

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

**Part Number:** [0522712869](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 28 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) 28  
 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 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.

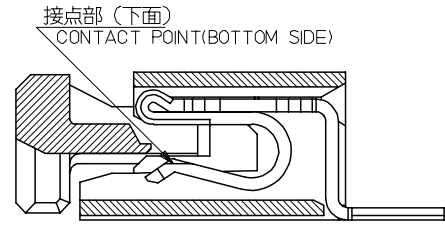
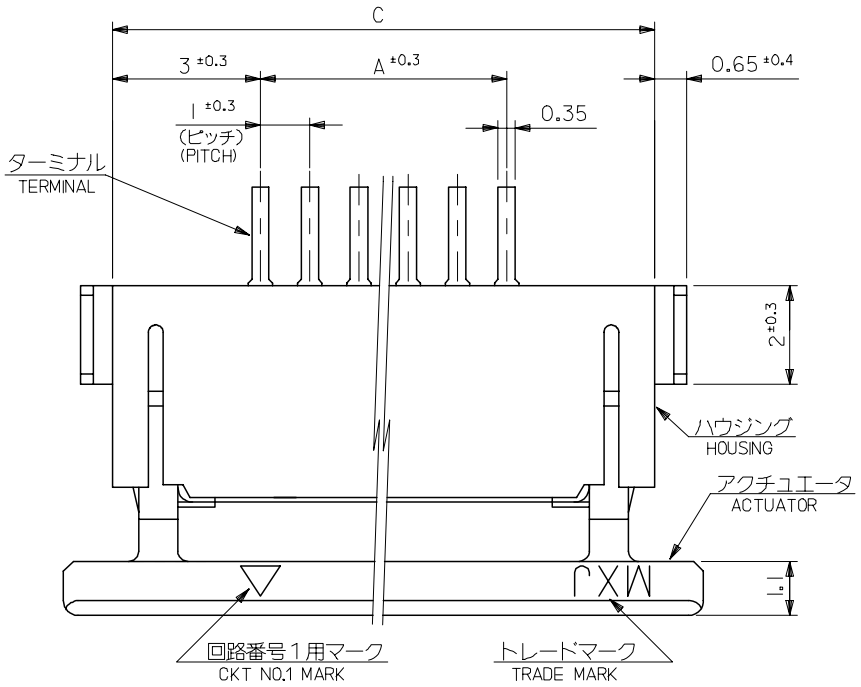
**Search Parts in this Series**  
[52271Series](#)

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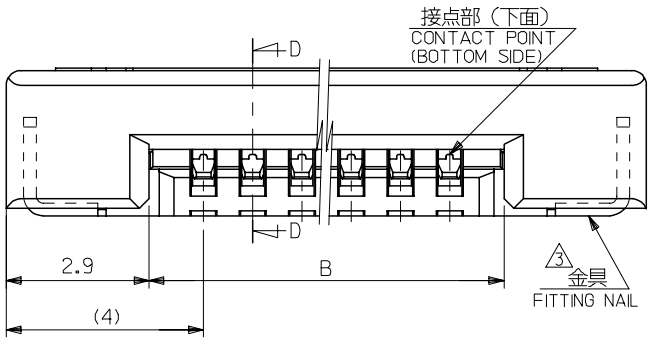
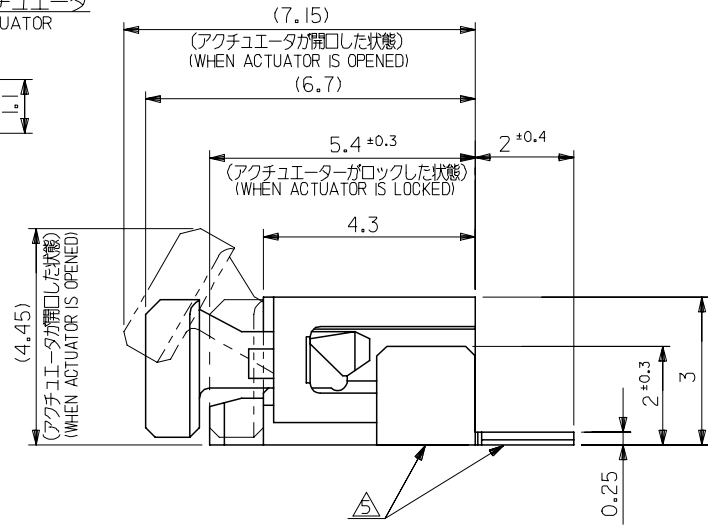
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10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A



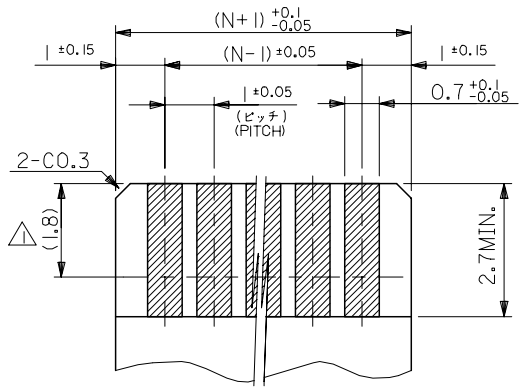
SECT. D-D



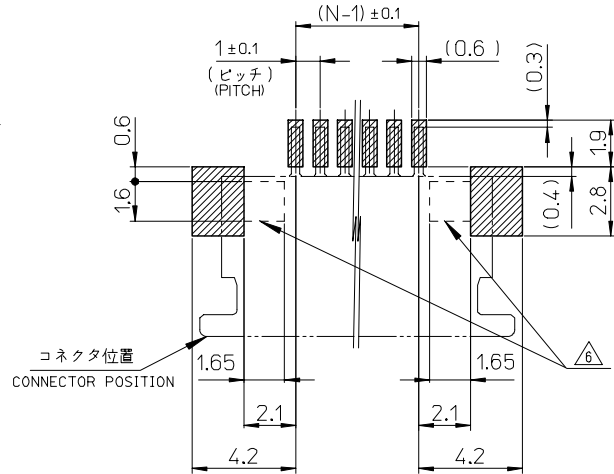
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31	27.2	25	52271-2629	26
30	26.2	24	52271-2529	25
29	25.2	23	52271-2429	24
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27	23.2	21	52271-2229	22
26	22.2	20	52271-2129	21
25	21.2	19	52271-2029	20
24	20.2	18	52271-1929	19
23	19.2	17	52271-1829	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	
DRAWN BY M.UMEDA DATE 2005/03/08		TITLE 1.0 FPC CONN ZIF SMT (BOTTOM CONTACT) -LEAD FREE-	
CHECKED BY K.TOYODA DATE 2005/03/08		MOLEX MOLEX INCORPORATED	
APPROVED BY N.UKITA DATE 2005/03/08		DOCUMENT NO. SD-52271-038	SHEET NO. 1 OF 2
MATERIAL NO. SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

REVISED EC NO: J2006-1261 DRWN:UMEDA 2005/10/19 CHKD:KTOYODA 2005/10/19 APPR:NUKITA 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 $\pm 3^\circ$		MATERIAL NO. SEE CHART		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
SIZE A3				



(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 CUPPER 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.

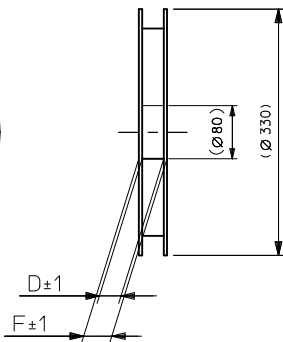
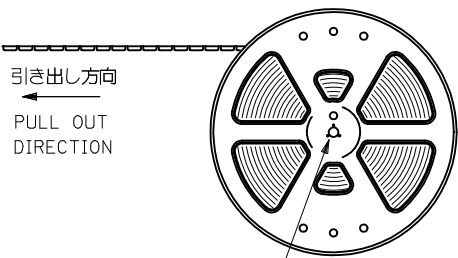
FPCについて:

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		
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

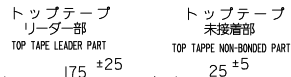


NOTES

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

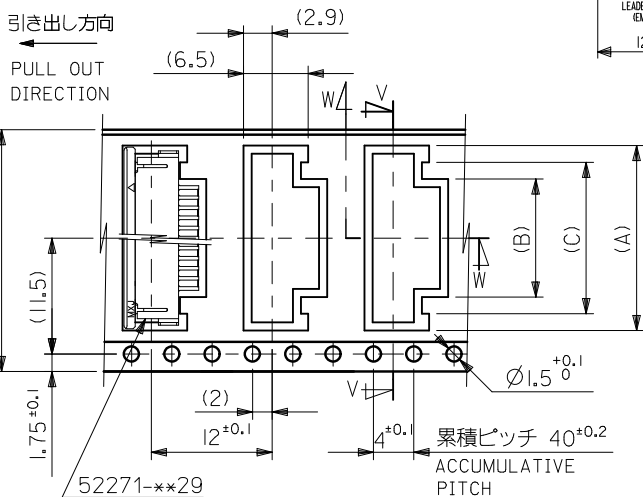
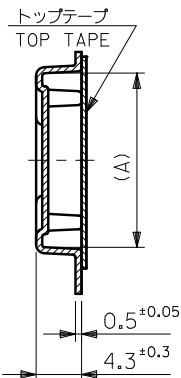
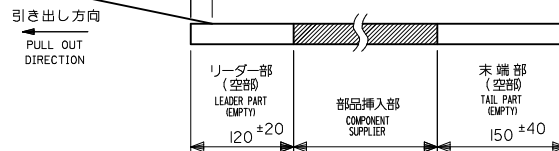
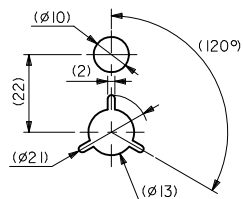
3. リードテープ長さ LEAD TAPE LENGTH



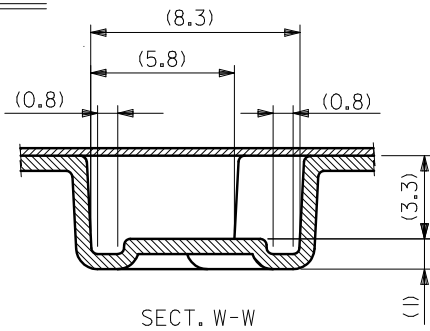
4. カバーテープの剥離強度については、IEC60286-3に準拠  
COVER TAPE PEEL FORCE IS DEFINED BY IEC60286-3

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>

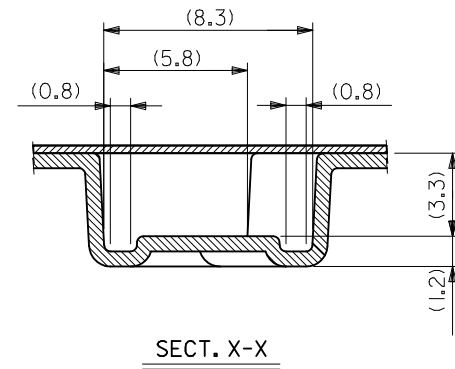
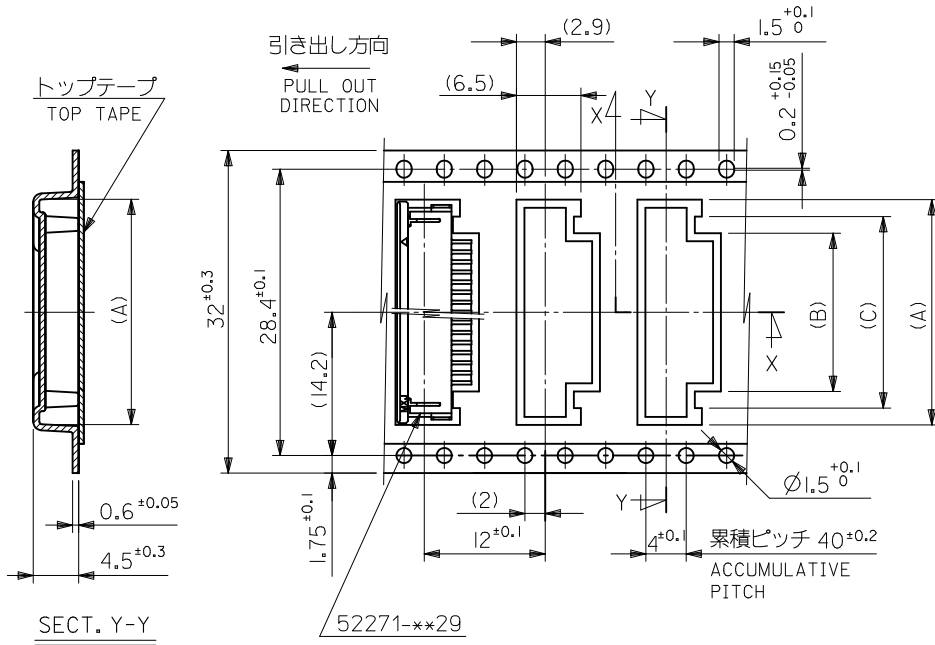
6. 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.



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)	(A)	MATERIAL NO.	種数 CKT.

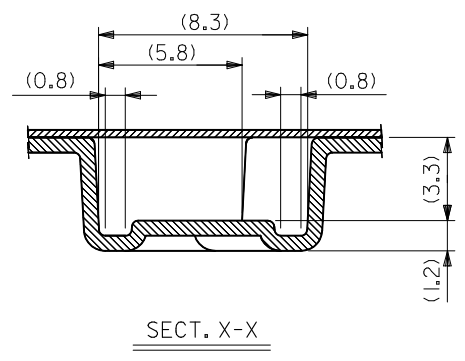
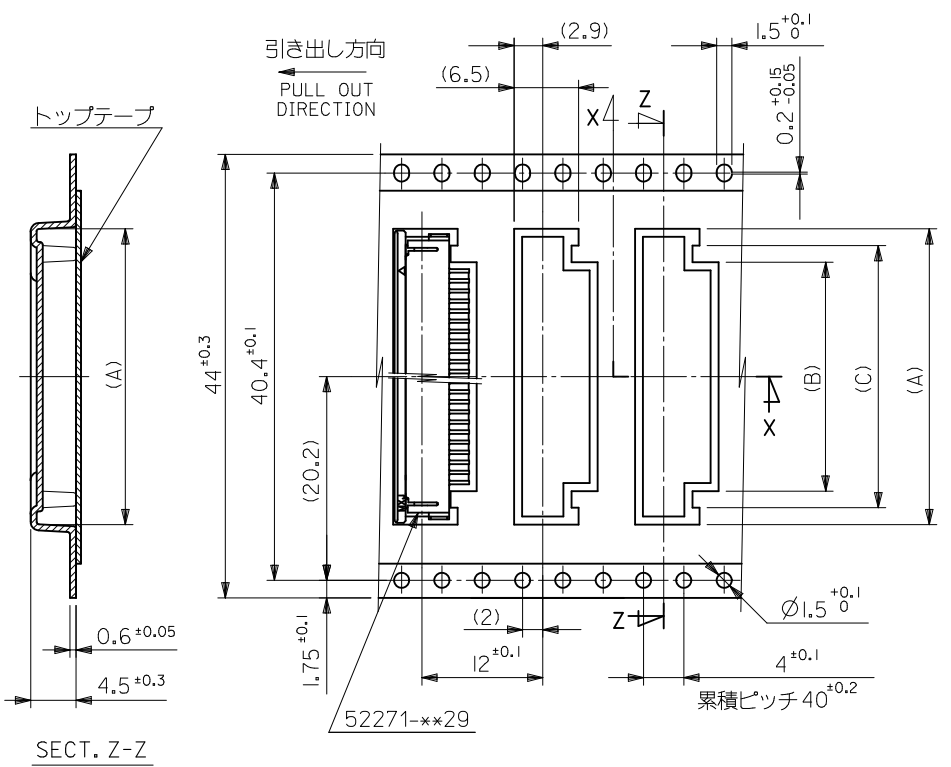


REVISED EC NO: J2010-2474 DRWN: YUHASEGAWA 2010/06/08 CHKD: K. TOYODA 2010/06/08 APPR: KMORI KAWA 2010/06/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---		DESIGN UNITS METRIC		MODEL NO. 52271-**69		
		10 UNDER	±0.2	DRAWN BY M. UEDA	DATE 2005/03/08	TITLE EMBOSSED 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												



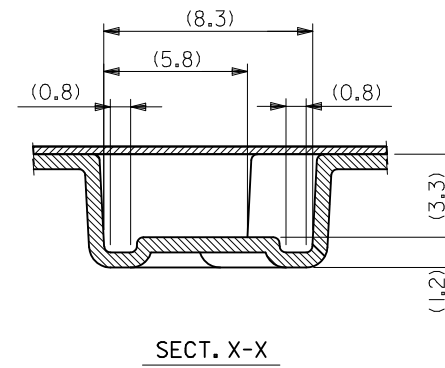
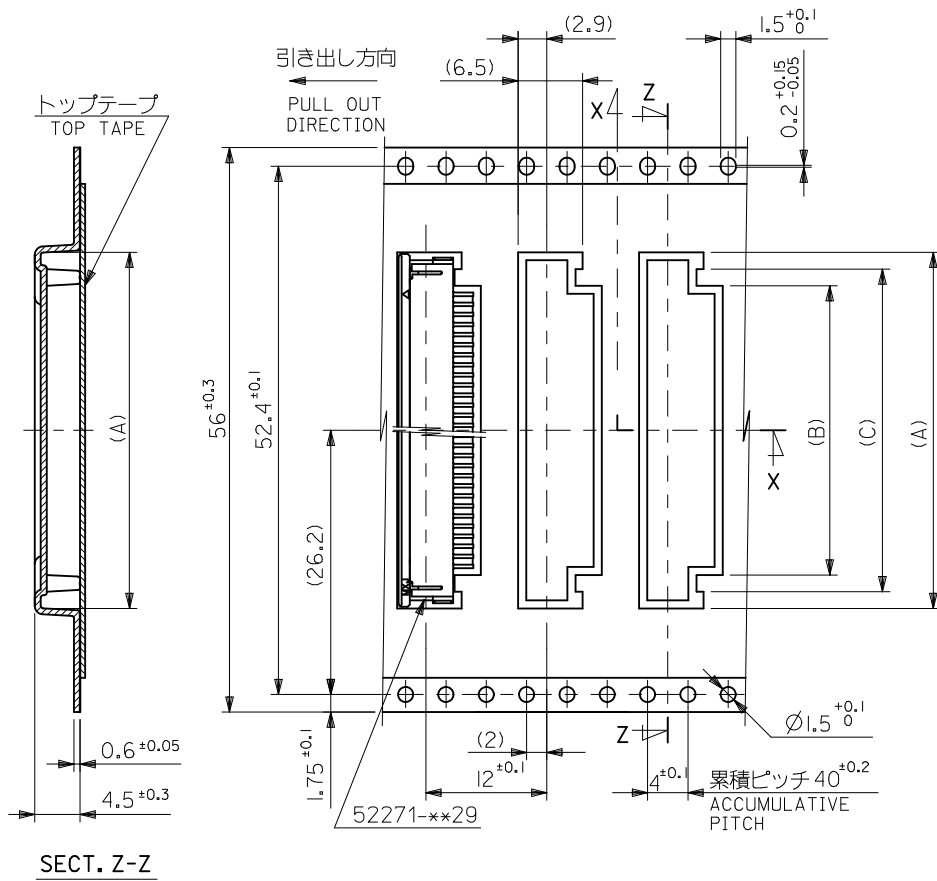
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			18	14.4	21.35	52271-1469	14		
			17	13.4	20.35	52271-1369	13		
			16	12.4	19.35	52271-1269	12		
キャリアテープ幅 CARRIER TAPE WIDTH			F	D	(C)	(B)	(A)	MATERIAL NO.	種数 CKT.

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	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52271-039		SHEET NO. 2 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						



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 CHK'D: 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-			
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	30 OVER	±0.3	APPROVED BY N.UKITA	DATE 2005/03/08	DOCUMENT NO. SD-52271-039			
	ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SHEET NO. 3 OF 4			



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.	極数 CKT.

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		
	ANGULAR	±3 °	MATERIAL NO. SEE TABLE		SHEET NO. 4 OF 4		
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				