

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

**Part Number:** [0533980471](#)  
**Status:** **Active**  
**Overview:** [picoblade](#)  
**Description:** 1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Vertical, Lead-free, 4 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-51021-024 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

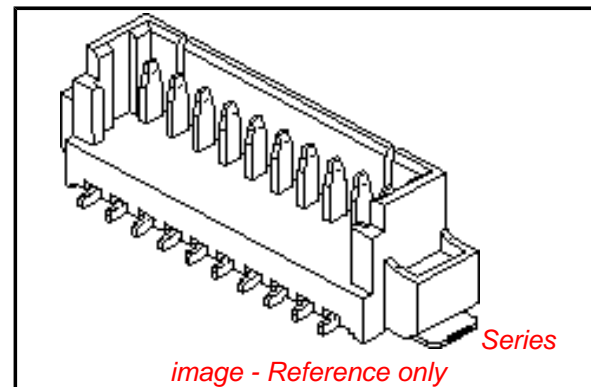
Product Family PCB Headers  
 Series [53398](#)  
 Application Wire-to-Board  
 MolexKits Yes  
 Overview [picoblade](#)  
 Product Name PicoBlade™

**Physical**

Breakaway No  
 Circuits (Loaded) 4  
 Color - Resin Natural  
 Durability (mating cycles max) 30  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Lock to Mating Part Yes  
 Mated Height (in) 0.224 In  
 Mated Height (mm) 5.70 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.024 In  
 PC Tail Length (mm) 0.60 mm  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.049 In  
 Pitch - Mating Interface (mm) 1.25 mm  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Shrouded Partial  
 Stackable No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 125V



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**China RoHS**



**Not 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.

**Search Parts in this Series**

[53398Series](#)

**Mates With**

[51021](#) PicoBlade™ Wire-to-Wire and Wire-to-Board Housing

## Material Info

### Reference - Drawing Numbers

Packaging Specification

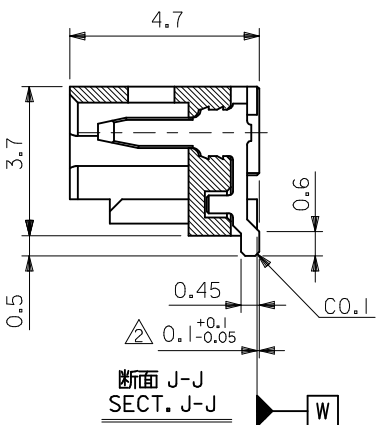
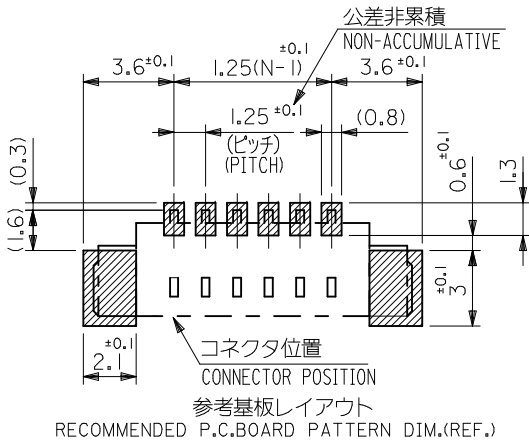
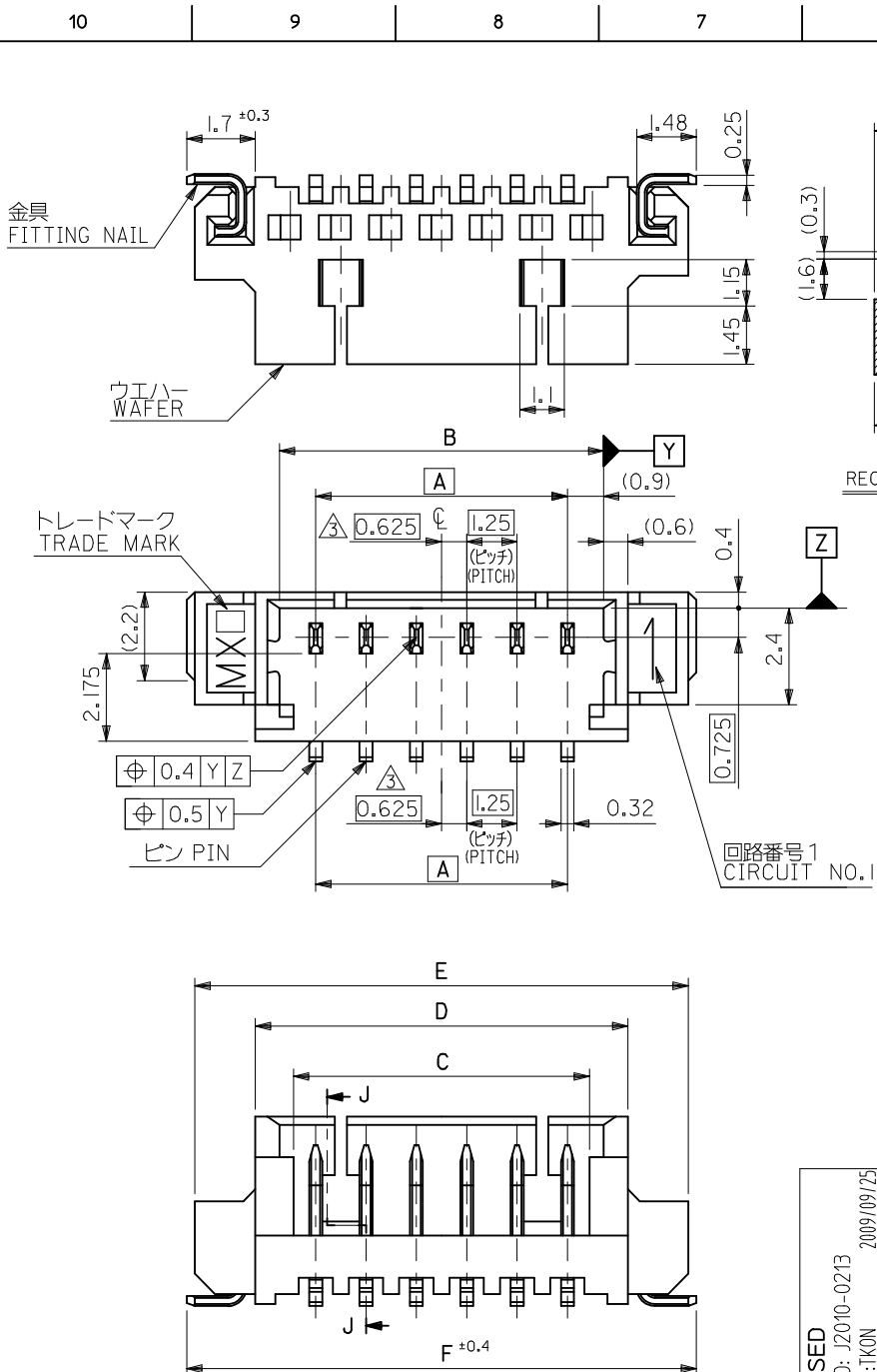
Product Specification

SPK-53398-001, SPK-53398-002  
PS-51021-024, RPS-51021-038, RPS-51021-039,  
RPS-51021-040, RPS-51021-043, RPS-51021-045,  
RPS-51021-046, RPS-51021-047, RPS-51021-051,  
RPS-51021-053, RPS-51021-057, RPS-51021-064,  
RPS-51021-065, RPS-51021-067, RPS-51021-068,  
RPS-51021-074, RPS-51021-077, RPS-51021-081,  
RPS-51021-085, RPS-51021-086, RPS-51021-091,  
RPS-51021-092, RPS-51021-097, RPS-51021-098,  
RPS-51021-099, RPS-51021-101, RPS-53398-002,  
RPS-53398-038  
SD-53398-032, SD-53398-033

Sales Drawing

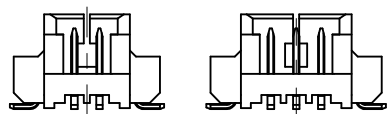
This document was generated on 06/07/2010

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注記 NOTES

- 嵌合相手 : 51021 シリーズ MATE WITH : 51021 SERIES
- 水平面上においての、ウエハー底面 [W] とソルダーテール及びフィッティングネイル底面とのズレ量を示す。  
MISALIGNMENT OF SOLDER TAIL & FITTING NAIL FROM [W]
- 偶数極にのみ適用。APPLY EVEN CIRCUIT PRODUCTS.
- ロック窓は、2、3極は1ヶ所、4極以上は2ヶ所とする。  
LOCKING WINDOW : ONE PLACE FOR 2&3 CKTS.  
TWO PLACES FOR MORE THAN 4 CKTS.
- 材質 MATERIAL PA, UL94V-0 COLOR:NATURAL  
ウエハー : WAFER  
ピン : リン青銅  
PIN : PHOS-BRO  
: 鏡メッキ 1.0マイクロメートル以上  
: MATTE TIN 1.0 MICROMETER MINIMUM  
: ニッケル下地 1.0マイクロメートル以上  
: NICKEL(UNDER PLATING)1.0 MICROMETER MINIMUM  
金具 : リン青銅  
FITTING NAIL : PHOS-BRO  
: 鏡メッキ 1.0マイクロメートル以上  
: MATTE TIN 1.0 MICROMETER MINIMUM  
: ニッケル下地 1.0マイクロメートル以上  
: NICKEL(UNDER PLATING)1.0 MICROMETER MINIMUM
- 本製品は 53398-\*\*-\*\*10 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53398-\*\*-\*\*10.



2極 2 CKT. 3極 3 CKT.  
△ ロック形状図  
LOCK CONFIGURATION

REVISED EC NO: J2010-0213 DRWN:TKON CHKD:NUKITA APPR:NUKITA	2009/09/25	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	53398-**-**19	MODEL NO.
	2009/09/25	10 UNDER ±0.2	DRAWN BY MNINOMIYA	DATE 04/02/06	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	2009/09/28	10 OVER 30 UNDER ±0.25	CHECKED BY KTOJO	DATE 04/02/06	1.25 W/B CONN. ASS'Y FOR SMT(ST.) -LEAD FREE-	
		30 OVER ±0.3	APPROVED BY MSASAO	DATE 04/02/06	MOLEX INCORPORATED	
	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 2	DOCUMENT NO. SD-53398-032	SHEET NO. 1 OF 2	
			SIZE A3	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

F

F

E

E

D

D

C

C

B


B

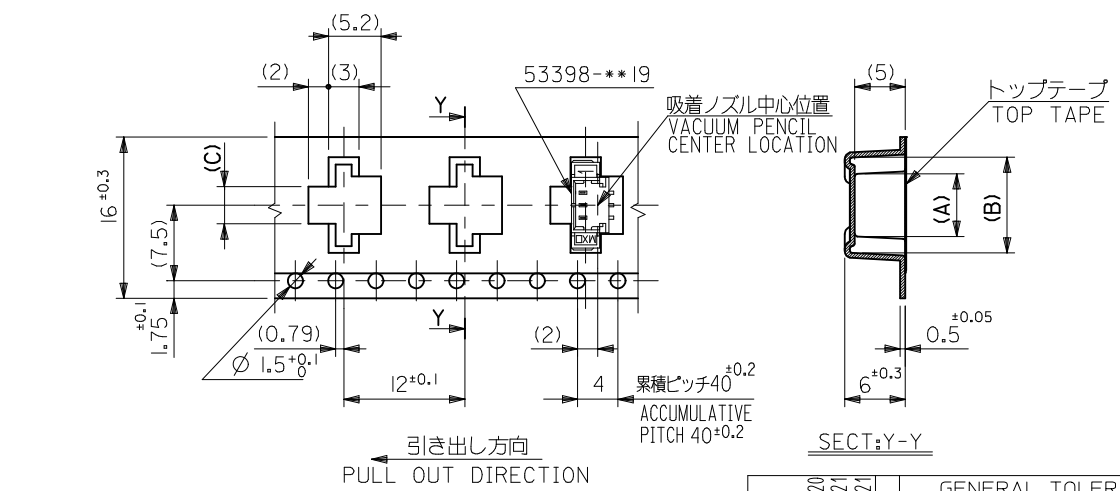
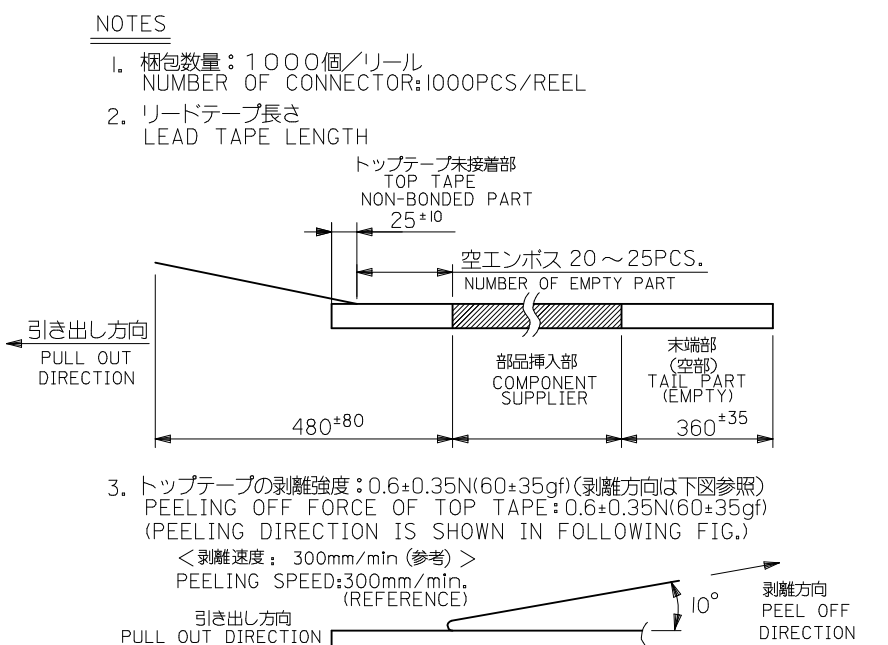
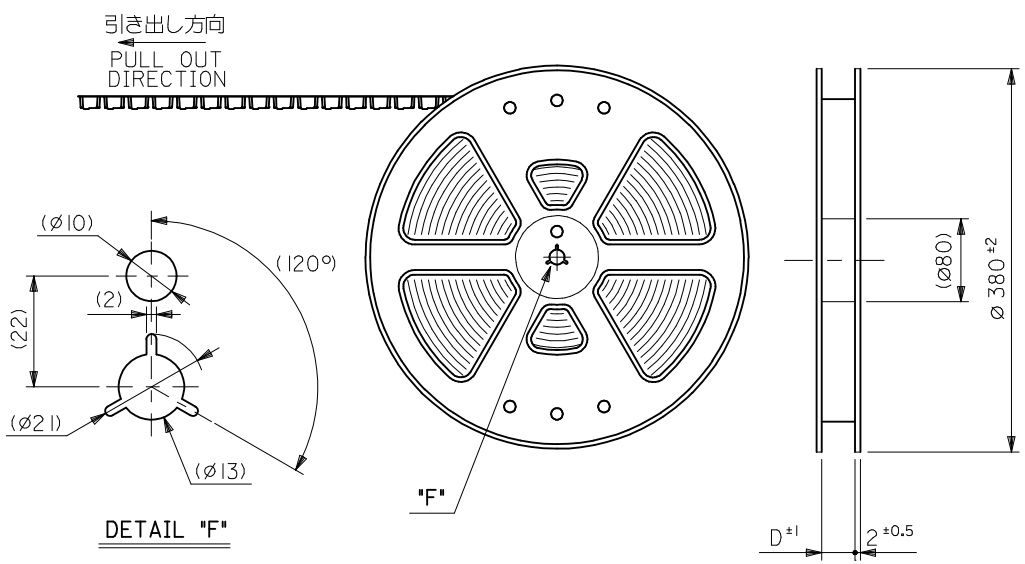
A

A

23.9	23.5	20.5	18.6	19.3	17.5	53398-1571	15
22.65	22.25	19.25	17.35	18.05	16.25	53398-1471	14
21.4	21	18	16.1	16.8	15	53398-1371	13
20.15	19.75	16.75	14.85	15.55	13.75	53398-1271	12
18.9	18.5	15.5	13.6	14.3	12.5	53398-1171	11
17.65	17.25	14.25	12.35	13.05	11.25	53398-1071	10
16.4	16	13	11.1	11.8	10	53398-0971	9
15.15	14.75	11.75	9.85	10.55	8.75	53398-0871	8
13.9	13.5	10.5	8.6	9.3	7.5	53398-0771	7
12.65	12.25	9.25	7.35	8.05	6.25	53398-0671	6
11.4	11	8	6.1	6.8	5	53398-0571	5
10.15	9.75	6.75	4.85	5.55	3.75	53398-0471	4
8.9	8.5	5.5	3.6	4.3	2.5	53398-0371	3
7.65	7.25	4.25	2.35	3.05	1.25	53398-0271	2
F	E	D	C	B	A	EMBOSSED TAPE PKG. (HIGH BARRIER PKG.) ORDER No.	種数 No. of &T's.

CONNECTOR SERIES NO. 53398-\*\*\*19

REVISED EC NO: J2010-0213 DRWN:TKON 2009/09/25 CHKD:NUKITA 2009/09/25 APPR:NUKITA 2009/09/28	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE ---	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY MNINOMIYA	DATE 04/02/06	TITLE 1.25 W/B CONN. ASS'Y FOR SMT(ST.) -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE 04/02/06	 <b>MOLEX INCORPORATED</b>		
	30 OVER	±0.3	APPROVED BY MSASAO	DATE 04/02/06			
	ANGULAR ±3 °		MATERIAL NO.	SEE TABLE	DOCUMENT NO.	SD-53398-032	SHEET NO.
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE <b>A3</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

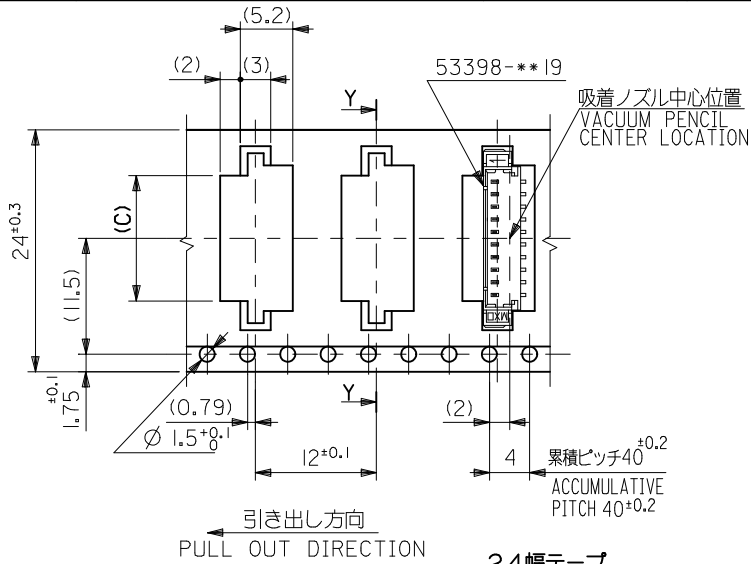


16幅テープ  
(TAPE WIDTH:16)

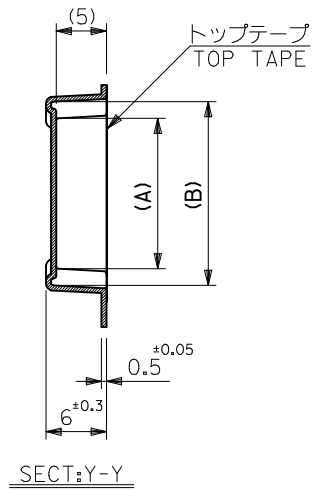
- トップテープの剥離強度:  $0.6 \pm 0.35N(60 \pm 35gf)$  (剥離方向は下図参照)  
PEELING OFF FORCE OF TOP TAPE:  $0.6 \pm 0.35N(60 \pm 35gf)$   
(PEELING DIRECTION IS SHOWN IN FOLLOWING FIG.)  
<剥離速度: 300mm/min (参考)>  
PEELING SPEED: 300mm/min. (REFERENCE)
- 53398-\*\*19の詳細寸法については図面 SD-53398-032 を参照下さい。  
RE DETAILED DIMENSIONS, SEE SD-53398-032.
- 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 (TOP TAPE): PET, PE, PEF  
リール (REEL): ポリスチレン (P.S) <リサイクル材含む>  
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>
- 本製品は 53398-\*\*90 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53398-\*\*90.
- 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

16	21.4	17.4	3.7	9.5	5.8	53398-0371	3
			2.45	8.25	4.55	53398-0271	2
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

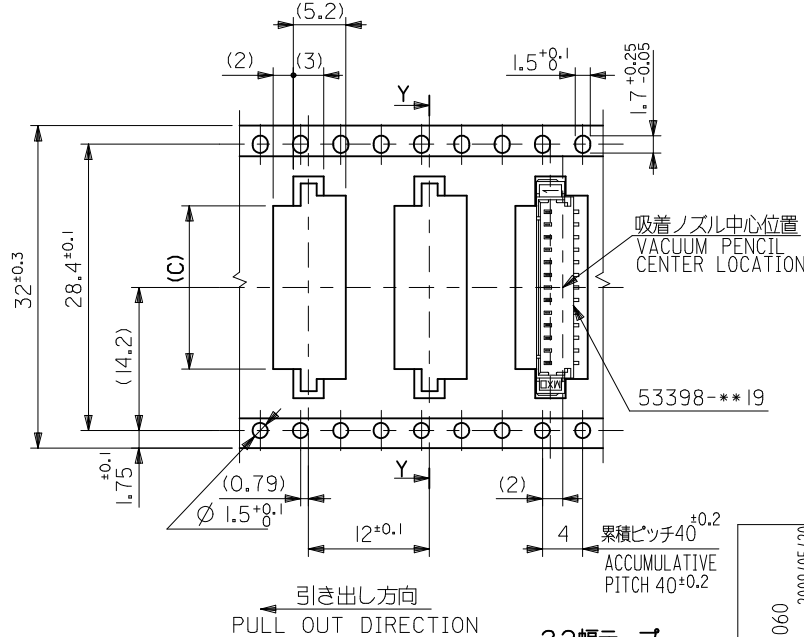
REVISED EC NO: J2009-2060 DRWN:TKON 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NIKIITA 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY NINOMIYA	DATE '04/02/06	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT. EMBSTP. PKG. -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '04/02/06	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/02/06	DOCUMENT NO. SD-53398-033	SHEET NO. 1 OF 3	
REV	DESCRIPTION	ANGULAR	±3 °	SEE TABLE & SHEET 2.3			
		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			



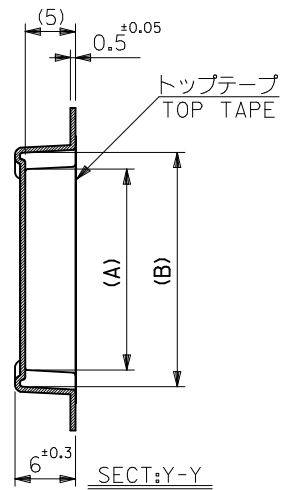
24幅テープ  
(TAPE WIDTH:24)



SECT:Y-Y



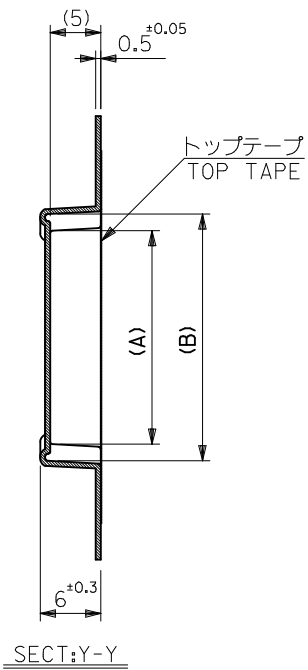
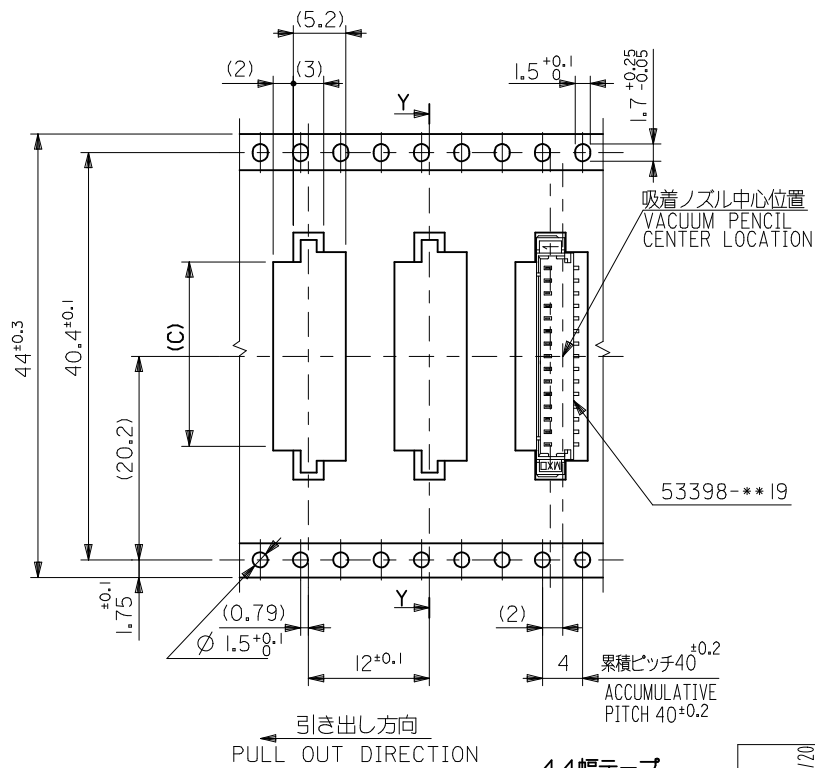
32幅テープ  
(TAPE WIDTH:32)



SECT:Y-Y

32	37.4	33.4	16.2	22	18.3	53398-1371	13	
			14.95	20.75	17.05	↑ -1271	12	
24	29.4	25.4	13.7	19.5	15.8	↑ -1171	11	
			12.45	18.25	14.55	-1071	10	
			11.2	17	13.3	-0971	9	
			9.95	15.75	12.05	-0871	8	
			8.7	14.5	10.8	-0771	7	
			7.45	13.25	9.55	-0671	6	
24	29.4	25.4	6.2	12	8.3	↓ -0571	5	
			4.95	10.75	7.05	53398-0471	4	
キャリアテープ幅 CARRIER TAPE WIDTH		E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2009-2060 DRWN:TKON 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY NINOMIYA	DATE '04/02/06	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT. EMBSTP. PKG. -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '04/02/06	MOLEX INCORPORATED DOCUMENT NO. SD-53398-033 SHEET NO. 2 OF 3			
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/02/06				
REV	DESCRIPTION	ANGULAR ±3 °	MATERIAL NO. SEE TABLE & SHEET 1,3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								



44幅テープ  
(TAPE WIDTH:44)

REVISED	DESCRIPTION
EC NO: J2009-2060	2009/05/20
DRWN:TKON	2009/05/21
CHKD:HMATSUMOTO	2009/05/21
APPR:NUKITA	2009/05/21

GENERAL TOLERANCES (UNLESS SPECIFIED)	
10 UNDER	±0.2
10 OVER 30 UNDER	±0.25
30 OVER	±0.3
ANGULAR	±3 °
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

44	49.4	45.4	18.7	24.5	20.8	53398-1571	15
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.
			17.45	23.25	19.55	53398-1471	14

DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
DRAWN BY NINOMIYA	DATE '04/02/06	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT. EMBSTP. PKG. -LEAD FREE-		
CHECKED BY K. TOJO	DATE '04/02/06	MOLEX INCORPORATED		
APPROVED BY M. SASAO	DATE '04/02/06	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE & SHEET 12		SD-53398-033		3 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				