

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

**Part Number:** [0525591653](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, Vertical, SMT, ZIF, 16 Circuits, Lead-free, Gold (Au) Contact Plating

**Agency Certification**

UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series 52559  
 Overview ffc\_fpc\_smt  
 Product Name N/A

**Physical**

Circuits (Loaded) 16  
 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**

Packaging Specification SPK-52559-001  
 Product Specification PS-52559-014, RPS-52559-062, RPS-52559-065,  
 RPS-52559-070, RPS-52559-078  
 Sales Drawing SD-52559-048, SD-52559-050

**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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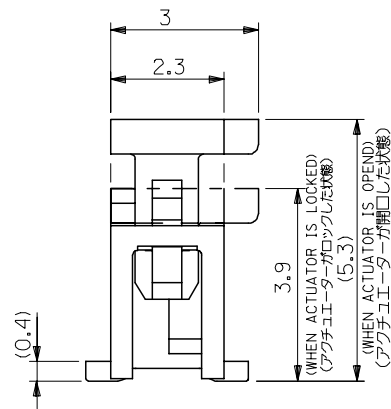
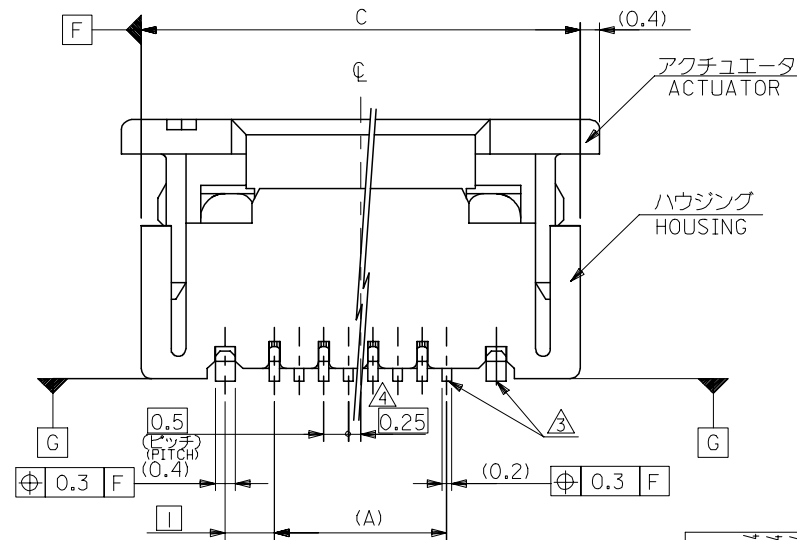
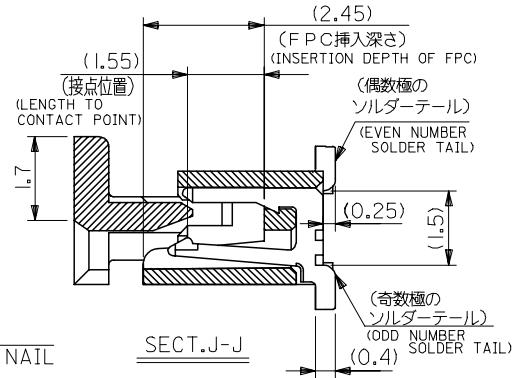
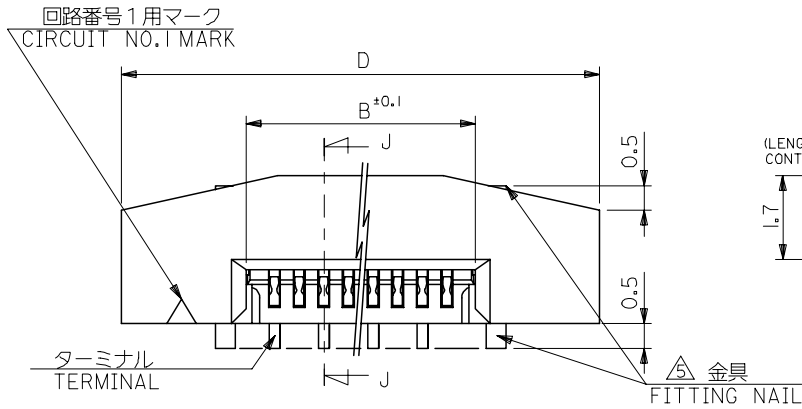
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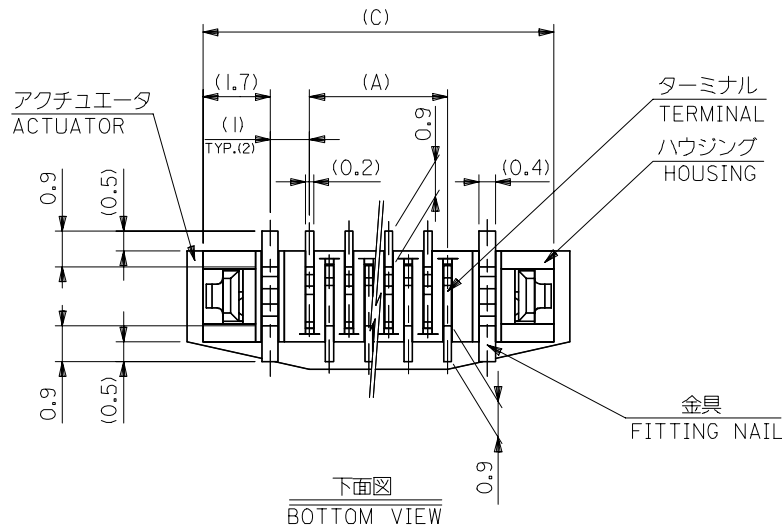


注記 NOTES

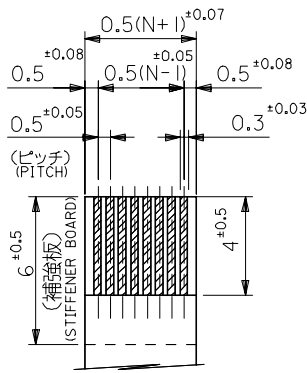
- 使用材料 : MATERIAL
  - ハウジング HOUSING : 46NYLON UL94V-0
  - アクチュエータ ACTUATOR : PPS UL94V-0
  - ターミナル TERMINAL : リン青銅 (t=0.2) PHOS-BRO
  - 接点部 金メッキ 0.1マイクロメートル以上 CONTACT GOLD 0.1 MICROMETER MINIMUM
  - 半田付け部 錫メッキ 1.0マイクロメートル以上 TAIL TIN 1.0 MICROMETER MINIMUM
  - ニッケル下地 1.0マイクロメートル以上 NICKEL (UNDER PLATING) 1.0 MICROMETER MINIMUM
  - 金具 FITTING NAIL : リン青銅 (t=0.4) PHOS-BRO
  - 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
- 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.
- RO. 3は、FPCの導体部にかからないこと。  
RO.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

MODEL NO. 52559-\*\*79

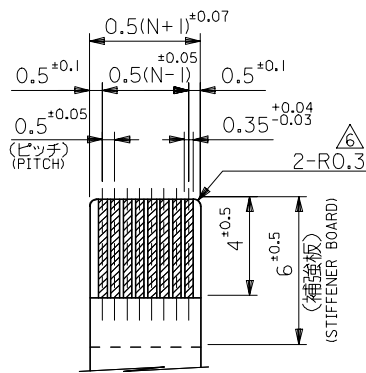
RELEASED EC NO: J2005-0174 DRAWN: MNABE1 2004/07/14 CHKD: KTOJO 2004/07/14 APPR: NUKITA 2004/07/14 REV: 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY MNABE1	DATE '04/07/13	TITLE 0.5 FPC CONN ASSY ZIF.			
	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 MOLEX INCORPORATED			
	ANGULAR	±3 °	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-52559-048	SHEET NO. 1 OF 2			
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						



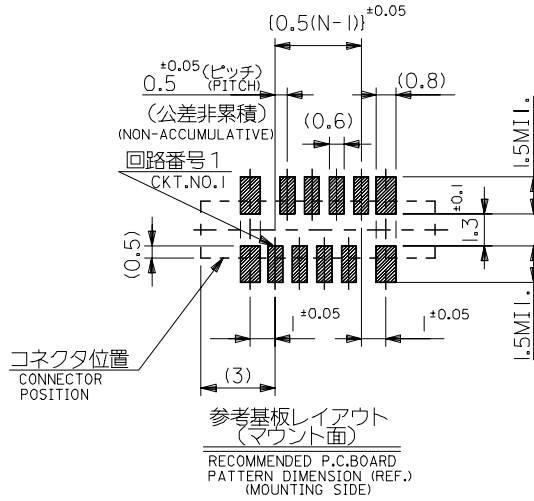
下面図  
BOTTOM VIEW



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>)



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.	極数

RELEASED EC NO: J2005-0174 DRAWN: MNABE CHKD: KTOJO APPR: NUKITA 2004/07/14 2004/07/14 2004/07/14	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	MODEL NO. DESIGN UNITS METRIC	52559-**79
	10 UNDER	±0.2	DRAWN BY MNABE1	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		
0	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-52559-048	SHEET NO. 2 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

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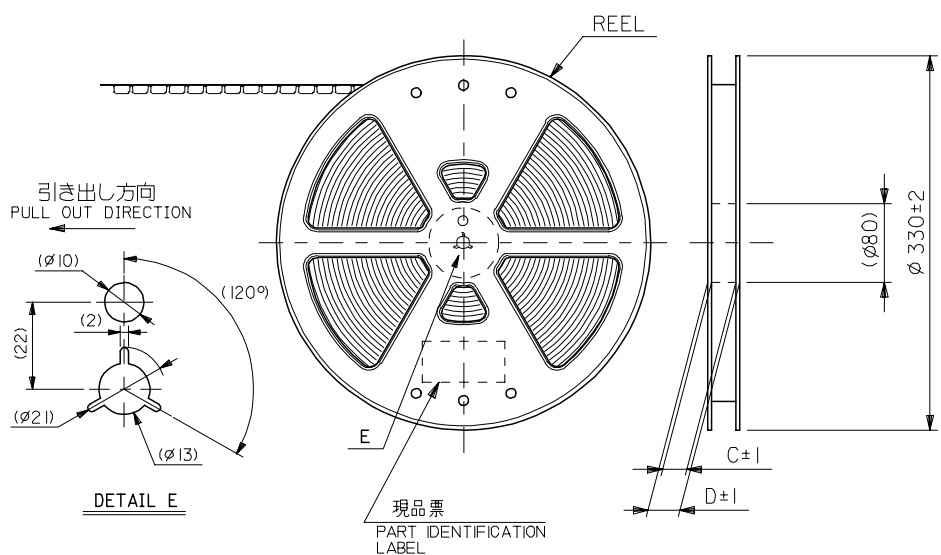
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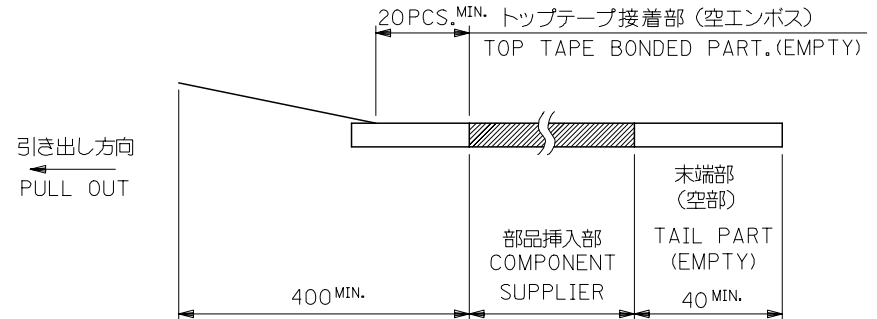


5. 材料 キャリアテープ:ポリプロピレン (PP)  
 トップテープ:PET, PE, PEF  
 リール:ポリスチレン (PS) <リサイクル材を含む>
- MATERIAL CARRIER TAPE:POLYPROPYLENE  
 TOP TAPE:PET,PE,PEF  
 REEL:POLYSTYRENE (PS)  
 <RECYCLE MATERIAL CONTAINED>

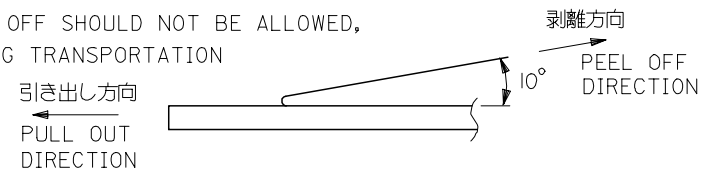
6. 本製品は 52559-\*\*52 のエンボステープ違い品である。  
 THIS PRODUCT IS EMBOSSED TAPE DIFFERENCE ARTICLE OF 52559-\*\*52.

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 SD-52559-048
- 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



4. 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



REVISED EC NO: J2006-3700 DRW:MNABE1 2006/06/16 CHKD:KTOYODA 2006/06/19 APPR:NUKITA 2006/06/22	DESCRIPTION D	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	52559-**53 MODEL NO.			
		10 UNDER ±0.2	10 OVER 30 UNDER ±0.25	DRAWN BY MNABE1	DATE '05/04/27	TITLE 0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		30 OVER ±0.3	ANGULAR ±3 °	CHECKED BY KTOJO	DATE '05/04/27	APPROVED BY NUKITA	DATE '05/04/27	MATERIAL NO.	DOCUMENT NO. SD-52559-050	SHEET NO. 1 OF 4
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MOLEX INCORPORATED				
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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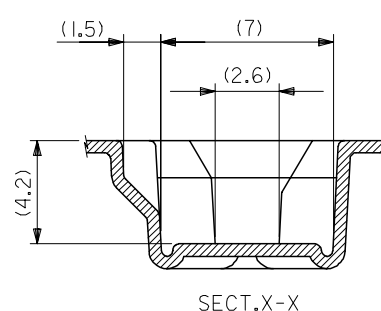
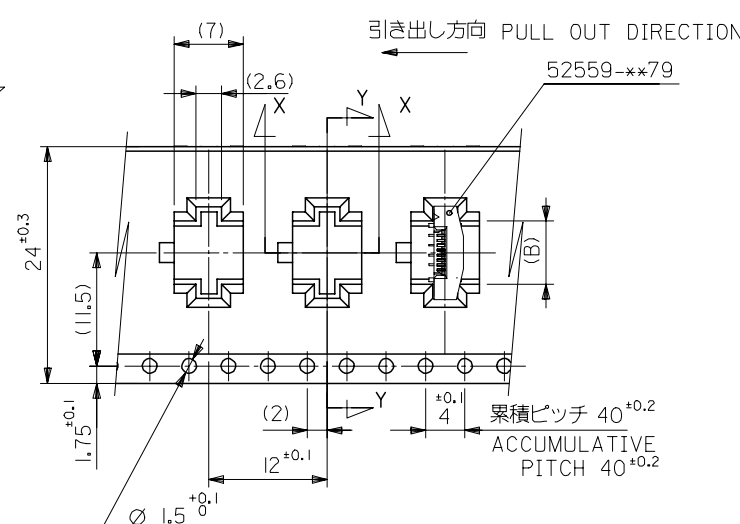
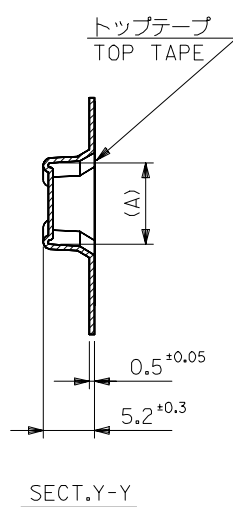
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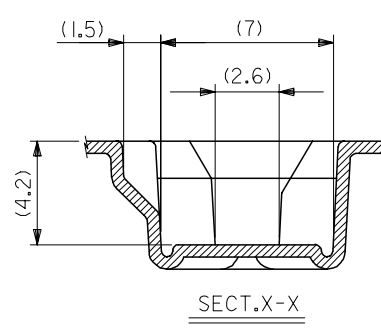
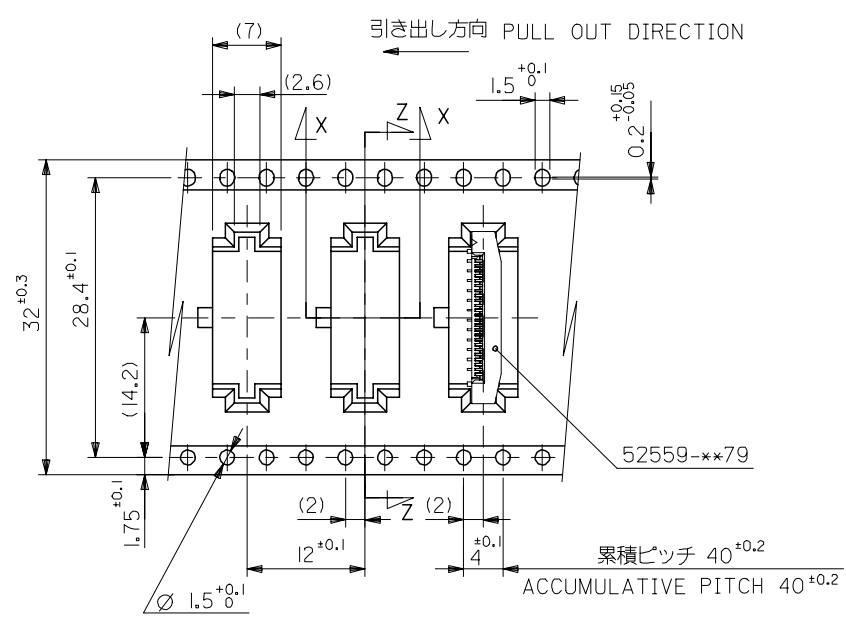
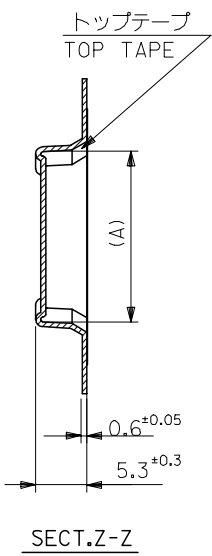
24mm幅キャリアテープ  
24mm WIDTH CARRIER TAPE

24	29.4	25.4	14.4	17.3	52559-2453	24
			13.4	16.3	52559-2253	22
			12.4	15.3	52559-2053	20
			11.9	14.8	52559-1953	19
			11.4	14.3	52559-1853	18
			10.4	13.3	52559-1653	16
			9.9	12.8	52559-1553	15
			9.4	12.3	52559-1453	14
			8.9	11.8	52559-1353	13
			8.4	11.3	52559-1253	12
7.9	10.8	52559-1153	11			
6.4	9.3	52559-0853	8			

キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	CIRCUIT NO.
52559-xx53			MODEL NO.			
GENERAL TOLERANCES (UNLESS SPECIFIED)			SCALE ---			
DIMENSION STYLE MM ONLY			DESIGN UNITS METRIC			
THIRD ANGLE PROJECTION			TITLE			
DRAWN BY DATE			0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-			
CHECKED BY DATE			MOLEX MOLEX INCORPORATED			
APPROVED BY DATE			DOCUMENT NO. SD-52559-050			
MATERIAL NO.			SHEET NO. 2 OF 4			
SIZE A3			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

REVISED	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)
EC NO: J2006-3700	2006/06/16	10 UNDER ± 0.2
DRW: MNABEI	2006/06/19	10 OVER 30 UNDER ± 0.25
CHK: KTOYODA	2006/06/19	30 OVER ± 0.3
APP: NUKITA	2006/06/22	ANGULAR ± 3 °
D	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

10 9 8 7 6 5 4 3 2 1



32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE

32	37.4	33.4	18.9	21.8	52559-3353	33
			18.4	21.3	52559-3253	32
			17.4	20.3	52559-3053	30
			16.4	19.3	52559-2853	28
			14.9	17.8	52559-2553	25
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	CIRCUIT NO.

REVISED EC NO: J2006-3700 DRWN: MNABE 2006/06/16 CHKD: KTOYODA 2006/06/19 APPR: NUKITA 2006/06/22	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	±0.2	DRAWN BY MNABE I	DATE '05/04/27	TITLE 0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-				
		10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '05/04/27	MATERIAL NO. 52559-xx53				
		30 OVER	±0.3	APPROVED BY NUKITA	DATE '05/04/27	DOCUMENT NO. SD-52559-050				
		ANGULAR	±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SHEET NO. 3 OF 4		
D	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

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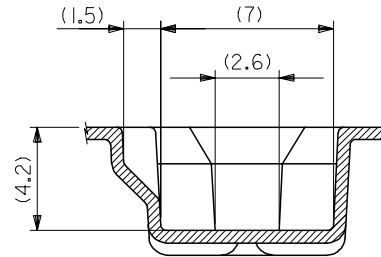
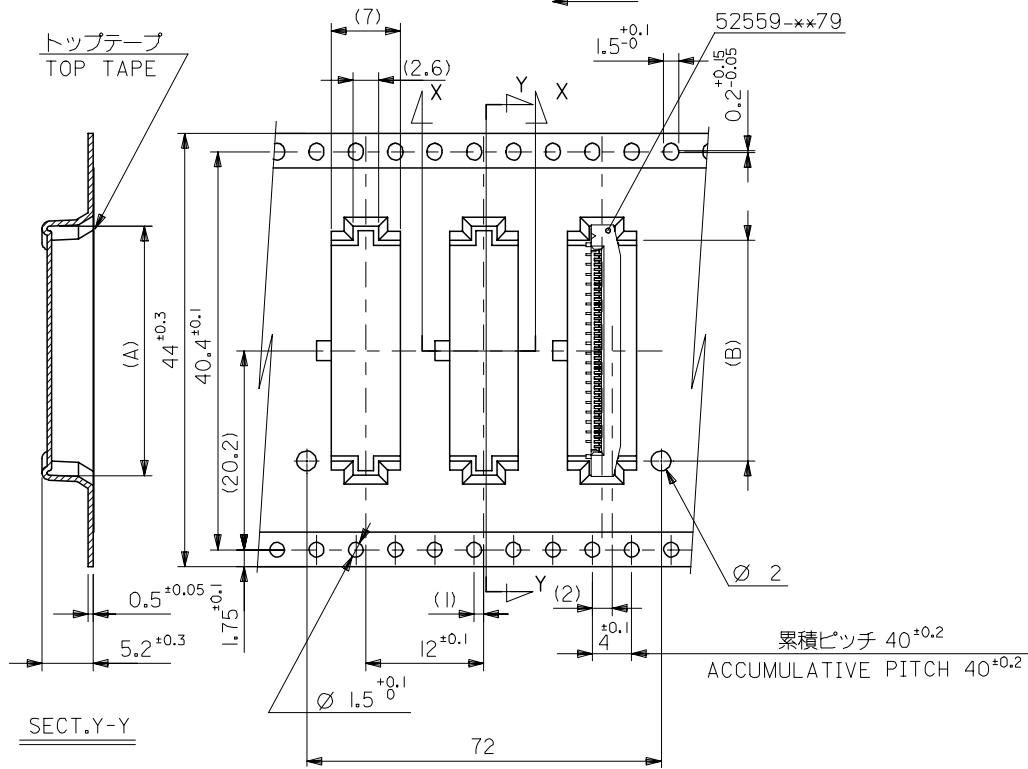
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引き出し方向 PULL OUT DIRECTION



SECT.X-X

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

44	49.4	45.4	22.4	25.3	52559-4053	40
			20.4	23.3	52559-3653	36
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	MATERIAL NO.	CIRCUIT NO.

REVISED EC NO: J2006-3700 DRWN: MNABE 2006/06/16 CHKD: KTOYODA 2006/06/19 APPR: NUKITA 2006/06/22	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			MM ONLY	---	METRIC	☉ □
	10 UNDER	± 0.2	DRAWN BY	DATE	TITLE	
	10 OVER 30 UNDER	± 0.25	MNABE I	'05/04/27	0.5 FPC CONN ASSY ZIF FOR SMT EMBSTP PKG -LEAD FREE-	
30 OVER	± 0.3	CHECKED BY	DATE	APPROVED BY		DATE
		KTOJO	'05/04/27	NUKITA		'05/04/27
	ANGULAR ± 3 °	MATERIAL NO.		DOCUMENT NO.		SHEET NO.
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART		SD-52559-050		4 OF 4
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.