

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

**Part Number:** [0537800370](#)  
**Status:** **Active**  
**Overview:** [panelmate 125mm 049 pitch ultra lowprofile](#)  
**Description:** 1.25mm (.049") Pitch PanelMate™ Header, Surface Mount, Right Angle, 1.90mm (.075") Height, Lead-free, 3 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-51146-012 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-51146-010 \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [53780](#)  
 Application Wire-to-Board  
 Overview [panelmate 125mm 049 pitch ultra lowprofile](#)  
 Product Name PanelMate™

**Physical**

Breakaway No  
 Circuits (Loaded) 3  
 Color - Resin Natural  
 Durability (mating cycles max) 50  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 1  
 Orientation Right Angle  
 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 PCB No  
 Shrouded Fully  
 Stackable No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount

**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification SPK-53780-ET

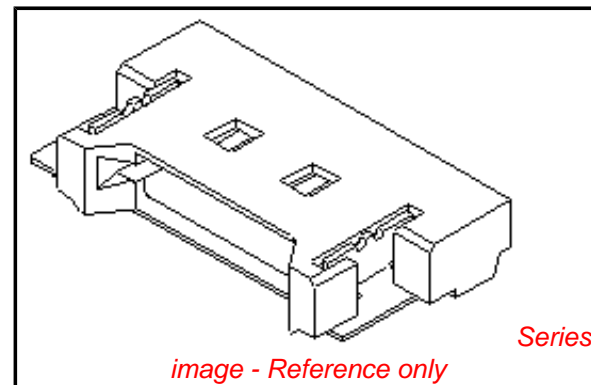


image - Reference only

**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**

[53780Series](#)

**Mates With**

[51146 PanelMate™ Wire-to-Board Receptacle Housing](#)

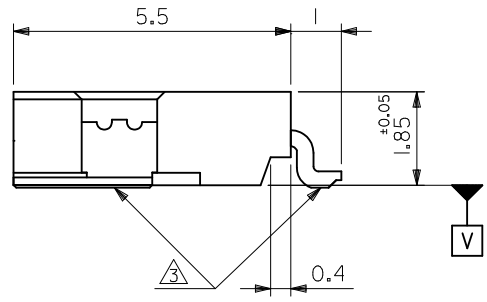
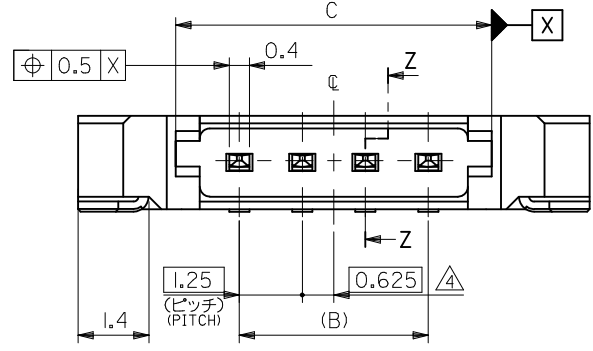
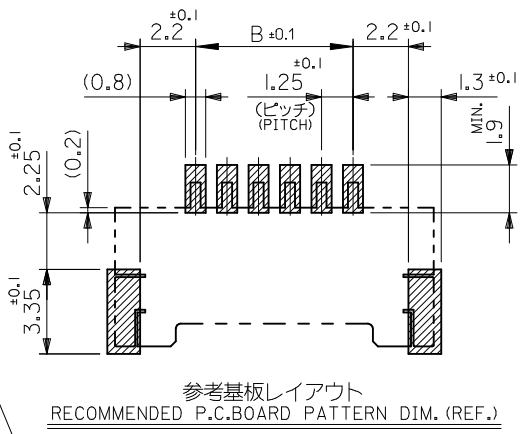
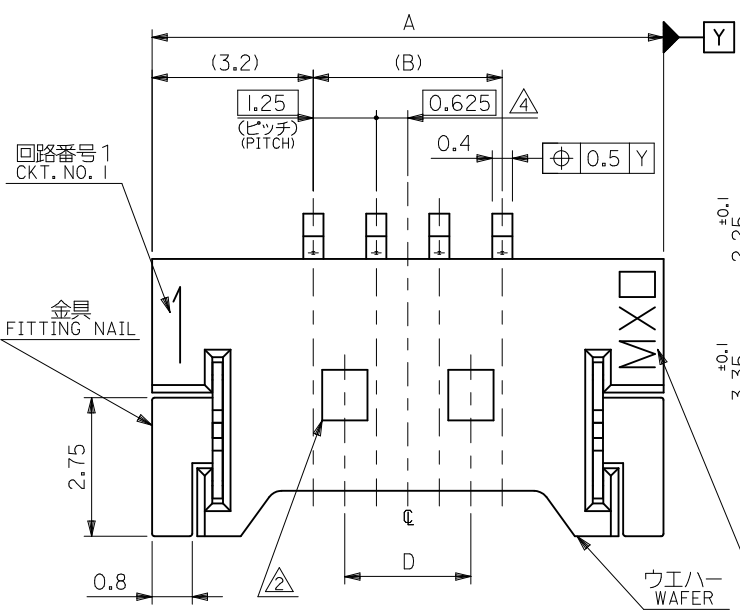
Product Specification

PS-51146-010, PS-51146-012, RPS-51146-020,  
RPS-51146-022, RPS-51146-023, RPS-51146-025,  
RPS-51146-026, RPS-51146-027, RPS-51146-028,  
RPS-51146-029  
SD-53780-003, SD-53780-004

Sales Drawing

This document was generated on 05/26/2010

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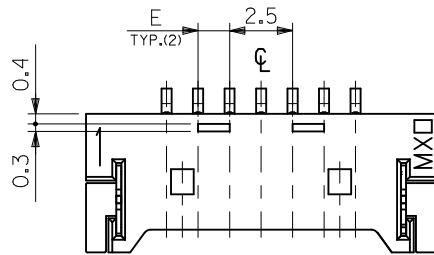


注記 NOTES

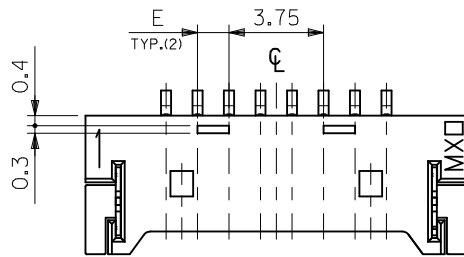
- 嵌合相手: 51146 シリーズ  
MATES WITH : 51146 SERIES
- ロック窓は2、3極品は1箇所、4極品以上は2箇所とする。  
LOCKING WINDOW : ONE PLACE FOR 2 AND 3 CIRCUIT PRODUCTS  
AND TWO PLACES FOR MORE THAN 3 CIRCUIT PRODUCTS.
- 基準面 [V] からのソルダーテールと金具の半田付け面のズレ量は、  
上方向に 0.05MAX.、下方向 0.15MAX. とし、20 極以下の相互の  
バラツキ量は 0.1MAX. とする。  
MISALIGNMENT OF SOLDER TAIL AND FITTING NAIL FROM [V]  
: UPPER DIRECTION 0.05MAX.  
: LOWER DIRECTION 0.15MAX.  
: OFFSET BETWEEN UPPER AND LOWER 0.1MAX. (UNDER 20 CKTS.)
- 偶数極の製品に適用。  
APPLY EVEN CIRCUIT PRODUCTS.
- 材質 MATERIAL  
ウエハ WAFER : PPS , UL94V-0  
ピン: リン青銅 PIN : PHOSPHOR BRONZE  
コンタクト部: 金メッキ 0.2 マイクロメートル以上  
CONTACT AREA : GOLD 0.2 MICROMETER MINIMUM  
テール部: 錫メッキ 3.0 マイクロメートル以上  
TAIL AREA : TIN 3.0 MICROMETER 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 1.0 MICROMETER MINIMUM  
金具: リン青銅 FITTING NAIL : PHOSPHOR BRONZE  
錫メッキ 3.0 マイクロメートル以上  
TIN 3.0 MICROMETER 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 1.0 MICROMETER MINIMUM
- 本製品は 53780-\*\*-\*\*10/-\*\*-\*\*18 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53780-\*\*-\*\*10/-\*\*-\*\*18.
- ELV 及び RoHS 適合品  
ELV & RoHS COMPLIANT.

16.25	22.5	38.77	36.25	42.65	53780-3070	30
8.75	22.5	26.27	23.75	30.15	-2070	20
7.5	20	23.77	21.25	27.65	-1870	18
6.25	16.25	20.02	17.5	23.9	-1570	15
5	15	18.77	16.25	22.65	-1470	14
3.75	12.5	16.27	13.75	20.15	-1270	12
2.5	10	13.77	11.25	17.65	-1070	10
2.5	8.75	12.52	10	16.4	-0970	9
1.25	7.5	11.27	8.75	15.15	-0870	8
1.25	6.25	10.02	7.5	13.9	-0770	7
--	5	8.77	6.25	12.65	-0670	6
--	3.75	7.52	5	11.4	-0570	5
--	2.5	6.27	3.75	10.15	-0470	4
--	--	5.02	2.5	8.9	-0370	3
--	--	3.77	1.25	7.65	53780-0270	2
E	D	C	B	A	EMBOSSED PACKAGE	CKT.
						極数
CONNECTOR SERIES NO. 53780-**-**19						
ORDER No. オダー番号						

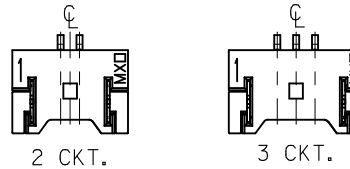
REVISED EC NO. J2010-1927 DRWN:SKUROSE 2010/03/25 CHKD:KASAKAWA 2010/03/26 APPR:NUKITA 2010/03/29	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT	
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE '04/04/15	MOLEX INCORPORATED	
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/04/15	MATERIAL NO. SEE CHART	
	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO. SD-53780-003	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		



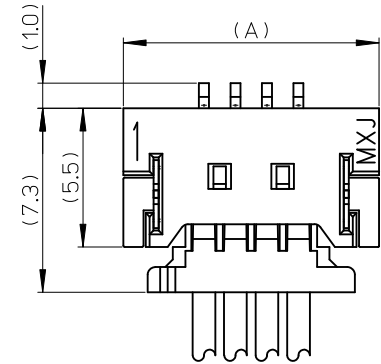
7~19極の奇数極に適用  
 APPLY FOR ODD CIRCUITS OF 7~19



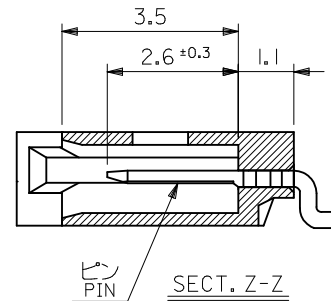
8~30 極の偶数極に適用  
 APPLY FOR EVEN CIRCUITS OF 8~30



ロック形状図  
 LOCK CONFIGURATION



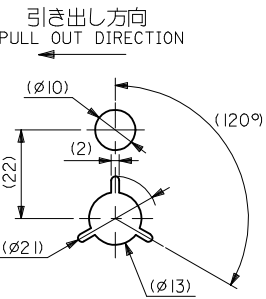
嵌合図 (SCALE 5:1)  
 MATED CONNECTORS (SCALE 5:1)



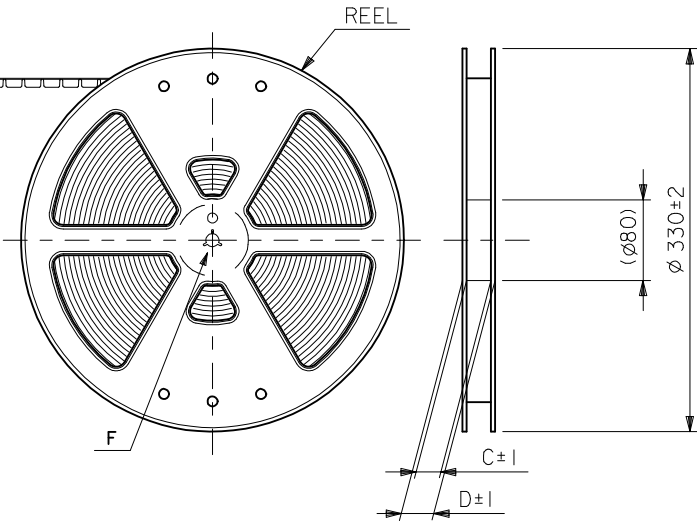
SECT. Z-Z

CONNECTOR SERIES NO. 53780-\*\*19

REVISED EC NO.: J2010-1927 DRWN:SKUROSE 2010/03/25 CHK'D:KASAKAWA 2010/03/26 APPR:NUKITA 2010/03/29	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT			
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE '04/04/15	APPROVED BY M. SASAO '04/04/15			
	30 OVER	±0.3	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-53780-003		SHEET NO. 2 OF 2	
ANGULAR ±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								

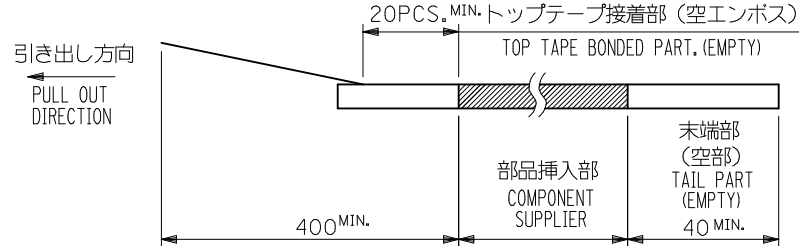


**DETAIL F**

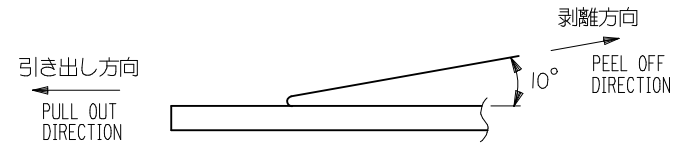


**NOTES**

- 梱包数量：1500個/リール  
NUMBER OF CONNECTORS : 1500PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



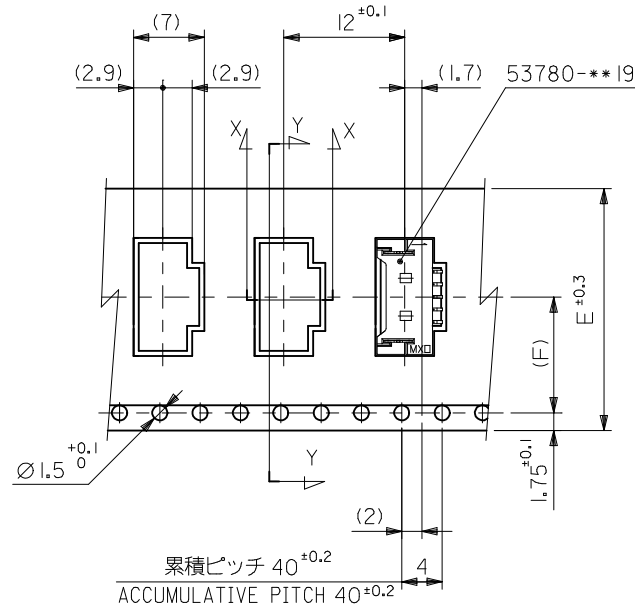
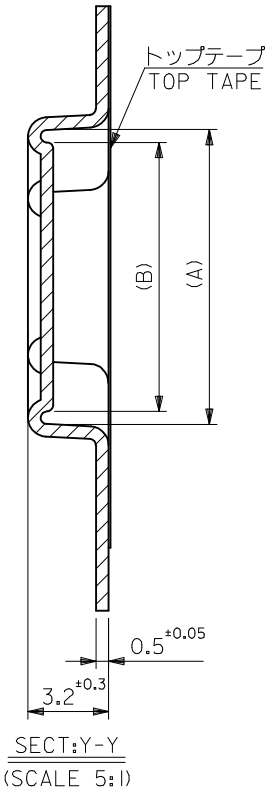
- トップテープの剥離強度：0.1N ~ 1.3N (10gf ~ 130gf)  
(剥離方向は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 0.1N ~ 1.3N (10gf ~ 130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



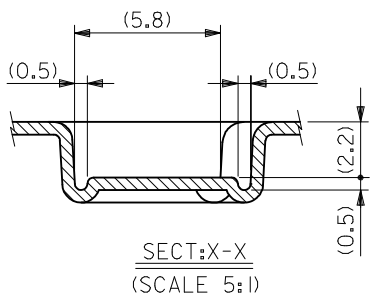
- 材料(MATERIAL)  
キャリアテープ(CARRIER TAPE)：ポリプロピレン(POLYPROPYLENE)  
トップテープ(TOPTAPE)：PET, PE, PEF  
リール(REEL)：ポリスチレン(PS) <リサイクル材を含む>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAINED>
- 本製品は 53780-\*\*-90/-\*\*-80 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53780-\*\*-90/-\*\*-80.
- ELV及びRoHS適合品  
ELV & RoHS COMPLIANT

MODEL NO. 53780-\*\*-70

REVISED EC NO: J2010-0021 DRWN:MTAKASAKI 2009/07/07 CHKD:MHAYASHI 2009/07/08 APPR:NUKITA 2009/07/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B WAFER ASSY EMBOSSED TAPE PACKAGE		
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE '04/04/15	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/04/15	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-53780-004	SHEET NO. 1 OF 3
DESCRIPTION	ANGULAR ±3 °	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3				

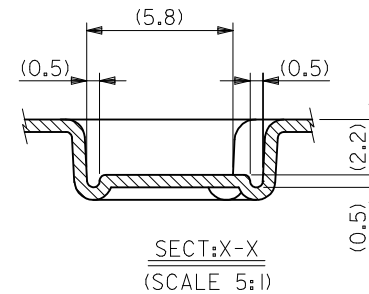
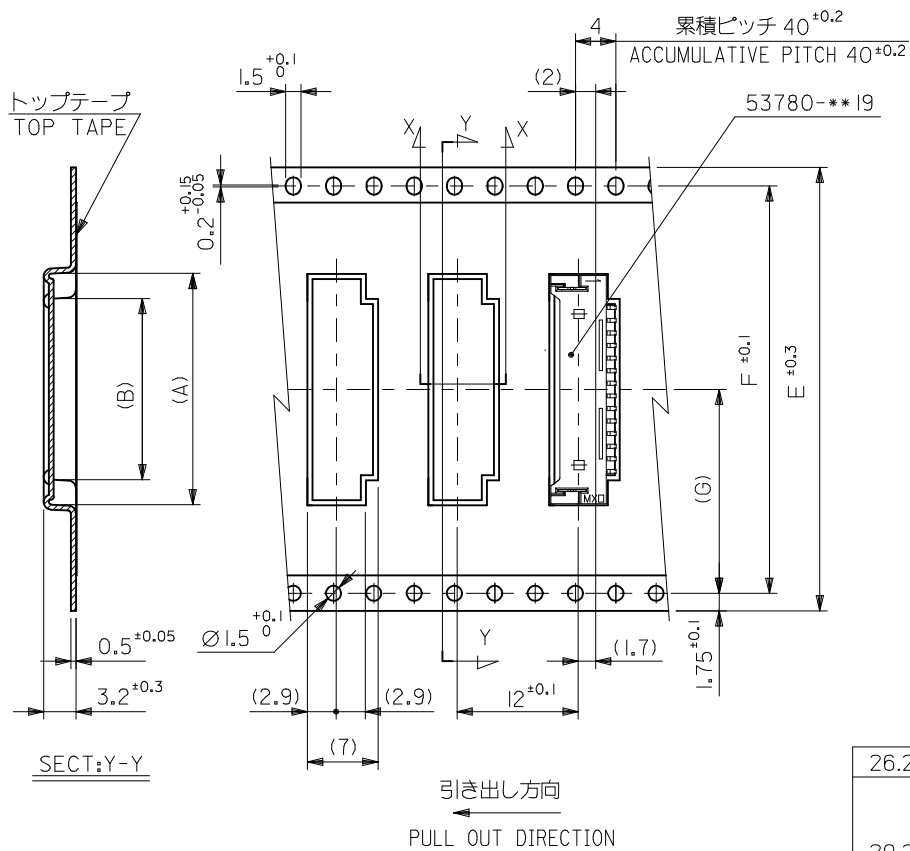


引き出し方向  
PULL OUT DIRECTION



11.5	24	29.4	25.4	11.75	16.7	53780-0970	9
				10.5	15.45	53780-0870	8
				9.25	14.2	53780-0770	7
				8	12.95	53780-0670	6
				6.75	11.7	53780-0570	5
7.5	16	21.4	17.4	5.5	10.45	53780-0470	4
				4.25	9.2	53780-0370	3
				3	7.95	53780-0270	2
(F)	E	D	C	(B)	(A)	MATERIAL NO.	種数 CKT.
						MODEL NO.	53780-***70

REVISED EC NO: J2010-0021 DRWN: TAKASAKI 2009/07/07 CHKD: HAYASHI 2009/07/08 APPR: NUKITA 2009/07/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B WAFER ASSY EMBOSSED TAPE PACKAGE				
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE '04/04/15	MOLEX INCORPORATED				
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/04/15	DOCUMENT NO. SD-53780-004				
	ANGULAR ±3 °		MATERIAL NO. SEE CHART		SHEET NO. 2 OF 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							



26.2	52.4	56	61.4	57.4	38	42.95	53780-3070	30
20.2	40.4	44	49.4	45.4	25.5	30.45	53780-2070	20
					25.5	27.95	53780-1870	18
					19.25	24.2	53780-1570	15
					18	22.95	53780-1470	14
14.2	28.4	32	37.4	33.4	15.5	20.45	53780-1270	12
					13	17.95	53780-1070	10
(G)	F	E キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2010-0021 DRWN:MTAKASAKI 2009/07/07 CHKD:MHAYASHI 2009/07/08 APPR:NUKITA 2009/07/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---		MODEL NO. 53780-***70	
	10 UNDER ±0.2		DRAWN BY T.UENO		DATE '04/04/15		DESIGN UNITS METRIC	
	10 OVER 30 UNDER ±0.25		CHECKED BY M.SASAO		DATE '04/04/15		THIRD ANGLE PROJECTION	
	30 OVER ±0.3		APPROVED BY M.SASAO		DATE '04/04/15		MOLEX INCORPORATED	
	ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO. SD-53780-004		SHEET NO. 3 OF 3	
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				