

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [5019514010](#)
Status: **Active**
Description: 0.50mm (.020") Pitch Easy-On™ FFC/FPC Connector, Vertical, SMT, Gold Plating, 40 Circuits

Documents:

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

General

Product Family FFC/FPC Connectors
 Series [501951](#)
 MolexKits Yes
 Product Name Easy-On™

Physical

Circuits (Loaded) 40
 Circuits (maximum) 40
 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

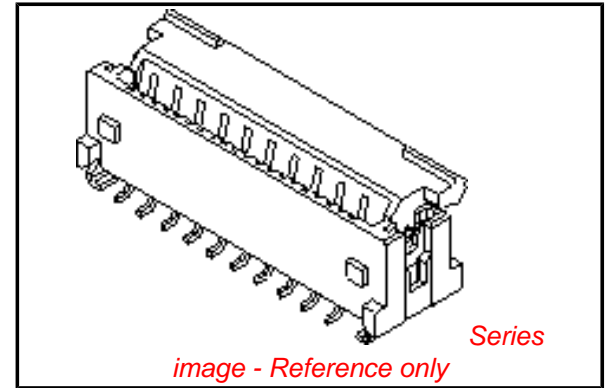
Electrical

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

Material Info

Reference - Drawing Numbers

Packaging Specification SPK-501951-001
 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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

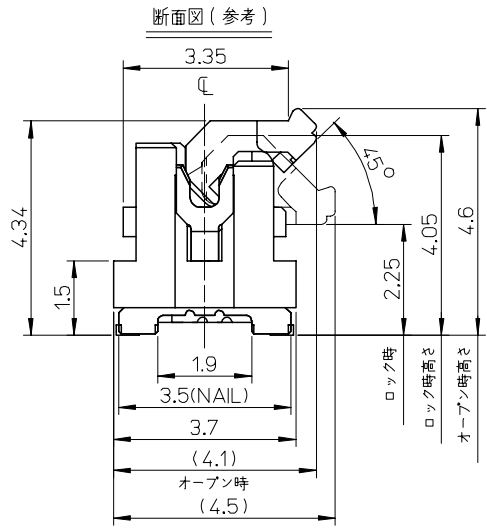
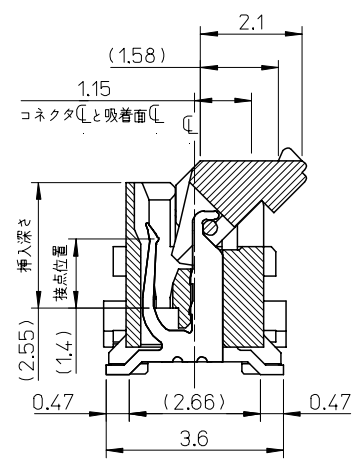
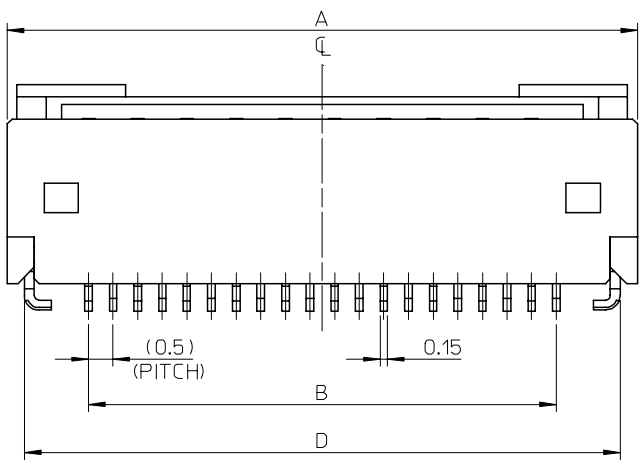
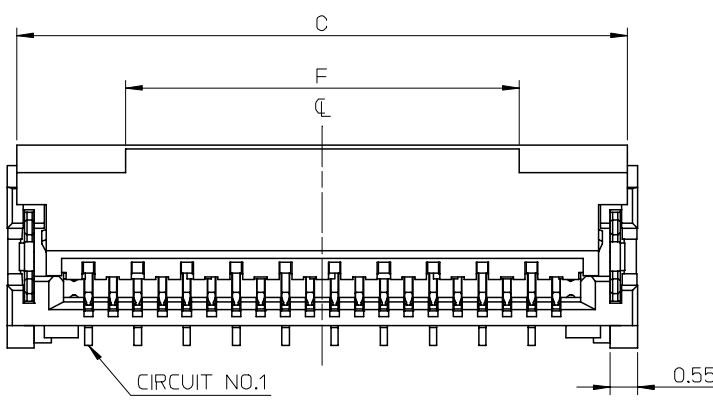
Please visit the [Contact Us](#) section for any non-product compliance questions.

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

This document was generated on 06/07/2010

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注記 NOTES

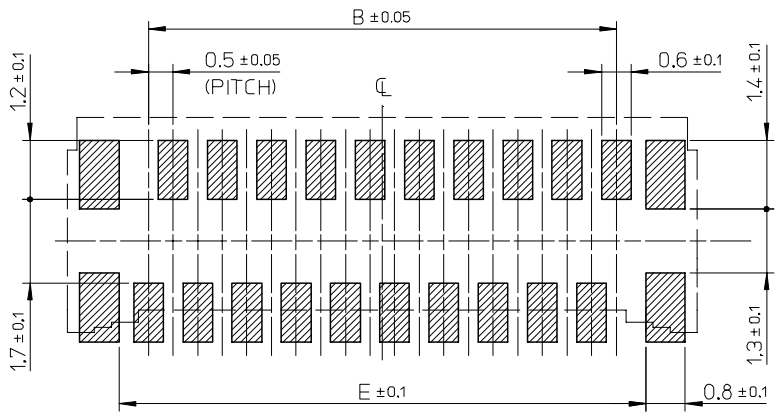
- 使用材料 MATERIAL
 - ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)
 - HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)
 - アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)
 - ACTUATOR : POLYAMIDE 9T, GLASS FILLED, UL94V-0 (BROWN)
 - ターミナル : 銅合金(1=0.15)
 - TERMINAL : COPPER ALLOY
 - 金具 : 銅合金(1=0.2)
 - FITTING NAIL : COPPER ALLOY
 - めっき仕様 PLATING
 - ターミナル TERMINAL : ニッケル下 超金めっき GOLD(AU) OVER NICKEL(NI) PLATING.
 - 金具 FITTING NAIL : ニッケル下 超銀めっき TIN(SN) OVER NICKEL(NI) PLATING.
 - 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)
 - 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 |

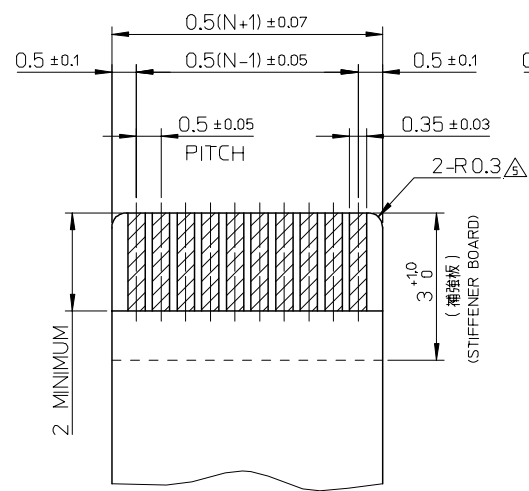
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|---|---------------------------------------|-------|---|--|--------------------|------------------------|---|--|
| REVISED EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 10:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ±0.2 | DRAWN BY TRSUZUKI | | DATE 2006/08/21 | | TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD) | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY HHIRATA | | DATE 2006/08/21 | | MOLEX INCORPORATED | |
| | 30 OVER | ±0.3 | APPROVED BY MSASAO | | DATE 2006/08/21 | | MATERIAL NO. DOCUMENT NO. SHEET NO. | |
| | ANGULAR | ±1 ° | SEE CHART | | SD-501951-003 | | 1 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 | | | | | |

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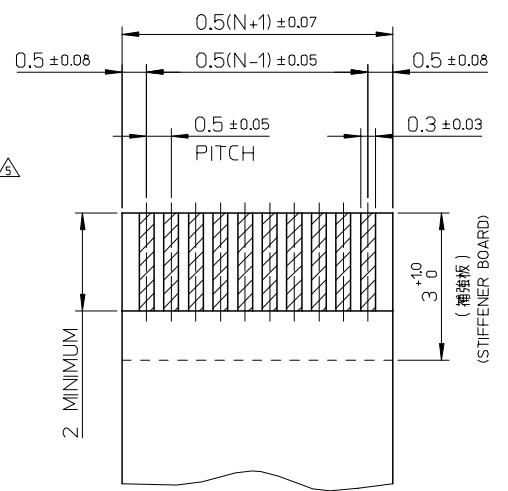
F
E
D
C
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A



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



適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3 ± 0.03)
(THICKNESS: 0.3 ± 0.03)
N: 極数
N: CIRCUITS



適合FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3 ± 0.03)
(THICKNESS: 0.3 ± 0.03)
N: 極数
N: CIRCUITS

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35μmまたは50μm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 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 : 25μm
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 EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ± 0.2 | DRAWN BY TRSUZUKI | DATE 2006/08/21 | TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD) | | | |
| | 10 OVER 30 UNDER | ± 0.25 | CHECKED BY HIRATA | DATE 2006/08/21 | | | | |
| | 30 OVER | ± 0.3 | APPROVED BY MSASAO | DATE 2006/08/21 | MOLEX INCORPORATED | | | |
| | ANGULAR | ± 1 ° | MATERIAL NO. | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE SHEET 1 | | SD-501951-003 | | 2 OF 2 | | |

10 9 8 7 6 5 4 3 2 1

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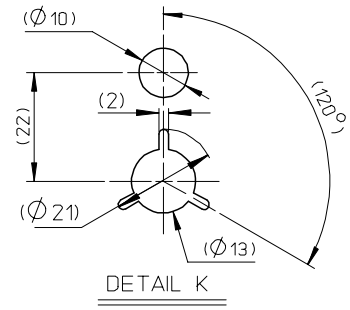
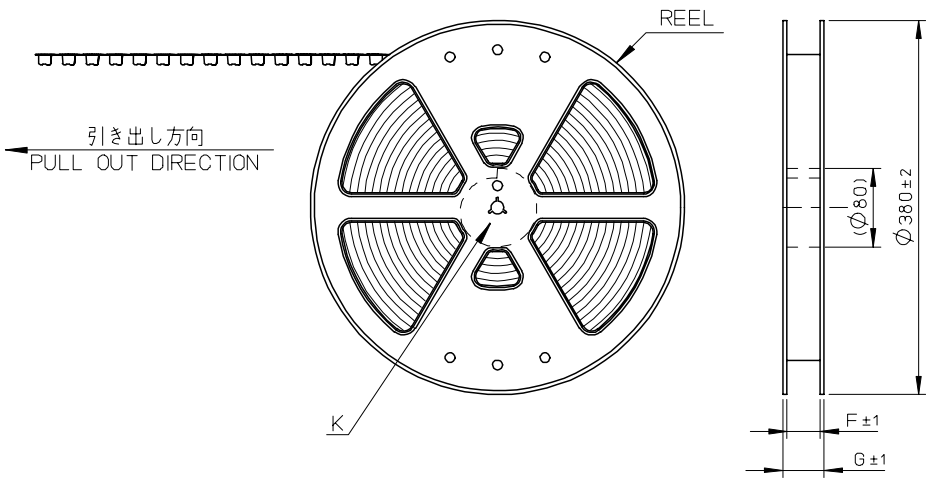
E

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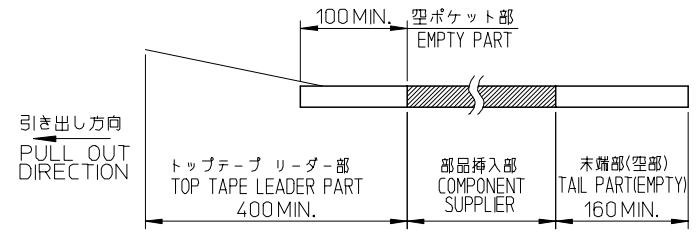
B

A



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



4. 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>

5. ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

| | | | | | | | | |
|---|---------------------------------------|--|-----------------------------|--|---------------------|------------------------|--|--|
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| | 10 UNDER | ±0.2 | DRAWN BY TRSUZUKI | | DATE 2006/09/05 | | TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD) | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY HIRATA | | DATE 2006/09/05 | | MOLEX INCORPORATED | |
| | 30 OVER | ±0.3 | APPROVED BY MSASAO | | DATE 2006/09/05 | | DOCUMENT NO. SD-501951-004 | |
| | ANGULAR | ±1 ° | MATERIAL NO. SEE SHEET 2 | | SHEET NO. 1 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 | | | | | | |

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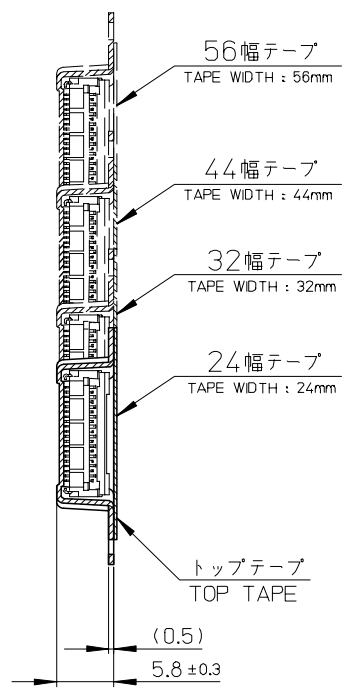
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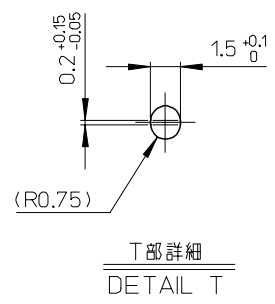
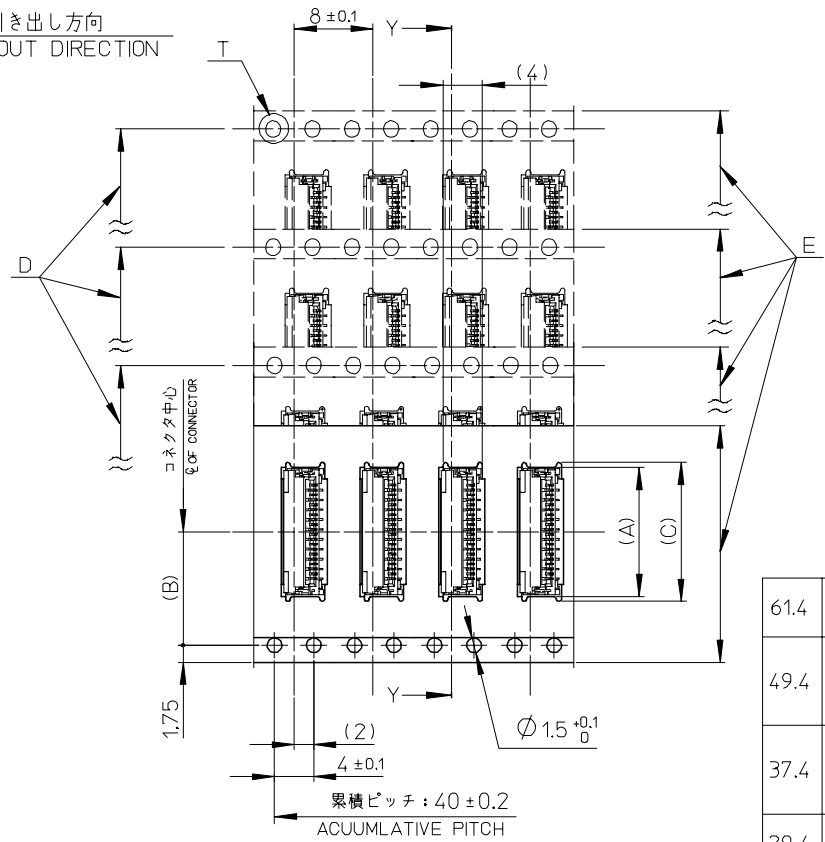
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引き出し方向
PULL OUT DIRECTION



断面 Y-Y
SECTION Y-Y



| | | | | | | | | |
|------|------|-------------------------------------|------|------|------|------|----------------------|----------------|
| 61.4 | 57.4 | 56 ± 0.3 | 52.4 | 39.1 | 26.2 | 38.1 | 501951-7010 | 70 |
| | | | | 34.1 | | 33.1 | 501951-6010 | 60 |
| 49.4 | 45.4 | 44 ± 0.3 | 40.4 | 29.1 | 20.2 | 28.1 | 501951-5010 | 50 |
| | | | | 24.1 | | 25.6 | 501951-4510 | 45 |
| | | | | 20.1 | | 23.1 | 501951-4010 | 40 |
| 37.4 | 33.4 | 32 ± 0.3 | 28.4 | 19.1 | 14.2 | 19.1 | 501951-3210 | 32 |
| | | | | 16.1 | | 18.1 | 501951-3010 | 30 |
| | | | | 15.1 | | 15.1 | 501951-2410 | 24 |
| 29.4 | 25.4 | 24 ± 0.3 | | 14.1 | 11.5 | 14.1 | 501951-2210 | 22 |
| | | | | 14.1 | | 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 DRW: HVAJIMA 2007/10/11 CHKD: THARUYAMA 2007/10/11 APPR: NUKITA 2007/10/12 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
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| | 30 OVER | ± 0.3 | APPROVED BY MSASAO | DATE 2006/09/05 | DOCUMENT NO. SD-501951-004 | | SHEET NO. 2 OF 2 | |
| | ANGULAR | ± 1 ° | 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 | | | | |