

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0559099974](#)  
**Status:** **Active**  
**Overview:** [slimstack\\_mm016\\_pitch](#)  
**Description:** 0.40mm (.016") Pitch Board-to-Board SlimStack™ Plug, Surface Mount, Dual Row, Vertical Stacking, 1.50mm (.059") Stacking Height, Lead-free, 12 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-51338-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

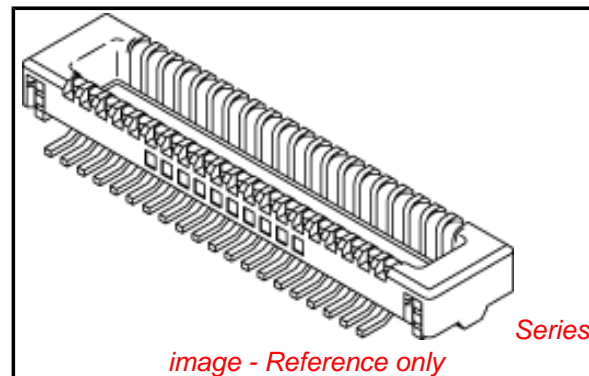
Product Family	PCB Headers
Series	<a href="#">55909</a>
Application	Board-to-Board
Comments	Solder Tab Plating: Tin
Overview	<a href="#">slimstack_mm016_pitch</a>
Product Name	SlimStack™

**Physical**

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12
Color - Resin	Black
Durability (mating cycles max)	30
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	Yes
Mated Height (in)	0.059 In
Mated Height (mm)	1.50 mm
Material - Metal	Brass, Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.020 In
PC Tail Length (mm)	0.50 mm
PCB Locator	No
PCB Retention	Yes
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.016 In
Pitch - Mating Interface (mm)	0.40 mm
Plating min: Mating (µin)	10
Plating min: Mating (µm)	0.25
Plating min: Termination (µin)	4
Plating min: Termination (µm)	0.1
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-25°C to +85°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	0.3A
Voltage - Maximum	50V



**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Halogen-Free**

**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.

**China RoHS**



**Search Parts in this Series**

[55909Series](#)

**Mates With**

[51338](#) Board-to-Board SlimStack™ Receptacle

## Material Info

### Reference - Drawing Numbers

Packaging Specification

Product Specification

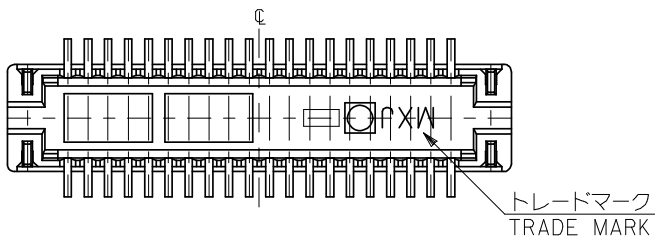
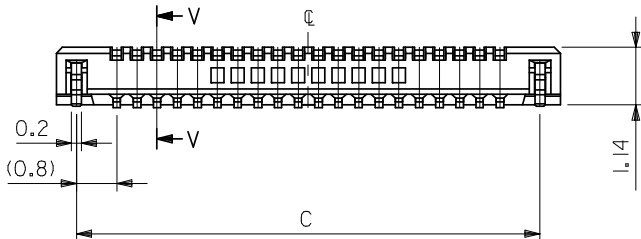
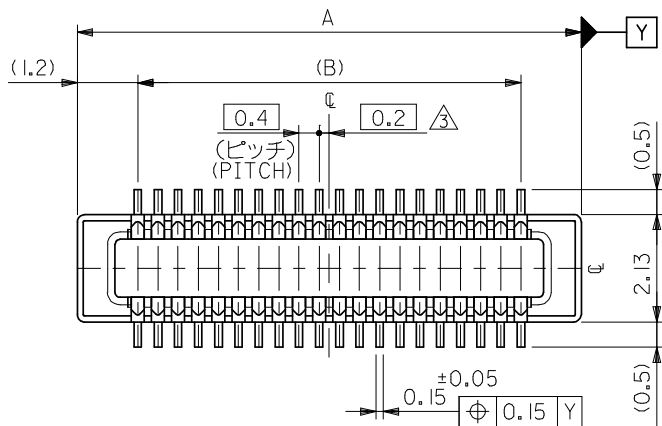
SPK-55909-001

PS-51338-002, RPS-500913-005, RPS-51338-013,  
RPS-51338-018, RPS-51338-019, RPS-51338-020,  
RPS-51338-022, RPS-51338-025, RPS-51338-027,  
RPS-51338-030, RPS-51338-031, RPS-55909-001  
SD-55909-003, SD-55909-004

Sales Drawing

This document was generated on 05/27/2010

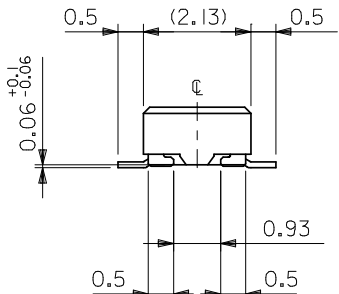
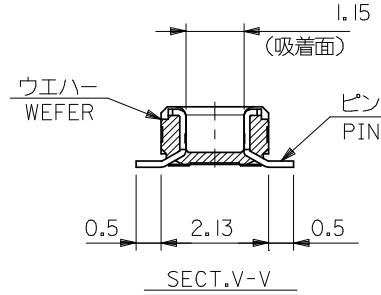
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注記 NOTES:

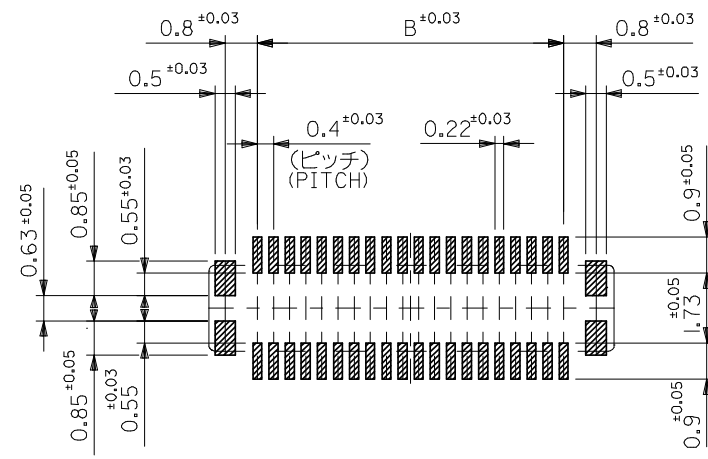
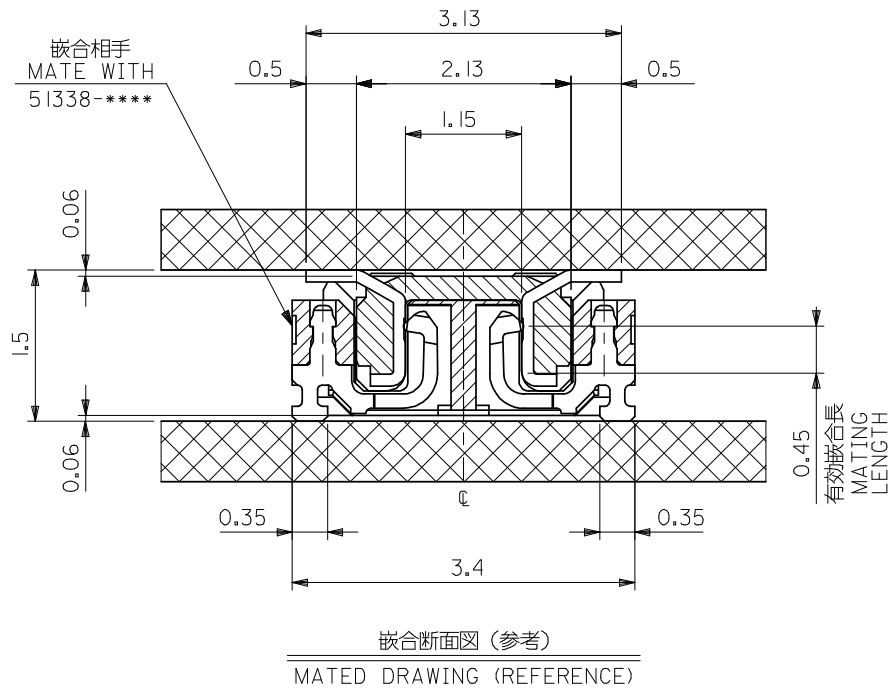
1. 使用材料 MATERIAL  
 ウェハー: 液晶ポリマー (LCP) ガラス充填 UL94V-0 (黒)  
 WAFER: LIQUID CRYSTAL POLYMER (GLASS FILLED)  
 UL94V-0 (COLOR: BLACK)  
 ピン: 黄銅 (t=0.12)  
 PIN: BRASS (t=0.12)  
 金具: リン青銅 (t=0.2)  
 FITTING NAIL: PHOSPHOR BRONZE (t=0.2)
2. メッキ仕様 PLATING  
 ピン PIN  
 金メッキ 0.2 マイクロメートル以上 (コンタクト部)  
 GOLD 0.2MICROMETER MINIMUM (CONTACT AREA)  
 金メッキ 0.4 マイクロメートル以下 (テール部)  
 GOLD 0.4MICROMETER MAXIMUM (TAIL AREA)  
 下地メッキ: ニッケルメッキ 1.5 マイクロメートル以上  
 UNDER PLATING: NICKEL 1.5MICROMETER MINIMUM  
 金具 FITTING NAIL  
 錫メッキ 1.0 マイクロメートル以上  
 TIN PLATING 1.0MICROMETER MINIMUM  
 下地メッキ: ニッケルメッキ 1.0 マイクロメートル以上  
 UNDER PLATING: NICKEL 1.0MICROMETER MINIMUM

3. (全極数/2) = 偶数の場合に適用。  
 APPLY FOR (CIRCUIT/2)=EVEN.
4. 嵌合相手: 51338シリーズ  
 MATE WITH: 51338 SERIES.
5. テール平坦度は、0.08以下  
 テール及び金具の平坦度は、0.1以下  
 TAIL COPLANARITY TO BE 0.08 MAXIMUM  
 TAIL AND FITTING NAIL  
 COPLANARITY TO BE 0.1 MAXIMUM
6. 本製品は 55909-\*\*\*3 の鉛フリー品である。  
 THIS PRODUCT IS LEAD FREE OF 55909-\*\*\*3



25.2	23.6	26.0	55909-1274	55909-1273	120
21.2	19.6	22.0	55909-1074	55909-1073	100
19.2	17.6	20.0	55909-0974	55909-0973	90
17.2	15.6	18.0	55909-0874	55909-0873	80
15.2	13.6	16.0	55909-0774	55909-0773	70
13.2	11.6	14.0	55909-0674	55909-0673	60
11.2	9.6	12.0	55909-0574	55909-0573	50
9.2	7.6	10.0	55909-0474	55909-0473	40
8.0	6.4	8.8	55909-3474	55909-3473	34
7.2	5.6	8.0	55909-0374	55909-0373	30
6.4	4.8	7.2	55909-2674	55909-2673	26
6.0	4.4	6.8	55909-2474	55909-2473	24
5.6	4.0	6.4	55909-2274	55909-2273	22
5.2	3.6	6.0	55909-0274	55909-0273	20
3.6	2.0	4.4	55909-9974	55909-9973	12
C	B	A	EMBOSSED TAPE PKG. ORDER No. オーダー番号	MATERIAL No.	CKT.

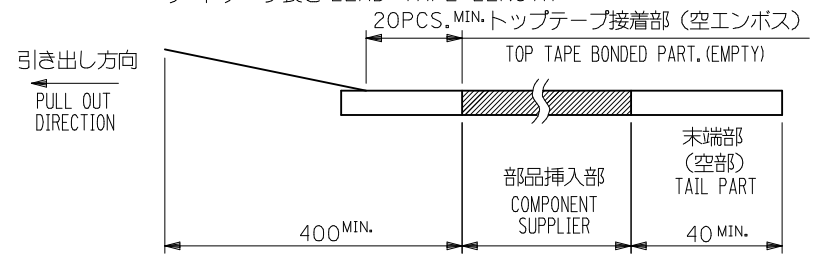
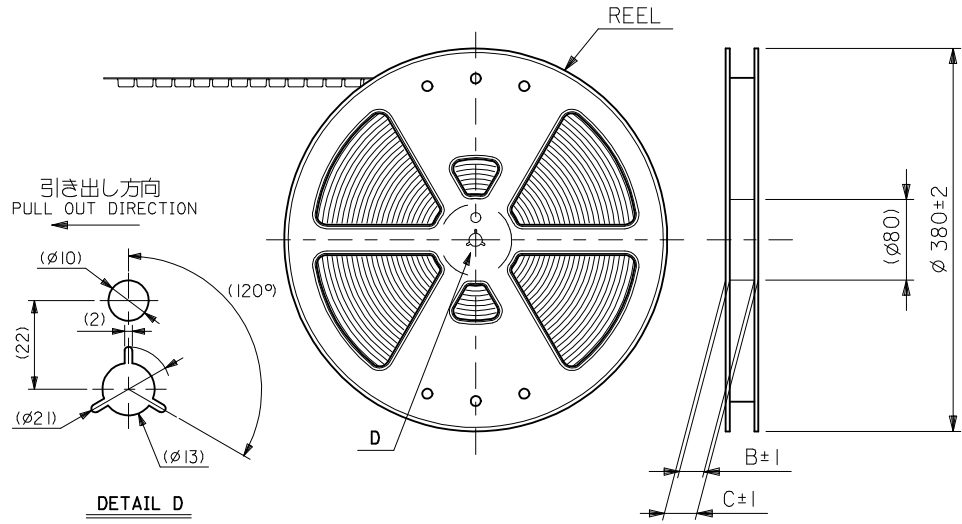
REVISED EC NO.: J2009-0301 DRWN: MWABEI 2008/08/27 CHKD: THARUYAMA 2008/08/28 APPR: NUKITA 2008/08/28	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 55909-***73
	10 UNDER	±0.2	DRAWN BY HSHIMABUKURO	DATE 2004/02/20	TITLE 0.4 B-TO-B CONN. PLUG ASSY (HGT=1.5) WITH NAIL -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	MATERIAL NO. SD-55909-003		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	SHEET NO. 1 OF 2		
	ANGULAR ±1/2 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO. SD-55909-003	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



REVISED EC NO.: J2009-0301 DRAWN: MWABEI 2008/08/27 CHKD: THARUYAMA 2008/08/28 APPR: NUKITA 2008/08/28	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	55909-**73	MODEL NO.
	10 UNDER	±0.2	DRAWN BY HSHIMABUKURO	DATE 2004/02/20	TITLE 0.4 B-TO-B CONN. PLUG ASSY (HGT=1.5) WITH NAIL -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	DOCUMENT NO. SD-55909-003		
REV	DESCRIPTION	ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 1	SHEET NO. 2 OF 2		EN-02JA(021)	

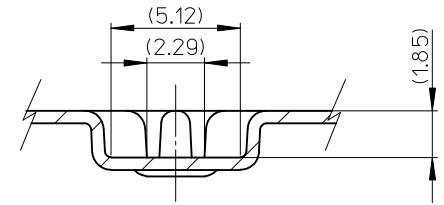
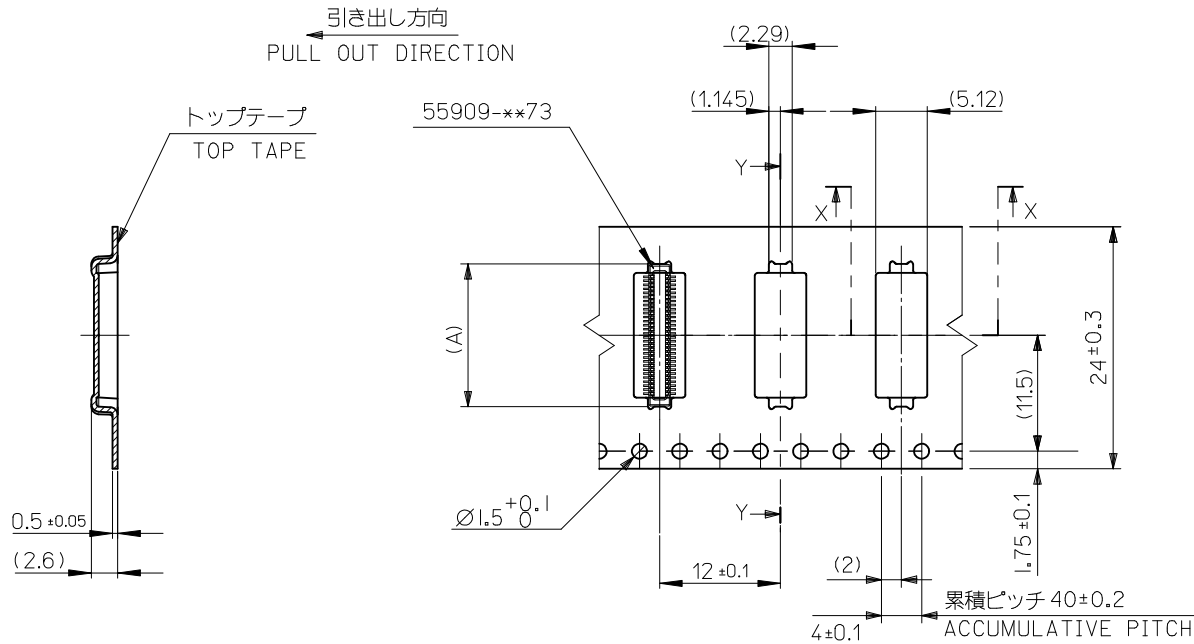
NOTES

- 製品詳細寸法については製品単体図面を参照下さい。  
RE DETAILED DIMENSION, SEE PRODUCT DRAWING.
- 梱包数量：2500個/リール  
NUMBER OF CONNECTORS : 2500PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- 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 (PS) <リサイクル材を含む>  
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>
- ELV 及び RoHS 適合品。  
ELV AND RoHS COMPLIANT.

REVISED EC NO: J2010-0487 DRWN:TKAIHO 2009/09/18 CHKD:SMARUYAMA 2009/09/18 APPR:MSASAO 2009/09/18	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 55909-**74
	10 UNDER	±0.2	DRAWN BY H. SHIMAB	DATE 2004/02/20	TITLE 0.4 B-T-O-B CONN PLUG ASSY(HGT=1.5) EMBSTP PKG		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	MATERIAL NO. SEE CHART		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	DOCUMENT NO. SD-55909-004		
	ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 5		

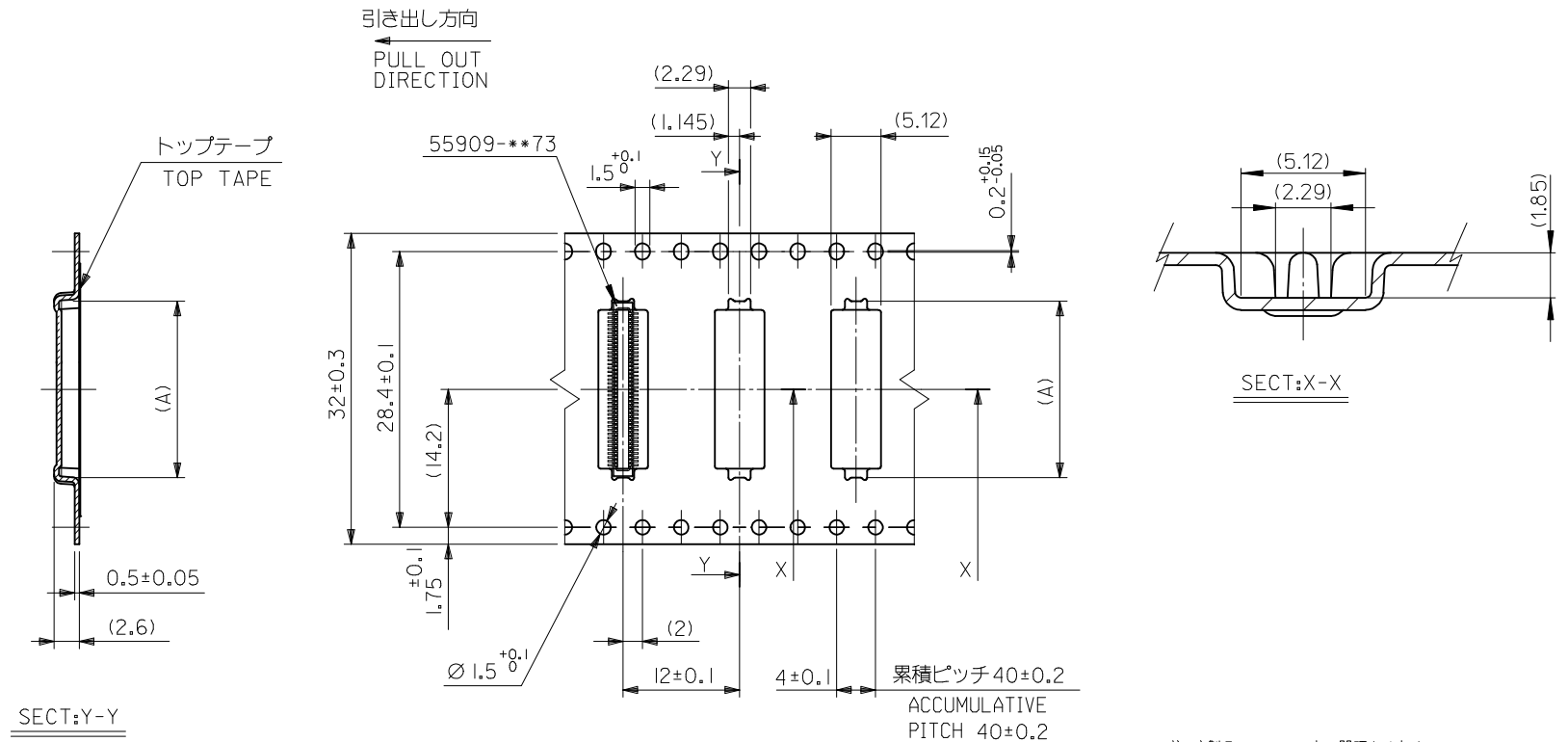


SECT. Y-Y

注記) 製品がポケット内に問題なく収まること。  
NOTE. Pocket should contain product smoothly.

24	29.4	25.4	14.16	55909-0674	60	
			12.16	55909-0574	50	
			10.16	55909-0474	40	
			8.96	55909-3474	34	
			8.16	55909-0374	30	
			7.36	55909-2674	26	
			6.96	55909-2474	24	
			6.56	55909-2274	22	
			6.16	55909-0274	20	
キャリアテープ幅 CARRIER TAPE WIDTH		C	B	(A)	MATERIAL NO.	CKT

REVISED EC NO: J2010-0487 DRWN:TKAIHO 2009/09/18 CHKD:SMARUYAMA 2009/09/18 APPR:MSASAO 2009/09/18	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	MODEL NO. 55909-**74	
		10 UNDER	±0.2	DRAWN BY H. SHIMAB	DATE 2004/02/20	TITLE 0.4 B-T-O-B CONN PLUG ASSY(HGT=1.5) EMBSTP PKG		
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	MOLEX INCORPORATED		
		30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	DOCUMENT NO. SD-55909-004		
REV	DESCRIPTION	ANGULAR	±3 °	MATERIAL NO.	SEE CHART	SHEET NO. 2 OF 5		
		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			

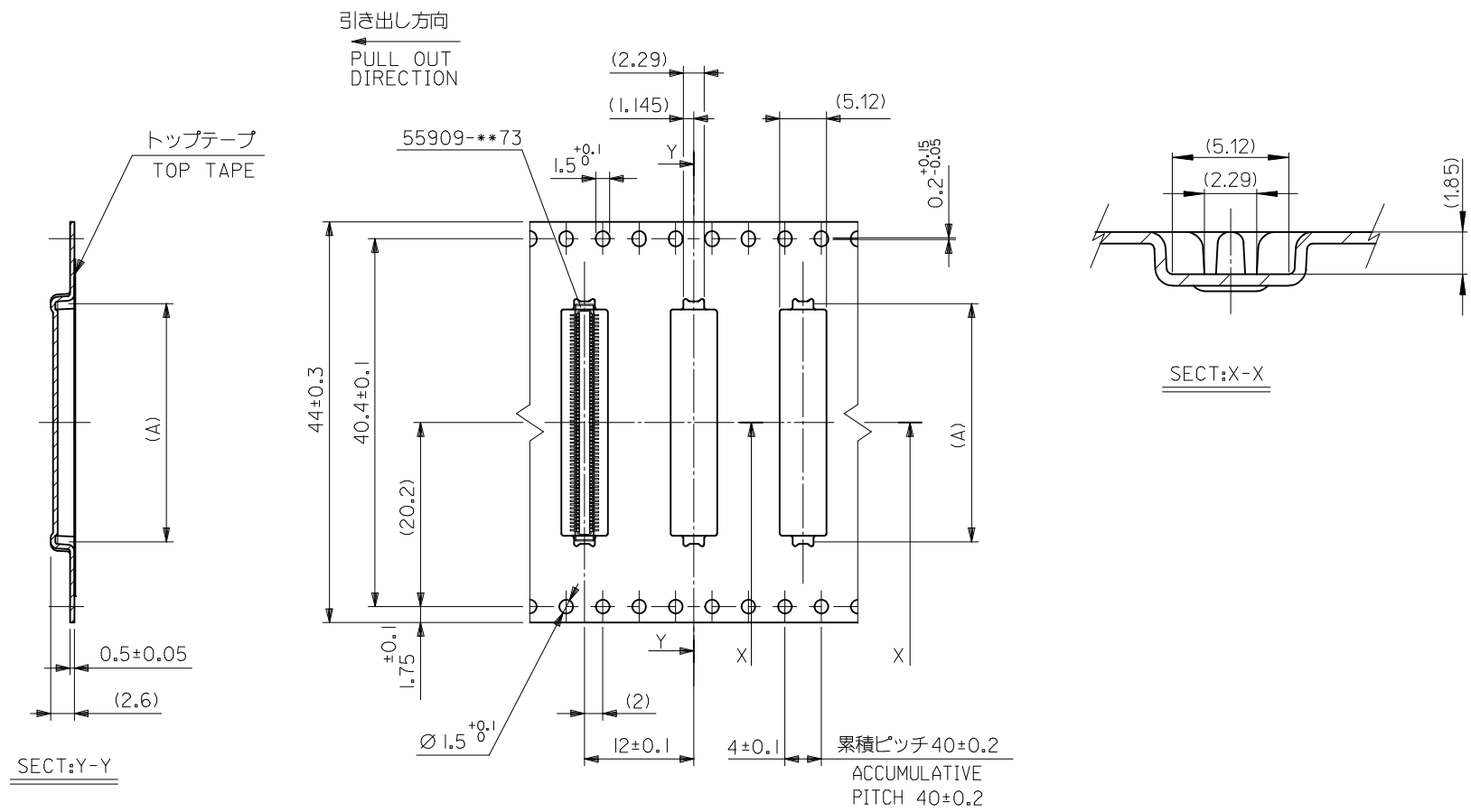


注記) 製品がポケット内に問題なく収まること。  
NOTE: Pocket should contain product smoothly.

32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE

32	37.4	33.4	19.16	55909-0974	90
			18.16	55909-0874	80
			16.16	55909-0774	70
キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2010-0487 DRWN:TKAIHO 2009/09/18 CHKD:SMARUYAMA 2009/09/18 APPR:MSASAO 2009/09/18	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 55909-**74
	10 UNDER	±0.2	DRAWN BY H. SHIMAB	DATE 2004/02/20	TITLE 0.4 B-T0-B CONN PLUG ASSY(HGT=1.5) EMBSTP PKG		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	THIRD ANGLE PROJECTION		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	MOLEX INCORPORATED		
DESCRIPTION	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		DOCUMENT NO. SD-55909-004	SHEET NO. 3 OF 5
REV	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



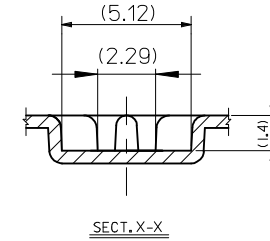
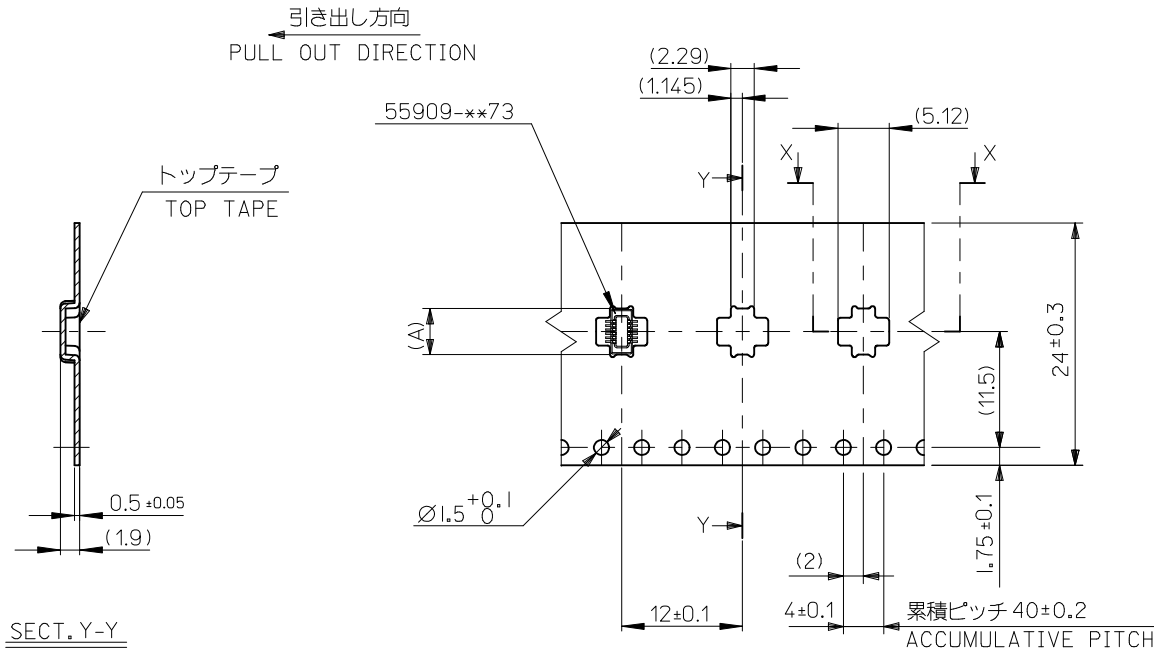
注記) 製品がポケット内に問題なく収まること。  
NOTE. Pocket should contain product smoothly.

4.4mm幅キャリアテープ  
44mm WIDTH CARRIER TAPE

44	49.4	45.4	22.16	55909-1074	100
キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2010-0487 DRWN:TKAIHO 2009/09/18 CH'KD:SMARUYAMA 2009/09/18 APPR:MSASAO 2009/09/18	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---		DESIGN UNITS METRIC		55909-**74 MODEL NO.		
		10 UNDER	±0.2	DRAWN BY	DATE	TITLE						
		10 OVER 30 UNDER	±0.25	H. SHIMAB	2004/02/20	0.4 B-TO-B CONN PLUG ASSY(HGT=1.5) EMBSTP PKG						
		30 OVER	±0.3	CHECKED BY	DATE	MATERIAL NO. DOCUMENT NO. SHEET NO.						
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY		DATE		MOLEX INCORPORATED				
				M. SASAO		2004/02/20		SEE CHART SD-55909-004				
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
				A3								





SECT. Y-Y

注記) 製品がポケット内に問題なく収まること。  
NOTE. Pocket should contain product smoothly.

24	29.4	25.4	4.56	55909-9974	12
キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	MATERIAL NO.	CKT

REVISED EC NO: J2010-0487 DRWN:TKAIHO 2009/09/18 CHKD:SMARUYAMA 2009/09/18 APPR:MSASAO 2009/09/18	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	MODEL NO. 55909-**74	THIRD ANGLE PROJECTION
	REV	10 UNDER ±0.2	DRAWN BY H. SHIMAB	DATE 2004/02/20	TITLE 0.4 B-T-O-B CONN PLUG ASSY(HGT=1.5) EMBSTP PKG		
		10 OVER 30 UNDER ±0.25	CHECKED BY K. TOJO	DATE 2004/02/20	MOLEX INCORPORATED		
		30 OVER ±0.3	APPROVED BY M. SASAO	DATE 2004/02/20	DOCUMENT NO. SD-55909-004		
		ANGULAR ±3 °	MATERIAL NO.	SHEET NO. 5 OF 5			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART				
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			