

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0545481271](#)
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, 12 Circuits, Lead-free, Gold Contact Plating

Documents:

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

General

Product Family FFC/FPC Connectors
 Series [54548](#)
 Overview [ffc fpc smt](#)
 Product Name N/A

Physical

Circuits (Loaded) 12
 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

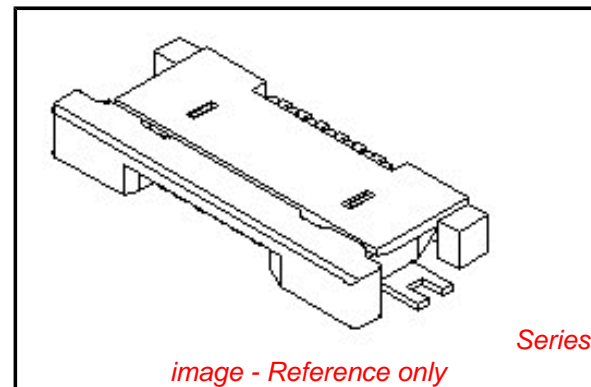


image - Reference only

EU RoHS

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

China RoHS



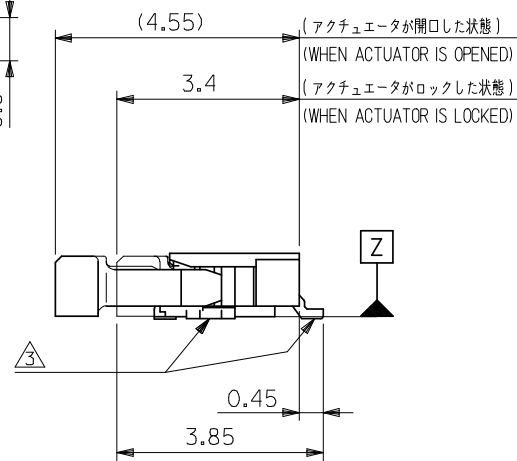
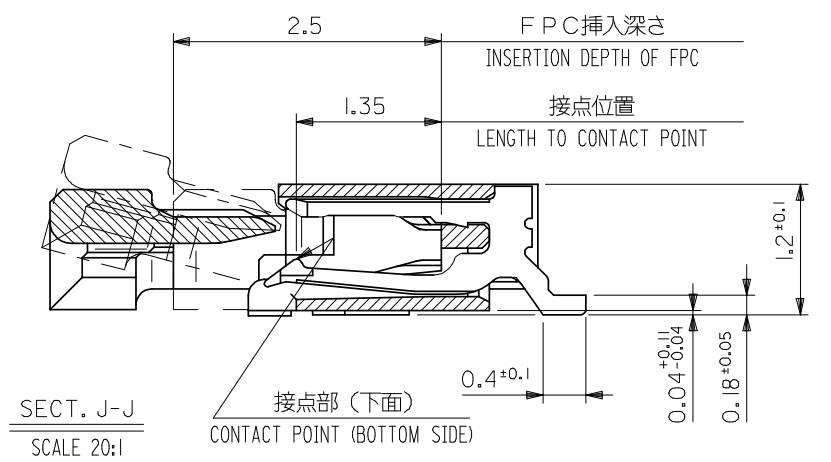
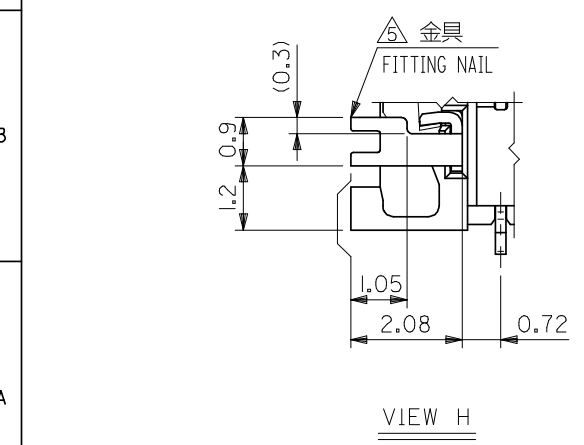
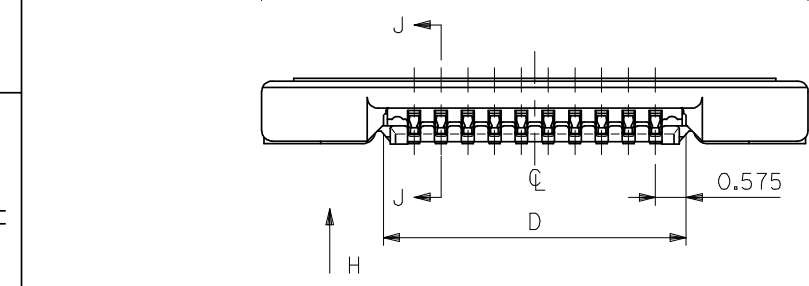
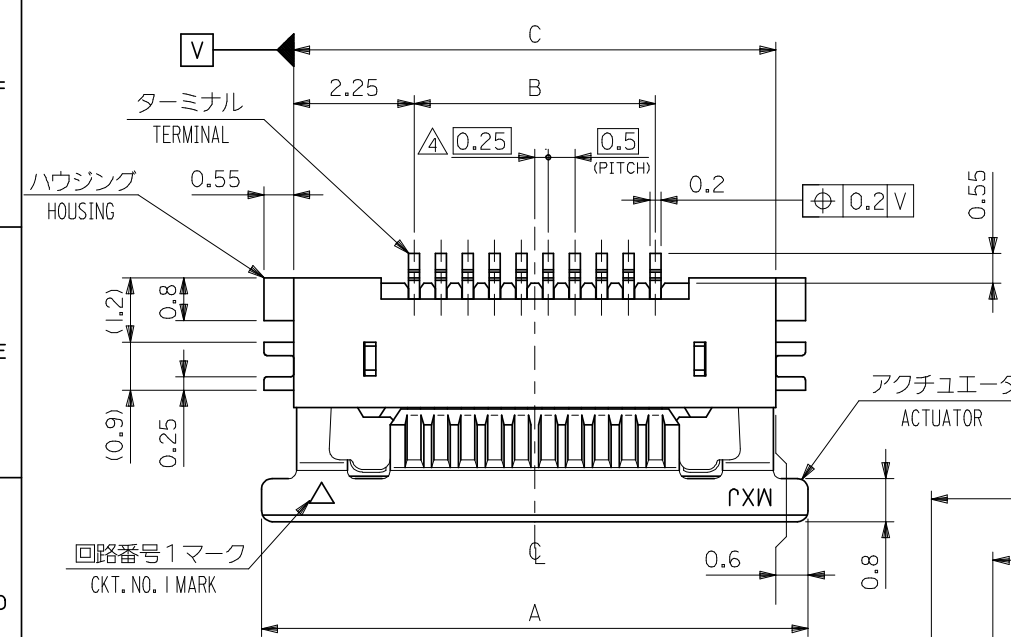
Need more information on product environmental compliance?

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

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

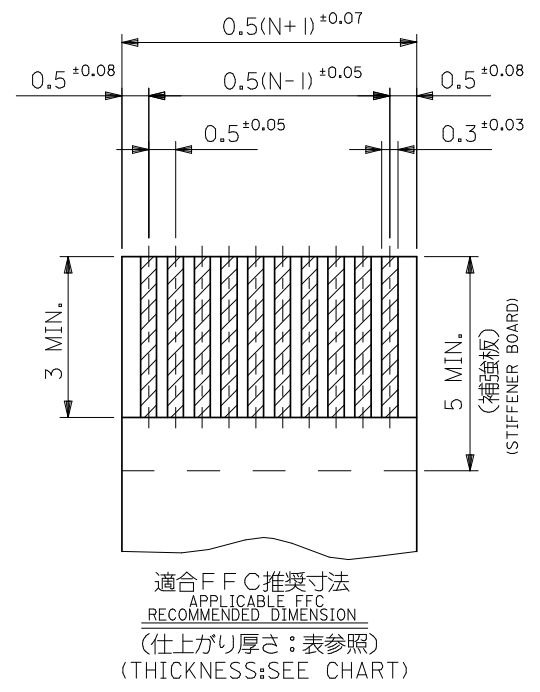
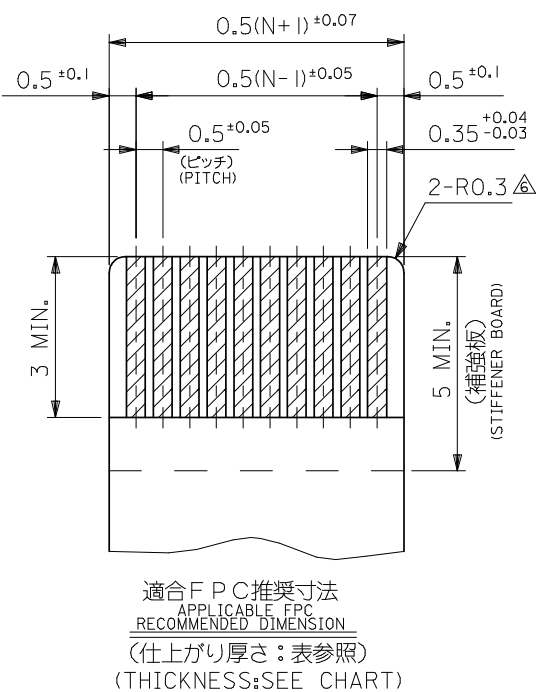
Search Parts in this Series

[54548Series](#)



| | | | | | | | |
|---------------|-------|------|------|------------|--------------------------------|-------------------|--------|
| 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 |
| | 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 | EMBOSSED TAPE ORDER No. オータ-番別 | 製品番号 MATERIAL No. | 極数 Ck+ |

| | | | | | | |
|--|---------------------------------------|-------|---|-------------------|--|------------------------|
| REVISED EC NO: J2008-4048 DRWN:MNABEI 2008/06/13 CH'KD:THARYAMA 2008/06/16 APPR:NUKITA 2008/06/16 REV N | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE 10:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ±0.2 | DRAWN BY HSHIMABUKURO | DATE '04/02/10 | TITLE 0.5 FPC CONN ZIF HSG ASSY FOR SMT RA BTM CONT -LEAD FREE- | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY KTOJO | DATE '04/02/10 | MOLEX INCORPORATED | |
| | 30 OVER | ±0.3 | APPROVED BY MSASAO | DATE '04/02/10 | DOCUMENT NO. SD-54548-039 | SHEET NO. 1 OF 2 |
| | ANGULAR ±3° | | MATERIAL NO. SEE TABLE | | | |
| 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 | | | |



適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(仕上がり厚さ:表参照)
(THICKNESS:SEE CHART)

適合FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION
(仕上がり厚さ:表参照)
(THICKNESS:SEE CHART)

注記 NOTES

- I. 使用材料 MATERIAL
- ハウジング : LCP, UL94V-0
 - アクチュエータ : PPS, UL94V-0
 - ターミナル :リン青銅 (t=0.2)
 - メッキ : 接点部:金メッキ
 - テール部:錫メッキ
 - 金具 :リン青銅、錫メッキ (t=0.2)

- △パターンはくり止め用金具
- △RO.3はFPC導体部にかからないこと
- 7.本製品は54548-**-21の鉛フリー(部分金メッキ)品である。
- 8. N: 極数 N: CIRCUIT.

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。
- △ソルダーテ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 OMAX.、下方向 0.15MAX.とし
- △偶数極に適用。

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35μmまたは50μm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.

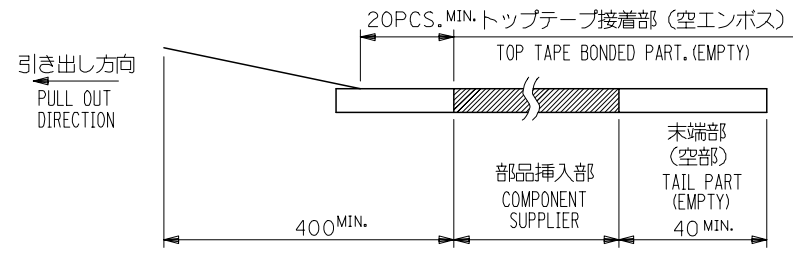
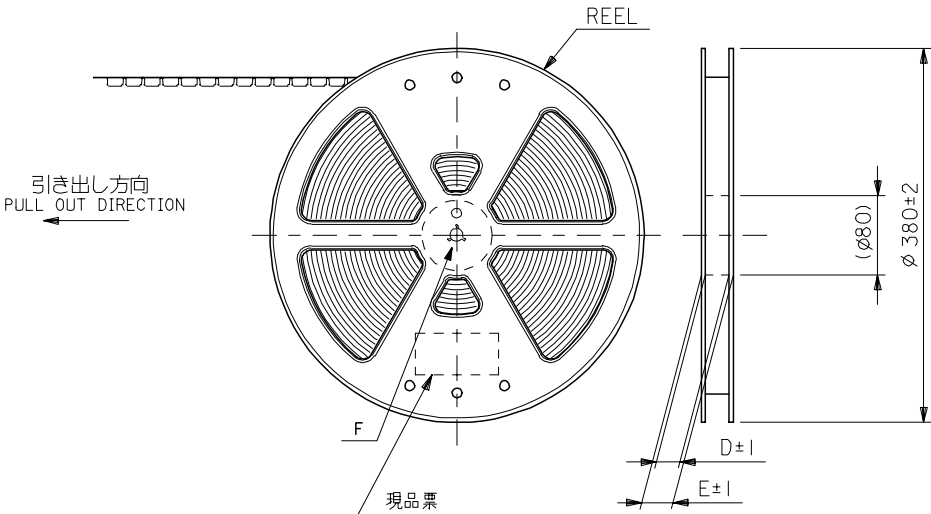
FPC について:
補強フィルム材質はポリイミドを推奨します。ベースフィルムは25μmを推奨します。
接着剤は熱硬化接着剤を推奨します。
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様、お願い致します。

ABOUT FPC
RECOMMENDED MATERIAL/THICKNESS.
STIFFENER FILM : POLYIMIDE
BASE FILM THICKNESS : 25μm
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.

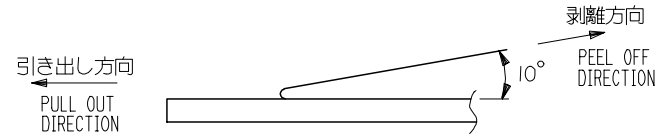
| | | | | | |
|--|---|-----------------------------|------------------------------|--|--------------------------|
| REVISED EC NO: J2008-4048 DRWN:WABEI CHKD:THARYAMA APPR:NUKITA | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE MM ONLY | SCALE --- | DESIGN UNITS METRIC | MODEL No. 54548-**-29 |
| | 10 UNDER ±0.2 | DRAWN BY HSHIMABUKURO | DATE '04/02/10 | THIRD ANGLE PROJECTION | |
| | 10 OVER 30 UNDER ±0.25 | CHECKED BY KTOJO | DATE '04/02/10 | TITLE 0.5 FPC CONN ZIF HSG ASSY FOR SMT RA BTM CONT -LEAD FREE- | |
| | 30 OVER ±0.3 | APPROVED BY MSASAO | DATE '04/02/10 | MOLEX INCORPORATED | |
| | ANGULAR ±3° | MATERIAL NO. SEE SHEET 1 | DOCUMENT NO. SD-54548-039 | SHEET NO. 2 OF 2 | |
| 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 | | | | |

NOTES

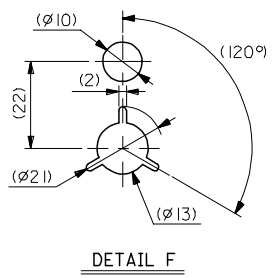
- 製品詳細寸法については図面 SD-54548-039 を参照下さい。
RE DETAILED DIMENSION, SEE SD-54548-039
- 梱包数量：3000個/リール
NUMBER OF CONNECTORS : 3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- 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 EC NO: J2006-3468 DRAWN: HSHIMABUKURO 2006/05/17 CHECKED: KTOJO 2006/05/19 APPR: MSASAO 2006/05/25 | DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) | 10 UNDER ±0.2 | | DIMENSION STYLE MM ONLY | | SCALE --- | 54548-**71 MODEL No. |
| | | 10 OVER 30 UNDER ±0.25 | | DRAWN BY DATE HSHIMABUKURO '04/02/10 | | DESIGN UNITS METRIC | |
| | | 30 OVER ±0.3 | | CHECKED BY DATE KTOJO '04/02/10 | | THIRD ANGLE PROJECTION | |
| | | ANGULAR ±3 ° | | APPROVED BY DATE MSASAO '04/02/10 | | TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE- | |
| J | REV | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE CHART | | DOCUMENT NO. SD-54548-040 | |
| | | SIZE A3 | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | SHEET NO. 1 OF 4 | |

10 9 8 7 6 5 4 3 2 1

F

E

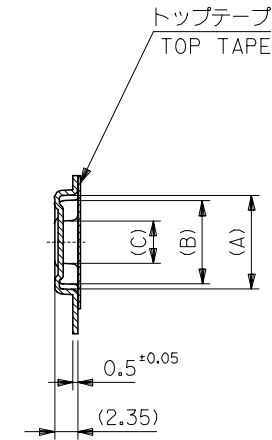
D

C

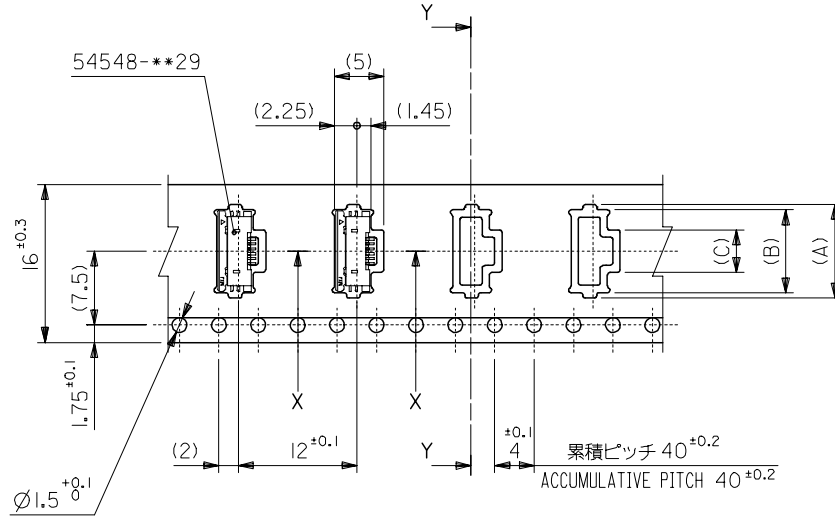
B

A

引き出し方向
PULL OUT DIRECTION



SECT. Y-Y



SECT. X-X

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 CARRIER TAPE WIDTH | E | D | (C) | (B) | (A) | 製品番号 MATERIAL No. | 極数 Ck+ |

| | | | | | | | |
|--|---------------------------------------|-----------|----------------------------|-------------------|--|------------------------|------------------------|
| REVISED EC NO: J2006-3468 DRW: MNABEI 2006/05/17 CHK: KTOYODA 2006/05/19 APPR: NUKITA 2006/05/25 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ± 0.2 | DRAWN BY HSHIMABUKURO | DATE '04/02/10 | TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE- MOLEX INCORPORATED | | |
| | 10 OVER 30 UNDER | ± 0.25 | CHECKED BY KTOJO | DATE '04/02/10 | | | |
| | 30 OVER | ± 0.3 | APPROVED BY MSASAO | DATE '04/02/10 | | | |
| | ANGULAR | ± 3 ° | MATERIAL NO. | | DOCUMENT NO. | SHEET NO. | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE CHART | | SD-54548-040 | | 2 OF 4 | |

9

8

7

6

5

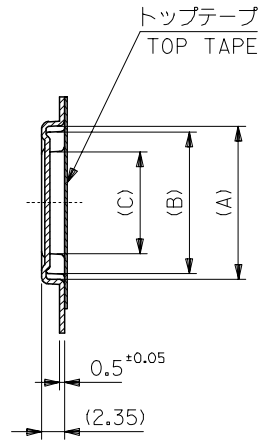
4

3

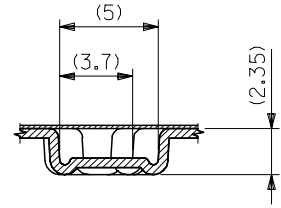
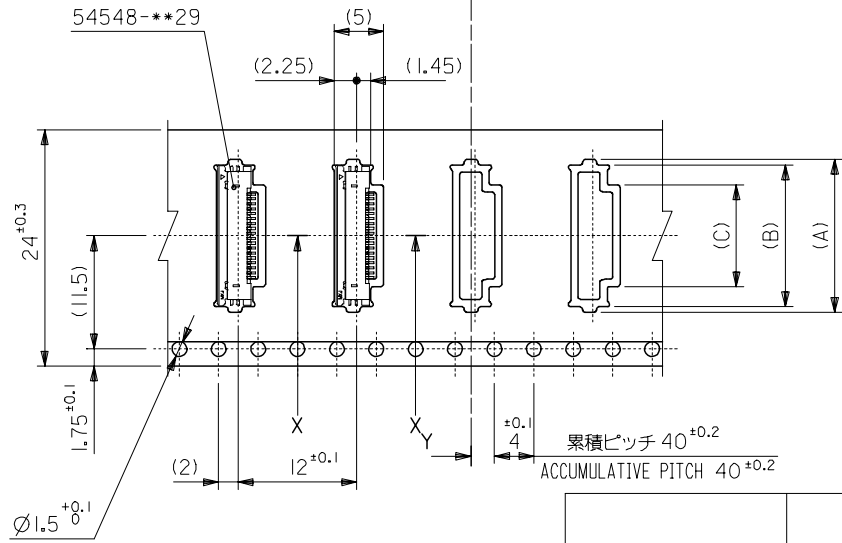
2

10 9 8 7 6 5 4 3 2 1

引き出し方向
PULL OUT DIRECTION



SECT. Y-Y



SECT. X-X

24mm幅キャリアテープ
24mm WIDTH CARRIER TAPE

| | | | | | | | | | |
|--------------------------------|------|------|------------|------|------|------------|-----|----------------------|-----------|
| 24 | 29.4 | 25.4 | 12.3 | 16.4 | 17.5 | 54548-2271 | 22 | | |
| | | | 11.8 | 15.9 | 17.0 | 54548-2171 | 21 | | |
| | | | 11.3 | 15.4 | 16.5 | 54548-2071 | 20 | | |
| | | | 10.8 | 14.9 | 16.0 | 54548-1971 | 19 | | |
| | | | 10.3 | 14.4 | 15.5 | 54548-1871 | 18 | | |
| | | | 9.8 | 13.9 | 15.0 | 54548-1771 | 17 | | |
| | | | 9.3 | 13.4 | 14.5 | 54548-1671 | 16 | | |
| | | | 8.8 | 12.9 | 14.0 | 54548-1571 | 15 | | |
| | | | 8.3 | 12.4 | 13.5 | 54548-1471 | 14 | | |
| | | | 7.8 | 11.9 | 13.0 | 54548-1371 | 13 | | |
| | | | 7.3 | 11.4 | 12.5 | 54548-1271 | 12 | | |
| | | | 6.8 | 10.9 | 12.0 | 54548-1171 | 11 | | |
| | | | 6.3 | 10.4 | 11.5 | 54548-1071 | 10 | | |
| | | | 5.8 | 9.9 | 11.0 | 54548-0971 | 9 | | |
| 5.3 | 9.4 | 10.5 | 54548-0871 | 8 | | | | | |
| 4.8 | 8.9 | 10.0 | 54548-0771 | 7 | | | | | |
| キャリアテープ幅 CARRIER TAPE WIDTH | | | E | D | (C) | (B) | (A) | 製品番号 MATERIAL No. | 極数 Ck+ |

| | | | | | | | | |
|--|--|--|----------------------------|---------------------------|--|------------------------|---------------------------|--|
| REVISED EC NO: J2006-3468 DRW: MABEI 2006/05/17 CHK: KTOYODA 2006/05/19 APP: NUKITA 2006/05/25 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ± 0.2 | DRAWN BY HSHIMABUKURO | DATE '04/02/10 | TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE- | | | |
| | 10 OVER 30 UNDER | ± 0.25 | CHECKED BY KTOJO | DATE '04/02/10 | APPROVED BY MSASAO | | | |
| | 30 OVER | ± 0.3 | APPROVED BY MSASAO | | DATE '04/02/10 | MOLEX INCORPORATED | | |
| | ANGULAR ± 3 ° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. SEE CHART | DOCUMENT NO. SD-54548-040 | SHEET NO. 3 OF 4 | | |
| | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

10 9 8 7 6 5 4 3 2 1

F

E

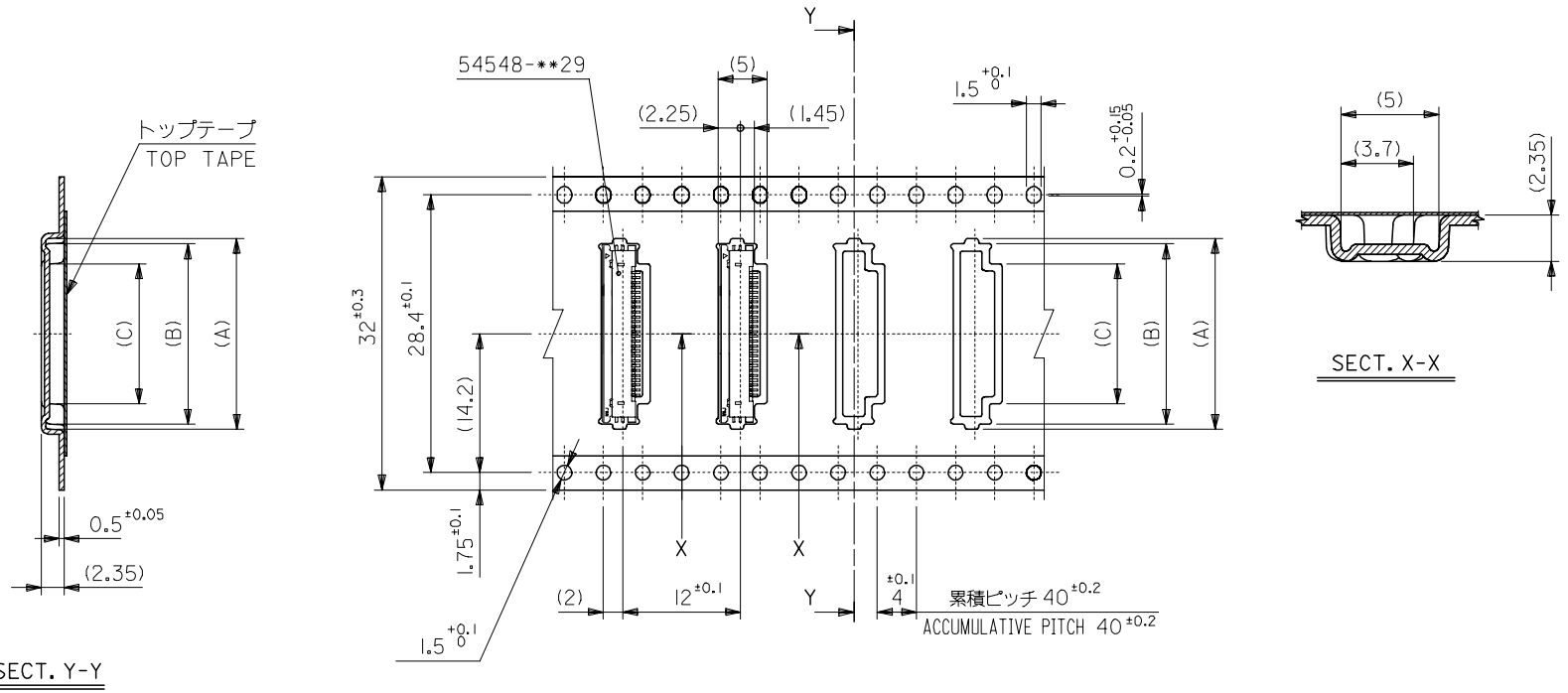
D

C

B

A

引き出し方向
PULL OUT DIRECTION



32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

| | | | | | | | |
|--------------------------------|------|------|------|------|------|----------------------|-----------|
| 32 | 37.4 | 33.4 | 14.3 | 18.4 | 19.5 | 54548-2671 | 26 |
| | | | 13.3 | 17.4 | 18.5 | 54548-2471 | 24 |
| | | | 12.8 | 16.9 | 18.0 | 54548-2371 | 23 |
| キャリアテープ幅 CARRIER TAPE WIDTH | E | D | (C) | (B) | (A) | 製品番号 MATERIAL No. | 極数 Ck+ |

| | | | | | | | |
|---|---------------------------------------|------------|----------------------------|-------------------|--|------------------------|------------------------|
| REVISED EC NO: J2006-3468 DRWN: NABEI 2006/05/17 CHK: KATOYODA 2006/05/19 APPR: NUKITA 2006/05/25 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ±0.2 | DRAWN BY HSHIMABUKURO | DATE '04/02/10 | TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE- | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY KTOJO | DATE '04/02/10 | MOLEX INCORPORATED | | |
| | 30 OVER | ±0.3 | APPROVED BY MSASAO | DATE '04/02/10 | DOCUMENT NO. SD-54548-040 | | |
| | ANGULAR | ±3 ° | MATERIAL NO. SEE CHART | | SHEET NO. 4 OF 4 | | |
| 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 | | |

9

8

7

6

5

4

3

2



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

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