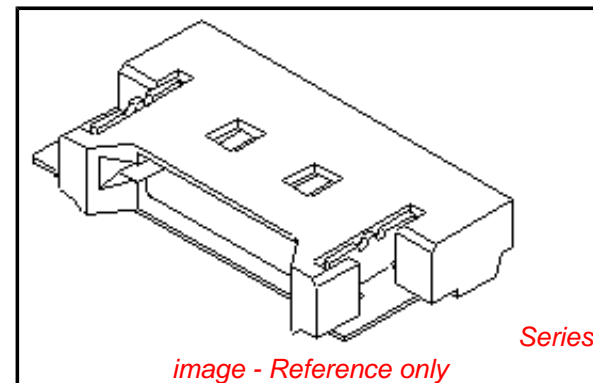


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0537800970](#)  
**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, 9 Circuits

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-51146-012 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>
<a href="#">Product Specification PS-51146-010 (PDF)</a>	



**Agency Certification**

CSA	LR19980
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">53780</a>
Application	Wire-to-Board
MolexKits	Yes
Overview	<a href="#">panelmate 125mm 049 pitch ultra lowprofile</a>
Product Name	PanelMate™

**Physical**

Breakaway	No
Circuits (Loaded)	9
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**

**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](#)

Packaging Specification  
Product Specification

Sales Drawing

SPK-53780-ET  
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

This document was generated on 06/07/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

F

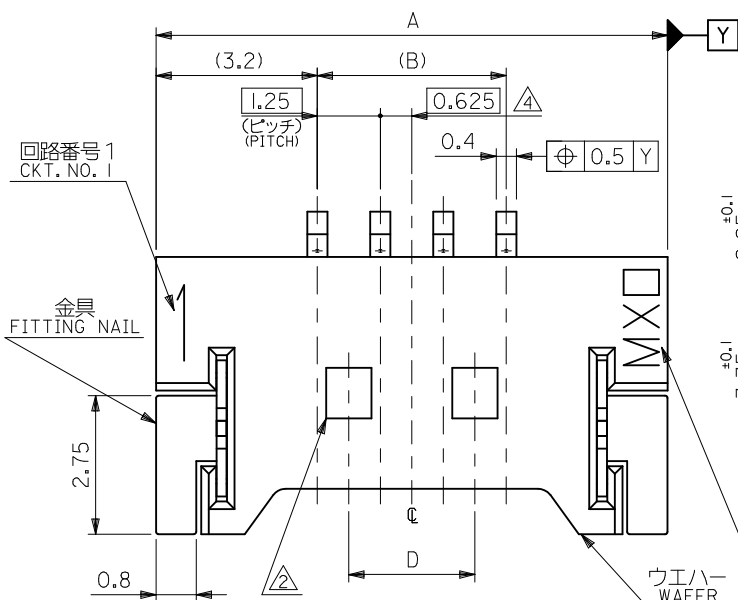
E

D

C

B

A

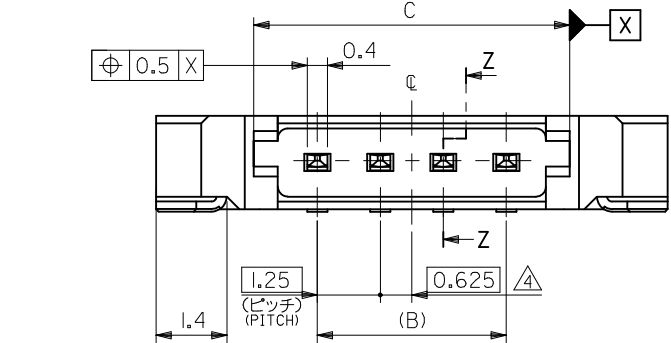


回路番号 1  
CKT. NO. 1

金具  
FITTING NAIL

2.75

0.8



1.4

1.25 (ピッチ)

0.625

0.4

(B)



5.5

I

L

±0.05

1.85

0.4

V

ウエハ  
WAFER

トレードマーク  
TRADE MARK

参考基板レイアウト  
RECOMMENDED P.C.BOARD PATTERN DIM. (REF.)

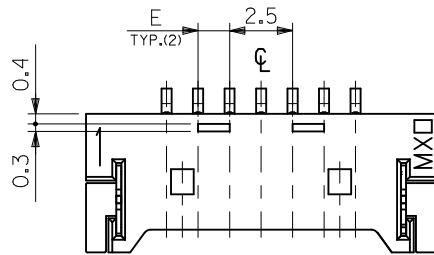
注記 NOTES

- 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.

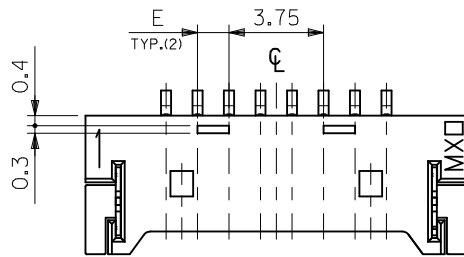
16.25	22.5	38.77	36.25	42.65	53780-3070	30
8.75	22.5	26.27	23.75	30.15	-2070	20
7.5	20	23.77	21.25	27.65	-1870	18
6.25	16.25	20.02	17.5	23.9	-1570	15
5	15	18.77	16.25	22.65	-1470	14
3.75	12.5	16.27	13.75	20.15	-1270	12
2.5	10	13.77	11.25	17.65	-1070	10
2.5	8.75	12.52	10	16.4	-0970	9
1.25	7.5	11.27	8.75	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

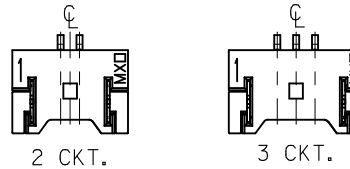
REVISED EC NO. J2010-1927 DRWN:KUROSE 2010/03/25 CHKD:KASAKAWA 2010/03/26 APPR:NUKITA 2010/03/29	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT	
	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	DOCUMENT NO. SD-53780-003
	ANGULAR ±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		



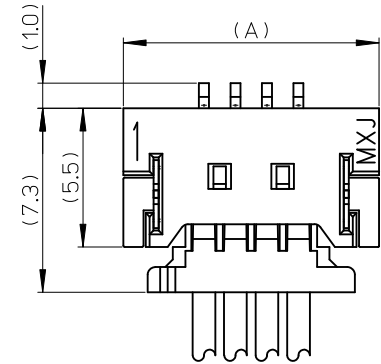
7~19極の奇数極に適用  
 APPLY FOR ODD CIRCUITS OF 7~19



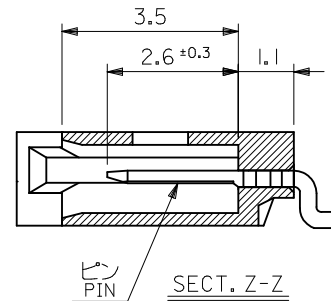
8~30 極の偶数極に適用  
 APPLY FOR EVEN CIRCUITS OF 8~30



ロック形状図  
 LOCK CONFIGURATION



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



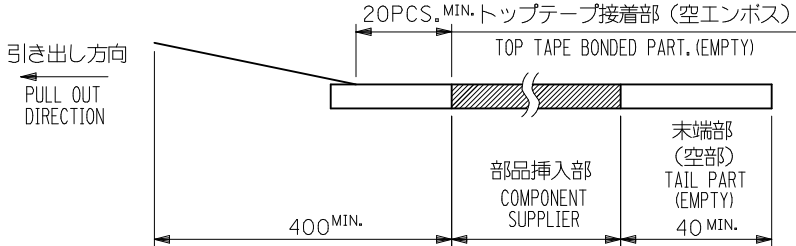
SECT. Z-Z

CONNECTOR SERIES NO. 53780-\*\*19

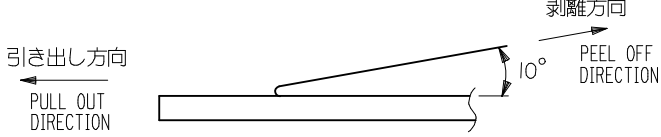
REVISED EC NO.: J2010-1927 DRWN:SKUROSE 2010/03/25 CHKD:KASAKAWA 2010/03/26 APPR:NUKITA 2010/03/29	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY T. UENO	DATE '04/04/15	TITLE 1.25 W/B CONN WAFER ASSY FOR SMT	
	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	DOCUMENT NO. SD-53780-003
	ANGULAR ±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		

NOTES

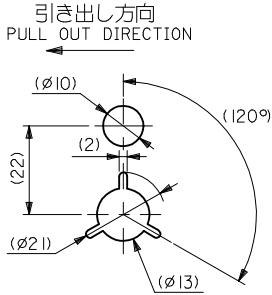
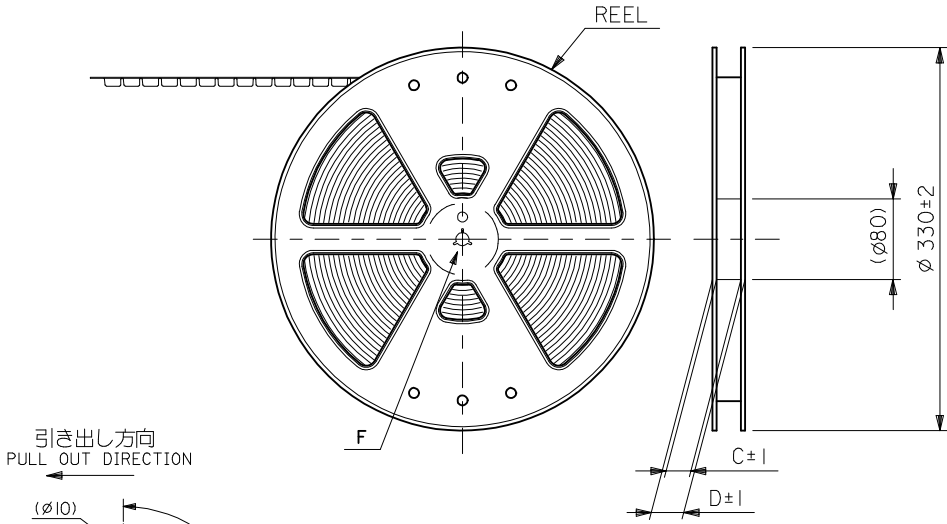
- 1. 梱包数量：1500個/リール  
NUMBER OF CONNECTORS : 1500PCS/REEL
- 2. リードテープ長さ LEAD TAPE LENGTH



- 3. 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.

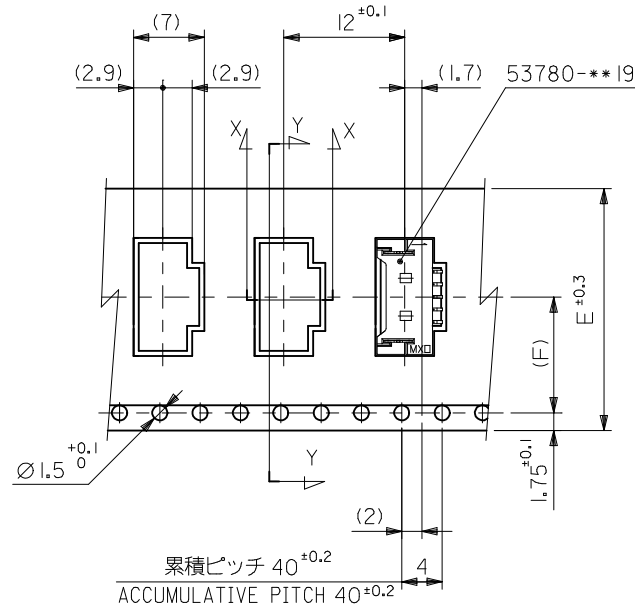
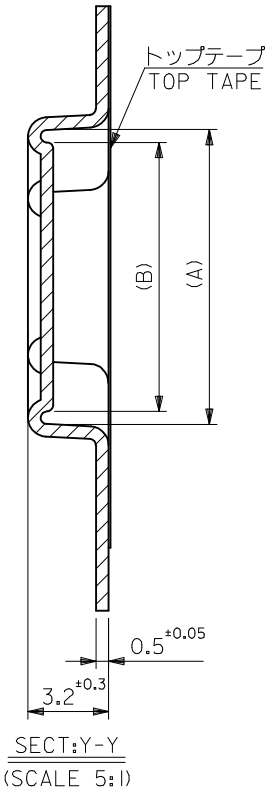


- 4. 材料(MATERIAL)  
キャリアテープ(CARRIER TAPE)：ポリプロピレン(POLYPROPYLENE)  
トップテープ(TOPTAPE)：PET, PE, PEF  
リール(REEL)：ポリスチレン(PS) <リサイクル材を含む>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAINED>
- 5. 本製品は 53780-\*\*-90/-\*\*80 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 53780-\*\*-90/-\*\*80.
- 6. ELV及びRoHS適合品  
ELV &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

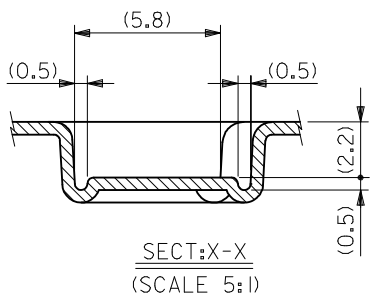


DETAIL F

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	MODEL NO.   53780-***70
	10 UNDER ±0.2		DRAWN BY DATE T. UENO '04/04/15		TITLE 1.25 W/B WAFER ASSY EMBOSSED TAPE PACKAGE		
	10 OVER 30 UNDER ±0.25		CHECKED BY DATE M. SASAO '04/04/15		APPROVED BY DATE M. SASAO '04/04/15		
	30 OVER ±0.3		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-53780-004		SHEET NO. 1 OF 3
ANGULAR ±3 °		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					

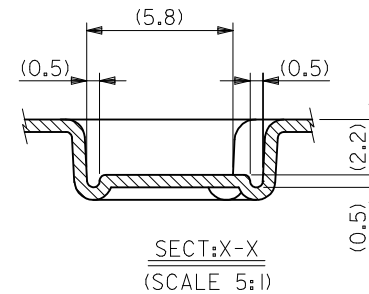
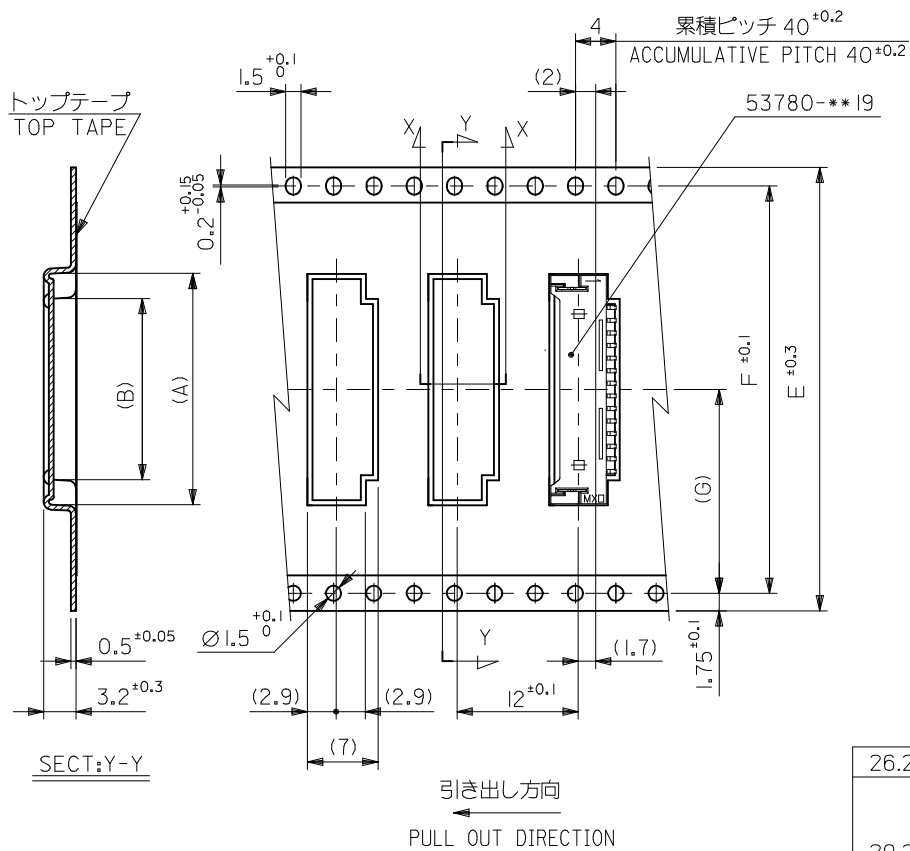


引き出し方向  
PULL OUT DIRECTION



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	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				