

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

**Part Number:** [0533091070](#)  
**Status:** **Active**  
**Description:** 0.80mm (.031") Pitch Board-to-Board Header, Surface Mount, Dual Row, Right Angle, Lead-free, 10 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-52588-031 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-52465-014 \(PDF\)](#)

**General**

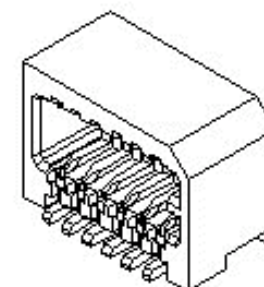
Product Family	PCB Headers
Series	<a href="#">53309</a>
Application	Board-to-Board
Product Name	N/A

**Physical**

Breakaway	No
Circuits (Loaded)	10
Circuits (maximum)	10
Color - Resin	Natural
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)	0.222 In
Mated Height (mm)	5.65 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.016 In, 0.020 In
PC Tail Length (mm)	0.40 mm, 0.50 mm
PCB Locator	No
PCB Retention	None
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.031 In
Pitch - Mating Interface (mm)	0.80 mm
Plating min: Mating (µin)	40
Plating min: Mating (µm)	1
Plating min: Termination (µin)	40
Plating min: Termination (µm)	1
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-20°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	0.5A
Voltage - Maximum	50V



*image - Reference only*

*Series*

**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](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.

**Search Parts in this Series**

[53309Series](#)

**Mates With**

[52465 Board-to-Board Receptacle](#)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

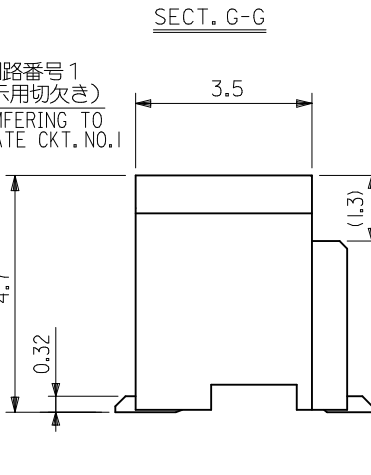
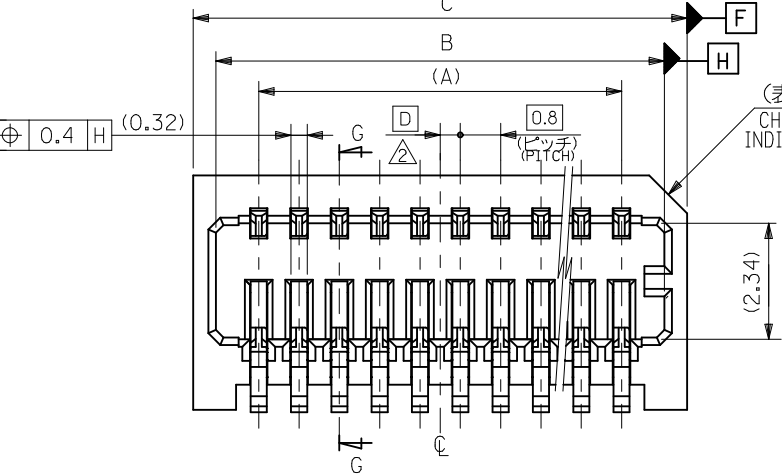
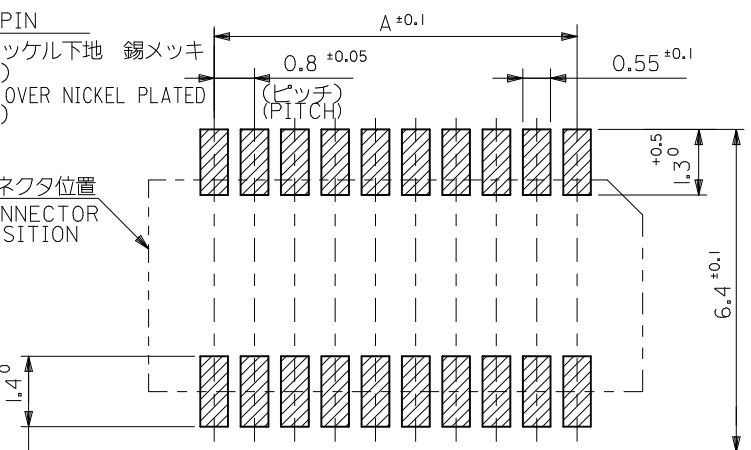
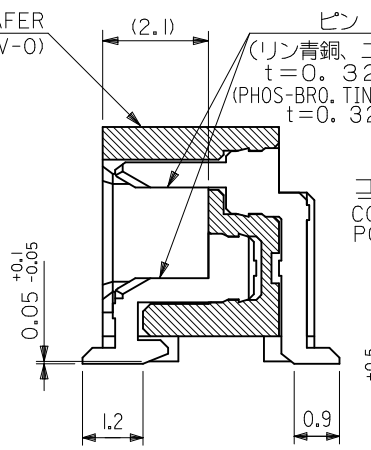
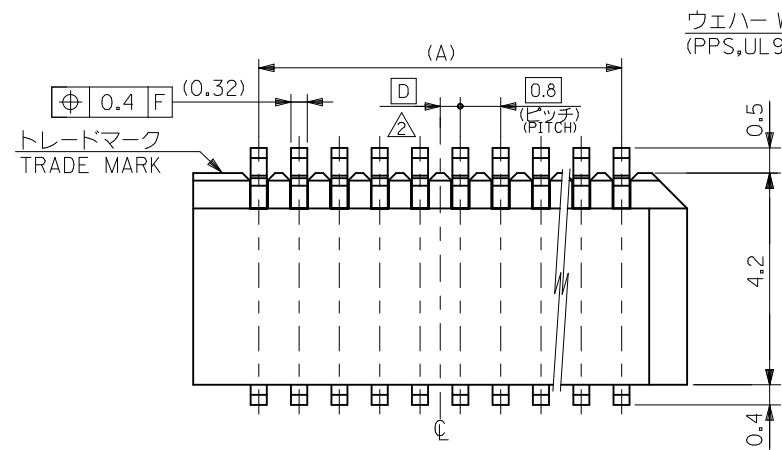
PS-52465-014, PS-52588-031, RPS-52465-042,  
RPS-52465-047, RPS-52465-049, RPS-52588-040,  
RPS-52588-041

Sales Drawing

SD-53309-011, SD-53309-012

This document was generated on 04/16/2010

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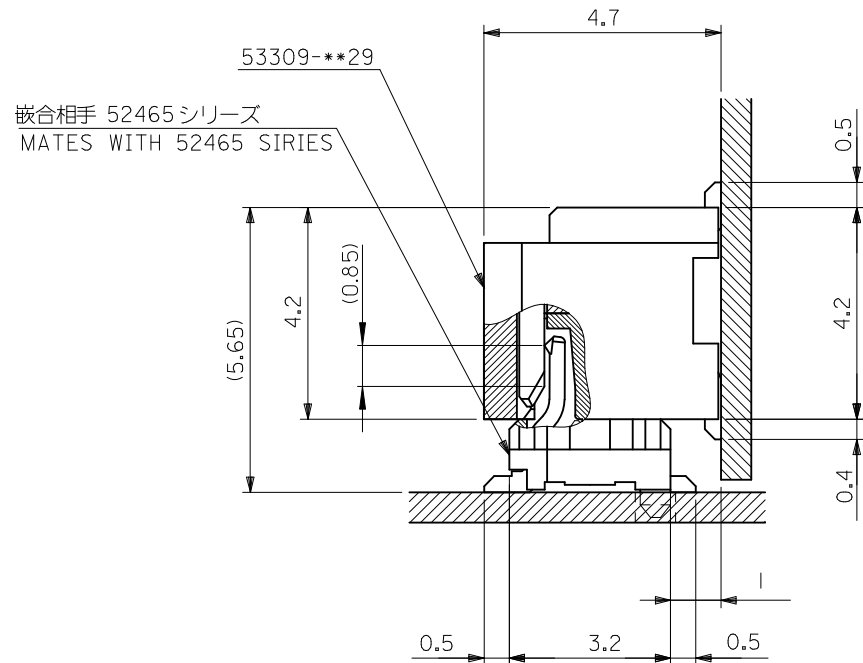
0.4	17.8	16.9	15.2	53309-4029	40	
0.8	17.0	16.1	14.4	-3829	38	
0.4	16.2	15.3	13.6	-3629	36	
0.8	15.4	14.5	12.8	-3429	34	
0.4	14.6	13.7	12.0	-3229	32	
0.8	13.8	12.9	11.2	-3029	30	
0.4	13.0	12.1	10.4	-2829	28	
0.8	12.2	11.3	9.6	-2629	26	
0.4	11.4	10.5	8.8	-2429	24	
0.8	10.6	9.7	8.0	-2229	22	
0.4	9.8	8.9	7.2	-2029	20	
0.8	9.0	8.1	6.4	-1829	18	
0.4	8.2	7.3	5.6	-1629	16	
0.8	7.4	6.5	4.8	-1429	14	
0.4	6.6	5.7	4.0	-1229	12	
53309-**29	0.8	5.8	4.9	3.2	53309-1029	10
MODEL NO.	D	C	B	A	MATERIAL NO.	極数 CKT.

注記 NOTES

1. 嵌合相手: 52465,52588 シリーズ  
MATE WITH : 52465,52588 SERIES
2. ウェハーの C から隣接するピンの C 迄の位置を示す。  
SHOW POSITION FROM C OF WAFER TO C OF ADJACENT PINS.
3. 本製品は 53309-\*\*27 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53309-\*\*27

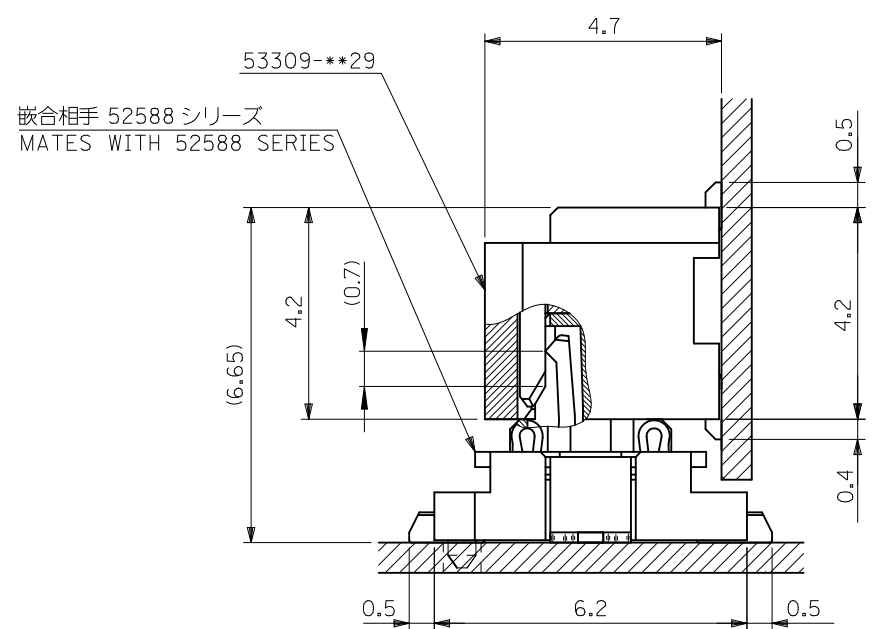
REVISED EC NO: J2010-1285 DRWN: YON002 2009/12/17 CHKD: SMARUYAMA 2009/12/17 APPR: SMARUYAMA 2009/12/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY M. NINOMIYA	DATE 2004/03/10	TITLE 0.8 B/B CONN.WAFER ASS'Y R/A SMT(WITHOUT BOSS)		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/03/10	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/03/10	DOCUMENT NO. SD-53309-011		
REV	DESCRIPTION	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	SHEET NO. 1 OF 2	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



嵌合相手 52465 シリーズ  
MATES WITH 52465 SERIES

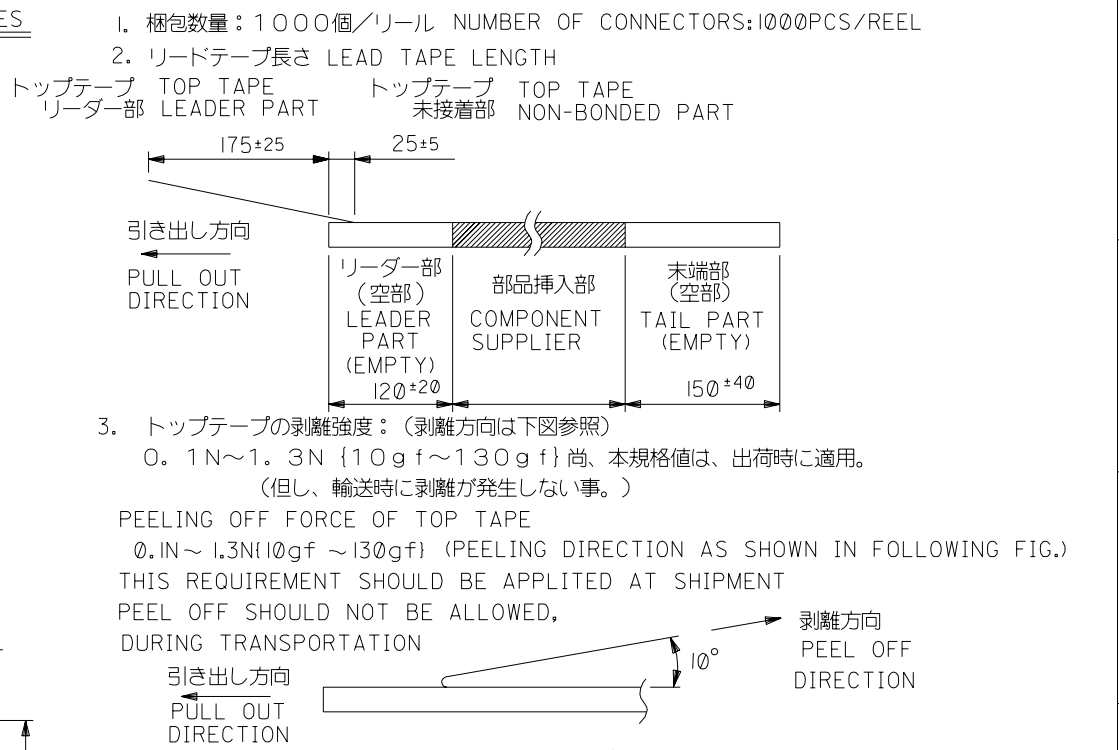
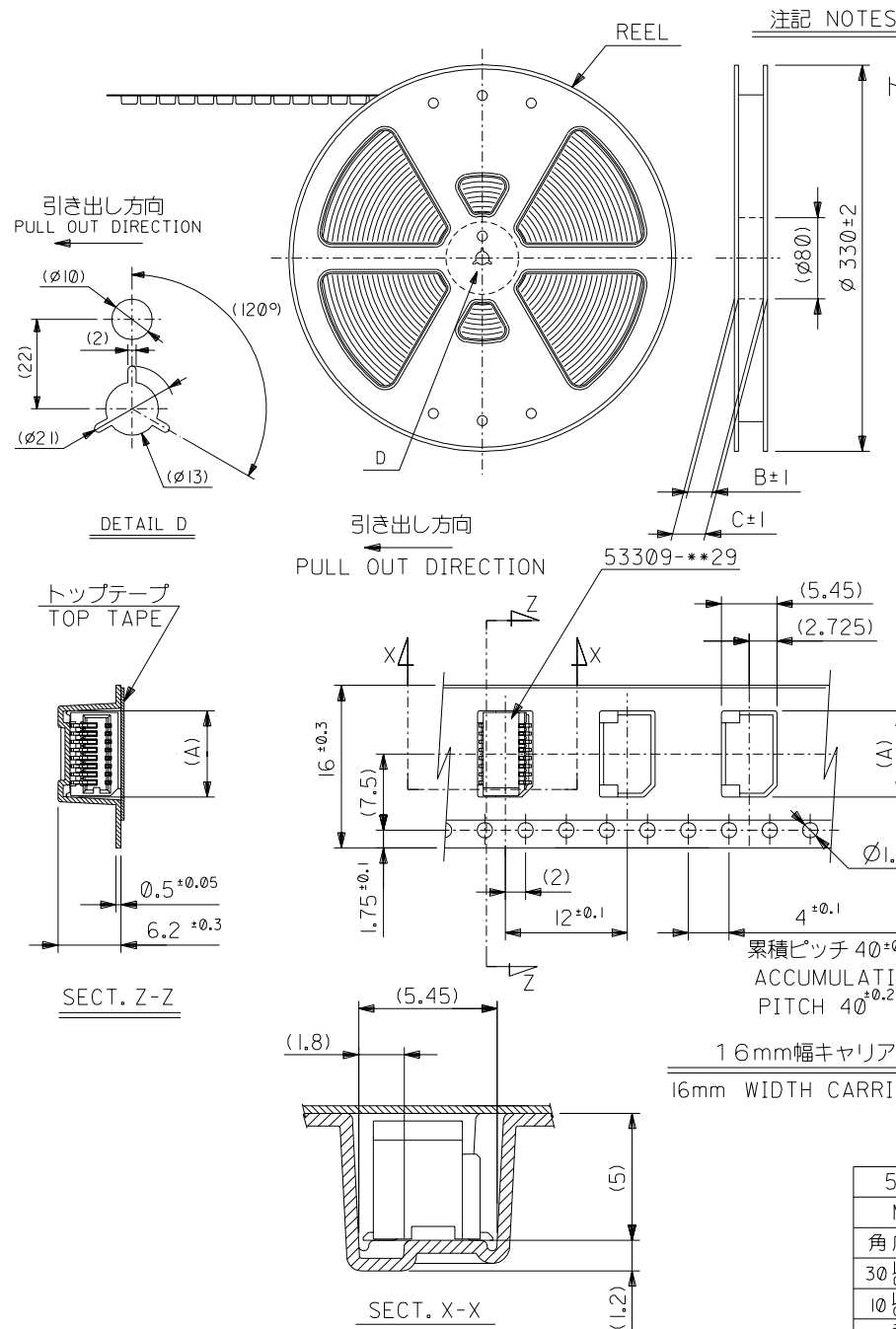
嵌合状態図 (参考)  
MATED DRAWING(REF.)



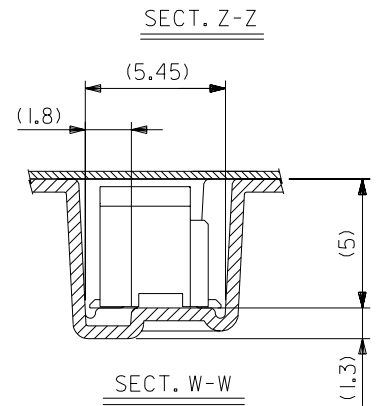
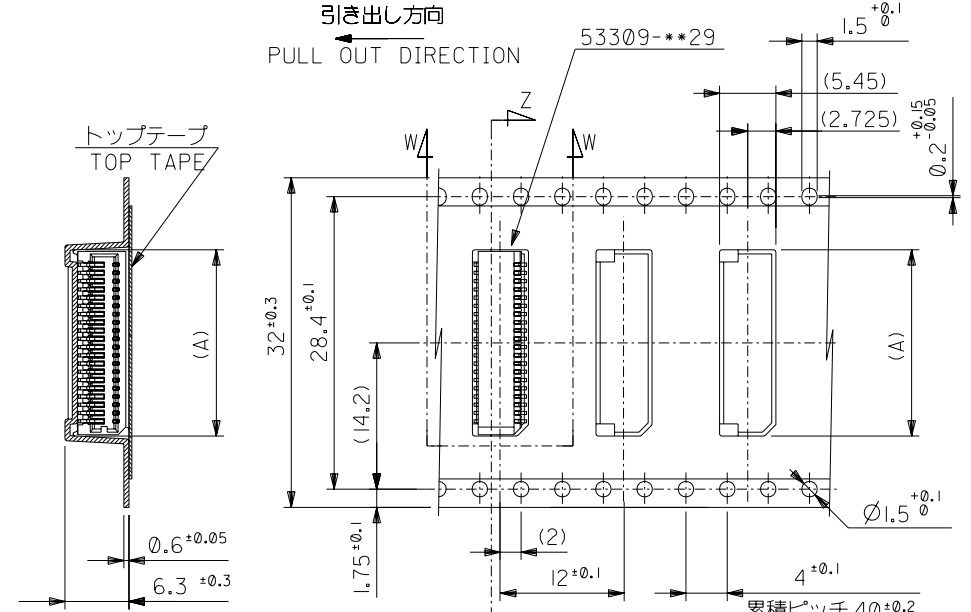
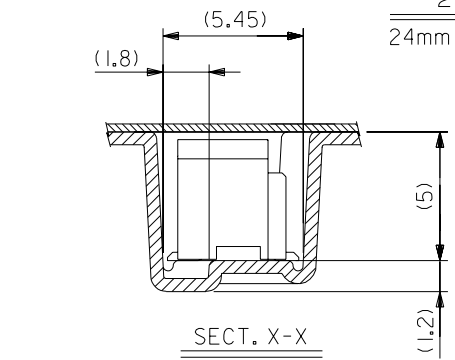
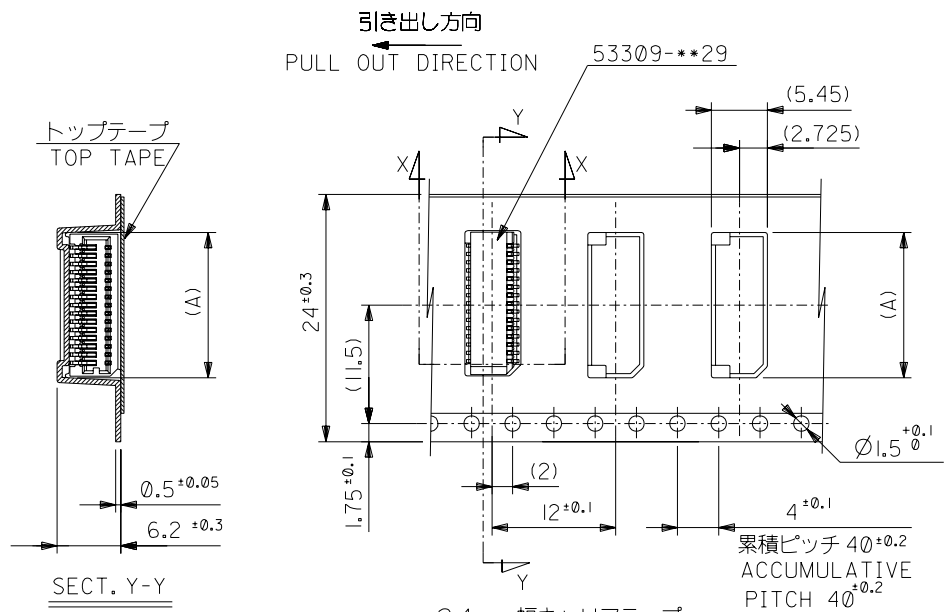
嵌合相手 52588 シリーズ  
MATES WITH 52588 SERIES

嵌合状態図 (参考)  
MATED DRAWING(REF.)

REVISED EC NO: J2010-1285 DRWN: YON002 2009/12/17 CHKD: SMARUYAMA 2009/12/17 APPR: SMARUYAMA 2009/12/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY M. NINOMIYA	DATE 2004/03/10	TITLE 0.8 B/B CONN. WAFER ASS'Y R/A SMT(WITHOUT BOSS)	
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE 2004/03/10		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/03/10	MOLEX INCORPORATED	
REV	DESCRIPTION	ANGULAR ±3 °	MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-53309-011	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				



53309-**70				材料 MATERIAL	注記参照 SEE NOTES	MOLEX-JAPAN CO.,LTD. 日本モレックス株式会社
MODEL NO.				仕上げ FINISH	—	
角度 ANGLE	+3°			適用電線範囲 WIRE RANGE	—	TITLE 名称 0.8 BtB Conn Wafer Assy RA SMT Without Boss Embstp Pkg
30以上 OVER	+0.3			被覆外径 INS. RANGE	—	-LEAD FREE-
10以上 OVER 30 UNDER	+0.25			DRAWN BY 04/03/10 M.NINOMIYA	CHK'D BY 04/03/10 K.TOJO	DWG. NO. (SHEET 1 OF 2) REV
未満 10 UNDER	+0.2			記号 LTR	変更内容 REVISION RECORD	SD-53309-012
一般公差 GENERAL TOLERANCES				DR. CHK.	日付 DATE	0



24	29.4	25.4	16.5	53309-3670	36
			15.7	53309-3470	34
			14.9	53309-3270	32
			14.1	53309-3070	30
			13.3	53309-2870	28
			12.5	53309-2670	26
			11.7	53309-2470	24
			10.9	53309-2270	22
10.1	53309-2070	20			
キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	MATERIAL NO.	極数 CIRCUIT

53309-***70		M.N.	
MODEL NO.		K.1.	
角度 ANGLE	±3°	DR.	日付 DATE
30以上 OVER	+0.3	CHK.	
10以上 30未満 UNDER	+0.25		
未満 10 UNDER	+0.2		
一般公差 GENERAL TOLERANCES	記号 LTR	変更内容 REVISION RECORD	新規作成 (J2004-2995) RELEASED

32	37.4	33.4	18.1	53309-4070	40
キャリアテープ幅 CARRIER TAPE WIDTH	C	B	(A)	53309-3870	38
				MATERIAL NO.	極数 CIRCUIT

材料 MATERIAL: SHEET 1 OF 2 参照 REFER TO SHEET 1 OF 2

仕上げ FINISH: //

適用電線範囲 WIRE RANGE: //

被覆外径 INS. RANGE: //

DRAWN BY 04/03/10 M.NINOMIYA  
CHK'D BY 04/03/10 K.TOJO

APP'D BY 04/03/10 M.SASAO

尺度 SCALE: //

材料 MOLEX-JAPAN CO.,LTD. 日本モレックス株式会社

REVISE ONLY ON CAD SYSTEM

TITLE 名称: 0.8 BtB Wafer Assy RA SMT Without Boss Embstp Pkg -LEAD FREE-

DWG. NO. (SHEET 2 OF 2) REV: 0  
SD-53309-012