

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0537800870](#)
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, 8 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) 8
 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

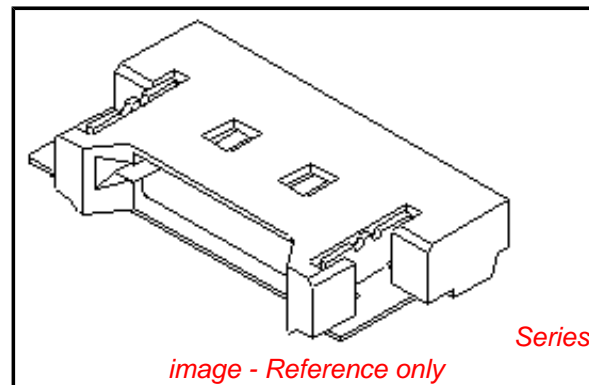
Electrical

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

Material Info

Reference - Drawing Numbers

Packaging Specification SPK-53780-ET



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
 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

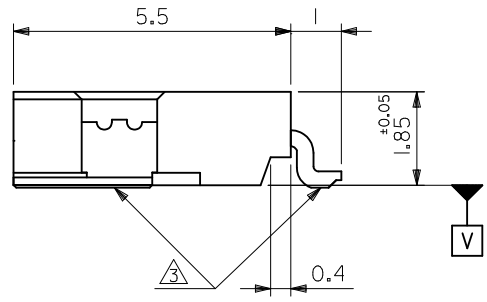
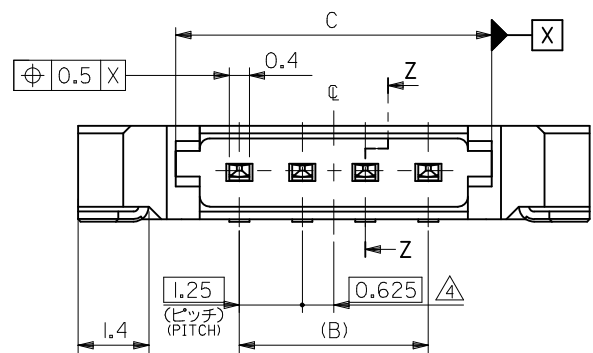
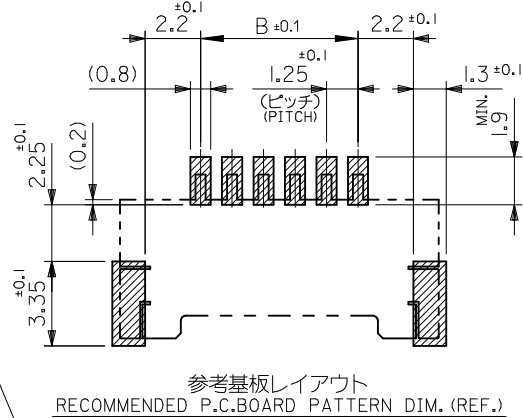
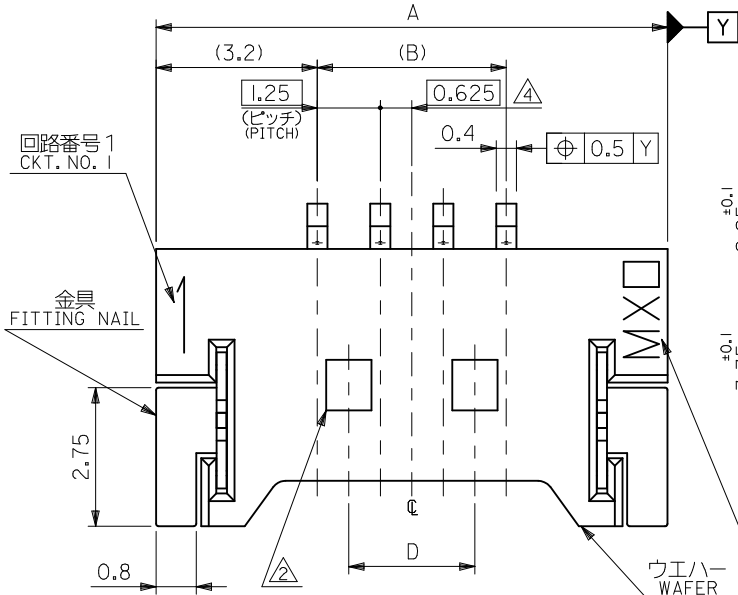
Sales Drawing

This document was generated on 05/26/2010

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注記 NOTES

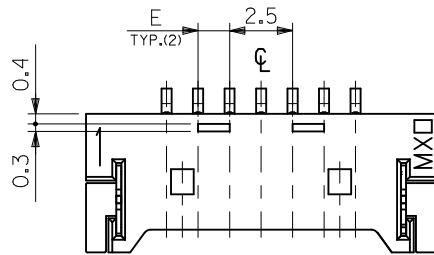
1. 嵌合相手：51146 シリーズ
MATES WITH : 51146 SERIES
2. ロック窓は2、3極品は1箇所、4極品以上は2箇所とする。
LOCKING WINDOW : ONE PLACE FOR 2 AND 3 CIRCUIT PRODUCTS
AND TWO PLACES FOR MORE THAN 3 CIRCUIT PRODUCTS.
3. 基準面 [V] からのソルダーテールと金具の半田付け面のズレ量は、
上方向に 0.05MAX.、下方向 0.15MAX. とし、20 極以下の相互の
バラツキ量は 0.1MAX. とする。
MISALIGNMENT OF SOLDER TAIL AND FITTING NAIL FROM [V]
: UPPER DIRECTION 0.05MAX.
: LOWER DIRECTION 0.15MAX.
: OFFSET BETWEEN UPPER AND LOWER 0.1MAX. (UNDER 20 CKTS.)
4. 偶数極の製品に適用。
APPLY EVEN CIRCUIT PRODUCTS.
5. 材質 MATERIAL
ウエハーフ 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
6. 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.
7. ELV 及び RoHS 適合品
ELV & RoHS COMPLIANT.



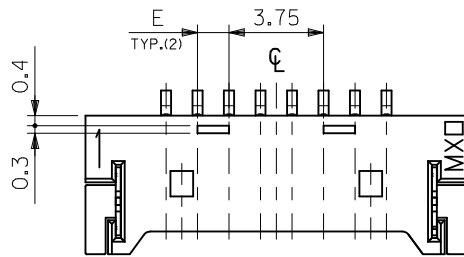
| | | | | | | |
|-------|-------|-------|-------|-------|------------------|------|
| 16.25 | 22.5 | 38.77 | 36.25 | 42.65 | 53780-3070 | 30 |
| 8.75 | 22.5 | 26.27 | 23.75 | 30.15 | -2070 | 20 |
| 7.5 | 20 | 23.77 | 21.25 | 27.65 | -1870 | 18 |
| 6.25 | 16.25 | 20.02 | 17.5 | 23.9 | -1570 | 15 |
| 5 | 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

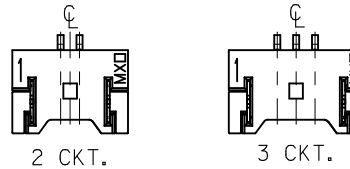
| | | | | | | |
|---|---------------------------------------|--------------|---|-----------|----------------------------------|--|
| REVISED EC NO: J2010-1927 DRWN: KUROSE 2010/03/25 CHKD: KASAKAWA 2010/03/26 APPR: NUKITA 2010/03/29 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | SCALE | DESIGN UNITS | MOLEX INCORPORATED SD-53780-003 SHEET NO. 1 OF 2 |
| | | | MM ONLY | --- | METRIC | |
| | 10 UNDER | ±0.2 | DRAWN BY | DATE | TITLE | |
| | 10 OVER 30 UNDER | ±0.25 | T. UENO | '04/04/15 | 1.25 W/B CONN WAFER ASSY FOR SMT | |
| 30 OVER | ±0.3 | CHECKED BY | DATE | | | |
| | | M. SASAO | '04/04/15 | | | |
| | | APPROVED BY | DATE | | | |
| | | M. SASAO | '04/04/15 | | | |
| | | MATERIAL NO. | DOCUMENT NO. | | | |
| | | SEE CHART | SD-53780-003 | | | |
| | | SIZE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |
| | | A3 | | | | |



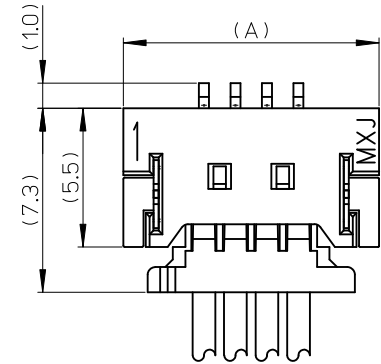
7~19極の奇数極に適用
 APPLY FOR ODD CIRCUITS OF 7~19



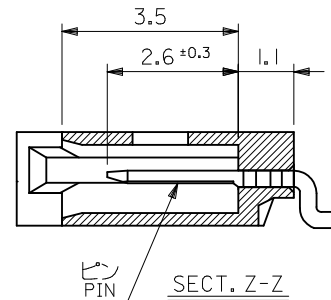
8~30 極の偶数極に適用
 APPLY FOR EVEN CIRCUITS OF 8~30



ロック形状図
 LOCK CONFIGURATION



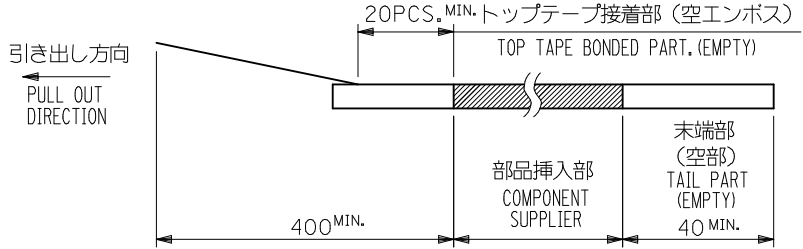
嵌合図 (SCALE 5:1)
 MATED CONNECTORS (SCALE 5:1)



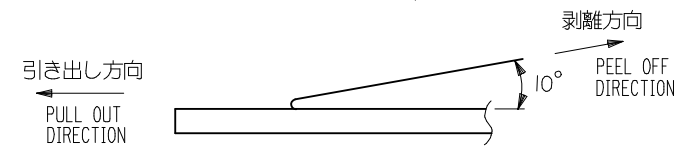
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|---|---------------------------------------|--|----------------------------|---|----------------------------------|--------------|
| REVISED EC NO: J2010-1927 DRWN:SKUROSE 2010/03/25 CHKD:KASAKAWA 2010/03/26 APPR:NUKITA 2010/03/29 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | CONNECTOR SERIES NO. 53780-**19 | |
| | 10 UNDER | ±0.2 | DRAWN BY | DATE | SCALE | DESIGN UNITS |
| | 10 OVER 30 UNDER | ±0.25 | T. UENO | '04/04/15 | --- | METRIC |
| | 30 OVER | ±0.3 | CHECKED BY | DATE | THIRD ANGLE PROJECTION | |
| | ANGULAR ±3 ° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY | DATE | TITLE | |
| | | | M. SASAO | '04/04/15 | 1.25 W/B CONN WAFER ASSY FOR SMT | |
| | | | MATERIAL NO. | DATE | MOLEX INCORPORATED | |
| | | | SEE CHART | '04/04/15 | DOCUMENT NO. SD-53780-003 | |
| | | | SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |
| | | | | | SHEET NO. 2 OF 2 | |

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



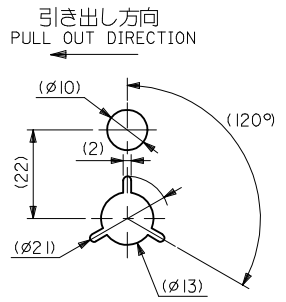
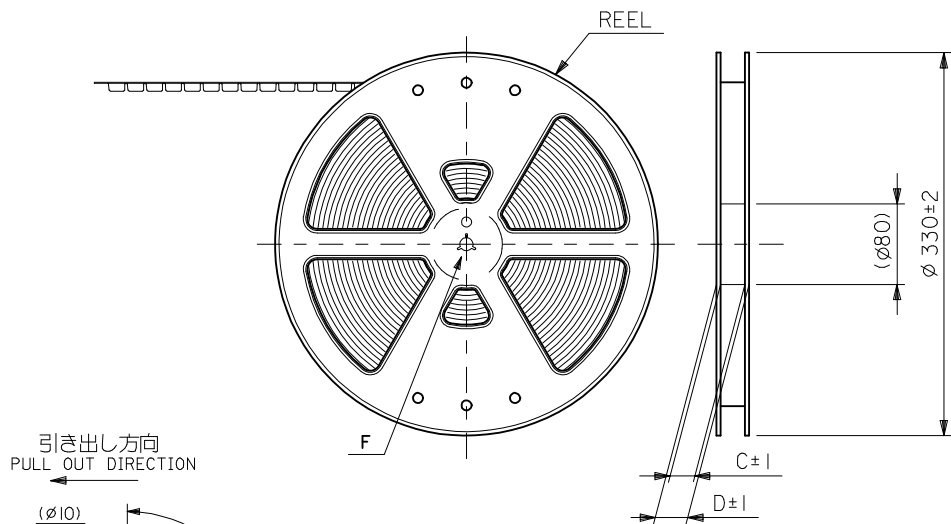
- トップテープの剥離強度：0.1N ~ 1.3N (10gf ~ 130gf)
(剥離方向は下図参照)
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)
PEELING OFF FORCE OF TOP TAPE : 0.1N ~ 1.3N (10gf ~ 130gf)
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



- 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 (TOP TAPE) : 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>

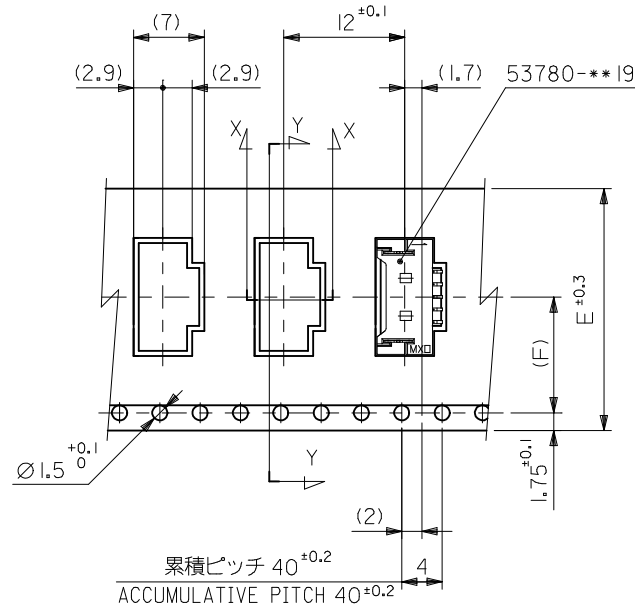
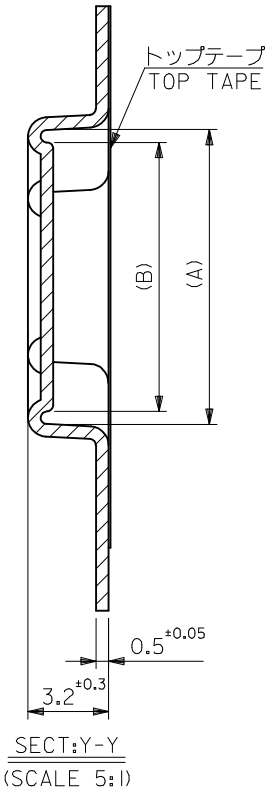
- 本製品は 53780-**-90/-**-80 の鉛フリー品である。
THIS PRODUCT IS LEAD FREE OF 53780-**-90/-**-80.

- ELV及びRoHS適合品
ELV & RoHS COMPLIANT

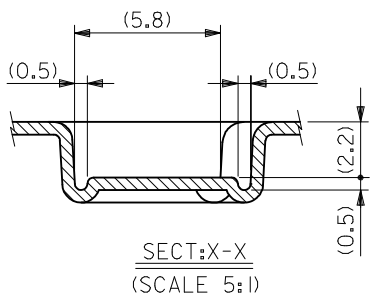


DETAIL F

| | | | | | | | |
|---|--|---------------------------|--|---------------------|---|------------------------|-------------------------|
| REVISED EC NO: J2010-0021 DRWN: MTAKASAKI 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 | MODEL NO. 53780-**-70 |
| | 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 | | |
| DESCRIPTION | ANGULAR ±3 ° | MATERIAL NO. SEE CHART | | SHEET NO. 1 OF 3 | | THIRD ANGLE PROJECTION | |
| REV | 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 | | | | |

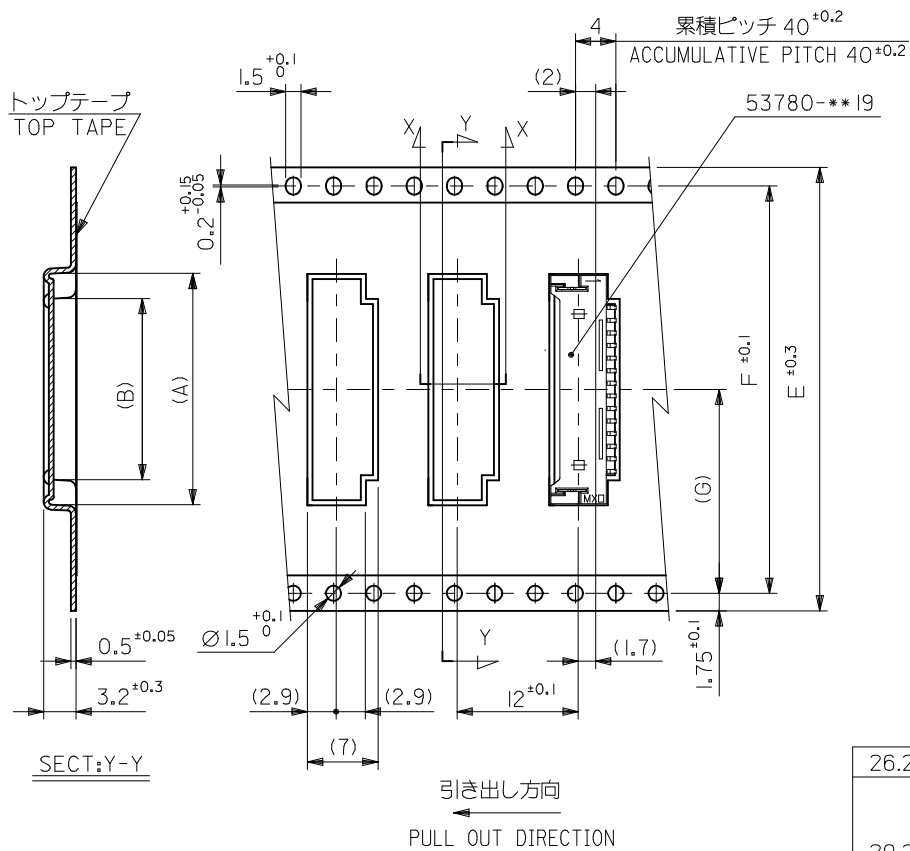


引き出し方向
PULL OUT DIRECTION



| | | | | | | | |
|------|----|------|------|-------|-------|--------------|-------------|
| 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 | | | | |
| REV | DESCRIPTION | ANGULAR ±3 ° | MATERIAL NO. SEE CHART | | SHEET NO. 2 OF 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 | | | | | | | |



| | | | | | | | | |
|------|------|-------------------------------------|------|------|-------|-------|--------------|------------|
| 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. | | SHEET NO. | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE CHART | | SD-53780-004 | | 3 OF 3 | | |
| | | SIZE A3 | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | |