

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

**Part Number:** [0522712169](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 21 Circuits, Lead-free, High Barrier Packaging

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series 52271  
 Overview ffc\_fpc\_smt  
 Product Name N/A

**Physical**

Circuits (Loaded) 21  
 Color - Resin Natural  
 Contact Position Bottom  
 Durability (mating cycles max) 30  
 Entry Angle 90° Angle  
 Flammability 94V-0  
 Mated Height (in) 0.118 In  
 Mated Height (mm) 3.00 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.039 In  
 Pitch - Mating Interface (mm) 1.00 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 AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Application Specification AS-52271-001  
 Packaging Specification SPK-52271-001, SPK-52271-002  
 Product Specification PS-52271-054, RPS-52271-076, RPS-52271-078, RPS-52271-079, RPS-52271-081, RPS-52271-082, RPS-52271-083, RPS-52271-084, RPS-52271-086, RPS-52271-088, RPS-52271-090  
 Sales Drawing SD-52271-038, SD-52271-039

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**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.

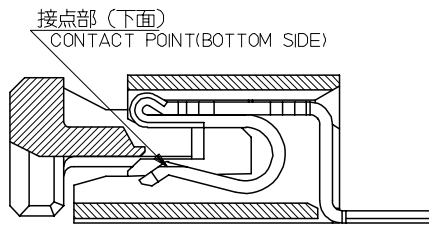
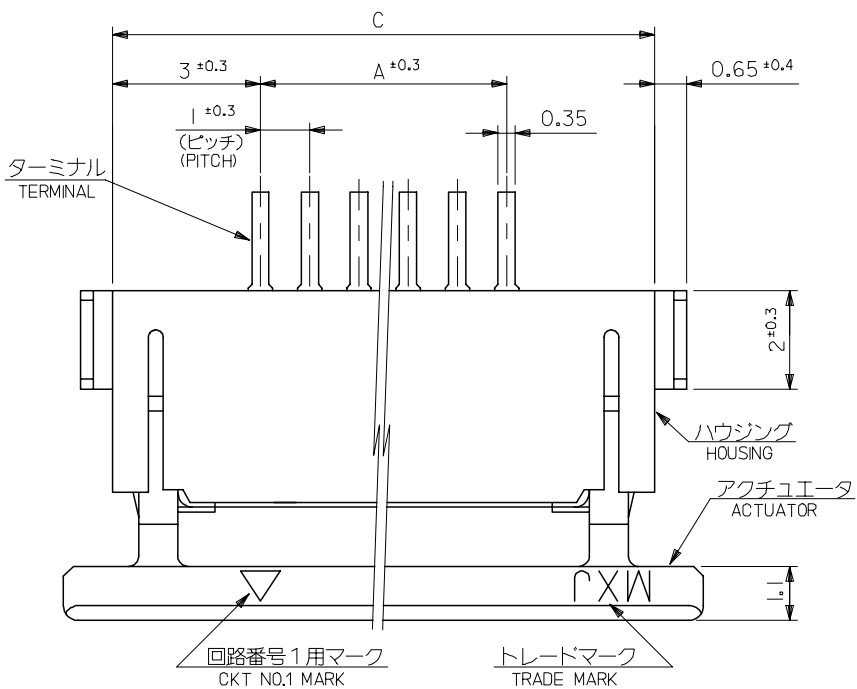
**Search Parts in this Series**  
[52271Series](#)

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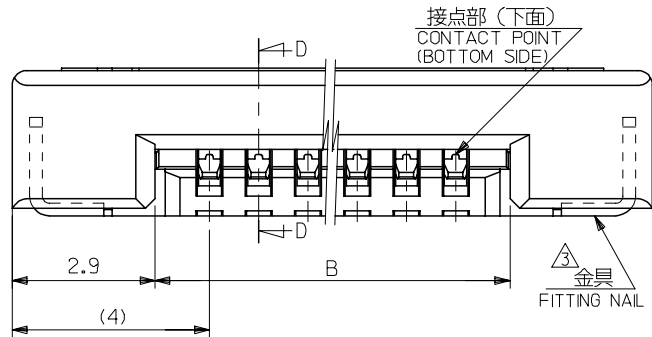
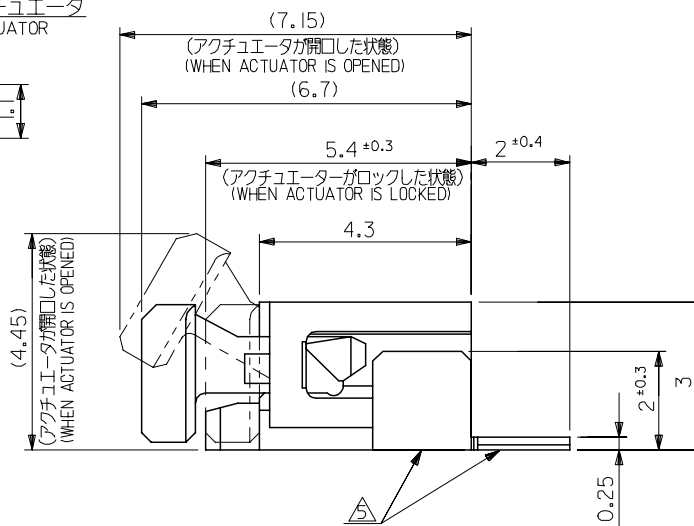
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10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A



SECT. D-D



35	31.2	29	52271-3029	30
34	30.2	28	52271-2929	29
33	29.2	27	52271-2829	28
32	28.2	26	52271-2729	27
31	27.2	25	52271-2629	26
30	26.2	24	52271-2529	25
29	25.2	23	52271-2429	24
28	24.2	22	52271-2329	23
27	23.2	21	52271-2229	22
26	22.2	20	52271-2129	21
25	21.2	19	52271-2029	20
24	20.2	18	52271-1929	19
23	19.2	17	52271-1829	18
22	18.2	16	52271-1729	17
21	17.2	15	52271-1629	16
20	16.2	14	52271-1529	15
19	15.2	13	52271-1429	14
18	14.2	12	52271-1329	13
17	13.2	11	52271-1229	12
16	12.2	10	52271-1129	11
15	11.2	9	52271-1029	10
14	10.2	8	52271-0929	9
13	9.2	7	52271-0829	8
12	8.2	6	52271-0729	7
11	7.2	5	52271-0629	6
10	6.2	4	52271-0529	5
9	5.2	3	52271-0429	4
C	B	A	MATERIAL NO.	CIRCUITS

52271-\*\*29 MODEL NO.

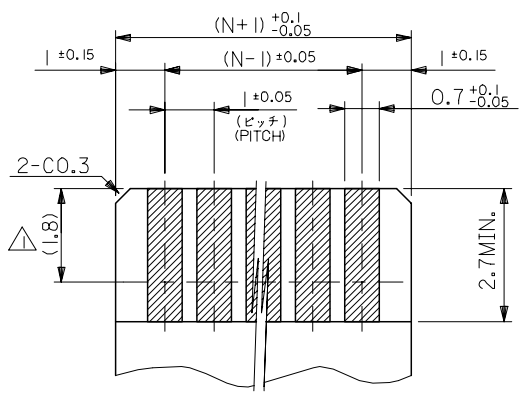
SCALE 10:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION

REVISED EC NO: J2006-1261 DRWN:UMEDA CHKD:KTOYODA APPR:NUKITA	DESCRIPTION 2005/10/19 2005/10/19 2005/10/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	
		10 UNDER	$\pm 0.2$	DRAWN BY M.UMEDA	DATE 2005/03/08
		10 OVER 30 UNDER	$\pm 0.25$	CHECKED BY K.TOYODA	DATE 2005/03/08
		30 OVER	$\pm 0.3$	APPROVED BY N.UKITA	DATE 2005/03/08
		ANGULAR	$\pm 3$	MATERIAL NO.	SEE CHART
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		

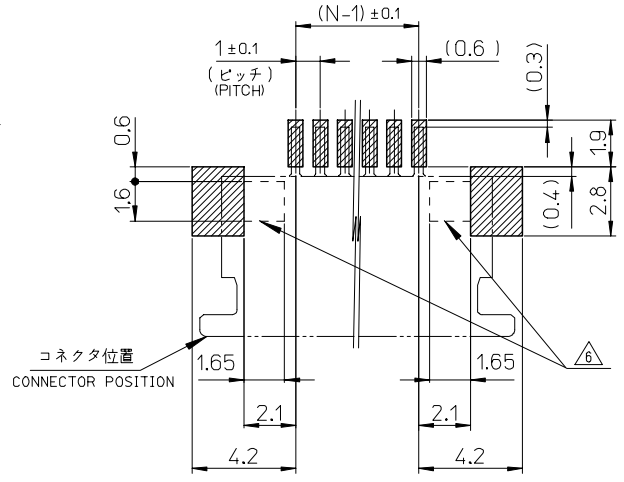
TITLE  
1.0 FPC CONN ZIF SMT (BOTTOM CONTACT) -LEAD FREE-

MOLEX MOLEX INCORPORATED

DOCUMENT NO. SD-52271-038 SHEET NO. 1 OF 2



(仕上り厚さ: 0.3±0.05)  
(THICKNESS: 0.3±0.05)  
適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(SCALE 10:1)



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(SCALE 5:1)

注記 NOTES

- △1 接点部までの嵌合長さ。  
LENGTH TO CONTACT POINT.
- 2. 使用材料 MATERIAL  
ハウジング : 46 NYLON, UL94V-0  
HOUSING  
アクチュエータ : PPS, UL94V-0  
ACTUATOR  
ターミナル : リン青銅 (t=0.25)  
TERMINAL PHOSPHOR BRONZE (t=0.25)  
メッキ : 接点部: 金メッキ : 0.1 MICROMETER MIN.  
PLATING CONTACT PORTION : GOLD PLATING : 0.1 MICROMETER MIN.  
半田付部: 錫メッキ : 1.0 MICROMETER MIN.  
SOLDERING PORTION : TIN PLATING : 1.0 MICROMETER MIN.  
下地: ニッケルメッキ : 1.0 MICROMETER MIN.  
UNDER PLATING : NICKEL PLATING : 1.0 MICROMETER MIN.  
金具 : 銅合金 (t=0.25)  
FITTING NAIL CAPPER ALLOY (t=0.25)  
メッキ: 錫メッキ : 1.0 MICROMETER MIN.  
PLATING : TIN PLATING : 1.0 MICROMETER MIN.  
下地: ニッケルメッキ : 1.0 MICROMETER MIN.  
UNDER PLATING : NICKEL PLATING : 1.0 MICROMETER MIN.
- △3 パターンはくり止め用金具  
FITTING NAIL FOR PREVENTION OF PEELING  
OF P.C.B. PATTERN.
- 4. 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.54550-\*\*\*29 SHOULD BE LOCKED.
- △5 テール及び金具の平坦度は、0.15以下とする。  
TAIL AND NAIL COPLANARITY TO BE 0.15 MAXIMUM.
- △6 パターン書き込み禁止エリア  
NO FOOT PRINT AREA.

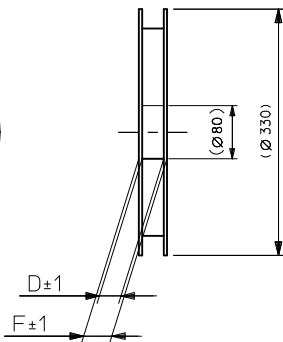
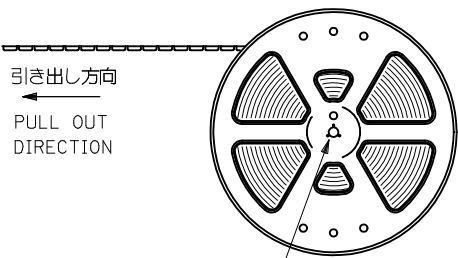
FPCについて:

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

REVISED EC NO: J2006-1261 DRW: NUKEDA CHK: KIKUYODA APP: NUKITA	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		52271-**29		MODEL NO.		
		10 UNDER	±0.2	DRAWN BY M.UMEDA	DATE 2005/03/08	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 OVER 30 UNDER	±0.25	CHECKED BY K.TOYODA	DATE 2005/03/08	TITLE 1.0 FPC CONN ZIF SMT (BOTTOM CONTACT) -LEAD FREE-				
		30 OVER	±0.3	APPROVED BY N.UKITA	DATE 2005/03/08	MOLEX INCORPORATED				
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 1		DOCUMENT NO. SD-52271-038		SHEET NO. 2 OF 2		
△3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

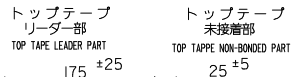


NOTES

1. 製品番号 52271-\*\*29 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-52271-038 を参照下さい。  
IN THE PACKAGE, ACTUATOR OF PART NO. 52271-\*\*29 SHOULD BE LOCKED  
RE DETAILED DIMENSIONS, SEE SD-52271-038.

2. 梱包数量：1000個/リール  
NUMBER OF CONNECTORS：1000 PCS/REEL

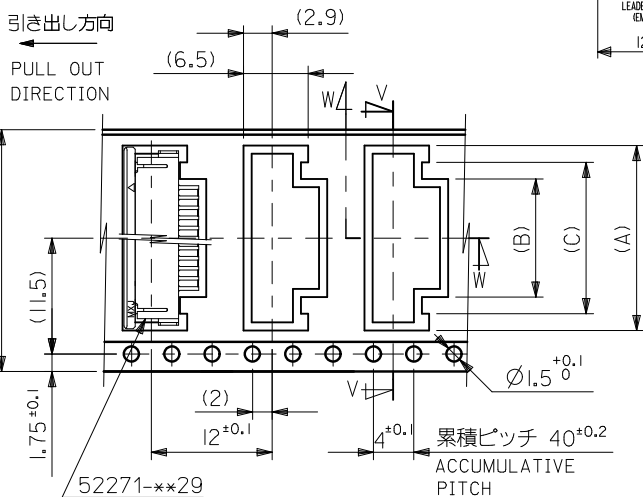
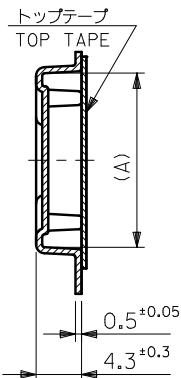
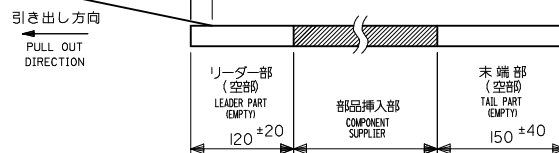
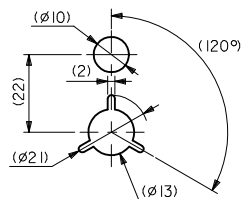
3. リードテープ長さ LEAD TAPE LENGTH



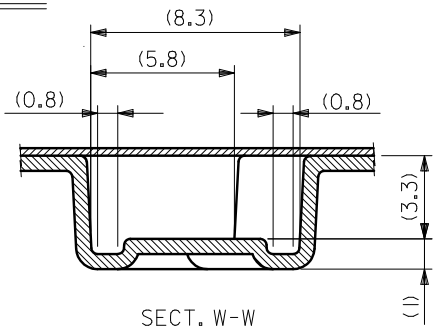
4. カバーテープの剥離強度については、IEC60286-3に準拠  
COVER TAPE PEEL FORCE IS DEFINED BY IEC60286-3

5. 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>

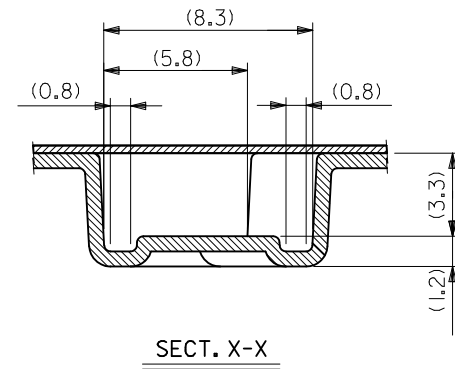
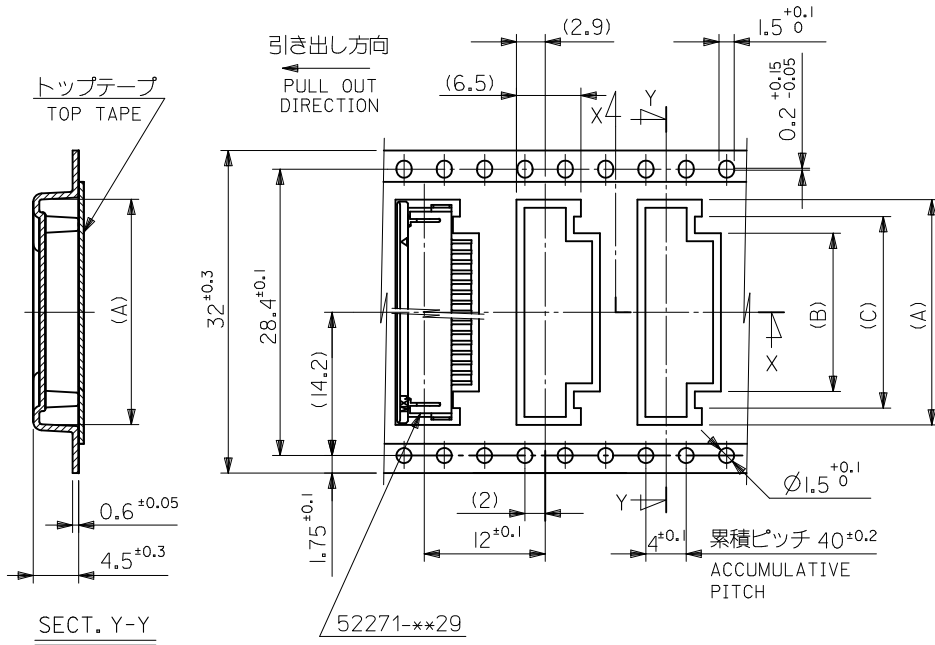
6. 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.



24	29.4	25.4	15	11.4	18.3	52271-1169	11		
			14	10.4	17.3	52271-1069	10		
			12	8.4	15.3	52271-0869	8		
			11	7.4	14.3	52271-0769	7		
			10	6.4	13.3	52271-0669	6		
			9	5.4	12.3	52271-0569	5		
			8	4.4	11.3	52271-0469	4		
			キャリアテープ幅 CARRIER TAPE WIDTH			F	D	(C)	(B)

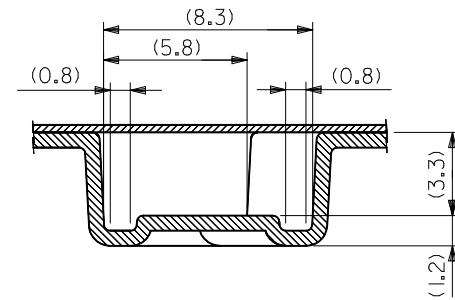
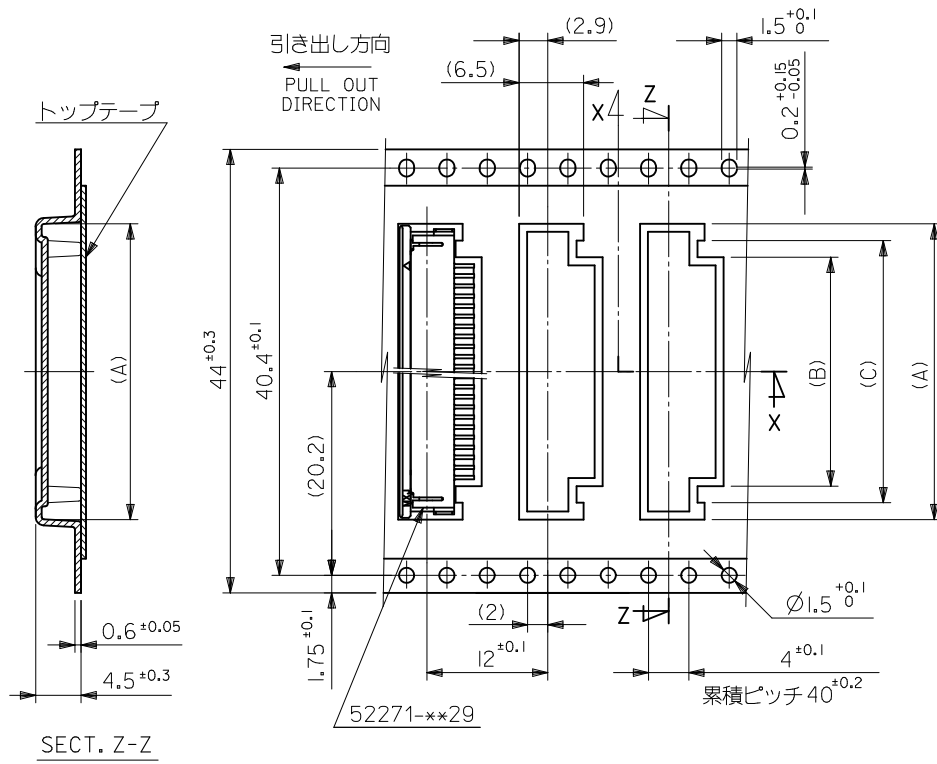


REVISED EC NO: J2010-2474 DRWN: YU HASEGAWA 2010/06/08 CHKD: K. TOYODA 2010/06/08 APPR: KMORI KAWA 2010/06/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---		DESIGN UNITS METRIC		MODEL NO. 52271-**69		
		10 UNDER	±0.2	DRAWN BY M. UEDA	DATE 2005/03/08	TITLE EMBOSSED TAPE PACKAGE FOR 52271-**29 -LEAD FREE-						
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOYODA	DATE 2005/03/08	MOLEX INCORPORATED						
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE 2005/03/08							
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52271-039		SHEET NO. 1 OF 4				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												



32	37.4	33.4	20	16.4	23.35	52271-1669	16		
			19	15.4	22.35	52271-1569	15		
			18	14.4	21.35	52271-1469	14		
			17	13.4	20.35	52271-1369	13		
			16	12.4	19.35	52271-1269	12		
キャリアテープ幅 CARRIER TAPE WIDTH			F	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

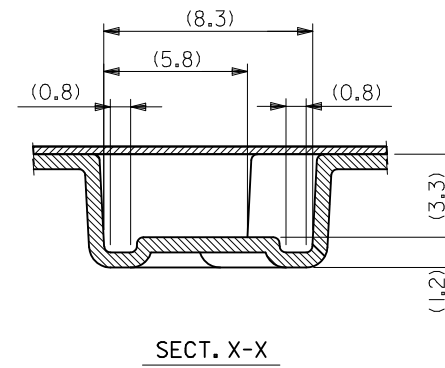
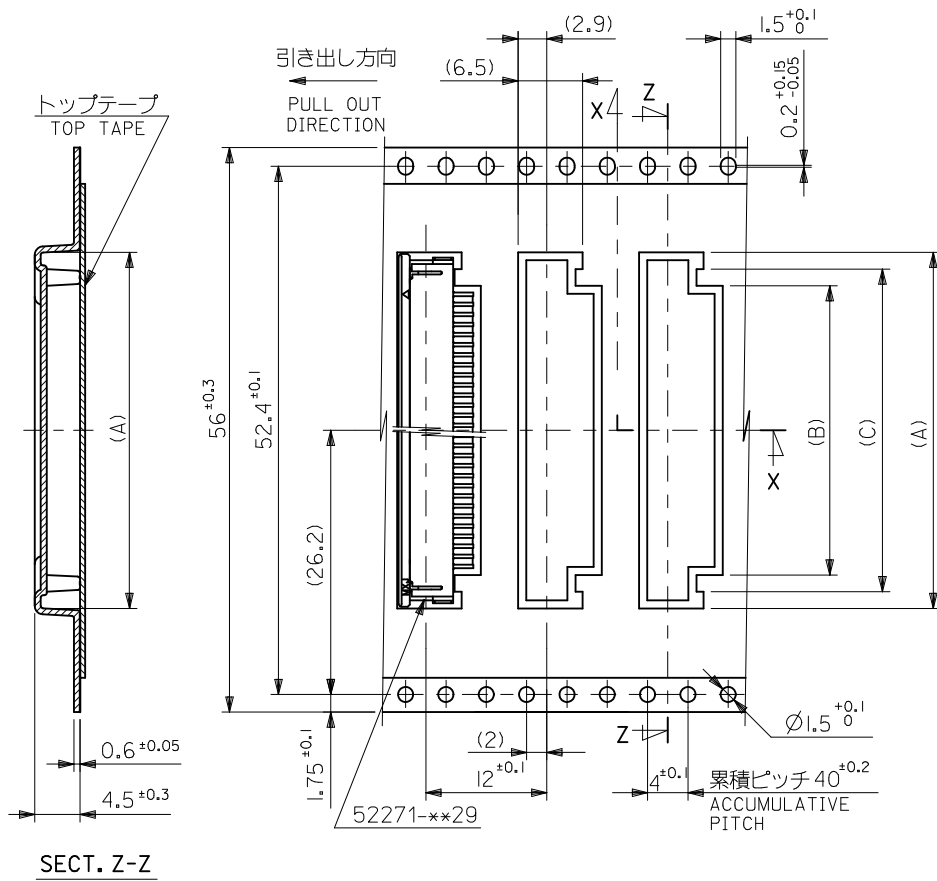
REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHKD: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	±0.2	DRAWN BY M.UMEDA	DATE 2005/03/08	TITLE EMBOSSD TAPE PACKAGE FOR 52271-**-29 -LEAD FREE-				
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOYODA	DATE 2005/03/08	MOLEX INCORPORATED				
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE 2005/03/08	DOCUMENT NO. SD-52271-039				
		ANGULAR	±3 °	MATERIAL NO. SEE TABLE			SHEET NO. 2 OF 4			
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. X-X

44	49.4	45.4	31	27.4	34.35	52271-2769	27		
			29	25.4	32.35	52271-2569	25		
			28	24.4	31.35	52271-2469	24		
			26	22.4	29.35	52271-2269	22		
			25	21.4	28.35	52271-2169	21		
			24	20.4	27.35	52271-2069	20		
			23	19.4	26.35	52271-1969	19		
			22	18.4	25.35	52271-1869	18		
			21	17.4	24.35	52271-1769	17		
キャリアテープ幅			F	D	(C)	(B)	(A)	MATERIAL NO.	極数

REVISED EC NO.: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CH'KD: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER ±0.2	DRAWN BY M. UMEDA	DATE 2005/03/08	TITLE EMBOSSD TAPe PACKAGE FOR 52271-**29 -LEAD FREE-	
	10 OVER 30 UNDER ±0.25	CHECKED BY K. TOYODA	DATE 2005/03/08	MOLEX INCORPORATED	
	30 OVER ±0.3	APPROVED BY N. UKITA	DATE 2005/03/08	DOCUMENT NO. SD-52271-039	SHEET NO. 3 OF 4
	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		



SECT. Z-Z

SECT. X-X

56	61.4	57.4	34	30.4	37.35	52271-3069	30
			32	28.4	35.35	52271-2869	28
キャリアテープ幅 CARRIER TAPE WIDTH			F	D	(C)	(B)	(A)
						MATERIAL NO.	種数 CKT.

REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CH'KD: K. TOYODA 2010/06/08 APPR: KMORIKAWA 2010/06/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY M. UMEDA	DATE 2005/03/08	TITLE EMBOSSD TAPE PACKAGE FOR 52271-**29 -LEAD FREE-			
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOYODA	DATE 2005/03/08	MOLEX INCORPORATED DOCUMENT NO. SD-52271-039 SHEET NO. 4 OF 4			
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE 2005/03/08				
		ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		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.