

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

**Part Number:** [0525591052](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, Vertical, SMT, ZIF, 10 Circuits, Lead-free, Gold Contact Plating, High Barrier Packaging

**Agency Certification**

UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series [52559](#)  
 Overview [ffc\\_fpc\\_smt](#)  
 Product Name N/A

**Physical**

Circuits (Loaded) 10  
 Contact Position N/A  
 Durability (mating cycles max) 20  
 Entry Angle Vertical  
 Flammability 94V-0  
 Mated Height (in) 0.154 In  
 Mated Height (mm) 3.90 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Vertical  
 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 No  
 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 AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Application Specification AS-52559-001  
 Packaging Specification SPK-52559-001, SPK-52559-003  
 Product Specification PS-52559-013, RPS-52559-062, RPS-52559-064, RPS-52559-065, RPS-52559-068, RPS-52559-070, RPS-52559-072  
 Sales Drawing SD-52559-048, SD-52559-049

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**  
**Not Halogen-Free**

**China RoHS**



**Need more information on product environmental compliance?**

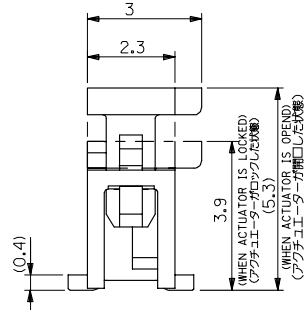
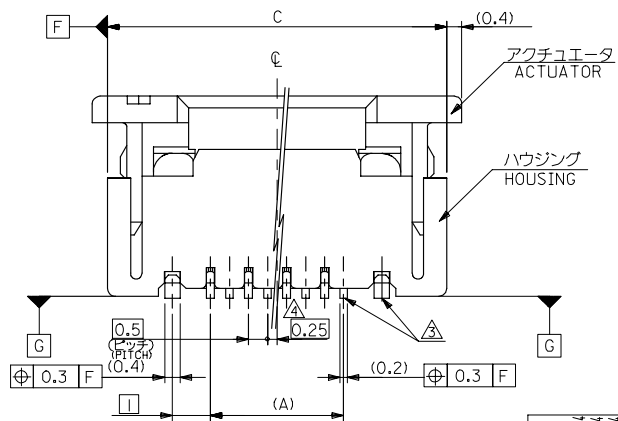
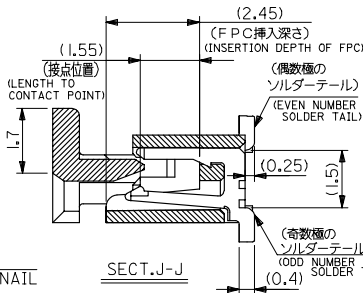
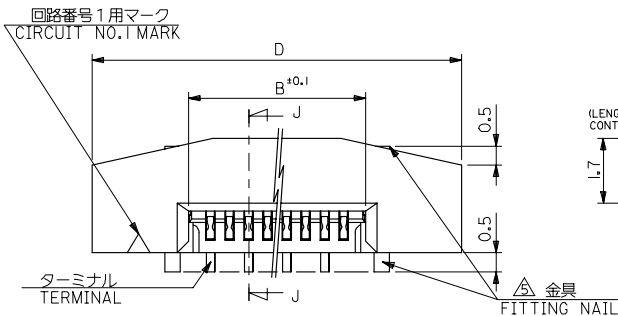
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[52559Series](#)

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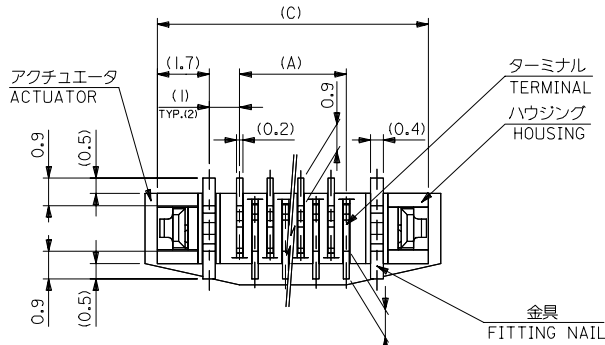
**注記 NOTES**

- I. 使用材料・MATERIAL
- ハウジング HOUSING :46NYLON UL94V-0
  - アクチュエータ ACTUATOR :PPS UL94V-0
  - ターミナル TERMINAL :リン青銅 (t=0.2) PHOS-BRO
  - 接点部 金メッキ 0.1マイクロメートル以上 CONTACT GOLD 0.1 MICROMETER MINIMUM
  - 半田付け部 錫メッキ 1.0マイクロメートル以上 TAL 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
  - リン青銅 (t=0.4) PHOS-BRO
  - 金具 FITTING NAIL :錫メッキ 1.0マイクロメートル以上 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
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.52559-\*\*79 SHOULD BE LOCKED.
- △ソルダータール半田付け面のスレ量、及び金具半田付け面のスレ量は、基準面 G に対し上方向 0.05 MAX.、下方向 0.15 MAX.とする。  
 MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM G UPPER DIRECTION: 0.05 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.
- △R.O. 3は、FPCの導体部にかからないこと。  
 R.O.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

MODEL NO. 52559-\*\*79

RELEASED IEC NO. J2005-0174 2004/07/14 DRAWN:MABEI CHKD:KTOJO 2004/07/14 APPR:NUMITA 2004/07/14	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABEI	DATE '04/07/13	TITLE 0.5 FPC CONN ASSY ZIF.		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/07/13	-LEAD FREE-		
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/07/13	MOLEX INCORPORATED		
	ANGULAR	±3 °	MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART	SD-52559-048		1 OF 2		
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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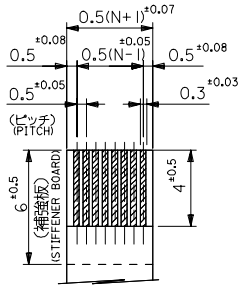


FPCについて：  
 打抜き方向は導体側から補強板側を推奨致します。  
 補強フィルム材質はポリイミドを推奨致します。  
 接着剤は熱硬化接着剤を推奨致します。

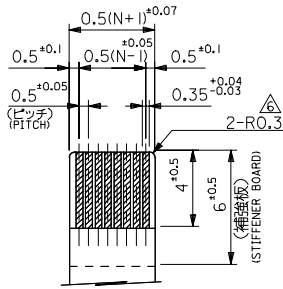
ABOUT FPC :  
 RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE.  
 RECOMMENDED MATERIAL :  
 STIFFENER FILM : POLYIMIDE  
 BONDING AGENT : THERMOSETTING BONDING AGENT

25.7	24.9	20.65	19.5	52559-4079	40
23.7	22.9	18.65	17.5		-3679 36
22.2	21.4	17.15	16.0		-3379 33
21.7	20.9	16.65	15.5		-3279 32
21.2	20.4	16.15	15.0		-3179 31
20.7	19.9	15.65	14.5		-3079 30
20.2	19.4	15.15	14.0		-2979 29
19.7	18.9	14.65	13.5		-2879 28
19.2	18.4	14.15	13.0		-2779 27
18.7	17.9	13.65	12.5		-2679 26
18.2	17.4	13.15	12.0		-2579 25
17.7	16.9	12.65	11.5		-2479 24
17.2	16.4	12.15	11.0		-2379 23
16.7	15.9	11.65	10.5		-2279 22
16.2	15.4	11.15	10.0		-2179 21
15.7	14.9	10.65	9.5		-2079 20
15.2	14.4	10.15	9.0		-1979 19
14.7	13.9	9.65	8.5		-1879 18
14.2	13.4	9.15	8.0		-1779 17
13.7	12.9	8.65	7.5		-1679 16
13.2	12.4	8.15	7.0		-1579 15
12.7	11.9	7.65	6.5		-1479 14
12.2	11.4	7.15	6.0		-1379 13
11.7	10.9	6.65	5.5		-1279 12
11.2	10.4	6.15	5.0		-1179 11
10.7	9.9	5.65	4.5		-1079 10
10.2	9.4	5.15	4.0		-0979 9
9.7	8.9	4.65	3.5		-0879 8
8.7	7.9	3.65	2.5	52559-0679	6
D	C	B	(A)	MATERIAL NO.	極致

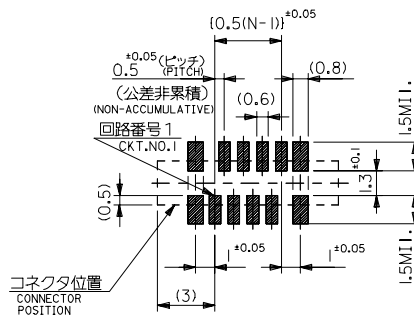
下面図  
 BOTTOM VIEW



適合FPC推奨寸法  
 APPLICABLE FPC  
 RECOMMENDED DIMENSION.  
 (仕上がり厚さ: 0.3<sup>+0.05</sup>)  
 (THICKNESS: 0.3<sup>+0.05</sup>)

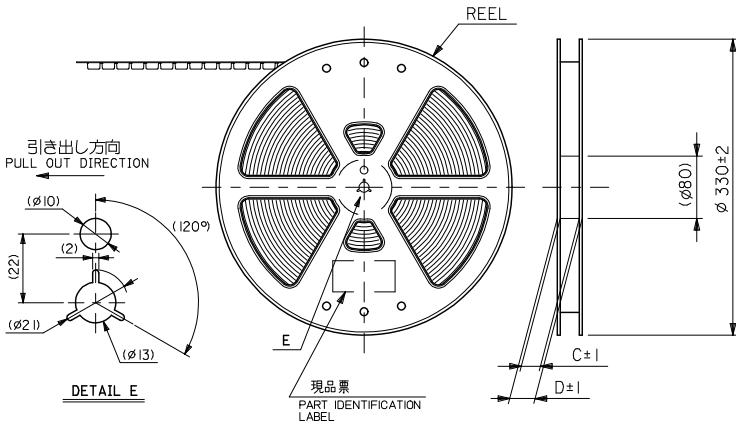


適合FPC推奨寸法  
 APPLICABLE FPC  
 RECOMMENDED DIMENSION.  
 (仕上がり厚さ: 0.3<sup>+0.05</sup>)  
 (THICKNESS: 0.3<sup>+0.05</sup>)



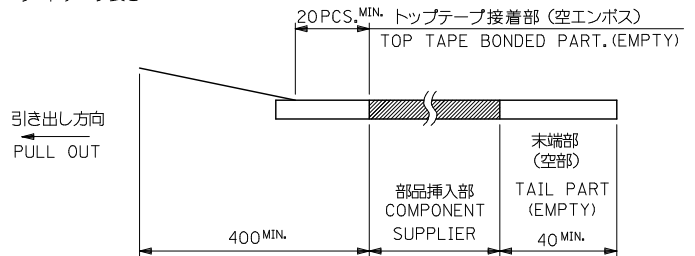
RELEASED	2004/07/14	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	MODEL NO. 52559-xx79
EC NO. J2005-0174	2004/07/14	10 UNDER ±0.2	DRAWN BY MNABE I	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
DRW: MNABE I	2004/07/14	10 OVER 30 UNDER ±0.25	DATE '04/07/13	0.5 FPC CONN ASSY ZIF.	
CHKD: KTOJO	2004/07/14	30 OVER ±0.3	CHECKED BY KTOJO	-LEAD FREE-	
APPR: NUKITA	2004/07/14	ANGULAR ±3 °	DATE '04/07/13	MOLEX INCORPORATED	
DESCRIPTION		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY NUKITA	MATERIAL NO.	DOCUMENT NO. SD-52559-048
REV 0			DATE '04/07/13	SEE CHART	SHEET NO. 2 OF 2
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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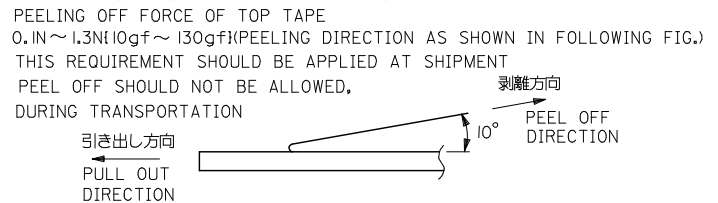


**注記 NOTES**

- 製品番号 52559-\*\*79 の梱包状態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.52559-\*\*79 SHOULD BE LOCKED  
RE DETAILED DIMENSIONS,SEE ASSY DRAWING
- 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。)



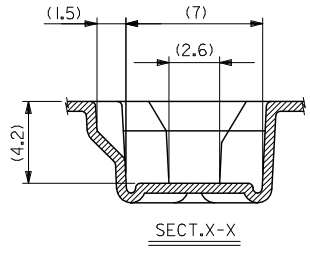
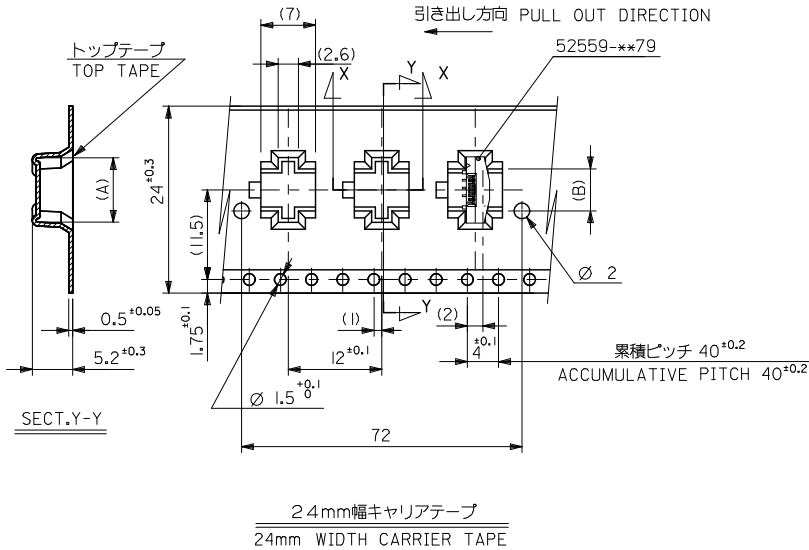
- 材料  
キャリアテープ：ポリプロピレン (PP)  
トップテープ：PET, PE, PEF  
リール：ポリスチレン (PS) <リサイクル材を含む>

MATERIAL CARRIER TAPE:POLYPROPYLENE  
TOP TAPE:PET,PE,PEF  
REEL:POLYSTYRENE (PS)  
<RECYCLE MATERIAL CONTAINED>

- 本製品は 52559-\*\*53 のエンボステープ違い品である。  
THIS PRODUCT IS EMBOSSED TAPE DIFFERENCE ARTICLE OF 52559-\*\*53.
- 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.

REVISED EC NO: J2009-2061 DRAWN BY DRWNTKON 2009/05/20 CHECKED BY CHYKHMATSUMOTO 2009/05/21 APPROVED BY APPRNKIKITA 2009/05/21 G	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	52559-**52	MODEL NO.
	10 UNDER	±0.2	DRAWN BY MNABE I	DATE '04/07/13	TITLE	0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-	
	10 OVER 30 UNDER	±0.25	CHECKED BY KT0JO	DATE '04/07/13	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/07/13	MATERIAL NO. SEE SHEET 2-4	DOCUMENT NO. SD-52559-049	SHEET NO. 1 OF 4
ANGULAR ±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			

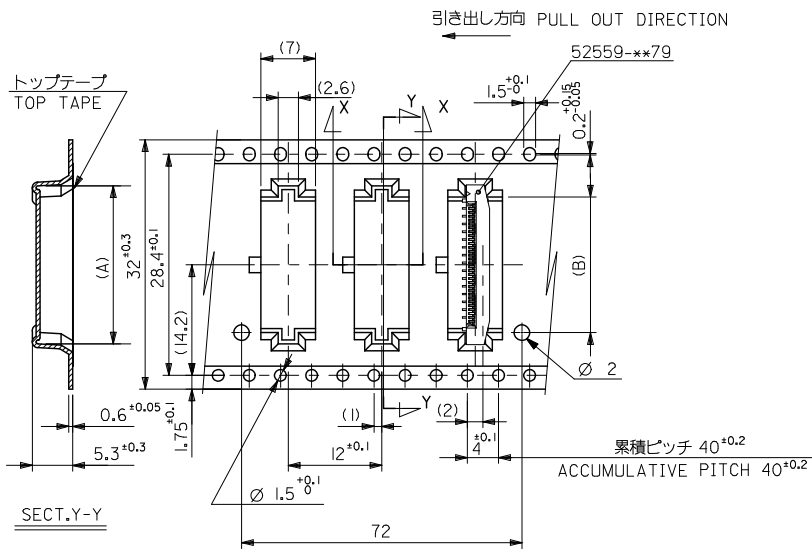
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24	29.4	25.4	14.4	17.3	52559-2452	24
			13.9	16.8	52559-2352	23
			12.9	15.8	52559-2152	21
			12.4	15.3	52559-2052	20
			10.9	13.8	52559-1752	17
			10.4	13.3	52559-1652	16
			9.9	12.8	52559-1552	15
			9.4	12.3	52559-1452	14
			8.4	11.3	52559-1252	12
			7.4	10.3	52559-1052	10
6.9	9.8	52559-0952	9			
5.4	8.3	52559-0652	6			
キャリアテープ幅 CARRIER TAPE WIDTH			(B)	(A)	MATERIAL NO.	CIRCUIT NO.

REVISED EEC NO: J2009-2061 DRAWN BY: IWANAKON CHECKED BY: CHYKOHMATSUMOTO APPROVED BY: APPR:NIKIITA G	DESCRIPTION 2009/05/20 2009/05/21 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY MNABEI	DATE '04/07/13	TITLE 0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-			
		10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/07/13	APPROVED BY NUKITA			
		30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/07/13	MATERIAL NO. SEE TABLE			
		ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DOCUMENT NO. SD-52559-049		SHEET NO. 2 OF 4	

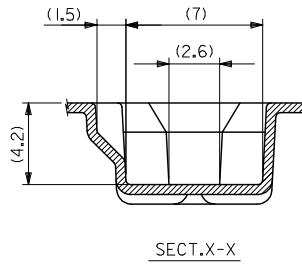
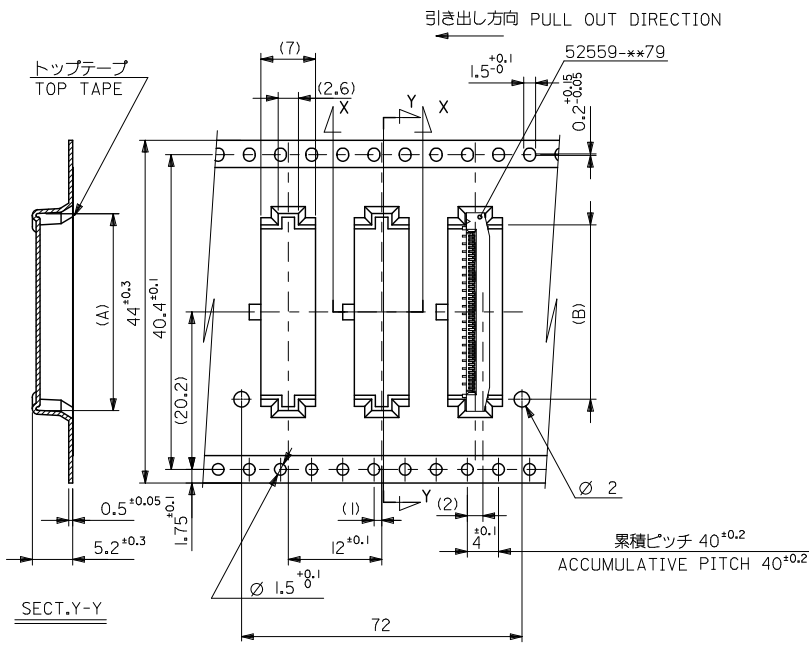
10 9 8 7 6 5 4 3 2 1



32	37.4	33.4	18.4	21.3	52559-3252	32
			17.4	20.3	52559-3052	30
			16.4	19.3	52559-2852	28
			15.9	18.8	52559-2752	27
			15.4	18.3	52559-2652	26
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	CIRCUIT NO.

REVISED E.C. NO: J2009-2061 DRAWN BY: CHYKOHMATSUOTO CHECKED BY: APPR: NUKITA DATE: 2009/05/21 DATE: 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABEI	DATE '04/07/13	TITLE 0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/07/13			
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/07/13	MOLEX INCORPORATED DOCUMENT NO. SD-52559-049 SHEET NO. 3 OF 4		
	ANGULAR	±3 °	MATERIAL NO. SEE TABLE				
	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		
DESCRIPTION		52559-**-52 MODEL NO.					

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44mm幅キャリアテープ  
44mm WIDTH CARRIER TAPE

44	49.4	45.4	22.4	25.3	52559-4052	40
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	CIRCUIT NO.

REVISED ELC NO: J2009-2061 DRAWN BY: DRWNTKON CHECKED BY: CHYKHMATSUMOTO APPROVED BY: APPR:NUKITA G 2009/05/20 2009/05/21 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABEI	DATE '04/07/13	TITLE <b>0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-</b>		
	10 OVER 30 UNDER	±0.25	CHECKED BY KT0JO	DATE '04/07/13			
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/07/13	MOLEX INCORPORATED DOCUMENT NO. SD-52559-049 SHEET NO. 4 OF 4		
ANGULAR ±3 °		MATERIAL NO. SEE TABLE					
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					