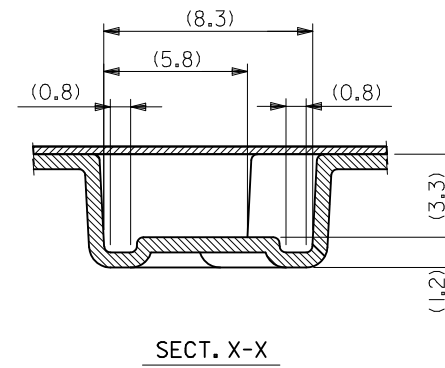
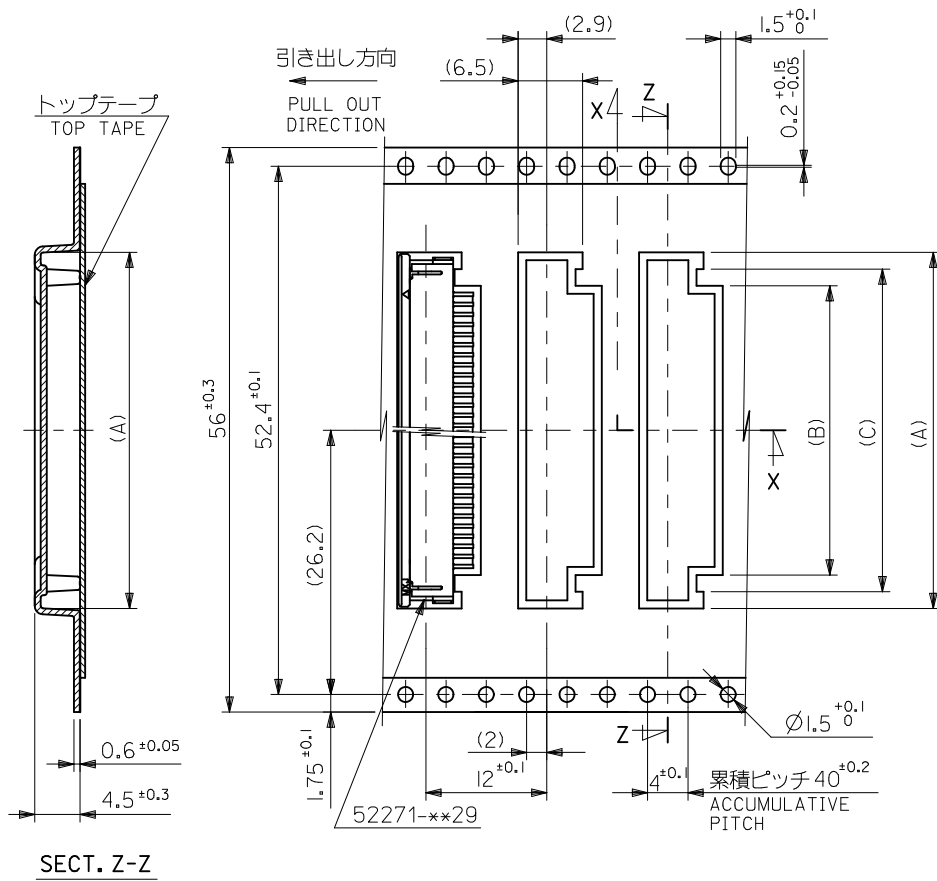
| | | | | | | | | | |
|--------------------------------|------|------|----|------|-------|------------|-----|--------------|------------|
| 32 | 37.4 | 33.4 | 20 | 16.4 | 23.35 | 52271-1669 | 16 | | |
| | | | 19 | 15.4 | 22.35 | 52271-1569 | 15 | | |
| | | | 18 | 14.4 | 21.35 | 52271-1469 | 14 | | |
| | | | 17 | 13.4 | 20.35 | 52271-1369 | 13 | | |
| | | | 16 | 12.4 | 19.35 | 52271-1269 | 12 | | |
| キャリアテープ幅 CARRIER TAPE WIDTH | | | F | D | (C) | (B) | (A) | MATERIAL NO. | 極数 CKT. |

| | | | | | | | | | |
|---|--------------------|--|-------|----------------------------|--------------------|---|------------------------|---------------------------|--|
| REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHKD: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09 | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | 10 UNDER | ±0.2 | DRAWN BY M.UMEDA | DATE 2005/03/08 | TITLE EMBOSSD TAPE PACKAGE FOR 52271-**-29 -LEAD FREE- | | | |
| | | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. TOYODA | DATE 2005/03/08 | MOLEX INCORPORATED | | | |
| | | 30 OVER | ±0.3 | APPROVED BY N. UKITA | DATE 2005/03/08 | DOCUMENT NO. SD-52271-039 | | | |
| | | ANGULAR | ±3 ° | MATERIAL NO. SEE TABLE | | SHEET NO. 2 OF 4 | | | |
| 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 | 52271-2769 | 27 | | |
| | | | 29 | 25.4 | 32.35 | 52271-2569 | 25 | | |
| | | | 28 | 24.4 | 31.35 | 52271-2469 | 24 | | |
| | | | 26 | 22.4 | 29.35 | 52271-2269 | 22 | | |
| | | | 25 | 21.4 | 28.35 | 52271-2169 | 21 | | |
| | | | 24 | 20.4 | 27.35 | 52271-2069 | 20 | | |
| | | | 23 | 19.4 | 26.35 | 52271-1969 | 19 | | |
| | | | 22 | 18.4 | 25.35 | 52271-1869 | 18 | | |
| | | | 21 | 17.4 | 24.35 | 52271-1769 | 17 | | |
| キャリアテープ幅 | | | F | D | (C) | (B) | (A) | MATERIAL NO. | 極数 |

| | | | | | | | | |
|--|--|-------|----------------------------|--------------------|---|------------------------|------------------------|--|
| REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHK'D: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ±0.2 | DRAWN BY M.UMEDA | DATE 2005/03/08 | TITLE EMBOSSD TAPE PACKAGE FOR 52271-**-29 -LEAD FREE- | | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K.TOYODA | DATE 2005/03/08 | MOLEX INCORPORATED | | | |
| | 30 OVER | ±0.3 | APPROVED BY N.UKITA | DATE 2005/03/08 | DOCUMENT NO. SD-52271-039 | | | |
| | ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE TABLE | | SHEET NO. 3 OF 4 | | | |



SECT. Z-Z

| | | | | | | | |
|--------------------------------|------|------|----|------|-------|--------------|------------|
| 56 | 61.4 | 57.4 | 34 | 30.4 | 37.35 | 52271-3069 | 30 |
| | | | 32 | 28.4 | 35.35 | 52271-2869 | 28 |
| キャリアテープ幅 CARRIER TAPE WIDTH | | | F | D | (C) | (B) | (A) |
| | | | | | | MATERIAL NO. | 種数 CKT. |

| | | | | | | | | | |
|--|--------------------|---------------------------------------|-------|--|--------------------|---|------------------------|--|--|
| REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHK'D: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09 | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | 10 UNDER | ±0.2 | DRAWN BY M.UMEDA | DATE 2005/03/08 | TITLE EMBOSSD TAPE PACKAGE FOR 52271-**29 -LEAD FREE- | | | |
| | | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K.TOYODA | DATE 2005/03/08 | MOLEX INCORPORATED DOCUMENT NO. SD-52271-039 SHEET NO. 4 OF 4 | | | |
| | | 30 OVER | ±0.3 | APPROVED BY N.UKITA | DATE 2005/03/08 | | | | |
| | | ANGULAR ±3 ° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE TABLE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | |