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Part Number: [0527451697](#)

Status: **Active**

Overview:

Description: 0.50mm (.020") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Top Contact Style, 16 Circuits, Lead-free, Gold (Au) Contact Plating, High Barrier Packaging

Agency Certification

UL E29179

General

Product Family FFC/FPC Connectors
Series 52745
Overview ffc_fpc_smt
Product Name N/A

Physical

Circuits (Loaded) 16
Color - Resin Black, White
Contact Position Top
Durability (mating cycles max) 20
Entry Angle 90° Angle
Flammability 94V-0
Mated Height (in) 0.079 In
Mated Height (mm) 2.00 mm
Material - Metal Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Gold
Number of Rows 1
Orientation Right Angle
PCB Locator No
PCB Retention Yes
Packaging Type Embossed Tape on Reel
Pitch - Mating Interface (in) 0.020 In
Pitch - Mating Interface (mm) 0.50 mm
Polarized to PCB Yes
Stackable No
Temperature Range - Operating -20°C to +85°C
Termination Interface: Style Surface Mount
Wire/Cable Type FFC/FPC

Electrical

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

Material Info

Reference - Drawing Numbers

Application Specification AS-52745-001
Packaging Specification SPK-52745-001, SPK-52745-002
Product Specification PS-52745-051, RPS-52745-056, RPS-52745-060, RPS-52745-061, RPS-52745-062, RPS-52745-063, RPS-52745-064, RPS-52745-065, RPS-52745-066, RPS-52745-068, RPS-52745-071, RPS-52745-072, RPS-52745-074, RPS-52745-075, RPS-52745-077
Sales Drawing SD-52745-050, SD-52745-051

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

[52745Series](#)

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注記 NOTES

1. 使用材料 MATERIAL

ハウジング HOUSING : ポリアミド46、ガラス充填、UL94V-0 (白)
 POLYAMIDE46, GLASS FILLED, UL94V-0(WHITE)
 アクチュエータ ACTUATOR : ポリフェニレンサルファイド、ガラス充填、UL94V-0 (黒)
 POLYPHENYLENE SULFIDE, GLASS FILLED, UL94V-0(BLACK)
 ターミナル TERMINAL : リン青銅 (t=0.2)
 PHOSPOR BRONZE
 メッキ
 コントクト部: 金メッキ 0.1マイクロメートル以上
 テール部: 金メッキ 0.05マイクロメートル以上
 下地: ニッケル 1.0マイクロメートル以上

PLATED
 CONTACT AREA : GOLD 0.1 MICROMETER MINIMUM
 TAIL AREA : GOLD 0.05 MICROMETER MINIMUM
 UNDER PLATING : NICKEL 1.0 MICROMETER MINIMUM
 金具 FITTING NAIL : リン青銅、ニッケル下地純銅メッキ (t=0.2)
 PHOSPOR BRONZE, TIN OVER NICKEL PLATING

2. エンボステープ梱包時は、アクチュエータがロックした状態とする。
 IN THE PACKAGE, ACTUATOR OF PART NO. 52745-***59 SHOULD BE LOCKED.
 △ソルダータール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 H に対し上方向 0.1 MAX.、下方向 0.15 MAX. とする。
 MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM H
 UPPER DIRECTION: 0.1 MAX., LOWER DIRECTION: 0.15 MAX.

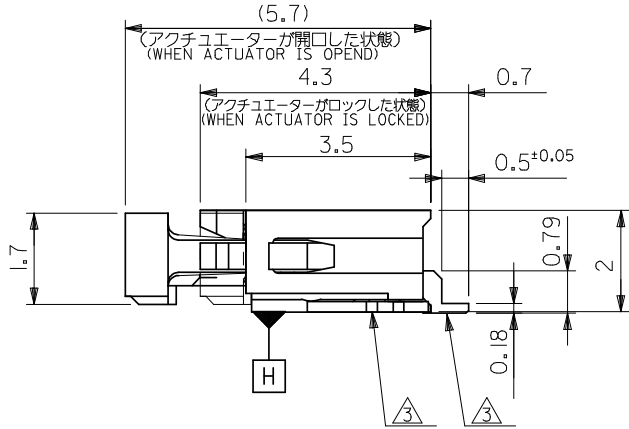
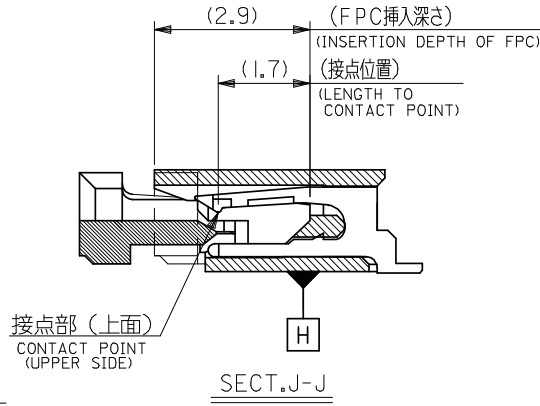
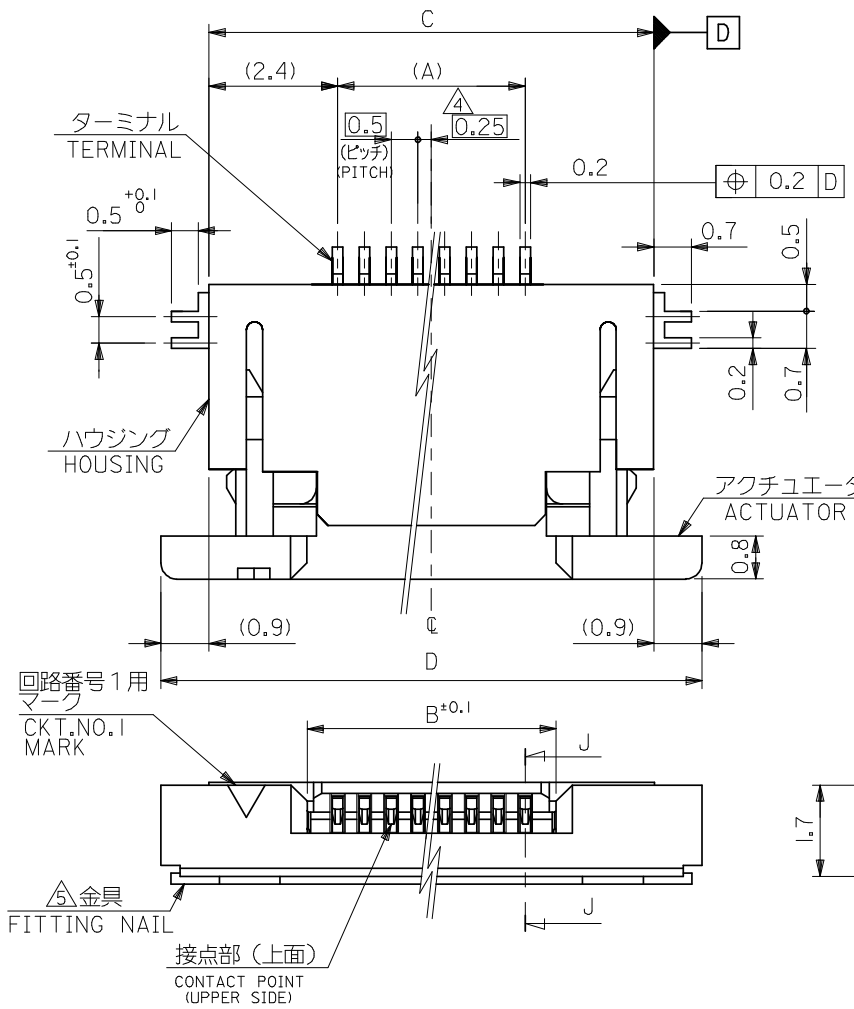
△偶数極に適用。
 APPLY FOR EVEN CIRCUIT.

△パターンはくり止め用金具
 FITTING NAIL FOR PREVENTION OF PEELING
 OF P.C.B. PATTERN.

6. 本製品は 54745-***17 の部分金メッキ品である。
 THIS PRODUCT IS SELECTIVE GOLD PLATING OF 52745-***17.

| | | | | | | |
|------|------|-------|-----|-----------------|--------------|---------|
| 16.1 | 14.3 | 10.65 | 9.5 | 52745-2097 | 52745-2059 | 20 |
| 15.6 | 13.8 | 10.15 | 9.0 | -1997 | -1959 | 19 |
| 15.1 | 13.3 | 9.65 | 8.5 | -1897 | -1859 | 18 |
| 14.6 | 12.8 | 9.15 | 8.0 | -1797 | -1759 | 17 |
| 14.1 | 12.3 | 8.65 | 7.5 | -1697 | -1659 | 16 |
| 13.6 | 11.8 | 8.15 | 7.0 | -1597 | -1559 | 15 |
| 13.1 | 11.3 | 7.65 | 6.5 | -1497 | -1459 | 14 |
| 12.6 | 10.8 | 7.15 | 6.0 | -1397 | -1359 | 13 |
| 12.1 | 10.3 | 6.65 | 5.5 | -1297 | -1259 | 12 |
| 11.6 | 9.8 | 6.15 | 5.0 | -1197 | -1159 | 11 |
| 11.1 | 9.3 | 5.65 | 4.5 | -1097 | -1059 | 10 |
| 10.6 | 8.8 | 5.15 | 4.0 | -0997 | -0959 | 9 |
| 10.1 | 8.3 | 4.65 | 3.5 | -0897 | -0859 | 8 |
| 9.6 | 7.8 | 4.15 | 3.0 | -0797 | -0759 | 7 |
| 9.1 | 7.3 | 3.65 | 2.5 | -0697 | -0659 | 6 |
| 8.1 | 6.3 | 2.65 | 1.5 | 52745-0497 | 52745-0459 | 4 |
| D | C | B | (A) | EMBOSSED TAPE | MATERIAL NO. | 極数 |
| | | | | ORDER No. オーダー番 | | CIRCUIT |

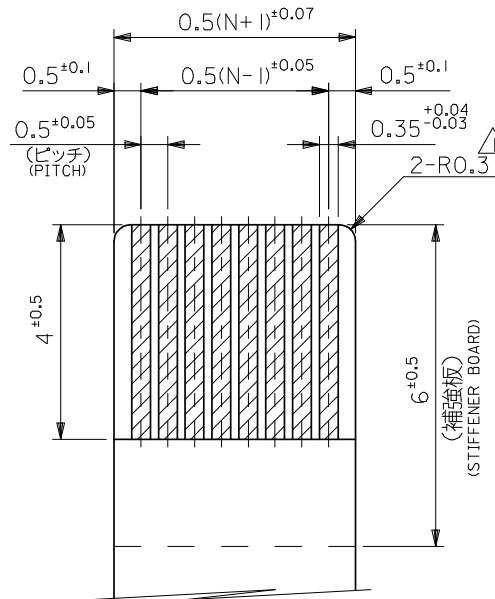
52745-***59 MODEL NO.



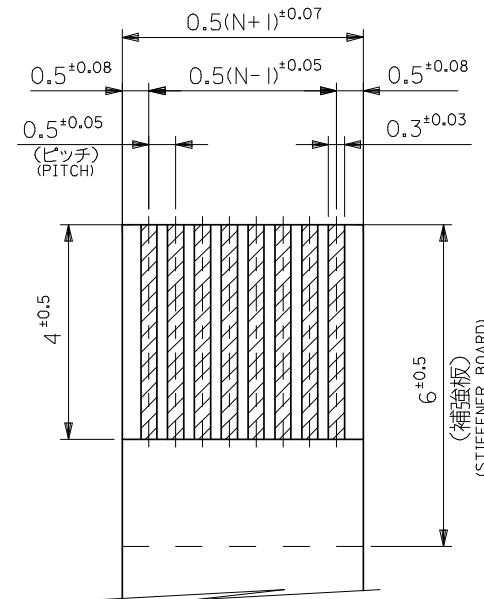
| | | | | | | |
|--|--|---------------------------------------|------------------|--------------------|--------------------------|--|
| REVISED EC NO: J2008-4308 DRWN: NABEI 2008/06/27 CH'KD: THARUYAMA 2008/06/30 APPR: NUKITA 2008/06/30 | DESCRIPTION | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | REV | 10 UNDER ±0.2 | MM ONLY | --- | METRIC | ◎ □ |
| | | 10 OVER 30 UNDER ±0.25 | DRAWN BY DATE | M. NABEI '05/02/14 | TITLE | 0.5 FPC CONN ASSY ZIF UPR CONT -LEAD FREE- |
| | | 30 OVER ±0.3 | CHECKED BY DATE | K. TOJO '05/02/14 | MOLEX MOLEX INCORPORATED | |
| | | ANGULAR ±3 ° | APPROVED BY DATE | N. UKITA '05/02/14 | MATERIAL NO. | DOCUMENT NO. |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | SD-52745-050 | | 1 OF 2 |



参考基板レイアウト
P.C.BOARD PATTERN
DIMENSION (REF.)
(マウント面)
(MOUNTING SIDE)



適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3±0.03)
(THICKNESS: 0.3±0.03)



適合FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3±0.03)
(THICKNESS: 0.3±0.03)

FPCについて:
打抜き方向は導体側から補強板側を推奨致します。
補強フィルム材質はポリイミドを推奨致します。
接着剤は熱硬化接着剤を推奨致します。

ABOUT FPC:
RECOMMENDED PUNCHER DIRECTION: FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE.
RECOMMENDED MATERIAL:
STIFFENER FILM: POLYIMIDE
BONDING AGENT: THERMOSETTING BONDING AGENT

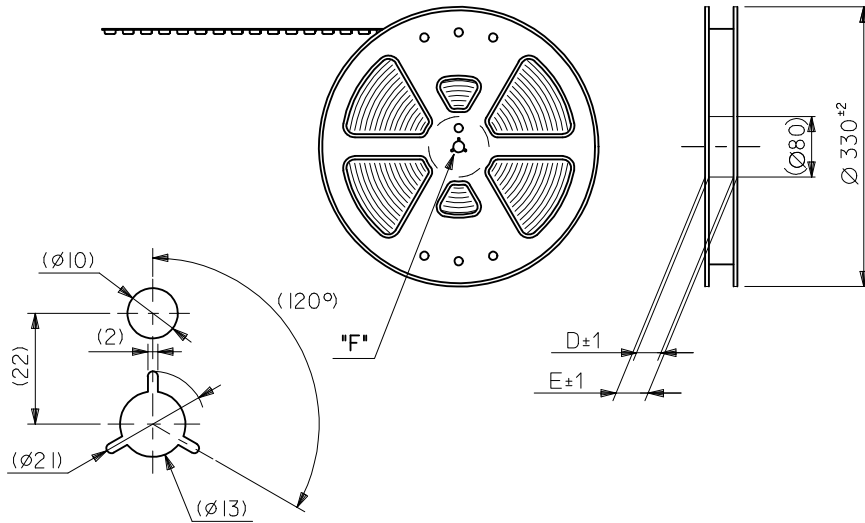
注記 NOTES

△ R0.3は、FPCの導体部にかからないこと。
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

52745-***59 MODEL NO.

| | | | | | | |
|---|--|-------|-----------------------------|-------------------|--|---------------------------|
| REVISED EC NO: J2008-4308 DRWN: NABEI 2008/06/27 CHKD: THARUYAMA 2008/06/30 APPR: NUKITA 2008/06/30 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | 10 UNDER | ±0.2 | DRAWN BY M. NABEI | DATE '05/02/14 | TITLE 0.5 FPC CONN ASSY ZIF UPR CONT -LEAD FREE- | |
| | 10 OVER 30 UNDER | ±0.25 | CHECKED BY K. TOJO | DATE '05/02/14 | MOLEX INCORPORATED | |
| | 30 OVER | ±0.3 | APPROVED BY N. UKITA | DATE '05/02/14 | DOCUMENT NO. SD-52745-050 | SHEET NO. 2 OF 2 |
| | ANGULAR | ±3 ° | MATERIAL NO. SEE SHEET 1 | | 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 | | | | | | |

引き出し方向
←
PULL OUT
DIRECTION



DETAIL "F"

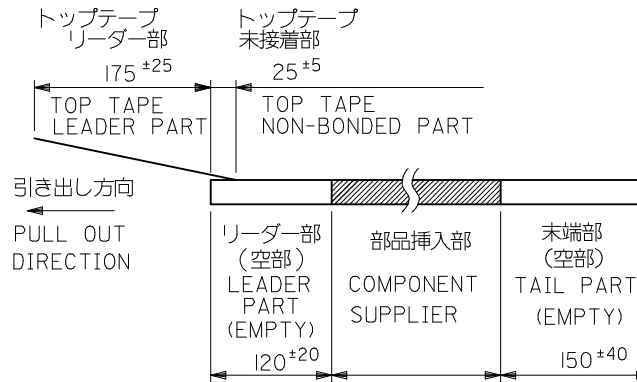
5. 材料 キャリアテープ:ポリプロピレン (PP)
 トップテープ:PET, PE, PEF
 リール:ポリスチレン (PS) <リサイクル材を含む>
 MATERIAL CARRIER TAPE:POLYPROPYLENE
 TOP TAPE:PET,PE,PEF
 REEL:POLYSTYRENE(PS)
 <RECYCLE MATERIAL CONTAINED>

6. 本製品は 52745- **90 の鉛フリー品である。
 THIS PRODUCT IS LEAD FREE OF 52745-**90

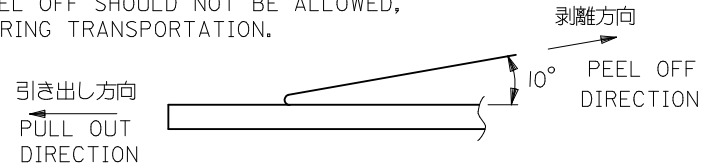
7. 本製品は乾燥剤入り、ハイバリア梱包仕様である。
 THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

注記 NOTES

- 製品番号 52745-**59 の梱包状態はアクチュエータがロックした状態とする。
 詳細寸法については図面 SD-52745-050 を参照下さい。
 IN THE PACKAGE,ACTUATOR OF PART NO.52745-**59 SHOULD BE LOCKED
 RE DETAILED DIMENSIONS,SEE SD-52745-050.
- 梱包数量:1000個/リール
 NUMBER OF CONNECTORS:1000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH

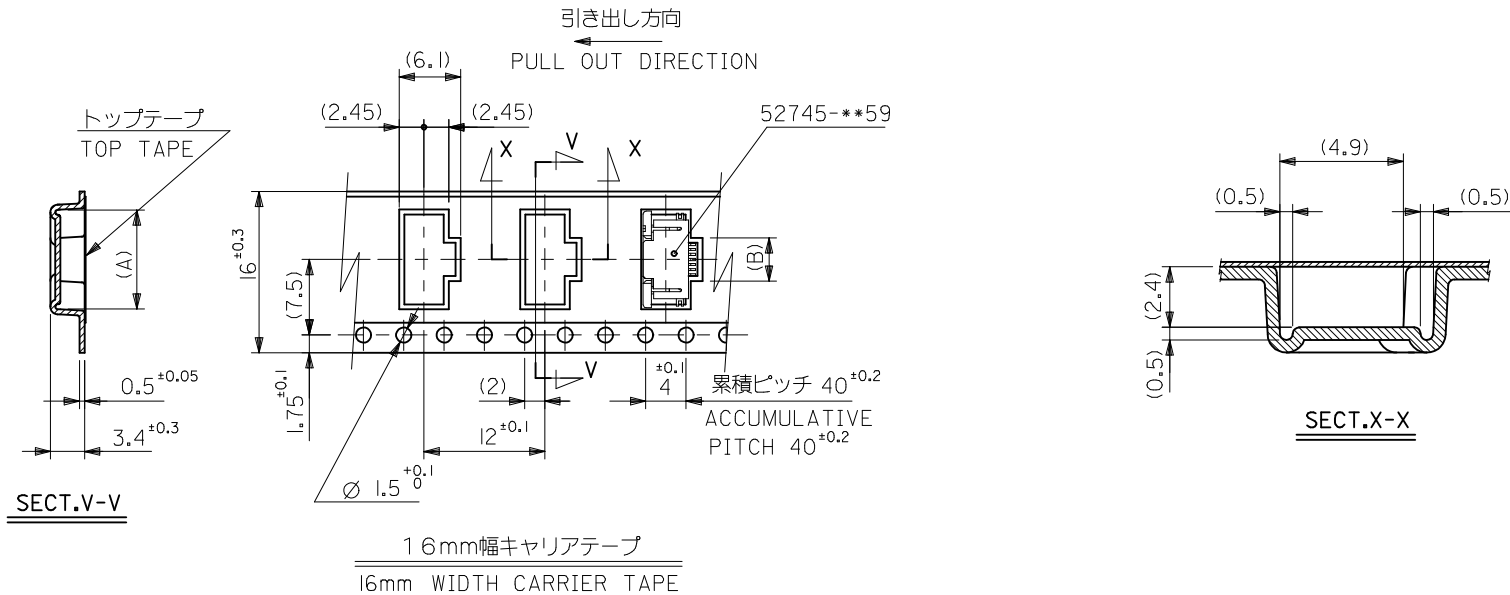


- トップテープの剥離強度: (剥離方向は下図参照)
 0. 1N~1.3N (10gf~130gf) 尚、本規格値は、出荷時に適用。
 (但し、輸送時に剥離が発生しない事。)
 PEELING OFF FORCE OF TOP TAPE:
 0.1N~1.3N(10gf~130gf)(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)
 THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT
 PEEL OFF SHOULD NOT BE ALLOWED,
 DURING TRANSPORTATION.



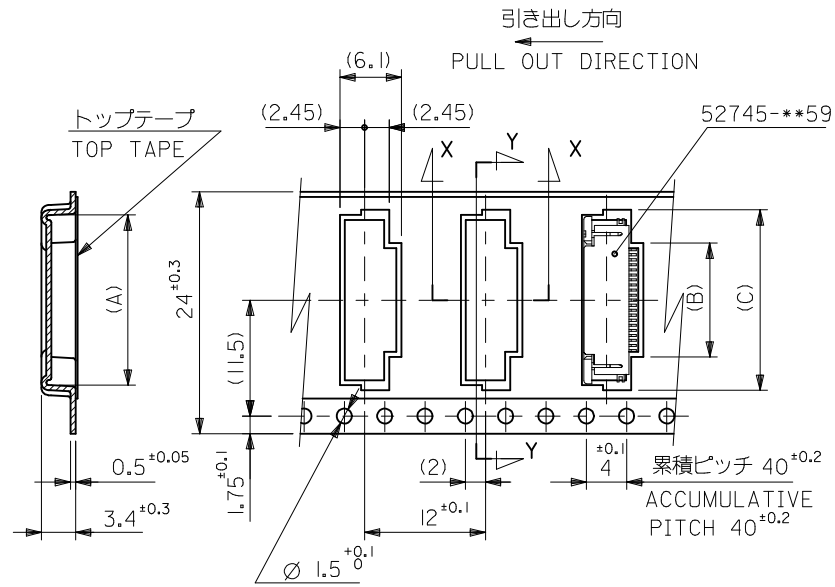
52745-**97 MODEL NO.

| | | | | | | | |
|--|--|--|----------------------------|-------------------|---|------------------------|---------------------------|
| REVISED EC NO: J2009-2061 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 | ±--- | DRAWN BY M.NABEI | DATE '05/02/14 | TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE- | | |
| | 10 OVER 30 UNDER | ±--- | CHECKED BY K.TOJO | DATE '05/02/14 | MOLEX INCORPORATED | | |
| | 30 OVER | ±--- | APPROVED BY N.NUKITA | DATE '05/02/14 | DOCUMENT NO. SD-52745-051 | | |
| REV | DESCRIPTION | ANGULAR ±---° | MATERIAL NO. SEE TABLE | | SHEET NO. 1 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 | | | | | |



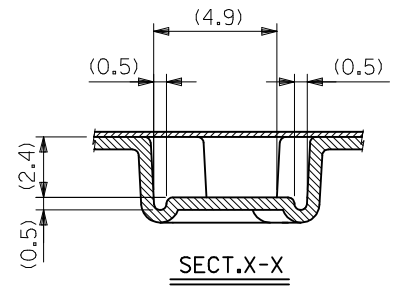
| | | | | | | |
|--------------------------------|------|------|-----|-----|--------------|---------------|
| 16 | 21.4 | 17.4 | 2.8 | 8.4 | 52745-0497 | 4 |
| キャリアテープ幅 CARRIER TAPE WIDTH | E | D | (B) | (A) | MATERIAL NO. | 極数 CIRCUIT |

| | | | | | | | | | |
|---|--------------------|--|------|---|-------------------|---|------------------------|------------------------------|--|
| REVISED EC NO.: J2009-2061 DRWN:TKGN 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21 | DESCRIPTION REV | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM ONLY | | SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | 10 UNDER | ±--- | DRAWN BY M. NABEI | DATE '05/02/14 | TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE- | | | |
| | | 10 OVER 30 UNDER | ±--- | CHECKED BY K. TOJO | DATE '05/02/14 | APPROVED BY N. UKITA | | | |
| | | 30 OVER | ±--- | APPROVED BY N. UKITA | DATE '05/02/14 | MATERIAL NO. SEE TABLE | | DOCUMENT NO. SD-52745-051 | |
| ANGULAR ±--- ° | | 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 | | | | | |



SECT.Y-Y

24mm幅キャリアテープ
24mm WIDTH CARRIER TAPE



SECT.X-X

| | | | | | | | |
|--------------------------------|------|------|------------|------|------|--------------|---------------|
| 24 | 29.4 | 25.4 | 17.4 | 10.8 | 16.4 | 52745-2097 | 20 |
| | | | 16.9 | 10.3 | 15.9 | -1997 | 19 |
| | | | 16.4 | 9.8 | 15.4 | -1897 | 18 |
| | | | 15.9 | 9.3 | 14.9 | -1797 | 17 |
| | | | 15.4 | 8.8 | 14.4 | -1697 | 16 |
| | | | 14.9 | 8.3 | 13.9 | -1597 | 15 |
| | | | 14.4 | 7.8 | 13.4 | -1497 | 14 |
| | | | 13.9 | 7.3 | 12.9 | -1397 | 13 |
| | | | 13.4 | 6.8 | 12.4 | -1297 | 12 |
| | | | 12.9 | 6.3 | 11.9 | -1197 | 11 |
| | | | 12.4 | 5.8 | 11.4 | -1097 | 10 |
| | | | 11.9 | 5.3 | 10.9 | -0997 | 9 |
| | | | 11.4 | 4.8 | 10.4 | -0897 | 8 |
| 10.9 | 4.3 | 9.9 | -0797 | 7 | | | |
| 10.4 | 3.8 | 9.4 | 52745-0697 | 6 | | | |
| キャリアテープ幅 CARRIER TAPE WIDTH | E | D | (C) | (B) | (A) | MATERIAL NO. | 極数 CIRCUIT |

| | | | | | | | | |
|---|---------------------------------------|--|-----------------------------------|-------------------|--|---|----------------------------|--|
| REVISED EC NO: J2009-2061 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 | ± --- | DRAWN BY M. NABEI | DATE '05/02/14 | TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE- | | | |
| | 10 OVER 30 UNDER | ± --- | CHECKED BY K. TOJO | DATE '05/02/14 | MOLEX INCORPORATED | | | |
| | 30 OVER | ± --- | APPROVED BY N. UKITA | DATE '05/02/14 | DOCUMENT NO. SD-52745-051 | | SHEET NO. 3 OF 3 | |
| A | ANGULAR ± --- ° | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE TABLE | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |