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Part Number: [5031481090](#)
Status: **Active**
Description: 1.50mm (.059") Pitch CLIK-Mate™ Wire-to-Board PCB Receptacle, Dual Row, Right Angle, 10 Circuits

Documents:

[3D Model](#) [Product Specification PS-503148-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

| | |
|----------------|------------------------|
| Product Family | PCB Receptacles |
| Series | 503148 |
| Application | Wire-to-Board |
| Product Name | CLIK-Mate™ |

Physical

| | |
|--------------------------------|-----------------------|
| Circuits (Loaded) | 10 |
| Color - Resin | Beige |
| Durability (mating cycles max) | 30 |
| Glow-Wire Compliant | No |
| Keying to Mating Part | Yes |
| Lock to Mating Part | Yes |
| Mated Height (in) | 0.362 In |
| Mated Height (mm) | 9.20 mm |
| Material - Metal | Copper Alloy |
| Material - Plating Mating | Tin |
| Number of Rows | 2 |
| Orientation | Right Angle |
| PCB Locator | No |
| PCB Retention | Yes |
| Packaging Type | Embossed Tape on Reel |
| Pitch - Mating Interface (in) | 0.059 In |
| Pitch - Mating Interface (mm) | 1.50 mm |
| Polarized to Mating Part | Yes |
| Polarized to PCB | Yes |
| Stackable | No |
| Temperature Range - Operating | -25°C to +85°C |
| Termination Interface: Style | Surface Mount |

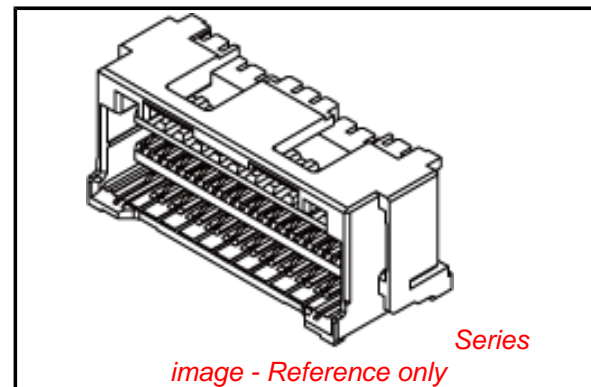
Electrical

| | |
|-------------------------------|------|
| Current - Maximum per Contact | 1A |
| Voltage - Maximum | 100V |

Material Info

Reference - Drawing Numbers

| | |
|---------------------------|-------------------------------|
| Application Specification | AS-503149-001 |
| Product Specification | PS-503148-001, RPS-503148-001 |
| Sales Drawing | SD-503148-001, SD-503148-002 |



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](#)

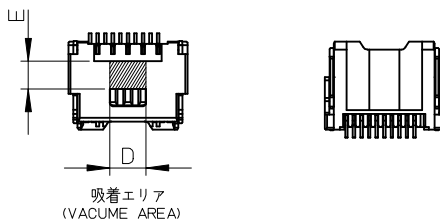
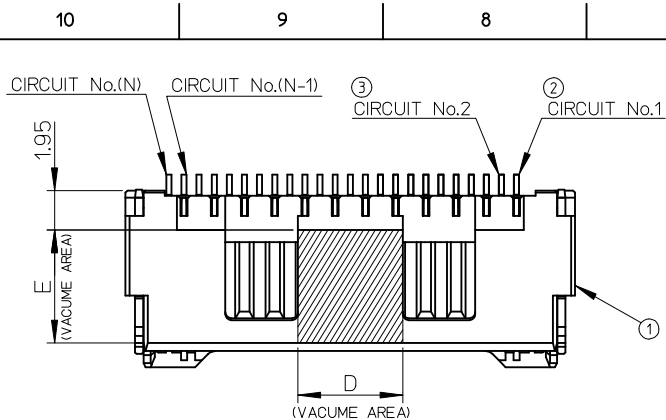
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[503148Series](#)

Mates With

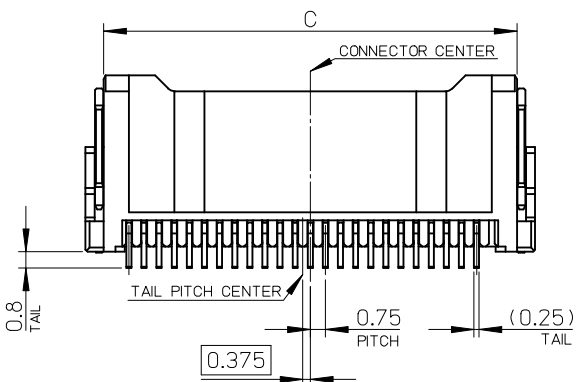
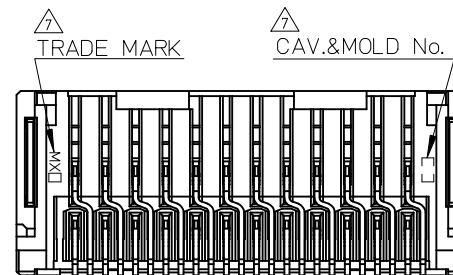
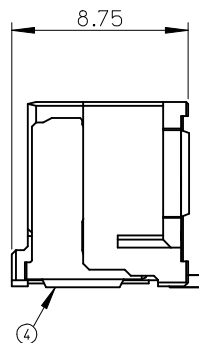
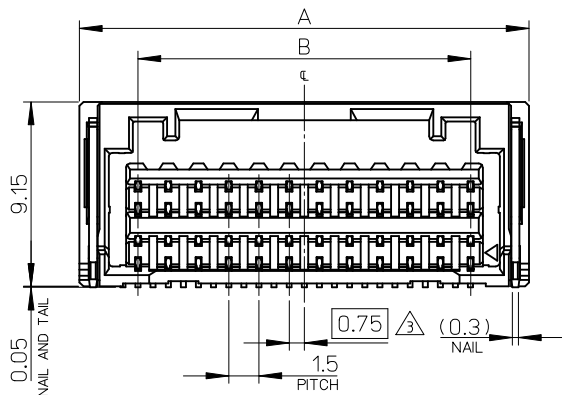
[503149](#) Crimp Housing . [502579](#) Crimp Terminal



10極ハウジング形状
(HOUSING FORM OF 10CKT)
SCALE 2:1

CONFIDENTIAL

| No. | PART | MATERIAL |
|-----|------------|--|
| ① | HOUSING | 耐熱性樹脂 UL94V-0 HEATPROOF RESIN UL94V-0 |
| ② | TERMINAL A | 銅合金 COPPER ALLOY 錫メッキ: 1.0 micro-meter MIN. TIN |
| ③ | TERMINAL B | ニッケルメッキ (下地): 1.0 micro-meter MIN. NICKEL (UNDER PLATING) |
| ④ | NAIL | 銅合金 COPPER ALLOY 錫メッキ: 1.0 micro-meter MIN. TIN ニッケルメッキ (下地): 1.0 micro-meter MIN. NICKEL (UNDER PLATING) |



| | | | | | | |
|-----------------------|------|-----|------|------|------|---------|
| 503148 - 249* | 5.6 | 5.2 | 20.5 | 16.5 | 22.3 | 24 |
| 503148 - 209* | 5.6 | 3.2 | 17.5 | 13.5 | 19.3 | 20 |
| 503148 - 169* | 5.6 | 2.5 | 14.5 | 10.5 | 16.3 | 16 |
| 503148 - 129* | 5.6 | 2.3 | 11.5 | 7.5 | 13.3 | 12 |
| 503148 - 109* | 2.75 | 3.6 | 10 | 6 | 11.8 | 10 |
| EMBOSSED TAPE PACKAGE | E | D | C | B | A | CIRCUIT |
| オーダー番号 ORDER No. | | | | | | |

| | | | | | | | |
|--|---------------------------------------|--|----------------------------|-------------------|--|-------------------------------|---------------------|
| REVISED EC NO: J2010-0024 DRWN:THANYU 2009/07/03 CHKD:KASAKAWA 2009/07/05 APPR:NUKITA 2009/07/06 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ±0.2 | DRAWN BY T. HANYU | DATE 2007/11/2 | TITLE 1.5 W/B CONN. DUAL R/A REC. ASSY | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. ASAKAWA | DATE 2007/11/2 | | | |
| | 30 OVER | ±0.3 | APPROVED BY Y.O. ITO | DATE 2007/11/2 | MATERIAL NO. SEE CHART | DOCUMENT NO. SD-503148-001 | SHEET NO. 1 OF 3 |
| REV | DESCRIPTION | ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE CHART | | | | |

NOTES

CONFIDENTIAL

- 1. 嵌合相手: 503149-****
MATE WITH: 503149-****
- 2. 端子テール部及びネイルの平坦度: 0.1mm MAX.
TAIL AND NAIL COPLANARITY TO BE 0.1 MAX.

△3 (極数/2) = 偶数に適用
APPLY FOR (CIRCUIT SIZE/2) = EVEN

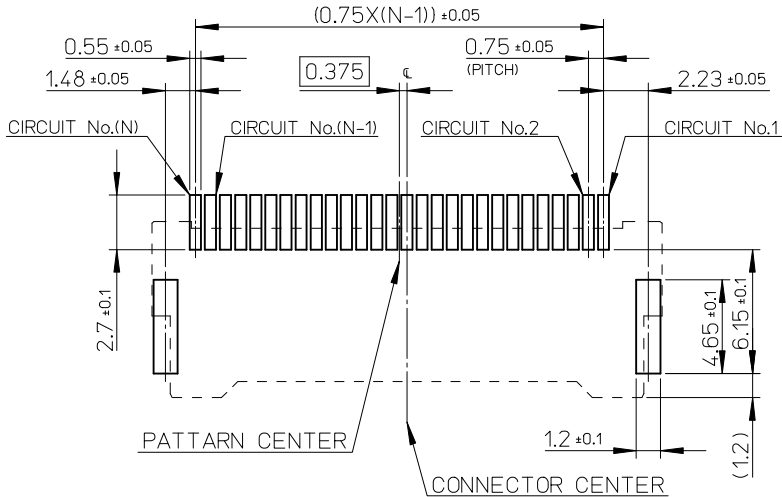
△4 端子テール部及びネイルに錫メッキを使用している為、
外観に摺動痕が付く場合があります。
製品番号

MATERIAL No.
503148 - **9*

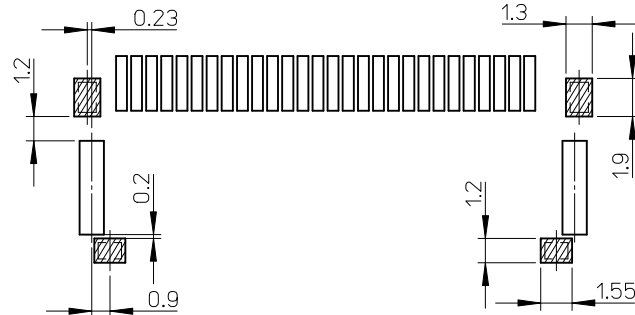
↑ ↑
極数 色
CIRCUIT SIZE COLOR

| | | | | | |
|-----------|------------|----------|-----------|------------|----------------------------|
| COLOR | 黒 BLACK | 赤 RED | 青 BLUE | 緑 GREEN | ベージュ BEIGE (NATURAL) |
| COLOR No. | 1 | 2 | 4 | 6 | 0 |

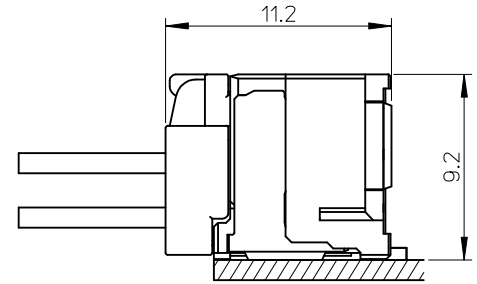
- 6. 本製品のプラスチック部に黒点・白点等が確認される場合や
色合いが異なる場合がありますが、製品性能に影響はありません。
THERE IS NO INFLUENCE IN THE PRODUCT PERFORMANCE THOUGH THE BLACK AND WHITE SPOT ETC. MIGHT BE CONFIRMED TO THE PLASTIC PART OF THIS PRODUCT AND THE SHADE MIGHT BE DIFFERENT.
- △7 トレードマーク: MXプラス1文字の製造工場を示すアルファベットにて表示
但し"J"はJAPANを示す。(例: MXJ)
キャビティー番号: 1桁から2桁の数字にて表示
金型番号: アルファベット1文字にて表示
FORMED BY MX AND 1 MORE LETTER OF ALPHABET WHICH MEAN THE MANUFACTORY.
BUT "J" MEANS JAPAN. (TO TRADE MARK) (e.g. MXJ)
AND BY 1 - 2 DIGIT NUMBER (TO CAVITY No.)
AND BY 1 LETTER OF ALPHABET (TO MOLD No.)
- △8 コネクタ下にパターン及びスルーホールを設置する場合、基板面からのパターン盛り上がりは、0.1mm MAX.とする事。
但し、図示したパターン禁止エリアは除く。
THE UPSURGE ON THE P.C.BOARD SIDE TO BE 0.1mm MAX. WHEN SET UP A PATTERN AND A THROUGH HALL UNDER THE CONNECTOR.
- 9. ELV及びRoHS適合品
ELV AND RoHS COMPLIANT
- △10 オーダー番号及びコネクタシリーズ番号
ORDER No. AND CONNECTOR SERIES No.



パターンレイアウト (参考)
PATTERN LAYOUT (REF.)



△8 パターン禁止エリア (参考)
PATTERN PROHIBITION AREA (REF.)



嵌合図
MATED CONNECTORES

| | | | | | | | |
|--|---------------------------------------|------------|---|-------------------|--|------------------------|--|
| REVISED EC NO: J2010-0024 DRWN: THANU 2009/07/03 CHKD: KASAKAWA 2009/07/05 APPR: NUKITA 2009/07/06 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | 10 UNDER | ±0.2 | DRAWN BY T. HANYU | DATE 2007/11/2 | TITLE 1.5 W/B CONN. DUAL R/A REC. ASSY | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. ASAKAWA | DATE 2007/11/2 | | | |
| | 30 OVER | ±0.3 | APPROVED BY YO. ITO | DATE 2007/11/2 | MOLEX INCORPORATED DOCUMENT NO. SD-503148-001 SHEET NO. 2 OF 3 | | |
| | 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 | | | | |

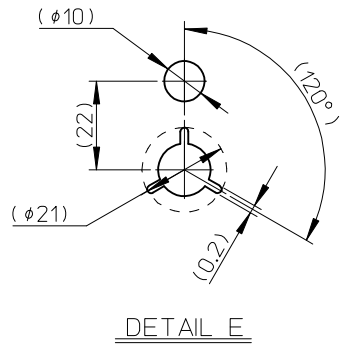
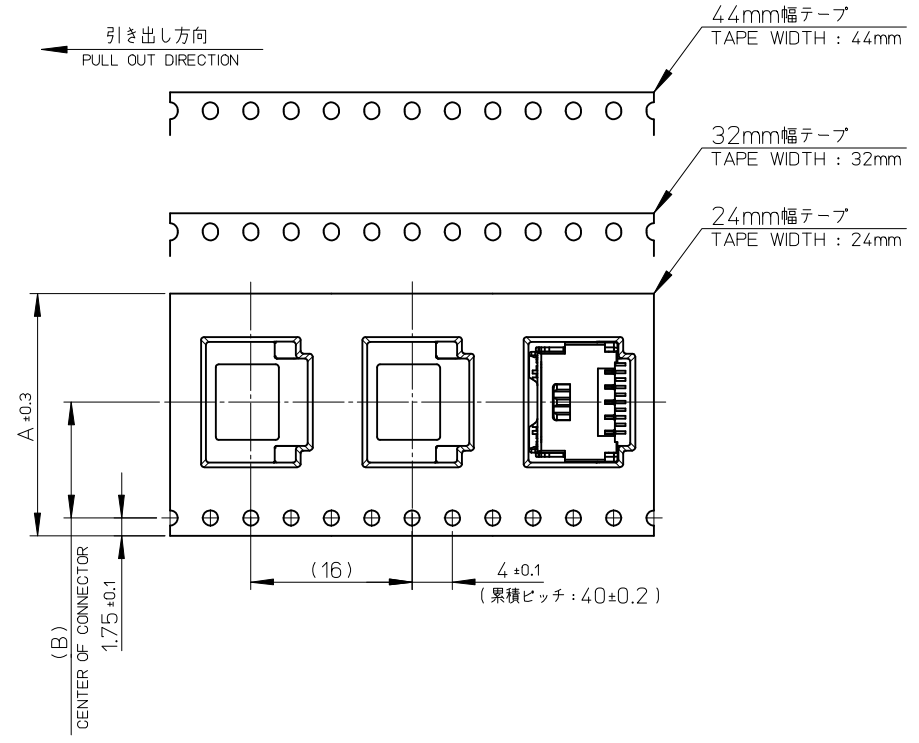
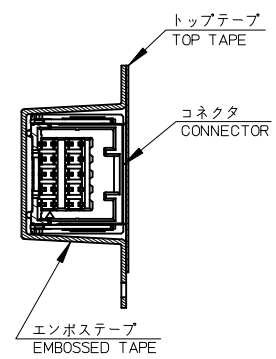
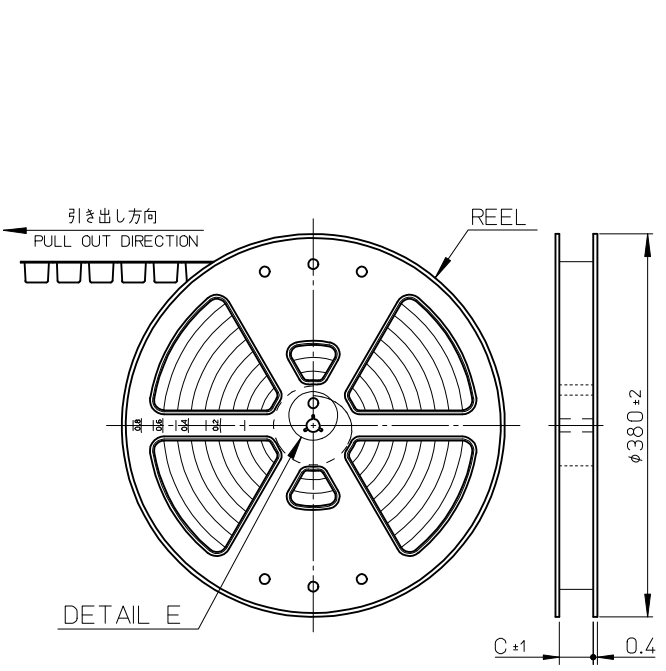
△ ORDER No. AND CONNECTOR SERIES No.

| HOUSING COLOR : BEIGE (NATURAL) | | | HOUSING COLOR : BLACK | | | HOUSING COLOR : RED | | |
|---------------------------------|--|------------------------------------|--|------------------------------------|--|------------------------------------|--|--|
| 24 | 503148 - 2490 | 503148 - **90 | 503148 - 2491 | 503148 - **91 | 503148 - 2492 | 503148 - **92 | | |
| 20 | 503148 - 2090 | | 503148 - 2091 | | 503148 - 2092 | | | |
| 16 | 503148 - 1690 | | 503148 - 1691 | | 503148 - 1692 | | | |
| 12 | 503148 - 1290 | | 503148 - 1291 | | 503148 - 1292 | | | |
| 10 | 503148 - 1090 | | 503148 - 1091 | | 503148 - 1092 | | | |
| CIRCUIT | EMBOSSSED TAPE PACKAGE オーダー番号 ORDER No. | CONNECTOR SERIES No. コネクタシリーズ番号 | EMBOSSSED TAPE PACKAGE オーダー番号 ORDER No. | CONNECTOR SERIES No. コネクタシリーズ番号 | EMBOSSSED TAPE PACKAGE オーダー番号 ORDER No. | CONNECTOR SERIES No. コネクタシリーズ番号 | | |

| HOUSING COLOR : BLUE | | | HOUSING COLOR : GREEN | | |
|----------------------|--|------------------------------------|--|------------------------------------|--|
| 24 | 503148 - 2494 | 503148 - **94 | 503148 - 2496 | 503148 - **96 | |
| 20 | 503148 - 2094 | | 503148 - 2096 | | |
| 16 | 503148 - 1694 | | 503148 - 1696 | | |
| 12 | 503148 - 1294 | | 503148 - 1296 | | |
| 10 | 503148 - 1094 | | 503148 - 1096 | | |
| CIRCUIT | EMBOSSSED TAPE PACKAGE オーダー番号 ORDER No. | CONNECTOR SERIES No. コネクタシリーズ番号 | EMBOSSSED TAPE PACKAGE オーダー番号 ORDER No. | CONNECTOR SERIES No. コネクタシリーズ番号 | |

| | | | | | | |
|---|---------------------------------------|---|----------------------------|-------------------------------|--|------------------------|
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| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. ASAKAWA | DATE 2007/11/2 | | |
| | 30 OVER | ±0.3 | APPROVED BY Y.O. ITO | DATE 2007/11/2 | MOLEX INCORPORATED | |
| | ANGULAR ±1 ° | | MATERIAL NO. SEE CHART | DOCUMENT NO. SD-503148-001 | | |
| 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 | | | | |

10 9 8 7 6 5 4 3 2 1



| | | | | |
|------|------|-----------------------------|------------------------|-------------|
| 45.5 | 20.2 | 44 | 503148-249* | 24 |
| 45.5 | 20.2 | 44 | 503148-209* | 20 |
| 33.5 | 14.2 | 32 | 503148-169* | 16 |
| 33.5 | 14.2 | 32 | 503148-129* | 12 |
| 25.5 | 11.5 | 24 | 503148-109* | 10 |
| C | B | エンボステープ幅 A WIDTH OF TAPE | △ 製品番号 MATERIAL No. | CIRCUIT No. |

| | | | | | | | | | | | |
|---|------------------|------------|--------------------------|--------------------|--|--|----------------------------|--|--------------|------------------------|---------------------------|
| REVISED EC NO: J2009-2874 DRWN: THANU CHKD: KASAKAWA APPR: S. CHIKAWA | 2009/06/22 | 2009/06/22 | 2009/06/23 | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ±0.2 | DRAWN BY T. HANYU | | DATE 2007/11/26 | TITLE EMBOSSSED TAPE PACKAGE FOR 503148-**** | | | | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. ASAKAWA | | DATE 2007/11/26 | MATERIAL NO. SEE CHART | | | | | |
| | 30 OVER | ±0.3 | APPROVED BY YO. ITO | | DATE 2007/11/26 | DOCUMENT NO. SD-503148-002 | | | | | |
| A | | | | | ANGULAR ±1 ° | 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 | | | |

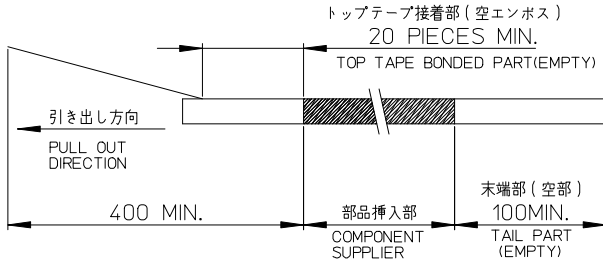
NOTE

- 1. 梱包数量 : 550個/リール
NUMBER OF CONNECTORS : 550 PIECES/REEL
- 2. リードテープ長さ
LEAD TAPE LENGTH

- 4. 製品詳細寸法については、SD-503148-001を参照して下さい。
PLEASE REFER TO SD-503148-001 FOR THE DETAILED DIMENSION OF THE CONNECTOR.

△ MATERIAL No. AND CONNECTOR SERIES No.

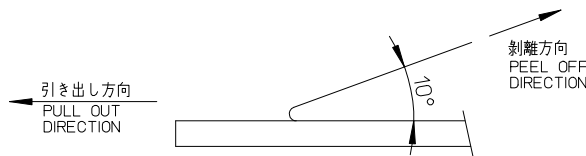
| HOUSING COLOR | MATERIAL No. | | | | |
|----------------------|--------------|--------------|--------------|--------------|----------------------------|
| | 黒 BLACK | 赤 RED | 青 BLUE | 緑 GREEN | ベージュ BEIGE (NATURAL) |
| CIRCUIT No.24 | 503148-2491 | 503148-2492 | 503148-2494 | 503148-2496 | 503148-2490 |
| CIRCUIT No.20 | ↑ 2091 | ↑ 2092 | ↑ 2094 | ↑ 2096 | ↑ 2090 |
| CIRCUIT No.16 | ↓ 1691 | ↓ 1692 | ↓ 1694 | ↓ 1696 | ↓ 1690 |
| CIRCUIT No.12 | ↓ 1291 | ↓ 1292 | ↓ 1294 | ↓ 1296 | ↓ 1290 |
| CIRCUIT No.10 | 503148-1091 | 503148-1092 | 503148-1094 | 503148-1096 | 503148-1090 |
| CONNECTOR SERIES No. | 503148- **91 | 503148- **92 | 503148- **94 | 503148- **96 | 503148- **90 |



- 3. トップテープの剥離強度 : 0.1~0.3 N (10.2~132.5gf)
剥離方向は下記参照。
PEELING OFF FORCE OF TOP TAPE
PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE.

尚、本規格は出荷時に適用。(但し、輸送時に剥離が発生しない事)
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTION.

- 6. 材料
MATERIAL
キャリアテープ : ポリスチレン
CARRIER TAPE : POLYSTYRENE
トップテープ : ポリエステル、ポリエチレン、ポリエチレンテレフタレート
TOP TAPE : POLYESTER, POLYETHYLENE, POLYETHYLENE TEREPHTHALATE
リール : ポリスチレン (リサイクル材含む)
REEL : POLYSTYRENE (RECYCLE MATERIAL CONTAINED)
- 7. ELV及びRoHS適合品
ELV AND RoHS COMPLIANT



| | | | | | | | |
|---|---------------------------------------|-----------|----------------------------|---|--|------------------------|------------------------|
| REVISED EC NO: J2009-2874 DRWN: HANYU 2009/06/22 CHKD: KASAKAWA 2009/06/22 APPR: S. GHIKAWA 2009/06/23 REV A | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE 2:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ±0.2 | DRAWN BY T. HANYU | DATE 2007/11/26 | TITLE EMBOSSED TAPE PACKAGE FOR 503148-**** | | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. ASAKAWA | DATE 2007/11/26 | MOLEX INCORPORATED | | |
| | 30 OVER | ±0.3 | APPROVED BY Y.O. ITO | DATE 2007/11/26 | MATERIAL NO. SD-503148-002 | DOCUMENT NO. | SHEET NO. 2 OF 2 |
| ANGULAR ±1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE CHART | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |