

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

**Part Number:** [0522712179](#)  
**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 Tin-Bismuth  
 Material - Plating Termination Tin-Bismuth  
 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 -40°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-52271-053, RPS-52271-066, RPS-52271-067, RPS-52271-069, RPS-52271-070, RPS-52271-072, RPS-52271-073, RPS-52271-075, RPS-52271-080, RPS-52271-085, RPS-52271-087, RPS-52271-091  
 Sales Drawing SD-52271-036, SD-52271-037

**EU RoHS**  
**ELV and RoHS**  
**Compliant**

**REACH SVHC**  
 Not Reviewed  
**Halogen-Free**  
**Status**

**Not Reviewed**

**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.

**China RoHS**



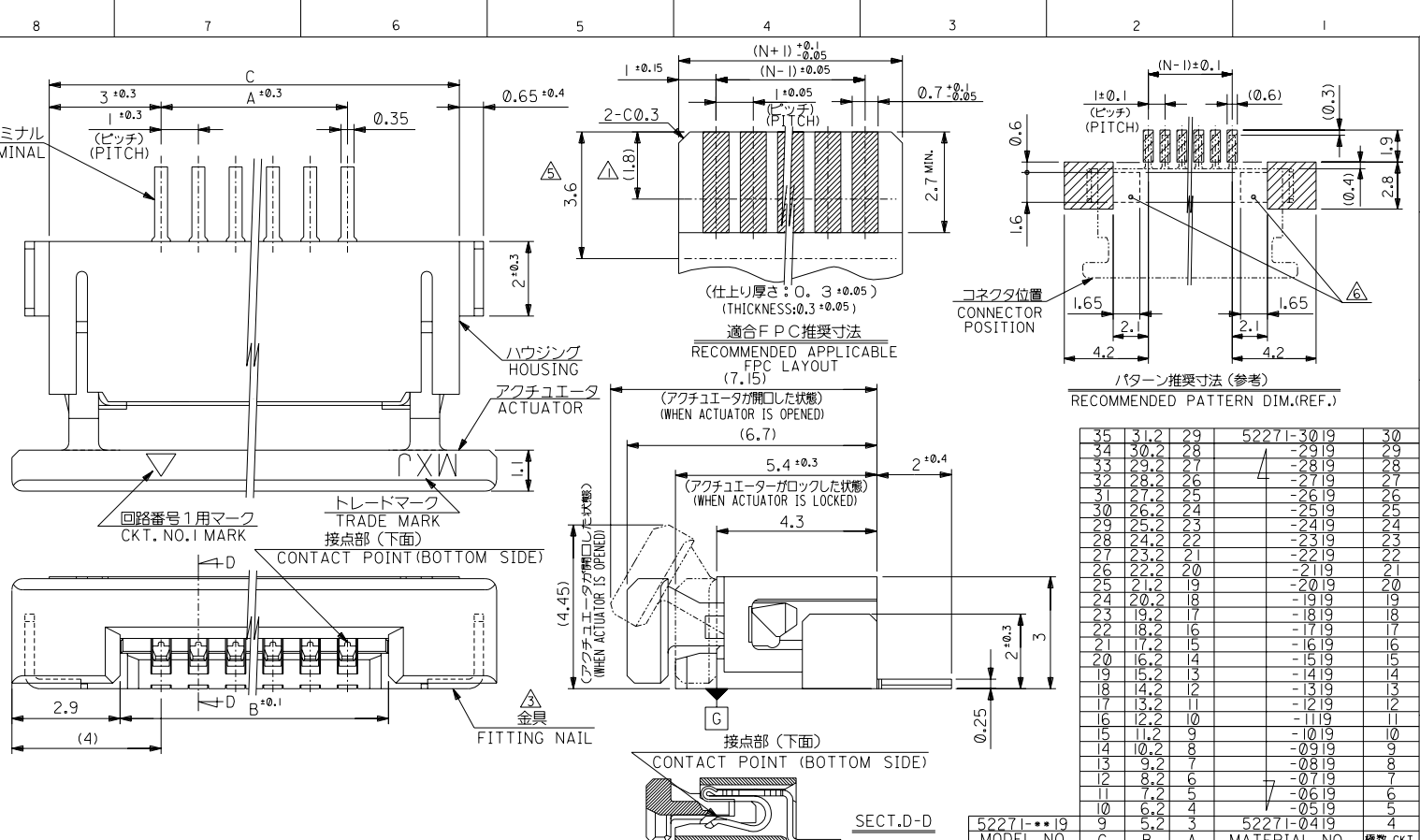
**Search Parts in this Series**  
[52271Series](#)

This document was generated on 06/04/2010

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DWG. NO. SD-52271-036

MM DIMENSIONS IN METRIC DO NOT SCALE DRAWING



パターン推奨寸法 (参考)  
RECOMMENDED PATTERN DIM.(REF.)

35	31.2	29	52271-30	19	30
34	30.2	28	-	20	29
33	29.2	27	4	21	28
32	28.2	26	-	22	27
31	27.2	25	-	23	26
30	26.2	24	-	24	25
29	25.2	23	-	25	24
28	24.2	22	-	26	23
27	23.2	21	-	27	22
26	22.2	20	-	28	21
25	21.2	19	-	29	20
24	20.2	18	-	30	19
23	19.2	17	-	31	18
22	18.2	16	-	32	17
21	17.2	15	-	33	16
20	16.2	14	-	34	15
19	15.2	13	-	35	14
18	14.2	12	-	36	13
17	13.2	11	-	37	12
16	12.2	10	-	38	11
15	11.2	9	-	39	10
14	10.2	8	-	40	9
13	9.2	7	-	41	8
12	8.2	6	-	42	7
11	7.2	5	-	43	6
10	6.2	4	-	44	5
9	5.2	3	-	45	4
8	4.2	2	-	46	3
7	3.2	1	-	47	2
6	2.2	0	-	48	1

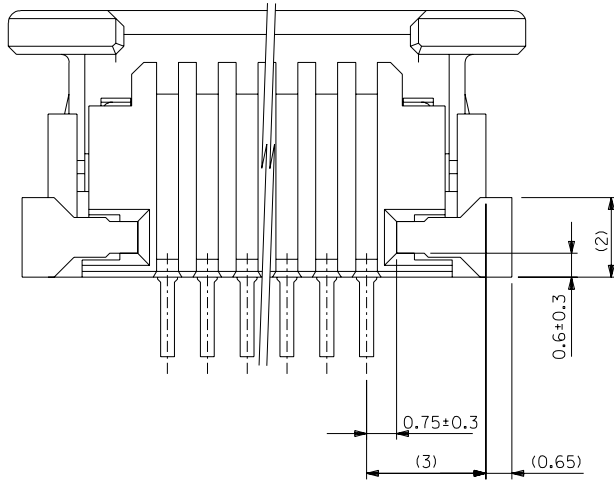
52271-019	MODEL NO.	C	B	A	52271-049	MATERIAL NO.	種数	CKT.
材料 MATERIAL								
注記参照 SEE NOTES								
仕上げ FINISH								
注記参照 SEE NOTES								
適用電線範囲 WIRE RANGE								
被覆外径 INS. RANGE								
DRAWN BY 04/03/12 K.TOUJO								
CHK'D BY 04/03/12 M.SASAO								
APP'D BY 04/03/12 M.SASAO								
SCALE								

角度 ANGLE	°	公差 TOL.	変更 REVISION	理由 REASON	作成日 DATE	作成者 CREATOR	承認者 APPROVER
30以上 OVER	+0.3	B	変更 REVIS	12004-3550	04/04/02	Y.K.	
10以上 OVER 30未過 UNDER	+0.25	A	変更 REVIS	12004-3370	04/03/25	Y.K.	
10未過 UNDER	+0.2	0	新規作成 RELEASED	12004-3050	04/03/12	Y.K.	

一般公差 GENERAL TOLERANCES	記号 LTR	基準内容 REVISION RECORD	DR. DATE	CHK. DATE
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8 7 6 5 4 3 2 1



下面図

注記 NOTES

- △ 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ナイロン, UL94V-0
  - アクチュエータ : PPS, UL94V-0
  - ターミナル : ジン青銅 (t=0.25)
  - メッキ : PHOS-BRO.(t=0.25)
  - メッキ : 銅-ビスムス 1.0 マイクロメートル以上
  - メッキ : ニッケル下地 1.0 マイクロメートル以上
- △ パターンはくり止め用金具  
FITTING NAIL FOR PREVENTION OF PEELING OF P.C.B.PATTERN.
- 4. エンボステーパ梱包時は、アクチュエータがロックした状態とする。  
WHEN CONNECTOR IS SHIPPED, ACTUATOR SHOULD BE LOCKED.
- △ FPC挿入深さ。  
INSERTION DEPTH OF FPC
- △ パターン書き込み禁止エリア。  
NO FOOT PRINT AREA.
- 7. 本製品は52271-\*\*-17の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52271-\*\*-17.

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。

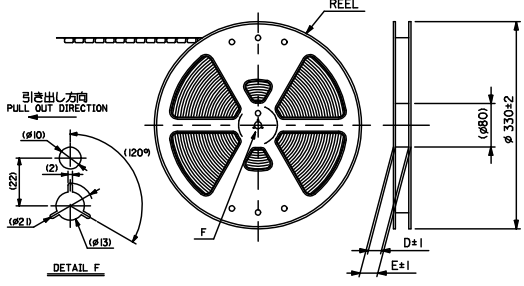
ABOUT FPC:  
RECOMMENDED PUNCHER DIRECTION FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE.  
RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT

MODEL NO. 52271-\*\*-19

		材料 MATERIAL		注記参照 SEE NOTES		MOLEX MOLEX-JAPAN CO.,LTD. 日本モレックス株式会社	
		仕上げ FINISH		注記参照 SEE NOTES		REVISE ONLY ON CAD SYSTEM	
		適用電線範囲 WIRE RANGE		---		TITLE 名称 I.O FPC CONN. Z.I.F. SMT (BOTTOM CONTACT) -LEAD FREE-	
		被覆外径 INS. RANGE		---		DWG. NO. (SHEET 2 OF 2) REV SD-52271-036 B	
角度 ANGLE	+3°						
30以上 OVER	+0.3	B	変更 REVISD	42004-3550	04/03/12		
10以上 未満 OVER 30 UNDER	+0.25	A	変更 REVISD	42004-3370	04/03/12		
10未満 UNDER	+0.2	O	新規作成 RELEASED	42004-3059	04/03/12		
一般公差 GENERAL TOLERANCES		記号 ITR	変更内容 REVISION RECORD	DR. CHK. DATE	APP'D BY M.SASAO	尺度 SCALE	

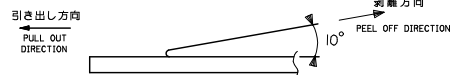
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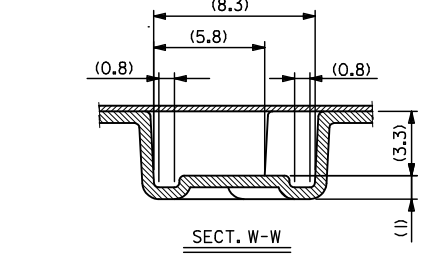
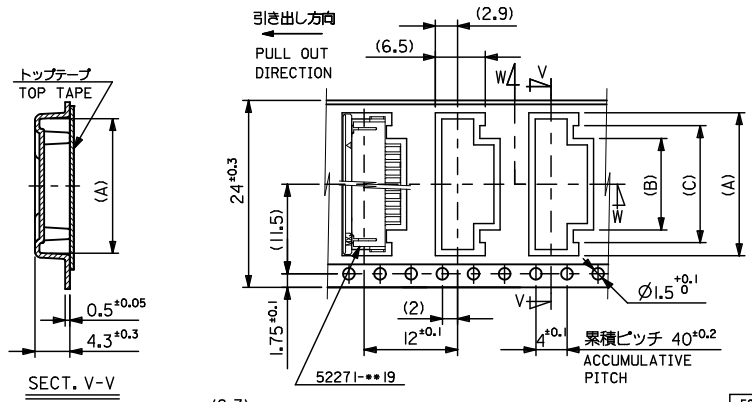


**NOTES**

- 製品番号 52271-\*\*19 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. 52271-\*\*19 SHOULD BE LOCKED RE DETAILED DIMENSIONS, SEE SD-52271-036.
- 梱包数量：1000個/リール  
NUMBER OF CONNECTORS：1000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH  
トップテープ リーダー部 TOP TAPE LEADER PART 175±25  
トップテープ 未接着部 TOP TAPE NON-BONDED PART 25±5
- トップテープの剥離強度：0.1～1.3N (10～130gf) (剥離方向は図参照) 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：0.1～1.3N (10～130gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
(THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION)



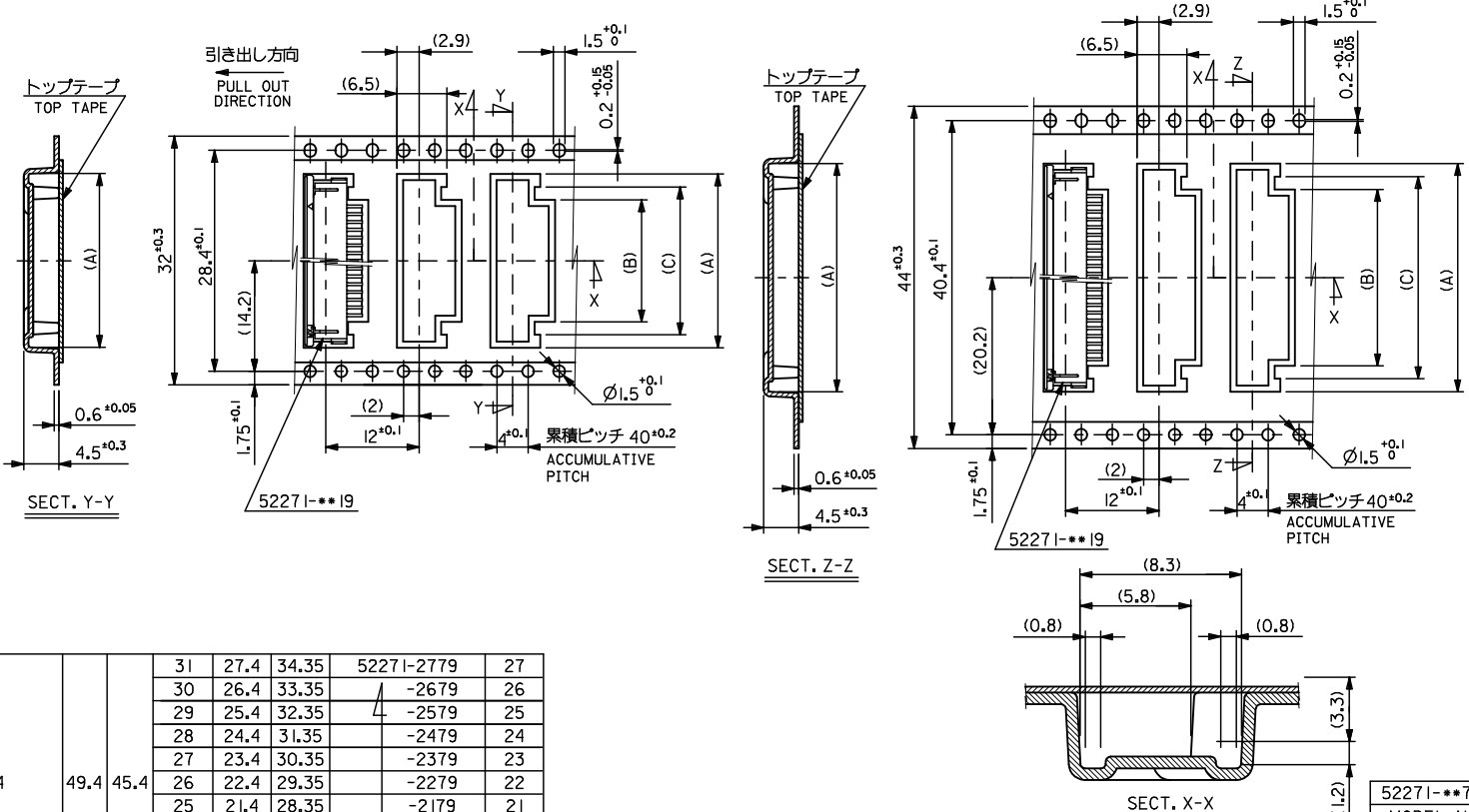
- 材料 (MATERIAL)  
キャリアテープ (CARRIER TAPE)：ポリプロピレン (POLYPROPYLENE)  
トップテープ (TOP TAPE)：PET, PE, PEF  
リール (REEL)：ポリスチレン (PS) <リサイクル材を含む>  
POLYSTYREN (PS) <RECYCLE MATERIAL CONTAINED>
- 本製品は52271-\*\*90の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52271-\*\*90.
- 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.



24	29.4	25.4	15	11.4	18.3	52271-1179	11
			14	10.4	17.3	-1079	10
			13	9.4	16.3	-0979	9
			12	8.4	15.3	-0879	8
			11	7.4	14.3	-0779	7
			10	6.4	13.3	-0679	6
			9	5.4	12.3	-0579	5
			8	4.4	11.3	52271-0479	4
			7	3.4	10.3		

REVISED	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
EC NO: J2009-2061	2009/05/20	10 UNDER ±0.2	MM ONLY	---	METRIC	☉
DRW: KON	2009/05/21	10 OVER 30 UNDER ±0.25	DRAWN BY	DATE	TITLE	
CHK: H. MATSUMOTO	2009/05/21	30 OVER ±0.3	H. KAWABATA	2004/03/12	EMBOSSSED TAPE PACKAGE FOR 52271-**19 -LEAD FREE-	
APP: R. NIKITA	2009/05/21	ANGULAR ±0.3	CHECKED BY	DATE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	K. TOJO	2004/03/12		
			APPROVED BY	DATE		
			M. SASAO	2004/03/12		
			MATERIAL NO.	DOCUMENT NO.		
			SEE TABLE	SD-52271-037		
			SIZE			
			A3			

10 9 8 7 6 5 4 3 2 1



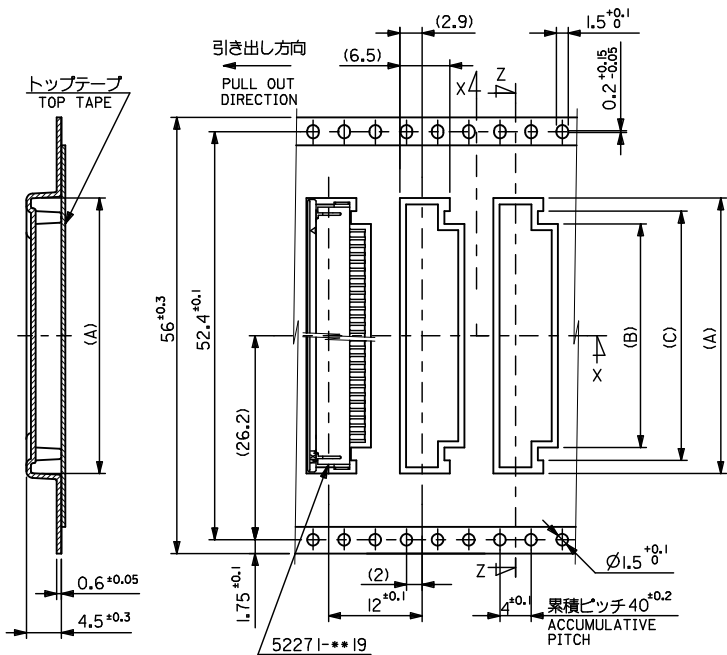
			31	27.4	34.35	5227I-2779	27
			30	26.4	33.35	-2679	26
			29	25.4	32.35	-2579	25
			28	24.4	31.35	-2479	24
			27	23.4	30.35	-2379	23
			26	22.4	29.35	-2279	22
			25	21.4	28.35	-2179	21
			24	20.4	27.35	-2079	20
			23	19.4	26.35	-1979	19
			22	18.4	25.35	-1879	18
			21	17.4	24.35	-1779	17
			20	16.4	23.35	-1679	16
			19	15.4	22.35	-1579	15
			18	14.4	21.35	-1479	14
			17	13.4	20.35	-1379	13
			16	12.4	19.35	5227I-1279	12
						5227I-2779	27
						-2679	26
						-2579	25
						-2479	24
						-2379	23
						-2279	22
						-2179	21
						-2079	20
						-1979	19
						-1879	18
						-1779	17
						-1679	16
						-1579	15
						-1479	14
						-1379	13
						5227I-1279	12

キャリアテープ幅	E	D	(C)	(B)	(A)	MATERIAL NO.	標準
CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	標準

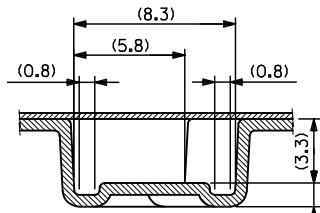
REVISED EC NO: J2009-2061 DRAWN BY DRYUNIKON 2009/05/20 CHKDHMATSUMOTO 2009/05/21 APPROVED BY APPRUNIKITA 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER ±0.2	DRAWN BY H. KAWABATA	DATE 2004/03/12	TITLE EMBOSSSED TAPE PACKAGE FOR 5227I-**19 -LEAD FREE-	
	10 OVER 30 UNDER ±0.25	CHECKED BY K. TOJO	DATE 2004/03/12	MOLEX INCORPORATED	
	30 OVER ±0.3	APPROVED BY M. SASAO	DATE 2004/03/12	DOCUMENT NO. SD-5227I-037	SHEET NO. 2 OF 3
ANGULAR ±3	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		
SIZE A3			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

EN-02JA(021)

10 9 8 7 6 5 4 3 2 1



SECT. Z-Z



SECT. X-X

56	61.4	57.4	34	30.4	37.35	52271-3079	30
			33	29.4	36.35	52271-2979	29
			32	28.4	35.35	52271-2879	28
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	巻数 Ck.F.

ib\_frame\_A3\_J\_ME\_S  
Rev. E 2006/04/15

REVISED		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		MODEL NO.	
EC NO: J2009-2061	2009/05/20	10 UNDER	±0.2	MM ONLY	DATE	---	---	52271-***79	
DRW: KON	2009/05/21	10 OVER 30 UNDER	±0.25	H. KAWABATA	2004/03/12	THIRD ANGLE PROJECTION			
CHK: H. MATSUMOTO	2009/05/21	30 OVER	±0.3	K. TOJO	2004/03/12	EMBOSSSED TAPE PACKAGE FOR 52271-***19 -LEAD FREE-			
APP: R. ITO	2009/05/21	ANGULAR	±3	M. SASAO	2004/03/12	MOLEX INCORPORATED			
DESCRIPTION		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		DOCUMENT NO.		SHEET NO.	
A						SD-52271-037		3 OF 3	
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
				A3					

EN-02JA(021)