

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [5031481690](#)
Status: **Active**
Description: 1.50mm (.059") Pitch CLIK-Mate™ Wire-to-Board PCB Receptacle, Dual Row, Right Angle, 16 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) 16
 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

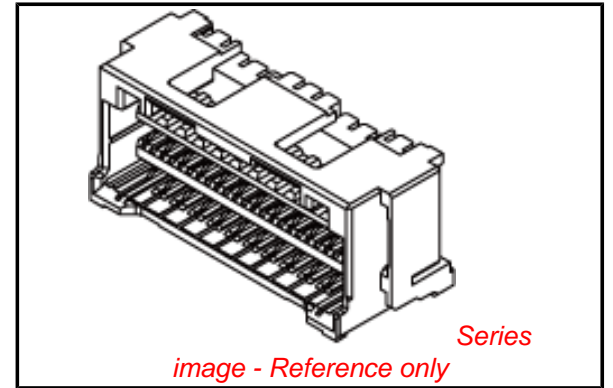


image - Reference only

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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

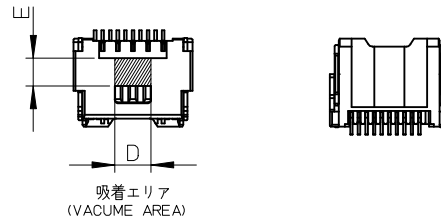
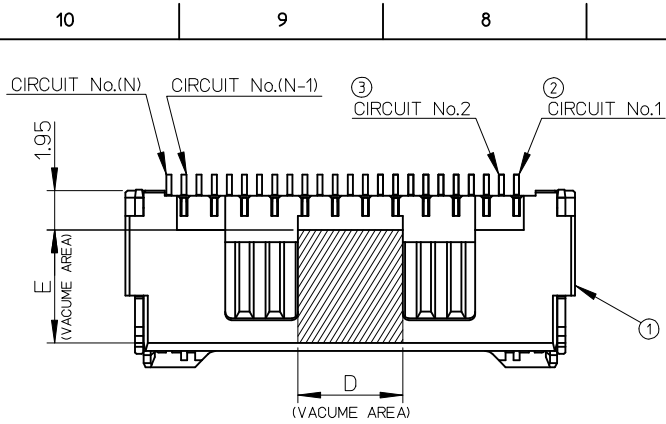
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

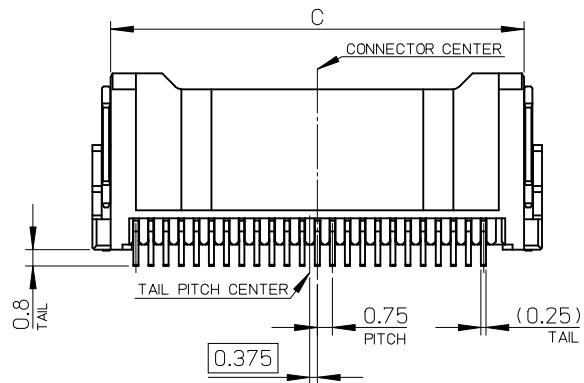
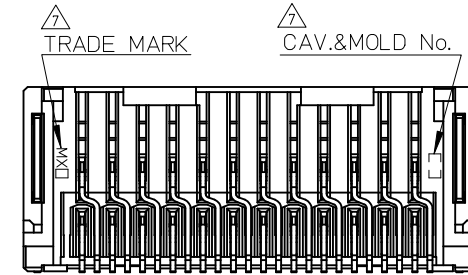
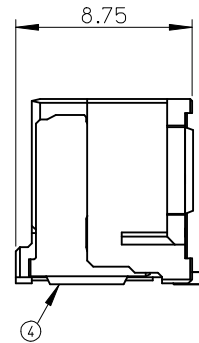
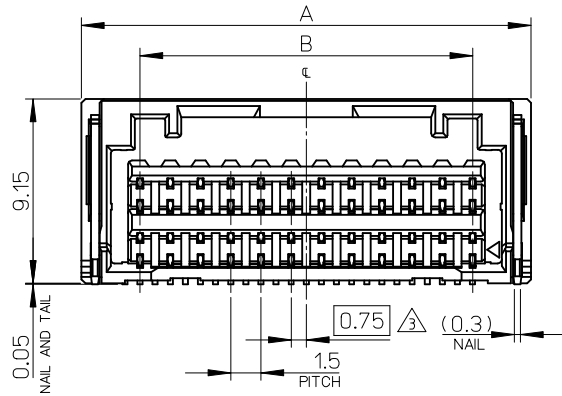
[503148Series](#)

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	MATERIAL NO. SEE CHART	
	30 OVER	±0.3	APPROVED BY Y.O. ITO	DATE 2007/11/2	DOCUMENT NO. SD-503148-001	
	ANGULAR ±1 °	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		
					SHEET NO. 1 OF 3	

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

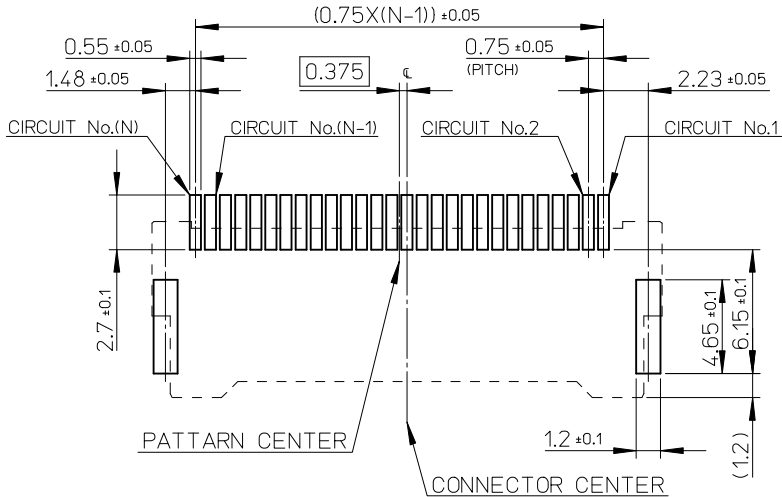
△4 端子テール部及びネイルに錫メッキを使用している為、
外観に摺動痕が付く場合があります。
製品番号

MATERIAL No.
503148 - **9*

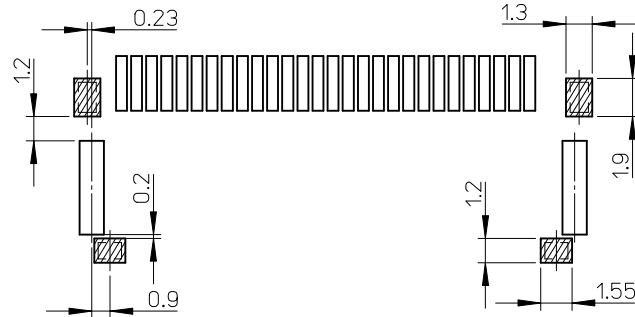
↑ ↑
極数 色
CIRCUIT SIZE COLOR

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

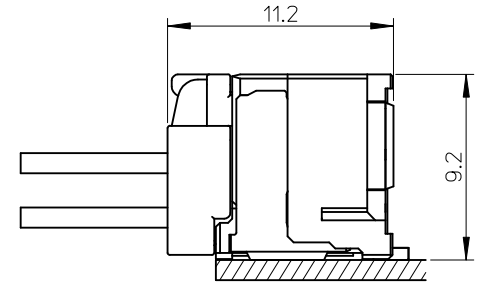
- 6. 本製品のプラスチック部に黒点・白点等が確認される場合や
色合いが異なる場合がありますが、製品性能に影響はありません。
THERE IS NO INFLUENCE IN THE PRODUCT
PERFORMANCE THOUGH THE BLACK AND WHITE SPOT ETC.
MIGHT BE CONFIRMED TO THE PLASTIC PART OF THIS PRODUCT AND
THE SHADE MIGHT BE DIFFERENT.
- △7 トレードマーク: MXプラス1文字の製造工場を示すアルファベットにて表示
但し"J"はJAPANを示す。(例: MXJ)
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	
	ANGULAR	±1 °	MATERIAL NO.	DOCUMENT NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-503148-001		SHEET NO. 2 OF 3

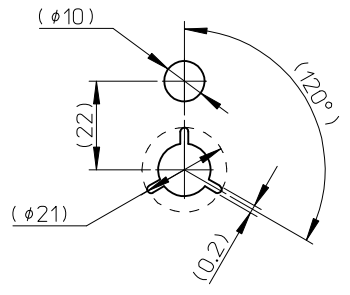
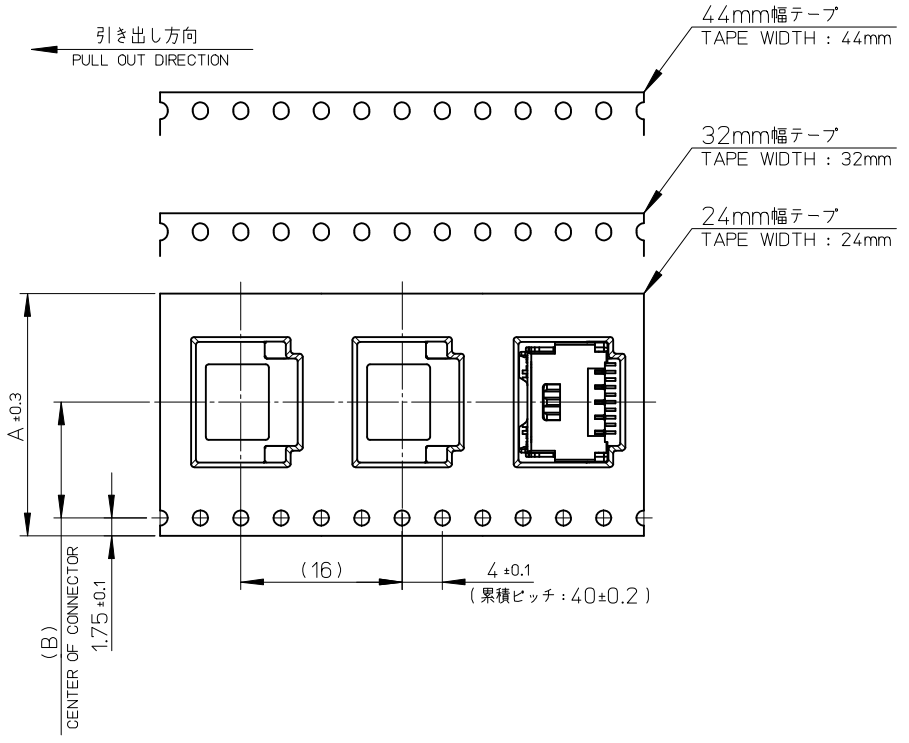
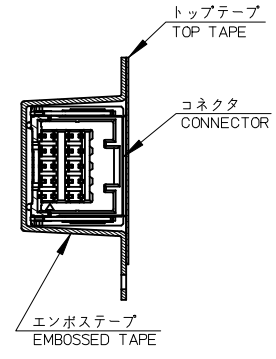
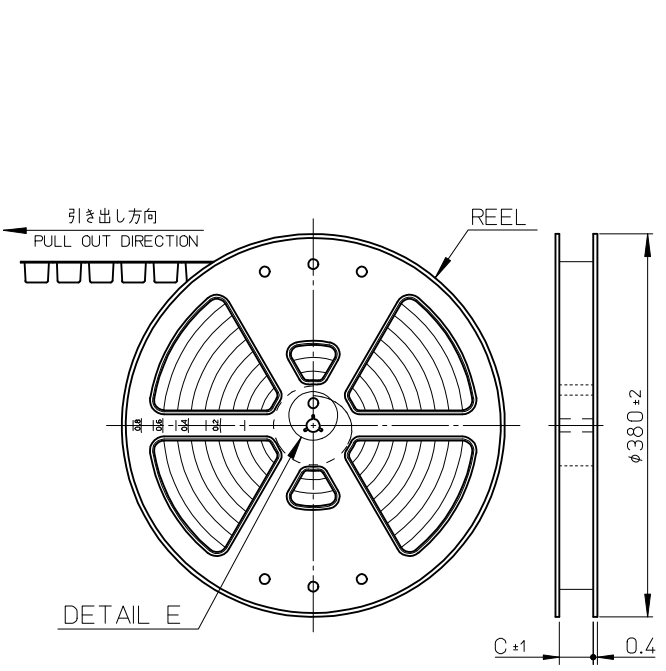
△ ORDER No. AND CONNECTOR SERIES No.

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	

REVISED EC NO: J2010-0024 2009/07/03 DRWN:THANYU 2009/07/05 CHKD:KASAKAWA 2009/07/06 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 YU. ITO	DATE 2007/11/2	MOLEX INCORPORATED			
	ANGULAR ±1 °		MATERIAL NO. SEE CHART					
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



DETAIL E

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	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	REV	ANGULAR	±1 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 2			

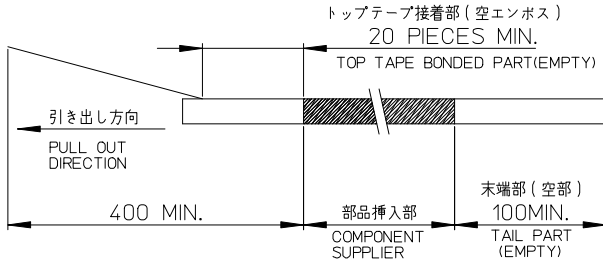
NOTE

- 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.

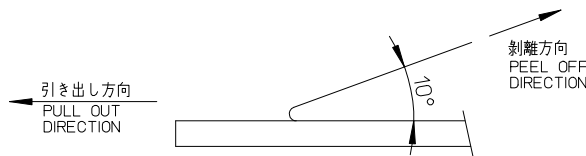
HOUSING COLOR	MATERIAL No.				
	黒 BLACK	赤 RED	青 BLUE	緑 GREEN	ベージュ BEIGE (NATURAL)
CIRCUIT No.24	503148-2491	503148-2492	503148-2494	503148-2496	503148-2490
CIRCUIT No.20	↑ 2091	↑ 2092	↑ 2094	↑ 2096	↑ 2090
CIRCUIT No.16	↓ 1691	↓ 1692	↓ 1694	↓ 1696	↓ 1690
CIRCUIT No.12	↓ 1291	↓ 1292	↓ 1294	↓ 1296	↓ 1290
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 EMBOSSD 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	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		