

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

**Part Number:** [0528521370](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 1.00mm (.039") Pitch FFC/FPC Connector, SMT, Right Angle, Non-ZIF, Bottom Contact Style Receptacle, 13 Circuits, Lead-free

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series 52852  
 Overview ffc\_fpc\_smt  
 Product Name N/A

**Physical**

Circuits (Loaded) 13  
 Circuits (maximum) 13  
 Contact Position Bottom  
 Durability (mating cycles max) 10  
 Entry Angle 90° Angle  
 Flammability 94V-0  
 Mated Height (in) 0.122 In  
 Mated Height (mm) 3.10 mm  
 Material - Metal Phosphor Bronze  
 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  
 Pitch - Term. Interface (in) 0.039 In  
 Pitch - Term. Interface (mm) 1.00 mm  
 Polarized to PCB No  
 Stackable No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -20°C to +80°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-52852-001  
 Product Specification PS-52852-014, RPS-52852-017, RPS-52852-018, RPS-52852-019, RPS-52852-022, RPS-52852-023, RPS-52852-025  
 Sales Drawing SD-52852-010, SD-52852-011

**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](#)

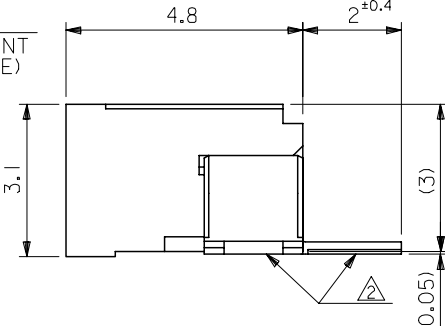
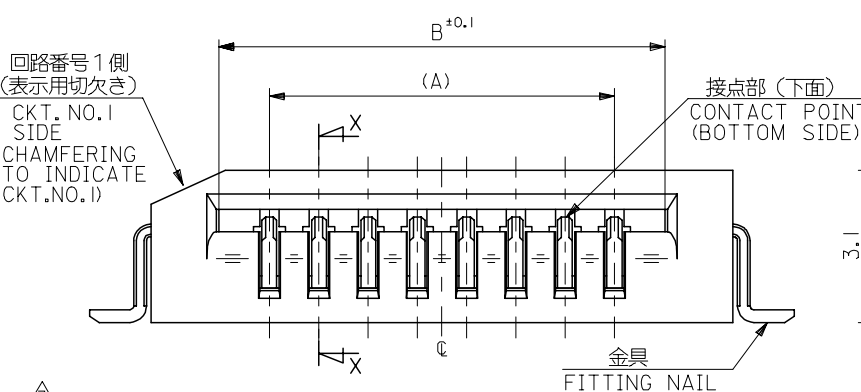
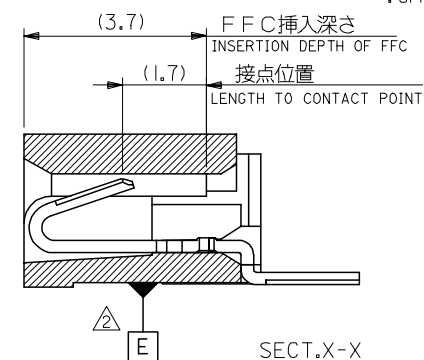
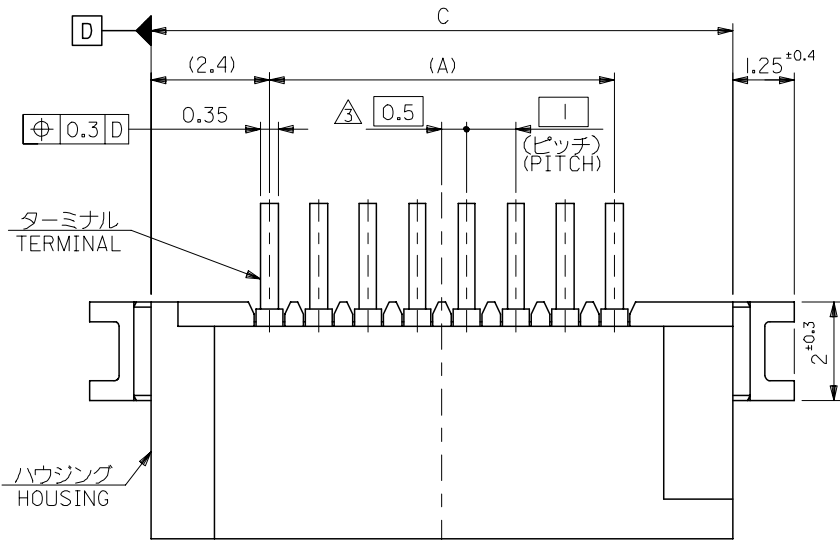
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[52852Series](#)

This document was generated on 06/05/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

10 9 8 7 6 5 4 3 2 1



△ 偶数極に適用。  
APPLY FOR EVEN CKT.  
4. 本製品は 52852-\*\*-10 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52852-\*\*-10

注記 NOTES:  
1. 使用材料 MATERIAL  
ハウジング: PPS,UL94V-0  
ターミナル: リン青銅 (τ=0.25)  
メッキ: ニッケル下地鍍ビスマスメッキ  
金具: リン青銅 (τ=0.25)  
メッキ: ニッケル下地鍍メッキ  
HOUSING : PPS,UL94V-0  
TERMINAL : PHOSPHOR BRONZE  
PLATING : TIN-BISMUTH OVER NICKEL  
FITTING NAIL : PHOSPHOR BRONZE  
PLATING : TIN OVER NICKEL  
△ 基準面 E からのソルダーテールとフィッティングネイルの半田付け面のズレ量は、  
上方向に0.1MAX、下方向0.15MAX、とする。  
MISALIGNMENT OF SOLDER TAIL AND FITTING NAIL FROM E  
: UPPER DIRECTION 0.1MAX, LOWER DIRECTION 0.15 MAX.

33.8	31.05	29	52852-3019	30
32.8	30.05	28	-2919	29
31.8	29.05	27	-2819	28
30.8	28.05	26	-2719	27
29.8	27.05	25	-2619	26
28.8	26.05	24	-2519	25
27.8	25.05	23	-2419	24
26.8	24.05	22	-2319	23
25.8	23.05	21	-2219	22
24.8	22.05	20	-2119	21
23.8	21.05	19	-2019	20
22.8	20.05	18	-1919	19
21.8	19.05	17	-1819	18
20.8	18.05	16	-1719	17
19.8	17.05	15	-1619	16
18.8	16.05	14	-1519	15
17.8	15.05	13	-1419	14
16.8	14.05	12	-1319	13
15.8	13.05	11	-1219	12
14.8	12.05	10	-1119	11
13.8	11.05	9	-1019	10
12.8	10.05	8	-0919	9
11.8	9.05	7	-0819	8
10.8	8.05	6	-0719	7
9.8	7.05	5	-0619	6
8.8	6.05	4	-0519	5
7.8	5.05	3	52852-0419	4
C	B	A	MATERIAL NO.	極数 CIRCUIT

REVISED EC NO: J2005-1451 DRAWN: NAIDA 2004/11/16 CHKD: KTOJO 2004/11/17 APPR: NUKITA 2004/11/26	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 52852-**-19
	10 UNDER	±0.2	DRAWN BY M. NAGATA	DATE '04/02/27	TITLE 1.0 FFC CONN NON ZIF SMT RA (BOTTOM CONTACT) -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '04/02/27	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/02/27	DOCUMENT NO. SD-52852-010		
	ANGULAR	±3 °	MATERIAL NO. SEE CAHRT	SHEET NO. 1 OF 2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

10 9 8 7 6 5 4 3 2 1

F

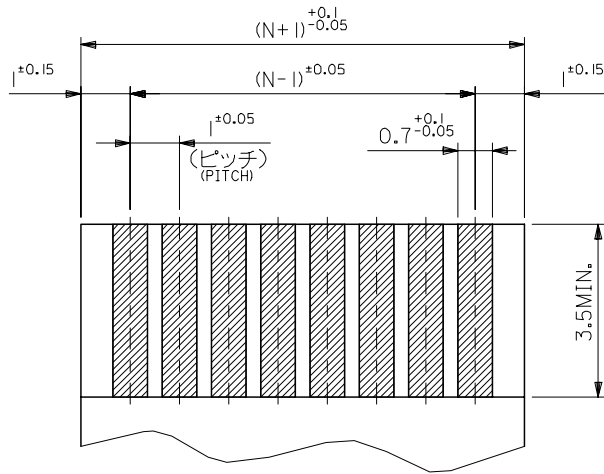
E

D

C

B

A



(仕上がり厚さ)  $0.3 \pm 0.03$   
THICKNESS  
適合 FPC/FFC 推奨寸法  
APPLICABLE FPC/FFC  
RECOMMENDED DIMENSION.

FPC/FFCについて:

打抜き方向は導体側から補強板側を推奨いたします。

ABOUT FPC/FFC

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.

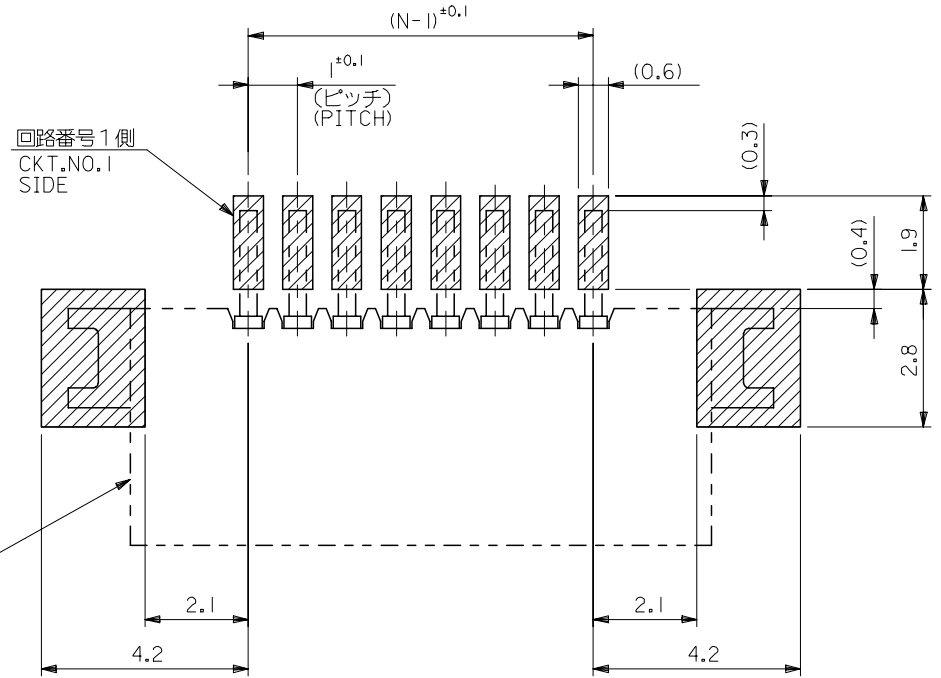
FPCについて:

補強フィルム材質はポリイミドを推奨します。

接着剤は熱硬化接着剤を推奨します。

ABOUT FPC

RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT



参考基板レイアウト (マウント面)

RECOMMENDED P.C.BOARD  
PATTERN DIMENSION. (REF.)  
(MOUNTING AREA)

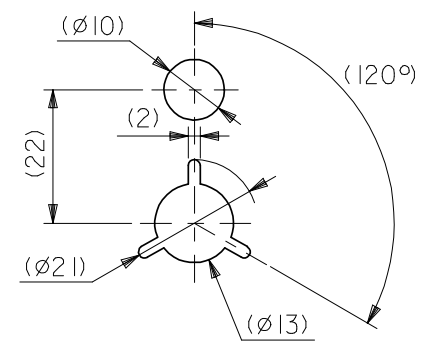
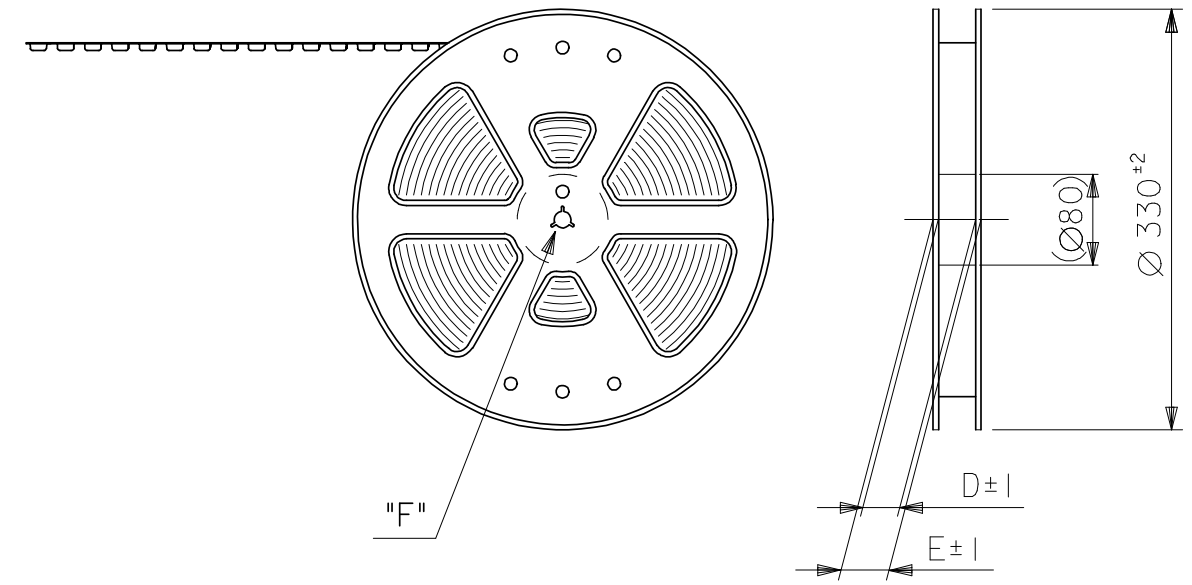
MODEL NO. 52852-\*\*\*19

REVISED EC NO: J2005-1451 DRAWN: NAIDA 2004/11/16 CHKD: KTOJO 2004/11/17 APPR: NUKITA 2004/11/26	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY M. NAGATA	DATE '04/02/27	TITLE 1.0 FFC CONN NON ZIF SMT RA (BOTTOM CONTACT) -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '04/02/27				
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/02/27	MOLEX INCORPORATED			
	ANGULAR	±3 °	MATERIAL NO.	DOCUMENT NO. SD-52852-010				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

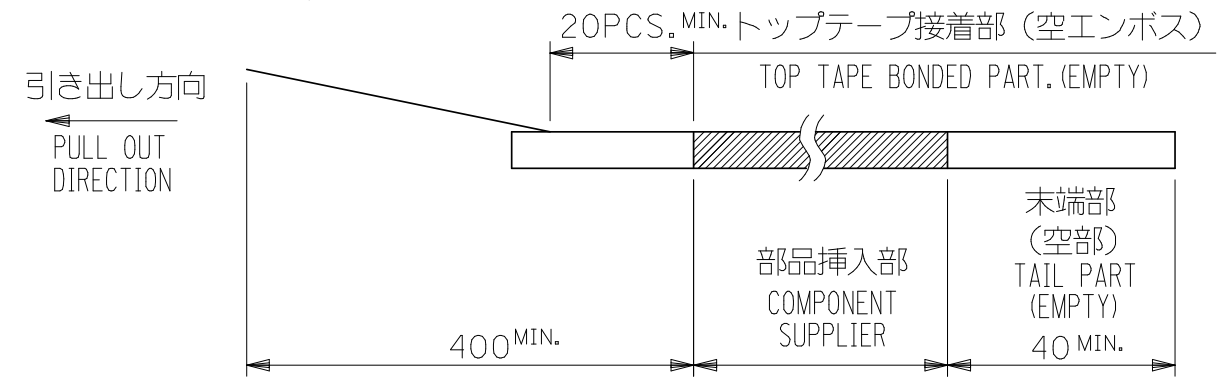
NOTES

- 製品詳細寸法は製品単体図面を参照して下さい。  
FOR DETAIL OF CONNECTOR DIMENSIONS, PLEASE SEE THE DRAWING OF CONNECTOR ITSELF (NOT PACKAGED).
- 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

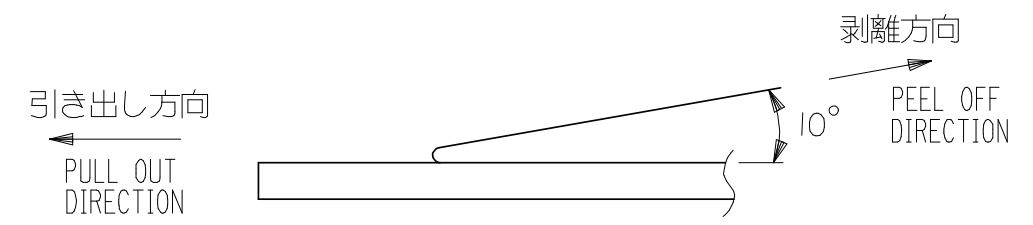
引き出し方向  
PULL OUT DIRECTION



DETAIL "F"



- トップテープの剥離強度：0.1～1.3N(10～130gf)  
(剥離方向は下図参照)  
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こと。)  
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.

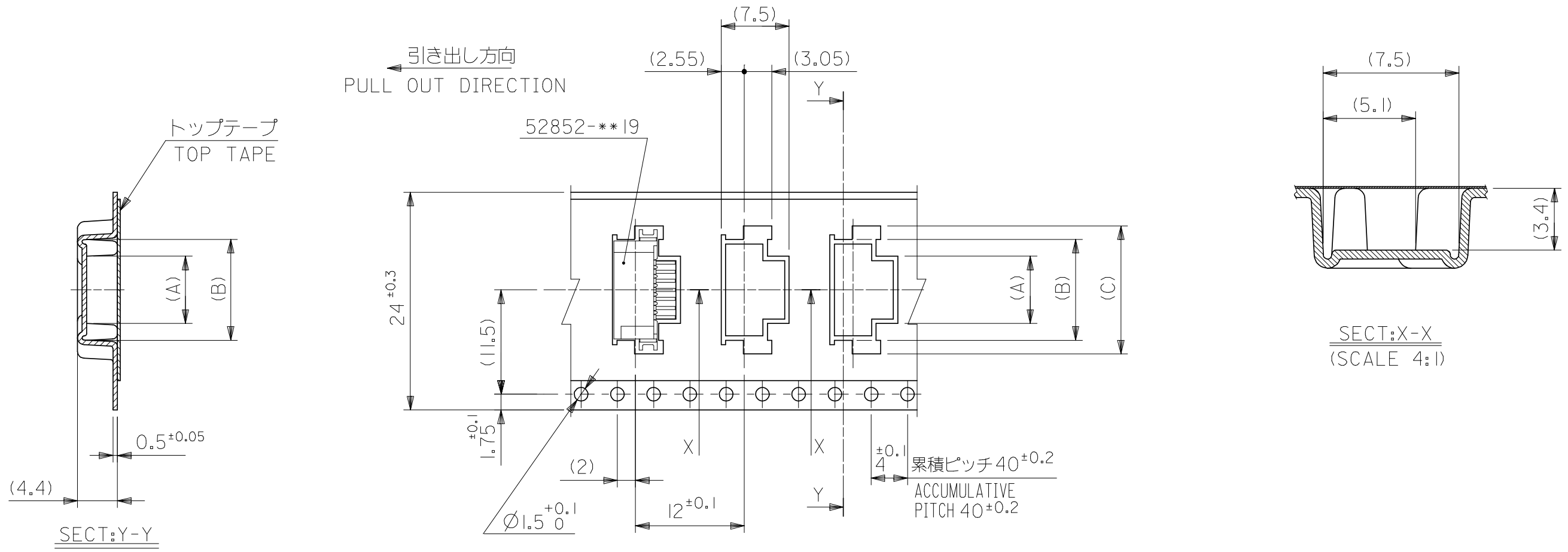


- 材料(MATERIAL)  
キャリアテープ(CARRIER TAPE)：ポリプロピレン(POLYPROPYLENE)  
トップテープ(TOPTAPE)：PET , PE , PEF  
リール(REEL)：ポリスチレン (P S) <リサイクル材を含む>  
POLYSTYREN(PS) <RECYCLE MATERIAL CONTAINED>

- 本製品は 52852-\*\*\*90 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 52852-\*\*\*90

MODEL NO. 52852-\*\*\*70

REVISED EC NO: J2008-1818 DRWN: MNABEI 2007/11/12 CHKD: MISOGAYA 2007/11/13 APPR: NUKITA 2007/11/26	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	±0.2	DRAWN BY M. NAGATA	DATE '04/02/27	TITLE 1.0 FPC CONN NON ZIF SMT RA BOTTOM CONTACT EMBSTP -LEAD FREE-				
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '04/02/27					
		30 OVER	±0.3	APPROVED BY M. SASAO	DATE '04/02/27	MOLEX INCORPORATED				
		ANGULAR ±3 °		MATERIAL NO.						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-52852-011		1 OF 5				
A	REV	SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

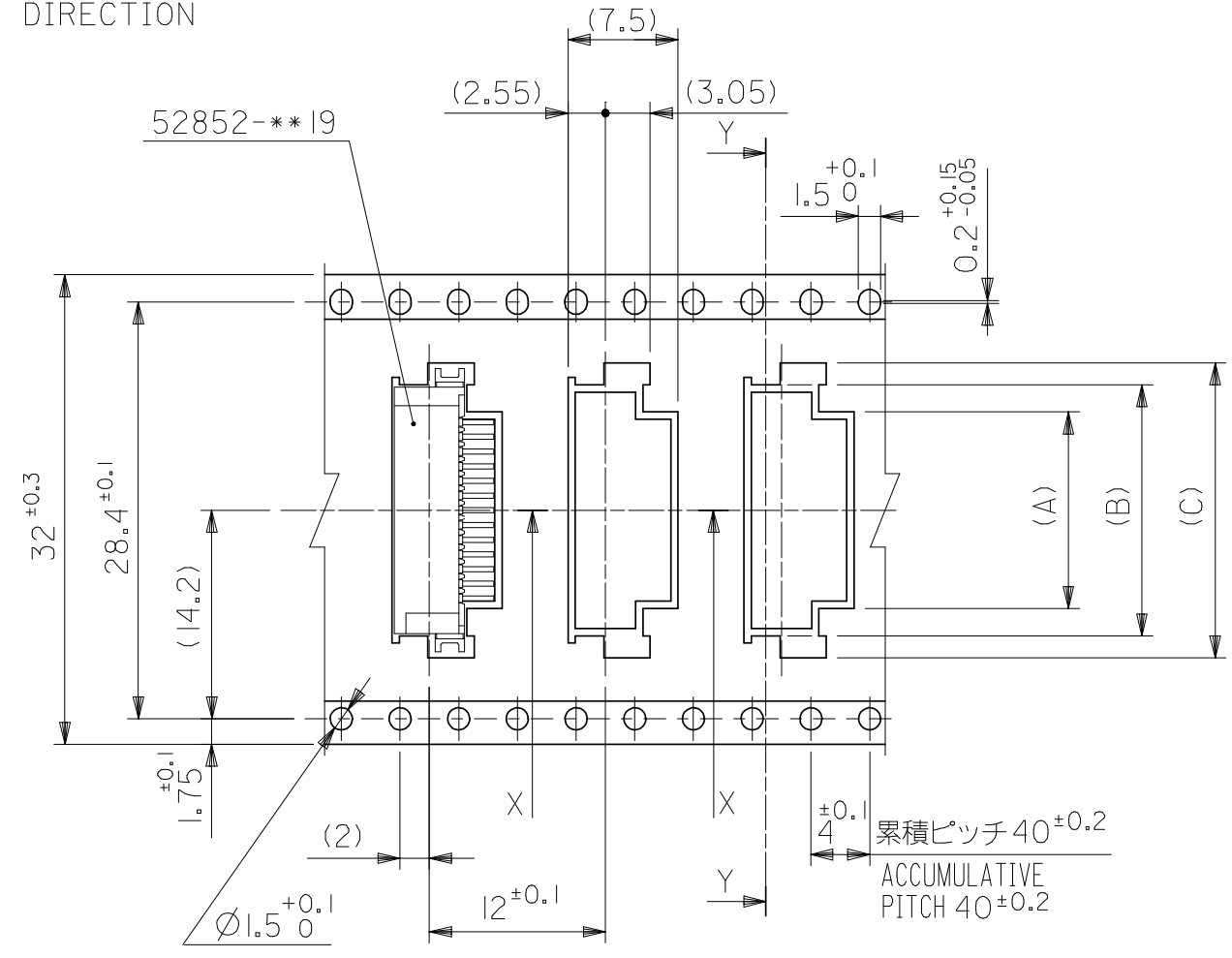
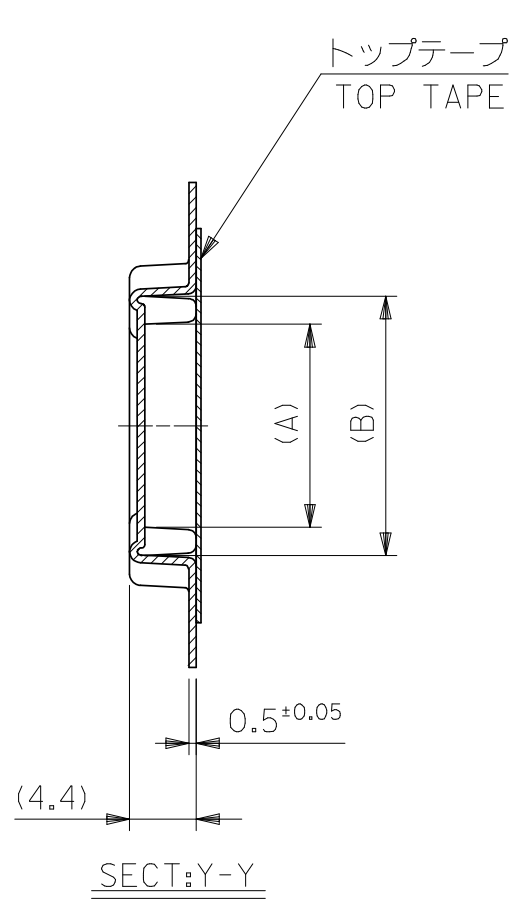


24mm幅キャリアテープ  
24mm WIDTH CARRIER TAPE

24	29.4	25.4	18.1	15.1	11.4	52852-1170	11
			17.1	14.1	10.4	52852-1070	10
			16.1	13.1	9.4	52852-0970	9
			15.1	12.1	8.4	52852-0870	8
			14.1	11.1	7.4	52852-0770	7
			13.1	10.1	6.4	52852-0670	6
			12.1	9.1	5.4	52852-0570	5
			11.1	8.1	4.4	52852-0470	4
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2008-1818 DRWN: MNABEI 2007/11/12 CHKD: M. ISOGAYA 2007/11/13 APPR: NUKITA 2007/11/26	DESCRIPTION 10 UNDER 10 OVER 30 UNDER 30 OVER ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 52852-***70	THIRD ANGLE PROJECTION
		10 UNDER ± 0.2	M. NAGATA '04/02/27	TITLE 1.0 FPC CONN NON ZIF SMT RA BOTTOM CONTACT EMBSTP -LEAD FREE-					
		10 OVER 30 UNDER ± 0.25	K. TOJO '04/02/27	MOLEX INCORPORATED					
		30 OVER ± 0.3	M. SASAO '04/02/27	DOCUMENT NO. SD-52852-011					
		ANGULAR ±3 °	MATERIAL NO. SEE TABLE	SHEET NO. 2 OF 5					
A	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

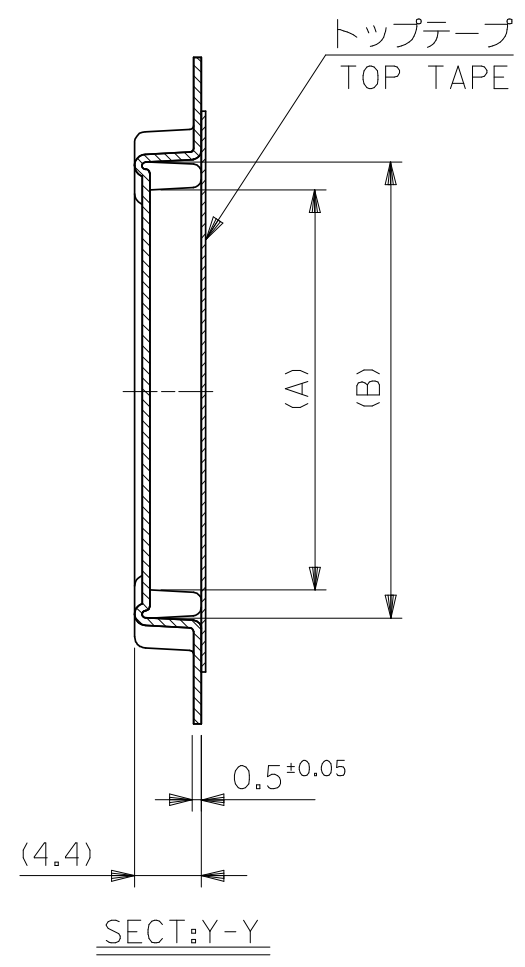
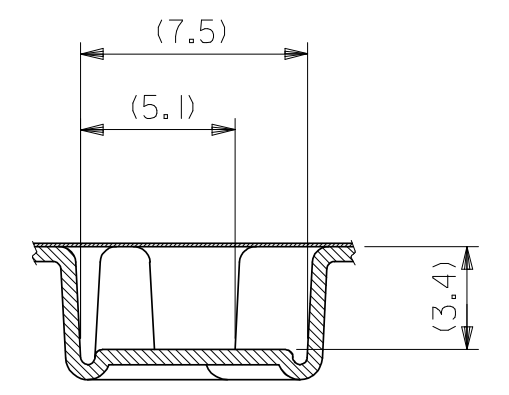
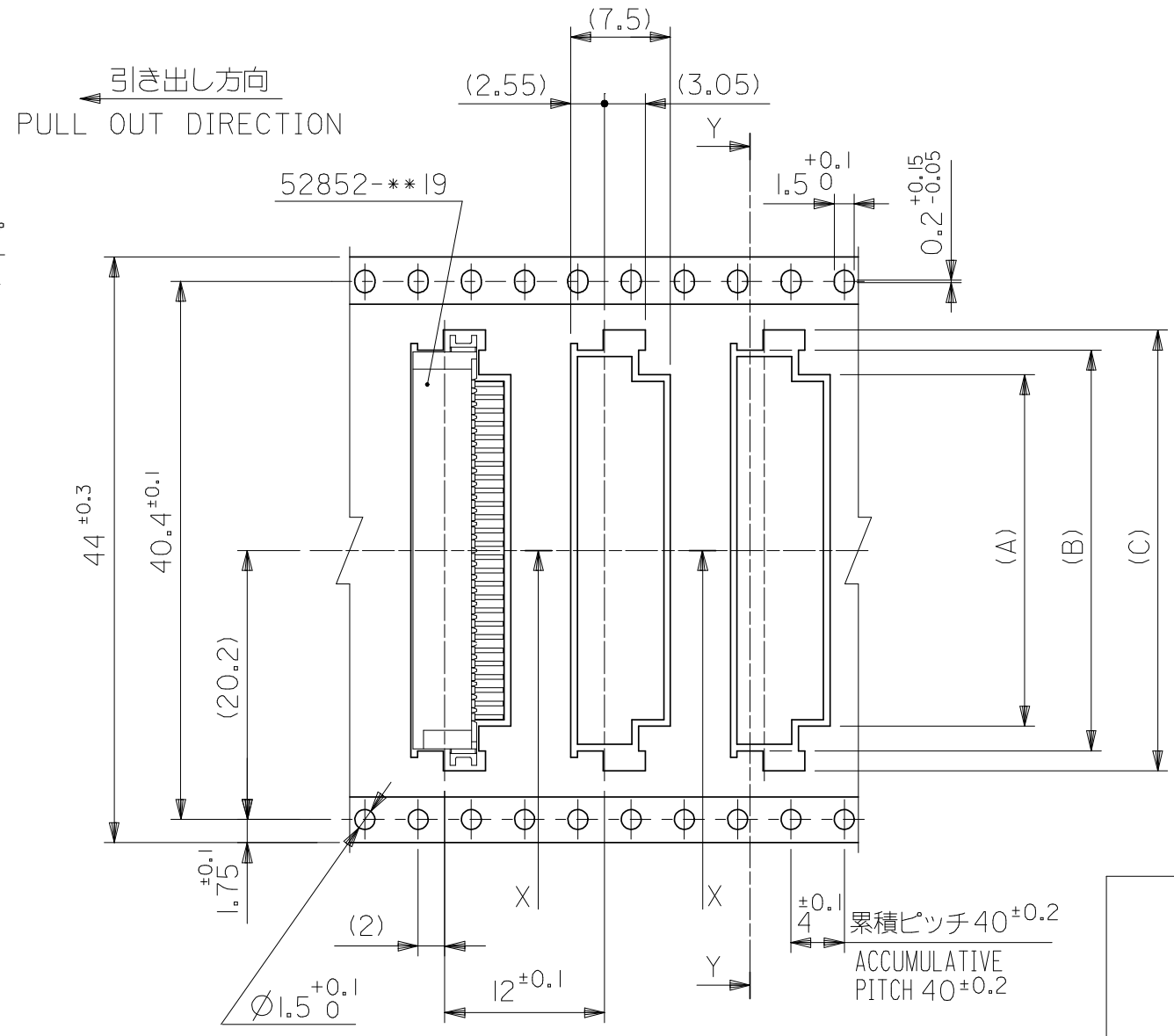
引き出し方向  
PULL OUT DIRECTION



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

32	37.5	33.5	23.1	20.1	16.4	52852-1670	16
			22.1	19.1	15.4	52852-1570	15
			21.1	18.1	14.4	52852-1470	14
			20.1	17.1	13.4	52852-1370	13
			19.1	16.1	12.4	52852-1270	12
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2008-1818 DRWN: MNABEI 2007/11/12 CHKD: M. ISOGAYA 2007/11/13 APPR: NUKITA 2007/11/26	DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	MODEL NO. 52852-***70		
		10 UNDER ± 0.2 10 OVER 30 UNDER ± 0.25 30 OVER ± 0.3	DRAWN BY M. NAGATA	DATE '04/02/27	TITLE 1.0 FPC CONN NON ZIF SMT RA BOTTOM CONTACT EMBSTP -LEAD FREE-		
		ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY K. TOJO	DATE '04/02/27	MOLEX INCORPORATED		
		SEE TABLE	APPROVED BY M. SASAO	DATE '04/02/27	MATERIAL NO.	DOCUMENT NO. SD-52852-011	SHEET NO. 3 OF 5
		A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

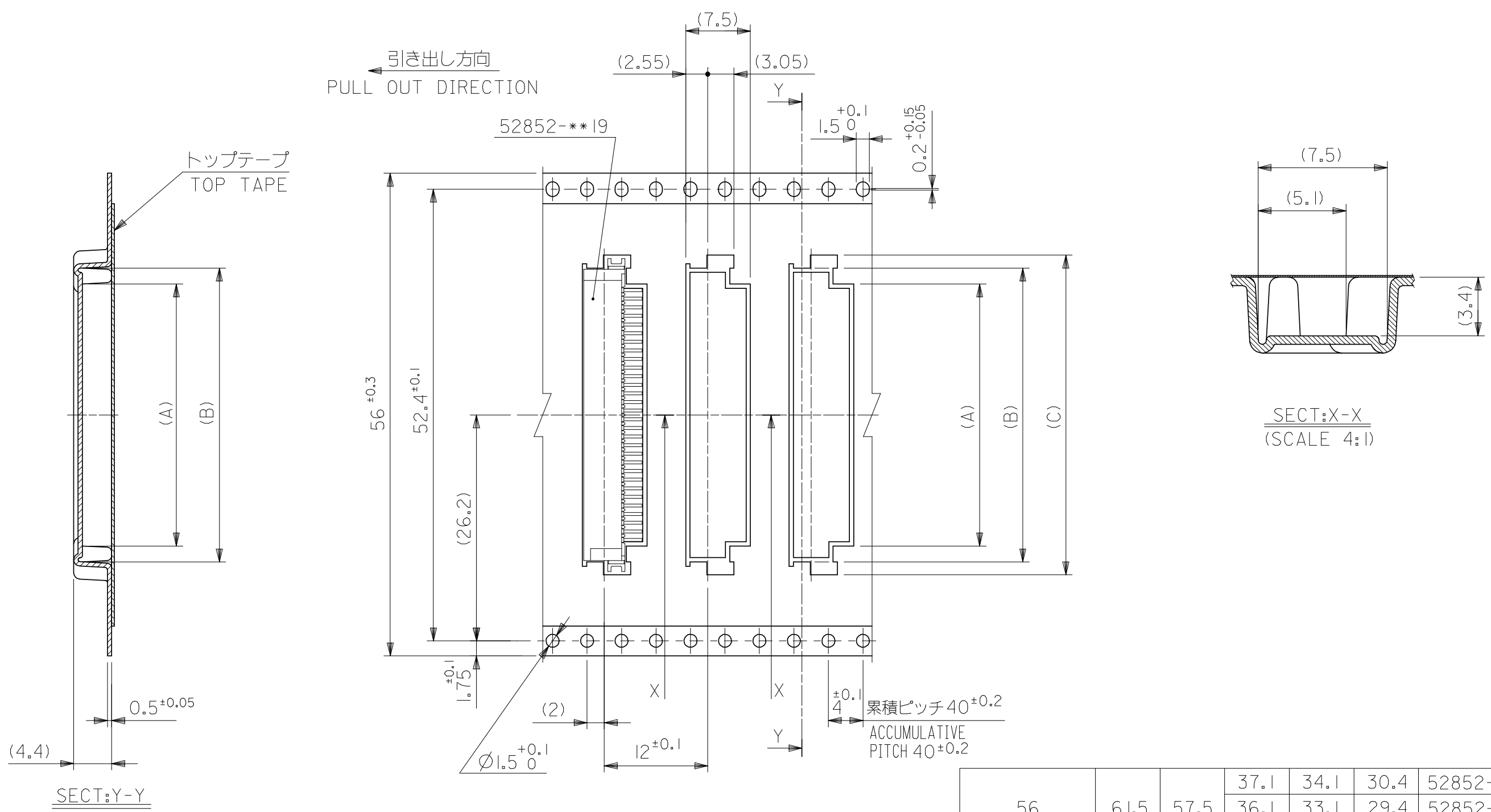


44mm幅キャリアテープ  
44mm WIDTH CARRIER TAPE

44	49.5	45.5	34.1	31.1	27.4	52852-2770	27		
			33.1	30.1	26.4	52852-2670	26		
			32.1	29.1	25.4	52852-2570	25		
			31.1	28.1	24.4	52852-2470	24		
			30.1	27.1	23.4	52852-2370	23		
			29.1	26.1	22.4	52852-2270	22		
			28.1	25.1	21.4	52852-2170	21		
			27.1	24.1	20.4	52852-2070	20		
			26.1	23.1	19.4	52852-1970	19		
			25.1	22.1	18.4	52852-1870	18		
24.1	21.1	17.4	52852-1770	17					
キャリアテープ幅 CARRIER TAPE WIDTH			E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2008-1818 DRWN: MNABEI 2007/11/12 CHKD: M. ISOGAYA 2007/11/13 APPR: NUKITA 2007/11/26	DESCRIPTION 10 UNDER 10 OVER 30 UNDER 30 OVER ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 52852-***70 THIRD ANGLE PROJECTION		
		±0.2	±0.25	±0.3	±3 °	DRAWN BY M. NAGATA	DATE '04/02/27	TITLE 1.0 FPC CONN NON ZIF SMT RA BOTTOM CONTACT EMBSTP -LEAD FREE-		
		±0.2	±0.25	±0.3	±3 °	CHECKED BY K. TOJO	DATE '04/02/27			
		±0.2	±0.25	±0.3	±3 °	APPROVED BY M. SASAO	DATE '04/02/27	MOLEX INCORPORATED		
		±0.2	±0.25	±0.3	±3 °	MATERIAL NO.	DOCUMENT NO.			
A	REV	SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SD-52852-011			





SECT:Y-Y

SECT:X-X  
(SCALE 4:1)

56mm幅キャリアテープ  
56mm WIDTH CARRIER TAPE

56	61.5	57.5	37.1	34.1	30.4	52852-3070	30
			36.1	33.1	29.4	52852-2970	29
			35.1	32.1	28.4	52852-2870	28
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2008-1818 DRWN: MNABEI 2007/11/12 CHKD: MISOGAYA 2007/11/13 APPR: NUKITA 2007/11/26	DESCRIPTION 10 UNDER 10 OVER 30 UNDER 30 OVER ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 52852-***70 THIRD ANGLE PROJECTION	
		±0.2	10 UNDER	M. NAGATA	DATE '04/02/27	TITLE 1.0 FPC CONN. N-ZIF R/A RA BOTTOM CONTACT EMBSTP -LEAD FREE-			
		±0.25	10 OVER 30 UNDER	K. TOJO	DATE '04/02/27				
		±0.3	30 OVER	M. SASAO	DATE '04/02/27	MOLEX INCORPORATED DOCUMENT NO. SD-52852-011 SHEET NO. 5 OF 5			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE					
A	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							