

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0545482271

Status:

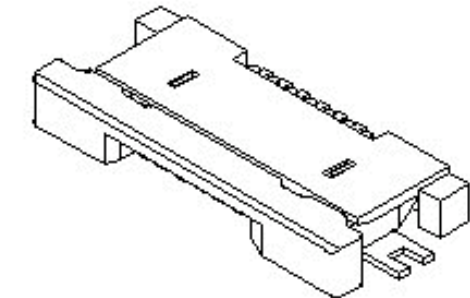
Active

Overview:

ffc\_fpc\_smt

Description:

0.50mm (.020") Pitch FFC/FPC Connector, 1.20mm (.047") Height, Right Angle, SMT, ZIF, Bottom Contact Style, 22 Circuits, Lead-free, Gold (Au)Plating



Series

image - Reference only

Documents:

- [3D Model](#)
- [Drawing \(PDF\)](#)
- [Product Specification PS-54548-039 \(PDF\)](#)
- [RoHS Certificate of Compliance \(PDF\)](#)

General

|                |                    |
|----------------|--------------------|
| Product Family | FFC/FPC Connectors |
| Series         | 54548              |
| Overview       | ffc_fpc_smt        |
| Product Name   | N/A                |

Physical

|                                |                       |
|--------------------------------|-----------------------|
| Circuits (Loaded)              | 22                    |
| Contact Position               | Bottom                |
| Durability (mating cycles max) | 20                    |
| Entry Angle                    | 90° Angle             |
| Mated Height (in)              | 0.047 In              |
| Mated Height (mm)              | 1.20 mm               |
| Material - Metal               | Phosphor Bronze       |
| Material - Plating Mating      | Gold                  |
| Material - Plating Termination | Tin                   |
| Number of Rows                 | 1                     |
| Orientation                    | Right Angle           |
| 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               |
| 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  |

Material Info

Reference - Drawing Numbers

|                         |                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------|
| Packaging Specification | SPK-54548-001                                                                           |
| Product Specification   | PS-54548-039, RPS-54548-083, RPS-54548-085, RPS-54548-091, RPS-54548-097, RPS-54548-099 |
| Sales Drawing           | SD-54548-039, SD-54548-040                                                              |

EU RoHS

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

China RoHS

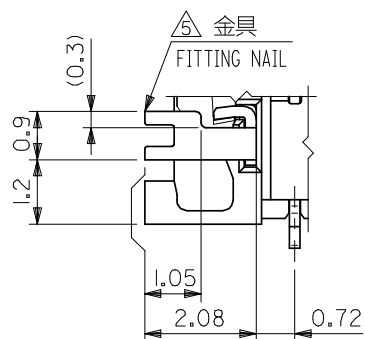
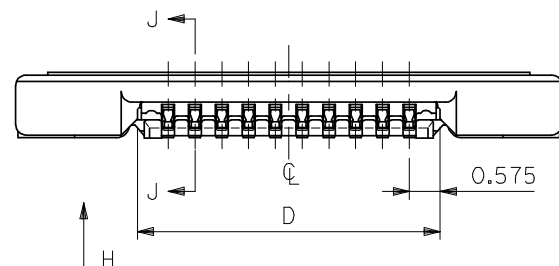
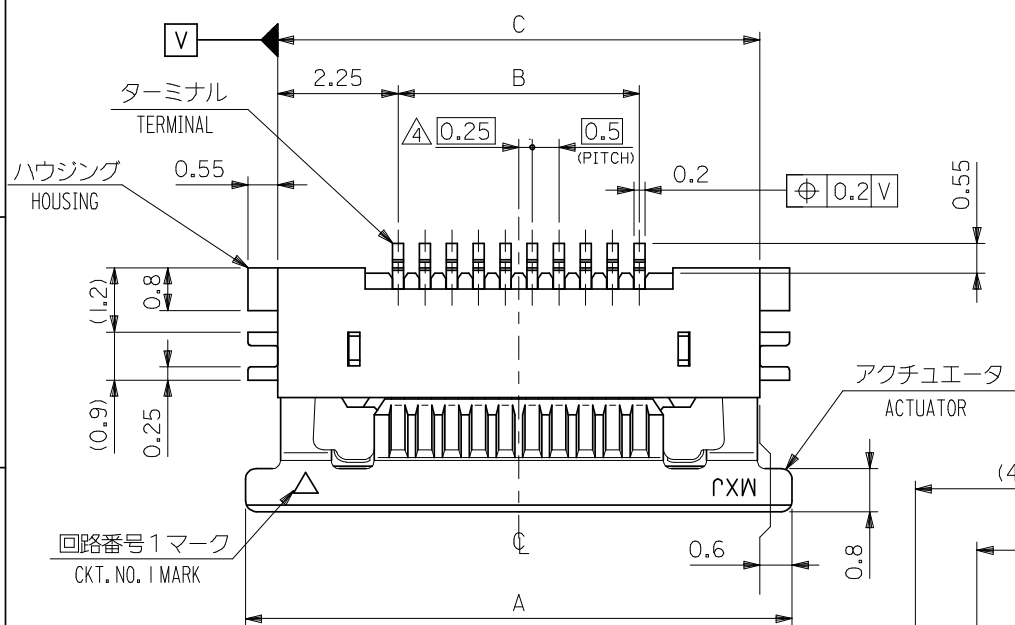


Need more information on product  
environmental compliance?

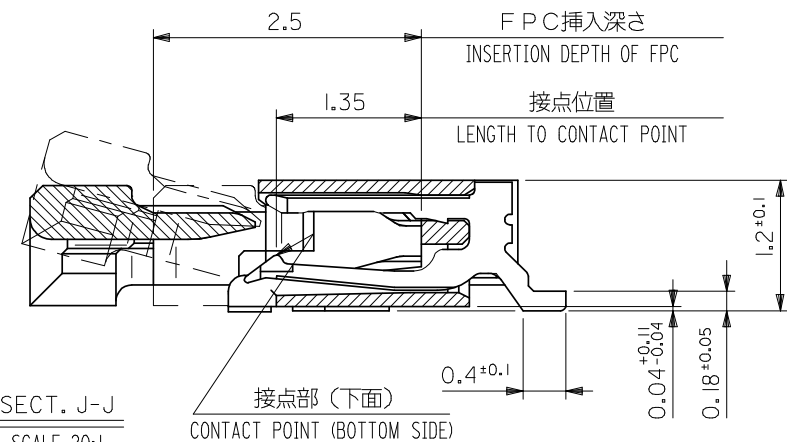
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of  
Compliance, [click here](#)

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

Search Parts in this Series  
54548Series



VIEW H



SECT. J-J  
SCALE 20:1

|               |       |      |      |      |                                  |                      |           |
|---------------|-------|------|------|------|----------------------------------|----------------------|-----------|
| 0.28±0.03     | 13.65 | 17.0 | 12.5 | 18.2 | 54548-2671                       | 54548-2629           | 26        |
|               | 12.65 | 16.0 | 11.5 | 17.2 | 54548-2471                       | 54548-2429           | 24        |
| 0.3±0.03      | 12.15 | 15.5 | 11.0 | 16.7 | 54548-2371                       | 54548-2329           | 23        |
|               | 11.65 | 15.0 | 10.5 | 16.2 | 54548-2271                       | 54548-2229           | 22        |
|               | 11.15 | 14.5 | 10.0 | 15.7 | 54548-2171                       | 54548-2129           | 21        |
|               | 10.65 | 14.0 | 9.5  | 15.2 | 54548-2071                       | 54548-2029           | 20        |
|               | 10.15 | 13.5 | 9.0  | 14.7 | 54548-1971                       | 54548-1929           | 19        |
|               | 9.65  | 13.0 | 8.5  | 14.2 | 54548-1871                       | 54548-1829           | 18        |
|               | 9.15  | 12.5 | 8.0  | 13.7 | 54548-1771                       | 54548-1729           | 17        |
|               | 8.65  | 12.0 | 7.5  | 13.2 | 54548-1671                       | 54548-1629           | 16        |
|               | 8.15  | 11.5 | 7.0  | 12.7 | 54548-1571                       | 54548-1529           | 15        |
|               | 7.65  | 11.0 | 6.5  | 12.2 | 54548-1471                       | 54548-1429           | 14        |
|               | 7.15  | 10.5 | 6.0  | 11.7 | 54548-1371                       | 54548-1329           | 13        |
|               | 6.65  | 10.0 | 5.5  | 11.2 | 54548-1271                       | 54548-1229           | 12        |
|               | 6.15  | 9.5  | 5.0  | 10.7 | 54548-1171                       | 54548-1129           | 11        |
|               | 5.65  | 9.0  | 4.5  | 10.2 | 54548-1071                       | 54548-1029           | 10        |
|               | 5.15  | 8.5  | 4.0  | 9.7  | 54548-0971                       | 54548-0929           | 9         |
|               | 4.65  | 8.0  | 3.5  | 9.2  | 54548-0871                       | 54548-0829           | 8         |
|               | 4.15  | 7.5  | 3.0  | 8.7  | 54548-0771                       | 54548-0729           | 7         |
|               | 3.65  | 7.0  | 2.5  | 8.2  | 54548-0671                       | 54548-0629           | 6         |
|               | 3.15  | 6.5  | 2.0  | 7.7  | 54548-0571                       | 54548-0529           | 5         |
|               | 2.65  | 6.0  | 1.5  | 7.2  | 54548-0471                       | 54548-0429           | 4         |
| FPC THICKNESS | D     | C    | B    | A    | EMBOSSD TAPE<br>ORDER No. オーダー番号 | 製品番号<br>MATERIAL No. | 極数<br>Ck+ |

|            |           |
|------------|-----------|
| 54548-**29 | MODEL No. |
|------------|-----------|

|              |             |
|--------------|-------------|
| DESIGN UNITS | THIRD ANGLE |
| METRIC       | PROJECTION  |

0.5 FPC CONN ZIF HSG  
ASSY FOR SMT RA BTM CONT  
-LEAD FREE-

 MOLEX INCORPORATED

|                              |                     |
|------------------------------|---------------------|
| DOCUMENT NO.<br>SD-54548-039 | SHEET NO.<br>1 OF 2 |
|------------------------------|---------------------|

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

|         |                   |             |                                                            |        |
|---------|-------------------|-------------|------------------------------------------------------------|--------|
| REVISED | EC NO: J2008-4048 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |        |
|         | DRWN:WABEI        |             | 10 UNDER                                                   | ± 0.2  |
|         | CH'KD: THIRUYAMA  |             | 10 OVER 30 UNDER                                           | ± 0.25 |
|         | APPR: NUKITA      |             | 30 OVER                                                    | ± 0.3  |
|         |                   |             | ANGULAR                                                    | ± 3 °  |
|         |                   | REV         | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        |

F

E

D

C

B

A

F

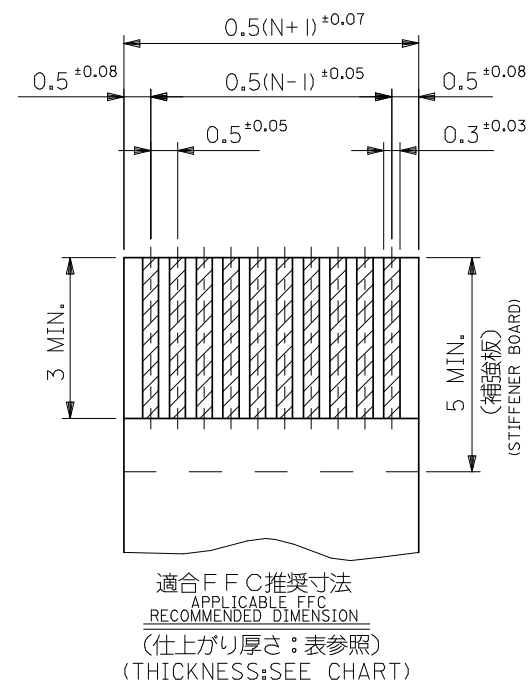
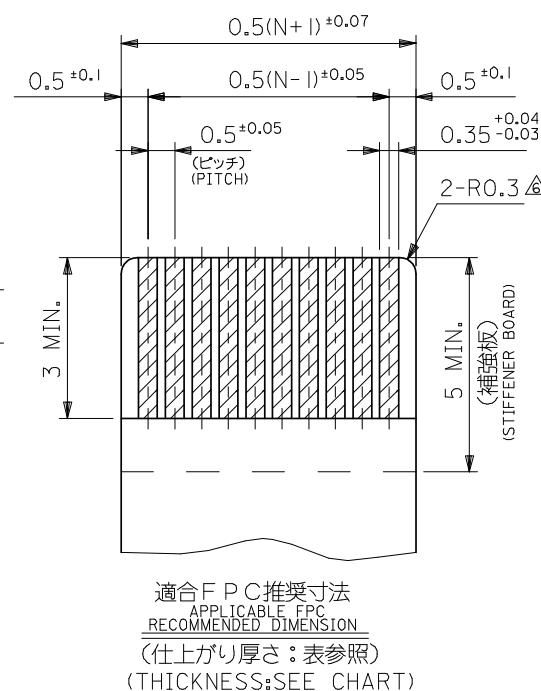
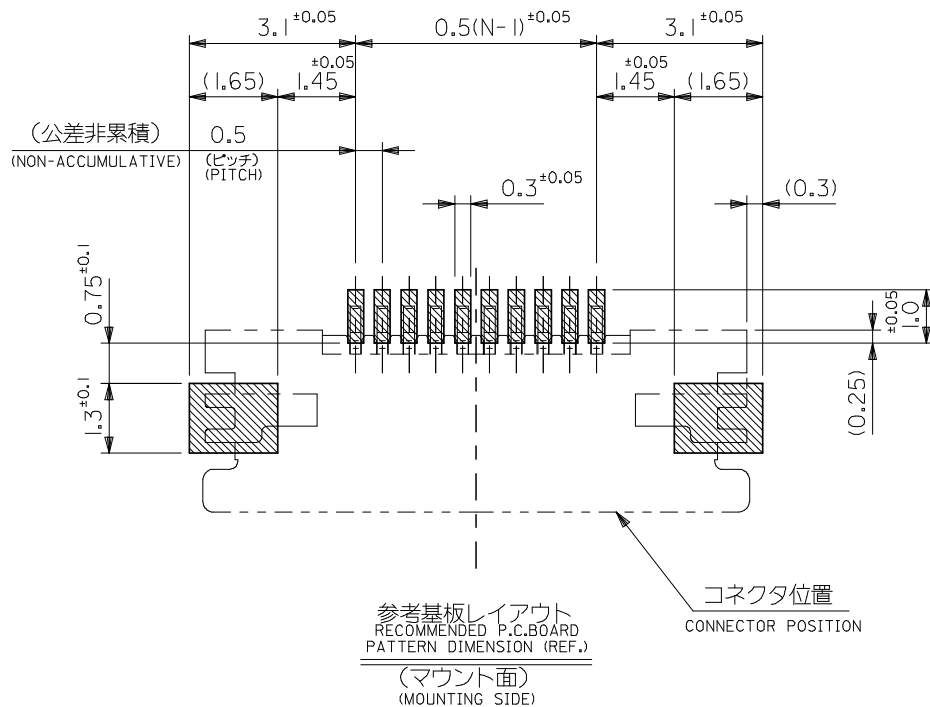
E

D

C

B

A



## 注記 NOTES

### I. 使用材料 MATERIAL

ハウジング : LCP, UL94V-0  
ハウジング  
アクチュエータ : PPS, UL94V-0  
アクチュエータ  
ターミナル : リン青銅 (t=0.2)  
ターミナル  
メッキ : PHOSPOR BRONZE  
メッキ  
PLATING : 接点部: 金メッキ  
CONTACT PORTION : GOLD PLATING  
テール部: 鍍メッキ  
SOLDERING PORTION : TIN OVER PLATING  
下地: ニッケルメッキ  
UNDER PLATING: NICKEL PLATING  
金具 : リン青銅、鍍メッキ (t=0.2)  
金具  
FITTING NAIL : PHOSPOR BRONZE, TIN PLATING  
下地: ニッケルメッキ  
UNDER PLATING: NICKEL PLATING

2. 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. 54548-\*\*29 SHOULD BE LOCKED.  
△ ソルダータール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 Z  
に対し上方向 0 MAX.、下方向 0.15 MAX. とし  
相互のバツキ量は 0.1 MAX. とする。  
MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM Z  
UPPER DIRECTION: 0 MAX., LOWER DIRECTION: 0.15 MAX.  
OFFSET BETWEEN UPPER AND LOWER 0.1 MAX.

△ 偶数極に適用。  
APPLY FOR EVEN CIRCUIT.

△ パターンはくり止め用金具  
FITTING NAIL FOR PREVENTION OF PEELING  
OF P.C.B. PATTERN.  
△ RO.3 は FPC 導体部にかからないこと  
RO.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.  
7. 本製品は 54548-\*\*21 の鉛フリー (部分金メッキ) 品である。  
THIS PRODUCT IS LEAD FREE OF 54548-\*\*21 (SELECTIVE GOLD).  
8. N: 極数 N: CIRCUIT.

### FPC/FFC 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 μm または 50 μm を推奨します。

### ABOUT FPC/FFC

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.

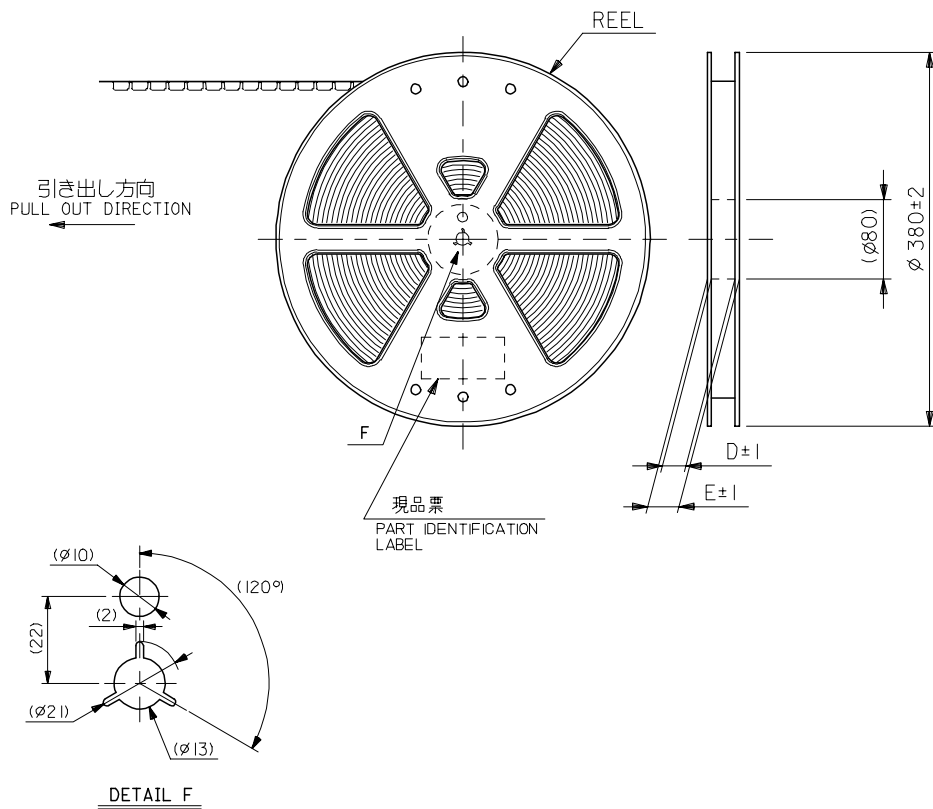
### FPC について:

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 μm 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

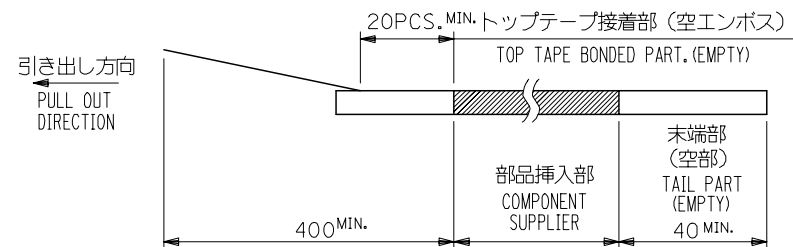
RECOMMENDED MATERIAL/THICKNESS.  
STIFFENER FILM : POLYIMIDE  
BASE FILM THICKNESS : 25 μm  
BONDING AGENT : THERMOSETTING BONDING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON THE CONTACT  
AREA BECAUSE THE EXTRA ADHESIVE MAY CAUSE THE DEFECT IN  
ELECTRICAL CONTINUITY.

|                                                                                |                    |                                          |                                                                                                                                  |                 |      |                                                                          |              |    |           |                           |  |
|--------------------------------------------------------------------------------|--------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------|------|--------------------------------------------------------------------------|--------------|----|-----------|---------------------------|--|
| REVISED<br>EC NO: J2008-4048<br>DRWN:WABEI<br>CHK'D: THARUYAMA<br>APPR: NUKITA | DESCRIPTION<br>REV | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |                                                                                                                                  | DIMENSION STYLE |      | SCALE                                                                    | DESIGN UNITS | 20 | MODEL NO. | THIRD ANGLE<br>PROJECTION |  |
|                                                                                |                    |                                          |                                                                                                                                  | MM ONLY         |      | ---                                                                      | METRIC       |    |           |                           |  |
|                                                                                |                    | 10 UNDER                                 | ± 0.2                                                                                                                            | DRAWN BY        | DATE | TITLE<br>0.5 FPC CONN ZIF HSG<br>ASSY FOR SMT RA BTM CONT<br>-LEAD FREE- |              |    |           |                           |  |
|                                                                                |                    | 10 OVER 30 UNDER                         | ± 0.25                                                                                                                           | CHECKED BY      | DATE |                                                                          |              |    |           |                           |  |
|                                                                                |                    | 30 OVER                                  | ± 0.3                                                                                                                            | APPROVED BY     | DATE | MOLEX INCORPORATED                                                       |              |    |           |                           |  |
|                                                                                | ANGULAR ±3 °       |                                          | MSASAO                                                                                                                           | '04/02/10       |      |                                                                          |              |    |           |                           |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                     |                    | MATERIAL NO.                             |                                                                                                                                  | DOCUMENT NO.    |      |                                                                          |              |    | SHEET NO. |                           |  |
|                                                                                |                    | SEE SHEET 1                              |                                                                                                                                  | SD-54548-039    |      |                                                                          |              |    | 2 OF 2    |                           |  |
|                                                                                |                    | SIZE                                     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                 |      |                                                                          |              |    |           |                           |  |

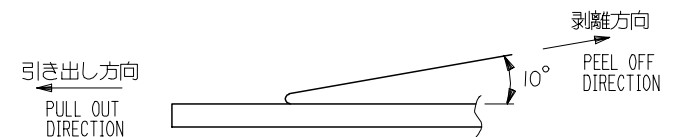


### NOTES

- 製品詳細寸法については図面 SD-54548-039 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-54548-039
- 梱包数量：3000個／リール  
NUMBER OF CONNECTORS：3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH

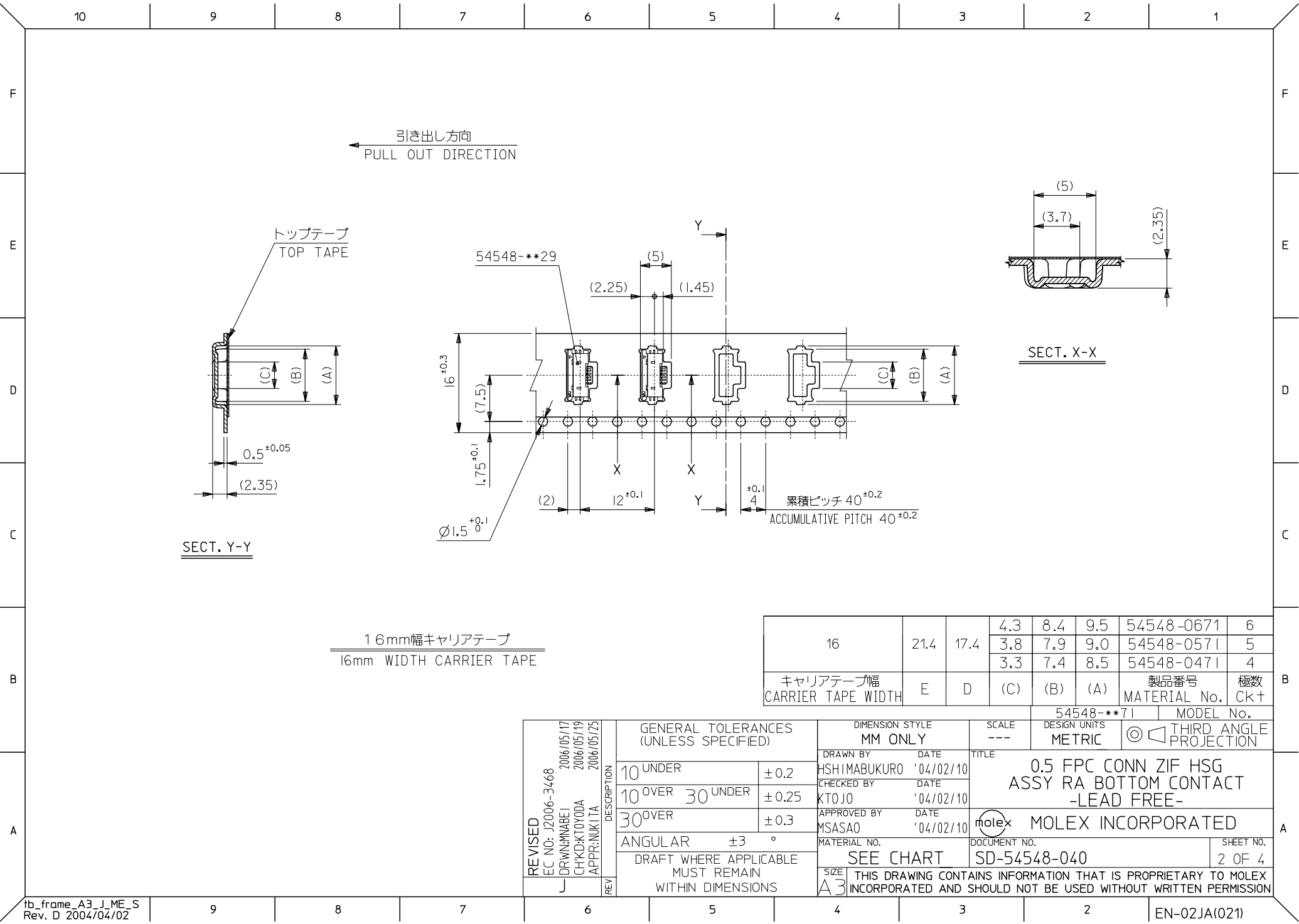


- トップテープの剥離強度：0.1N ～ 1.3N(10gf ～ 130gf)  
(剥離方向は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE：0.1N ～ 1.3N(10gf ～ 130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED ,DURING TRANSPORTATION.



- 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(TOPTAPE)：PET、PE、PEF  
リール(REEL)：ポリスチレン(P.S)＜リサイクル材を含む＞  
POLYSTYRENE(PS)＜RECYCLE MATERIAL CONTAINED＞
- 本製品は 54548-\*\*-91 の鉛フリー(部分金メッキ)品である。  
THIS PRODUCT IS LEAD FREE OF 54548-\*\*-91 (SELECTIVE GOLD).

|                                                                             |             |                                                                                                                                          |       |                            |                   |                                                                                                                                                                           |                                                                                                                              |           |
|-----------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------|
| REVISED<br>EC NO: J2006-3468<br>DRAWN:MABEI<br>CHKD:KTOYODA<br>APPR:NIKI TA | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                 |       | DIMENSION STYLE<br>MM ONLY | SCALE<br>---      | 54548-***71<br>DESIGN UNITS<br>METRIC                                                                                                                                     | MODEL No.<br> THIRD ANGLE<br>PROJECTION |           |
|                                                                             |             | 10 UNDER                                                                                                                                 | ±0.2  | DRAWN BY<br>HSHIMABUKURO   | DATE<br>'04/02/10 | 0.5 FPC CONN ZIF HSG<br>ASSY RA BOTTOM CONTACT<br>-LEAD FREE-<br> MOLEX INCORPORATED |                                                                                                                              |           |
|                                                                             |             | 10 OVER 30 UNDER                                                                                                                         | ±0.25 | CHECKED BY<br>KTOJO        | DATE<br>'04/02/10 |                                                                                                                                                                           |                                                                                                                              |           |
|                                                                             |             | 30 OVER                                                                                                                                  | ±0.3  | APPROVED BY<br>MSASAO      | DATE<br>'04/02/10 |                                                                                                                                                                           |                                                                                                                              |           |
|                                                                             |             | ANGULAR ±3 °                                                                                                                             |       | MATERIAL NO.               |                   | DOCUMENT NO.                                                                                                                                                              |                                                                                                                              | SHEET NO. |
|                                                                             |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                               |       | SEE CHART                  |                   | SD-54548-040                                                                                                                                                              |                                                                                                                              | 1 OF 4    |
| J                                                                           | REV         | SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |       |                            |                   |                                                                                                                                                                           |                                                                                                                              |           |



16mm 幅キャリアテープ  
16mm WIDTH CARRIER TAPE

|                                |      |      |     |     |     |                      |                 |
|--------------------------------|------|------|-----|-----|-----|----------------------|-----------------|
| 16                             | 21.4 | 17.4 | 4.3 | 8.4 | 9.5 | 54548-0671           | 6               |
|                                |      |      | 3.8 | 7.9 | 9.0 | 54548-0571           | 5               |
|                                |      |      | 3.3 | 7.4 | 8.5 | 54548-0471           | 4               |
| キャリアテープ幅<br>CARRIER TAPE WIDTH | E    | D    | (C) | (B) | (A) | 製品番号<br>MATERIAL No. | 極数<br>Pin Count |

|                                                                                    |                    |                                                            |            |                            |                                                                                                                                  |                                                                        |                        |                           |  |  |
|------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------|------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------|---------------------------|--|--|
| REVISED<br>EC NO: J2006-3468<br>DRAWN: NABEJ<br>CHKD: KTOYODA<br>APPR: NUKITA<br>J | DESCRIPTION<br>REV | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |            | DIMENSION STYLE<br>MM ONLY |                                                                                                                                  | SCALE<br>---                                                           | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |  |  |
|                                                                                    |                    | 10 UNDER                                                   | ±0.2       | DRAWN BY<br>HSHIMABUKURO   | DATE<br>'04/02/10                                                                                                                | TITLE<br>0.5 FPC CONN ZIF HSG<br>ASSY RA BOTTOM CONTACT<br>-LEAD FREE- |                        |                           |  |  |
|                                                                                    |                    | 10 OVER 30 UNDER                                           | ±0.25      | CHECKED BY<br>KTOJO        | DATE<br>'04/02/10                                                                                                                |                                                                        |                        |                           |  |  |
|                                                                                    |                    | 30 OVER                                                    | ±0.3       | APPROVED BY<br>MSASAO      | DATE<br>'04/02/10                                                                                                                | MOLEX MOLEX INCORPORATED                                               |                        |                           |  |  |
|                                                                                    |                    | ANGULAR ±3 °                                               |            | MATERIAL NO.               |                                                                                                                                  | DOCUMENT NO.                                                           |                        | SHEET NO.                 |  |  |
|                                                                                    |                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |            | SEE CHART                  |                                                                                                                                  | SD-54548-040                                                           |                        | 2 OF 4                    |  |  |
|                                                                                    |                    |                                                            | SIZE<br>A3 |                            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                        |                        |                           |  |  |





## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<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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