

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

**Part Number:** [5019512210](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch Easy-On™ FFC/FPC Connector, Vertical, SMT, Gold Plating, 22 Circuits

**Documents:**  
[3D Model](#) [Product Specification PS-501951-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

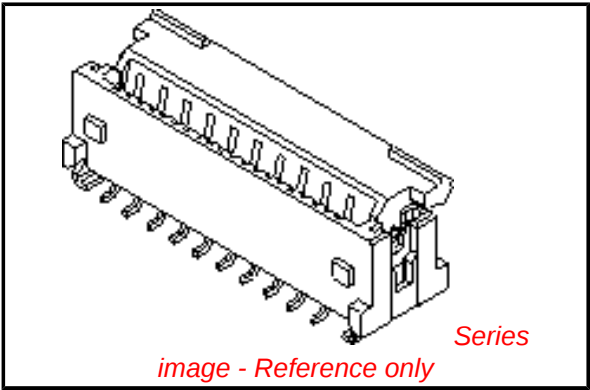
| General                        |                        |
|--------------------------------|------------------------|
| Product Family                 | FFC/FPC Connectors     |
| Series                         | <a href="#">501951</a> |
| Product Name                   | Easy-On™               |
| Physical                       |                        |
| Circuits (Loaded)              | 22                     |
| Circuits (maximum)             | 22                     |
| Color - Resin                  | Brown, Natural         |
| Contact Position               | N/A                    |
| Durability (mating cycles max) | 20                     |
| Entry Angle                    | Vertical               |
| Mated Height (in)              | 0.159 In               |
| Mated Height (mm)              | 4.05 mm                |
| Material - Metal               | Phosphor Bronze        |
| Material - Plating Mating      | Gold                   |
| Material - Plating Termination | Gold                   |
| Number of Rows                 | 1                      |
| Orientation                    | Vertical               |
| PCB Locator                    | No                     |
| PCB Retention                  | Yes                    |
| Packaging Type                 | Embossed Tape on Reel  |
| Pitch - Mating Interface (in)  | 0.020 In               |
| Pitch - Mating Interface (mm)  | 0.50 mm                |
| Pitch - Term. Interface (in)   | 0.020 In               |
| Pitch - Term. Interface (mm)   | 0.50 mm                |
| Polarized to PCB               | No                     |
| Stackable                      | No                     |
| Surface Mount Compatible (SMC) | Yes                    |
| Temperature Range - Operating  | -25°C to +85°C         |
| Termination Interface: Style   | Surface Mount          |
| Wire/Cable Type                | FFC/FPC                |

| Electrical                    |                 |
|-------------------------------|-----------------|
| Current - Maximum per Contact | 0.4A            |
| Voltage - Maximum             | 50V AC (RMS)/DC |

**Material Info**

**Reference - Drawing Numbers**

|                       |                                                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Product Specification | PS-501951-002, RPS-501951-001, RPS-501951-003, RPS-501951-004, RPS-501951-005, RPS-501951-006, RPS-501951-007, RPS-501951-009, RPS-501951-015 |
| Sales Drawing         | SD-501951-003, SD-501951-004                                                                                                                  |



**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
Not Reviewed  
**Halogen-Free**  
**Status**  
**Not Reviewed**

**China RoHS**

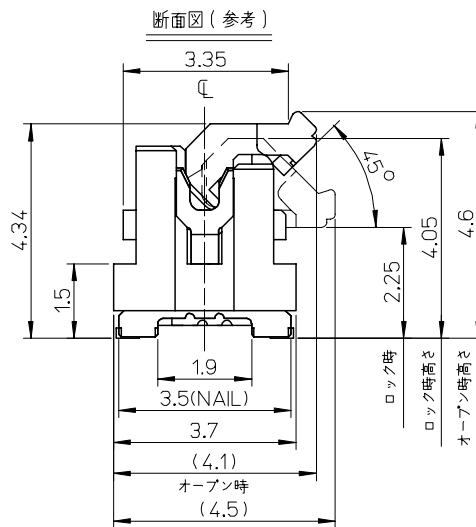
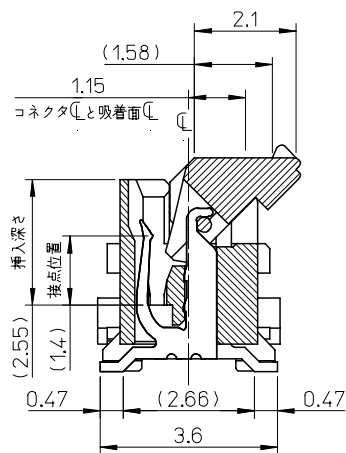
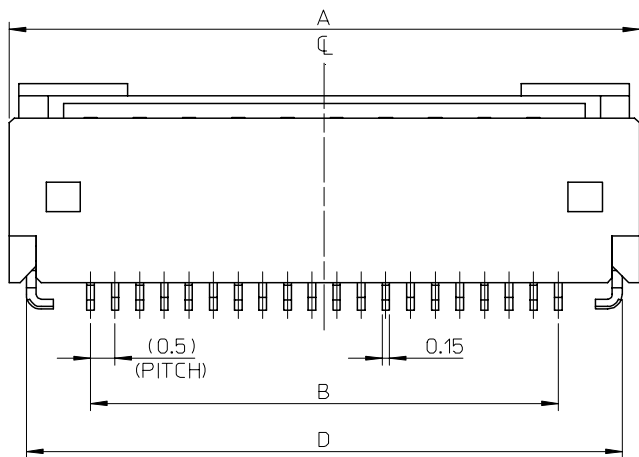
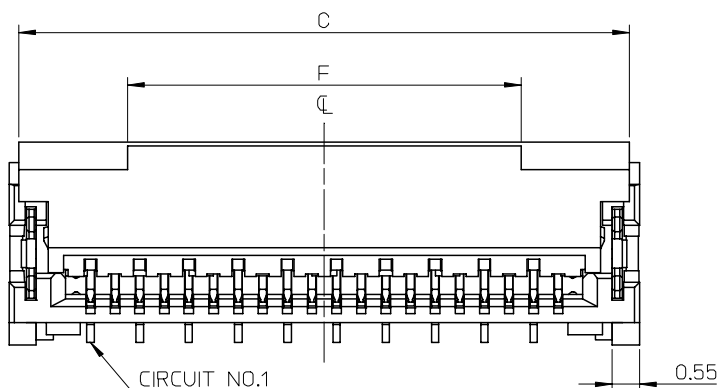


**Need more information on product environmental compliance?**  
  
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of Compliance, [click here](#)  
  
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[501951Series](#)

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10 9 8 7 6 5 4 3 2 1



## 注記 NOTES

1. 使用材料 MATERIAL  
ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)  
HOUSING : LIQUID CRYSTAL POLYMER  
GLASS FILLED, UL94V-0 (WHITE)  
アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)  
ACTUATOR : POLYAMIDE 9T, GLASS FILLED,  
UL94V-0 (BROWN)  
ターミナル : 銅合金(t=0.15)  
TERMINAL : COPPER ALLOY  
金具 : 銅合金(t=0.2)  
FITTING NAIL : COPPER ALLOY
  2. めっき仕様 PLATING  
ターミナル TERMINAL  
ニッケル下めっき  
GOLD(AU) OVER NICKEL(NI) PLATING.  
金具 FITTING NAIL  
ニッケル下めっき  
TIN(Sn) OVER NICKEL(NI) PLATING.
  3. テールと金具を併せた平坦度は 0.1ミリメートル以下(リフロー前)  
TAILS AND NAILS COPLANARITY  
TO BE 0.1 MAX. (BEFORE REFLOW)
  4. ELV及びRoHS適合品  
ELV AND RoHS COMPLIANT
- ⚠ R0.3は、FPC導体部にかからないこと。  
R0.3 MUST NOT BE OVERLAPPED  
TO PATTERN OF FPC.

|   |      |      |      |      |      |                       |    |
|---|------|------|------|------|------|-----------------------|----|
| 8 | 35.7 | 37.1 | 37.4 | 34.5 | 37.8 | 501951-7019           | 70 |
|   | 30.7 | 32.1 | 32.4 | 29.5 | 32.8 | 501951-6019           | 60 |
|   | 25.7 | 27.1 | 27.4 | 24.5 | 27.8 | 501951-5019           | 50 |
|   | 23.2 | 24.6 | 24.9 | 22   | 25.3 | 501951-4519           | 45 |
|   | 20.7 | 22.1 | 22.4 | 19.5 | 22.8 | 501951-4019           | 40 |
|   | 16.7 | 18.1 | 18.4 | 15.5 | 18.8 | 501951-3219           | 32 |
|   | 15.7 | 17.1 | 17.4 | 14.5 | 17.8 | 501951-3019           | 30 |
|   | 12.7 | 14.1 | 14.4 | 11.5 | 14.8 | 501951-2419           | 24 |
|   | 11.7 | 13.1 | 13.4 | 10.5 | 13.8 | 501951-2219           | 22 |
|   | 10.7 | 12.1 | 12.4 | 9.5  | 12.8 | 501951-2019           | 20 |
| F | E    | D    | C    | B    | A    | MATERIAL NO. CIRCUITS |    |

|                                                                                |             |                                                            |            |                                                                                                                                  |                    |                                                                                                          |                        |                                                                                                                 |
|--------------------------------------------------------------------------------|-------------|------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|
| REVISED<br>EC NO: J2008-1229<br>DRAWN:YAJI MA<br>CHKD:THARUYAMA<br>APPR:NUKITA | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |            | DIMENSION STYLE<br>MM ONLY                                                                                                       |                    | SCALE<br>10:1                                                                                            | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION |
|                                                                                |             | 10 UNDER                                                   | ±0.2       | DRAWN BY<br>TRSUZUKI                                                                                                             | DATE<br>2006/08/21 | TITLE<br>0.5 FPC CONN. HSG ASSY<br>EASY ON / STRAIGHT<br>(GOLD)                                          |                        |                                                                                                                 |
|                                                                                |             | 10 OVER 30 UNDER                                           | ±0.25      | CHECKED BY<br>HHIRATA                                                                                                            | DATE<br>2006/08/21 |                                                                                                          |                        |                                                                                                                 |
|                                                                                |             | 30 OVER                                                    | ±0.3       | APPROVED BY<br>MSASAO                                                                                                            | DATE<br>2006/08/21 |  MOLEX INCORPORATED |                        |                                                                                                                 |
|                                                                                |             | ANGULAR ±1 °                                               |            | MATERIAL NO.                                                                                                                     |                    |                                                                                                          |                        |                                                                                                                 |
|                                                                                |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |            | SEE CHART                                                                                                                        |                    | SD-501951-003                                                                                            |                        |                                                                                                                 |
|                                                                                | REV         |                                                            | SIZE<br>A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                                                                                                          |                        |                                                                                                                 |

10 9 8 7 6 5 4 3 2 1

F

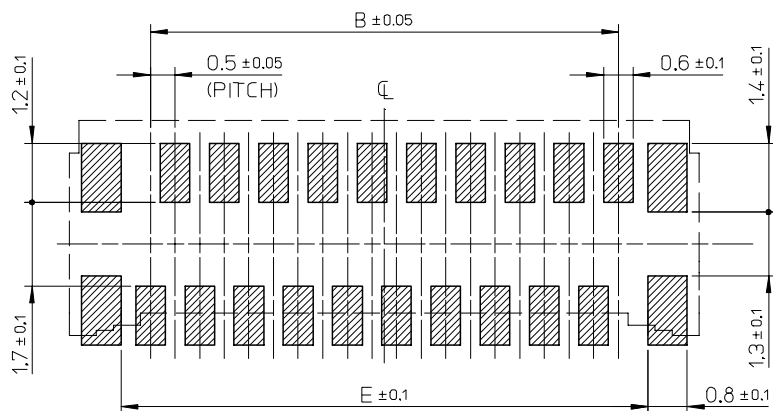
E

D

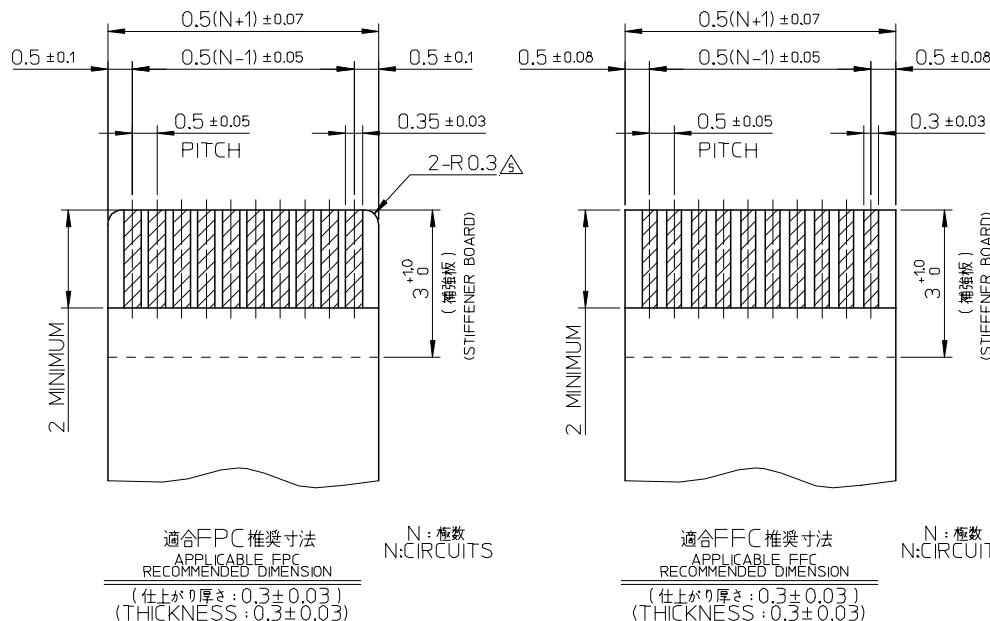
C

B

A



参考基板レイアウト (マウント面)  
P.C. BOARD PATTERN DIMENSION (REF.)  
(MOUNT AREA)



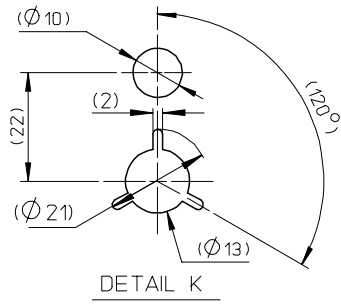
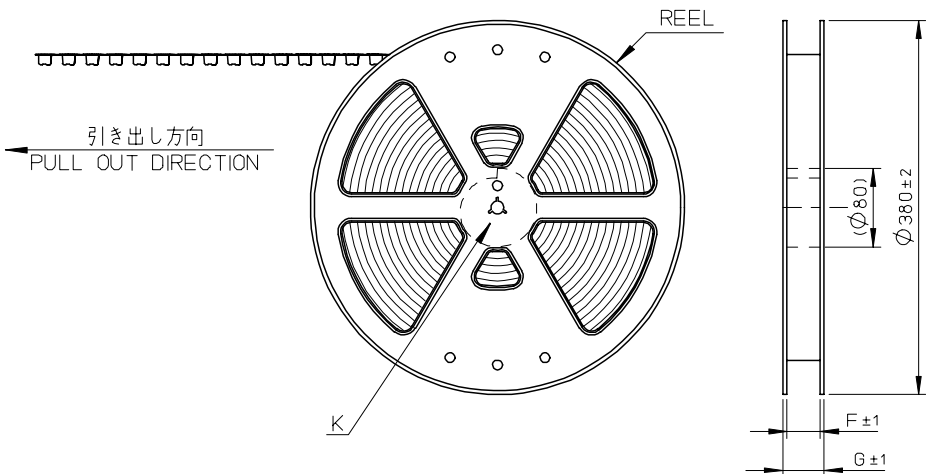
### FPC について:

打ち抜き方向は導体側から補強板側を推奨します。  
導体部については軟銅箔35 $\mu$ mまたは50 $\mu$ mを推奨します。  
補強フィルム材質はポリイミドを推奨します。ベースフィルムは25 $\mu$ mを推奨します。  
接着剤は熱硬化接着剤を推奨します。  
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様お願い致します。

### ABOUT FPC

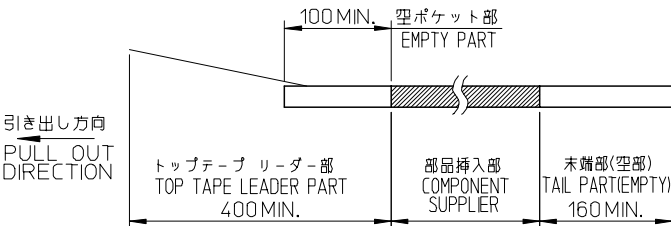
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.  
RECOMMENDED MATERIAL/THICKNESS.  
STIFFENER FILM : POLYIMIDE  
BASE FILM THICKNESS : 25 $\mu$ m  
BONDING AGENT : THERMOSETTING BONDING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

|                                                                                                                               |             |                                          |                                                            |                            |                    |                                                                 |                        |                                                                                                                 |           |
|-------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|------------------------------------------------------------|----------------------------|--------------------|-----------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|-----------|
| SEE SHEET 1<br>EC NO: J2008-1229<br>DRAWN:HAJIMA 2007/10/11<br>CHKD:THARUYAMA 2007/10/11<br>APPR:NUKITA 2007/10/12            | 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>TRSUZUKI       | DATE<br>2006/08/21 | TITLE<br>0.5 FPC CONN. HSG ASSY<br>EASY ON / STRAIGHT<br>(GOLD) |                        |                                                                                                                 |           |
|                                                                                                                               |             | 10 OVER 30 UNDER                         | ± 0.25                                                     | CHECKED BY<br>HIRATA       | DATE<br>2006/08/21 |                                                                 |                        |                                                                                                                 |           |
|                                                                                                                               |             | 30 OVER                                  | ± 0.3                                                      | APPROVED BY<br>MSASAO      | DATE<br>2006/08/21 | MOLEX INCORPORATED                                              |                        |                                                                                                                 |           |
|                                                                                                                               |             | ANGULAR ±1 °                             |                                                            | MATERIAL NO.               |                    | DOCUMENT NO.                                                    |                        |                                                                                                                 | SHEET NO. |
|                                                                                                                               | D           | REV                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                            | SEE SHEET 1        |                                                                 | SD-501951-003          |                                                                                                                 | 2 OF 2    |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |             |                                          |                                                            |                            |                    |                                                                 |                        |                                                                                                                 |           |



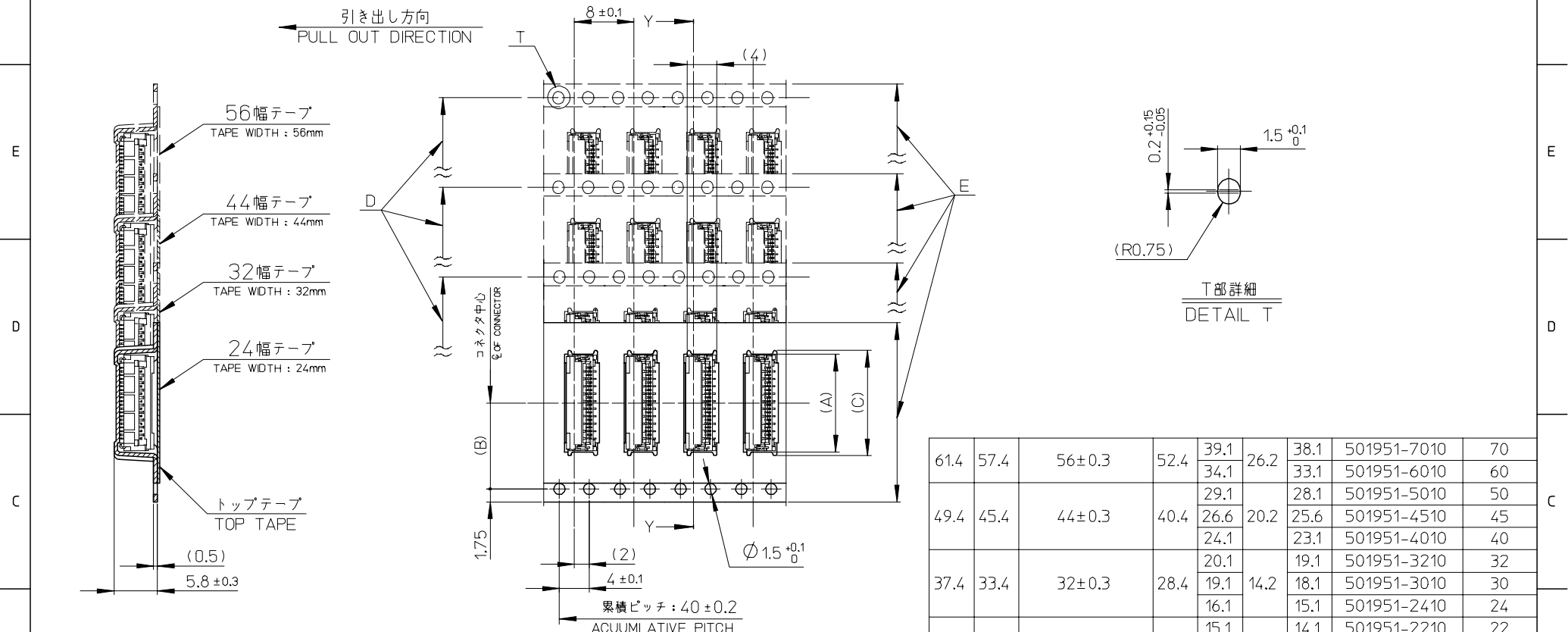
NOTES

- 製品詳細寸法については図面 SD-501951-003を参照下さい。  
FOR DIMENSIONS OF PRODUCT, REFER TO RSD-501951-007.
- 梱包数量 : 2000個/リール  
NUMBER OF CONNECTORS : 2000PIECES/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- 材料 MATERIAL  
キャリアテープ : ポリプロピレン  
CARRIER TAPE : POLYPROPYLENE  
トップテープ : ポリエチレンテレフタレート, ポリエチレン  
TOP TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE  
リール : ポリスチレン<リサイクル材を含む>  
REEL : POLYSTYRENE<RECYCLE MATERIAL CONTAINED>
- ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

|                                                                                   |             |                                                            |       |                            |                    |                                                                                                                                  |                        |                           |  |  |
|-----------------------------------------------------------------------------------|-------------|------------------------------------------------------------|-------|----------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2008-1229<br>DRAWN: HAYASHI<br>CHKD: THARUYAMA<br>APPR: NUKITA | 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>TRSUZUKI       | DATE<br>2006/09/05 | TITLE<br>0.5 FPC CONN. HSG ASSY<br>E/O STRAIGHT EMBSTP PKG<br>(GOLD)                                                             |                        |                           |  |  |
|                                                                                   |             | 10 OVER 30 UNDER                                           | ±0.25 | CHECKED BY<br>HHIRATA      | DATE<br>2006/09/05 |                                                                                                                                  |                        |                           |  |  |
|                                                                                   |             | 30 OVER                                                    | ±0.3  | APPROVED BY<br>MSASAO      | DATE<br>2006/09/05 |                                                                                                                                  |                        |                           |  |  |
|                                                                                   |             | ANGULAR ±1°                                                |       | MATERIAL NO.               |                    | DOCUMENT NO.                                                                                                                     |                        | SHEET NO.                 |  |  |
|                                                                                   |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       | SEE SHEET 2                |                    | SD-501951-004                                                                                                                    |                        |                           |  |  |
|                                                                                   |             |                                                            |       | SIZE<br>A3                 |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                           |  |  |



断面 Y-Y

SECTION Y-Y

29.4

25.4

24±0.3

14.1

11.5

13.1

501951-2010

20

G

F

E  
キャリアテープ幅  
CARRIER TAPE WIDTH

D

(C)

(B)

(A)

製品番号  
MATERIAL NO.

極数  
CIRCUITS

SEE SHEET 1

EC NO: J2008-1229

DRWN:HYAJIMA

CHKD:THARUYAMA

APPR:NUKITA

D

REV

DESCRIPTION

GENERAL TOLERANCES  
(UNLESS SPECIFIED)

10 UNDER ±0.2

10 OVER 30 UNDER ±0.25

30 OVER ±0.3

ANGULAR ±1 °

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DATE

2007/10/11

2007/10/11

2007/10/12

DIMENSION STYLE  
MM ONLY

DRAWN BY  
TRSUZUKI

CHECKED BY  
HHIRATA

APPROVED BY  
MSASAO

MATERIAL NO.  
SEE CHART

DATE  
2006/09/05

DATE  
2006/09/05

DATE  
2006/09/05

DATE  
2006/09/05

SCALE  
---

DESIGN UNITS  
METRIC

THIRD ANGLE  
PROJECTION

TITLE  
0.5 FPC CONN. HSG ASSY  
E/O STRAIGHT EMBSTP PKG  
(GOLD)

MOLEX INCORPORATED

SD-501951-004

SHEET NO.  
2 OF 2

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## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

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<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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