

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

**Part Number:** [0545481671](#)  
**Status:** **Active**  
**Overview:** [ffc fpc smt](#)  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, 1.20mm (.047") Height, Right Angle, SMT, ZIF, Bottom Contact Style, 16 Circuits, Lead-free, Gold (Au)Plating

**Documents:**

[3D Model](#) [Product Specification PS-54548-039 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [54548](#)  
 Overview [ffc fpc smt](#)  
 Product Name N/A

**Physical**

Circuits (Loaded) 16  
 Contact Position Bottom  
 Durability (mating cycles max) 20  
 Entry Angle 90° Angle  
 Mated Height (in) 0.047 In  
 Mated Height (mm) 1.20 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 1  
 Orientation Right Angle  
 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 Yes  
 Stackable No  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FFC/FPC

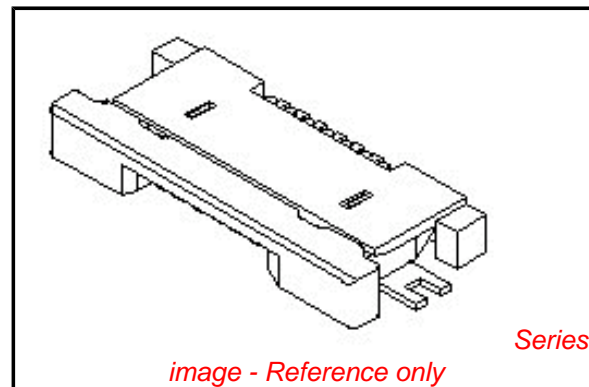
**Electrical**

Current - Maximum per Contact 0.5A  
 Voltage - Maximum 50V

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification SPK-54548-001  
 Product Specification PS-54548-039, RPS-54548-083, RPS-54548-085, RPS-54548-091, RPS-54548-097, RPS-54548-099  
 Sales Drawing SD-54548-039, SD-54548-040



*image - Reference only*

**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
 Status**  
 Not Reviewed

**China RoHS**



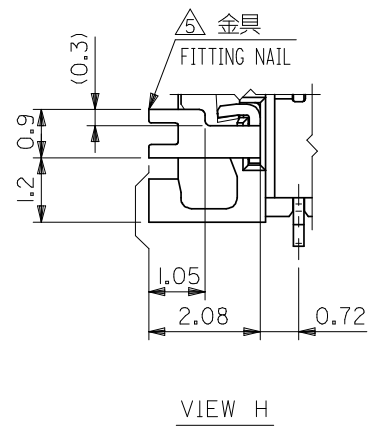
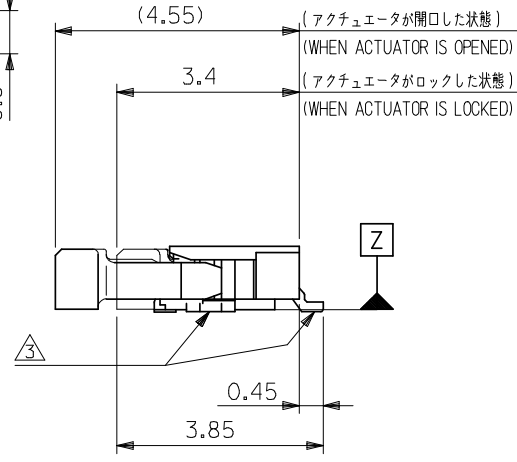
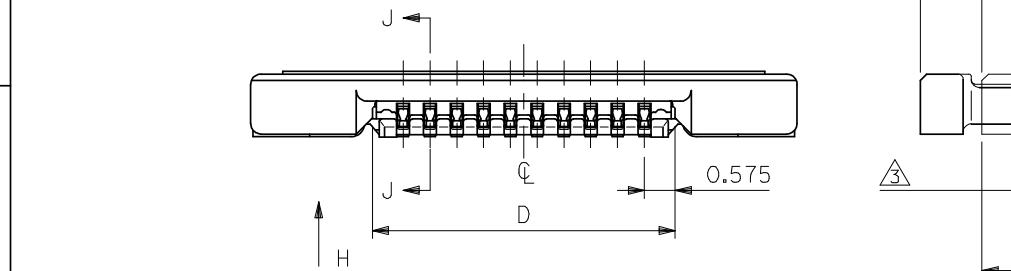
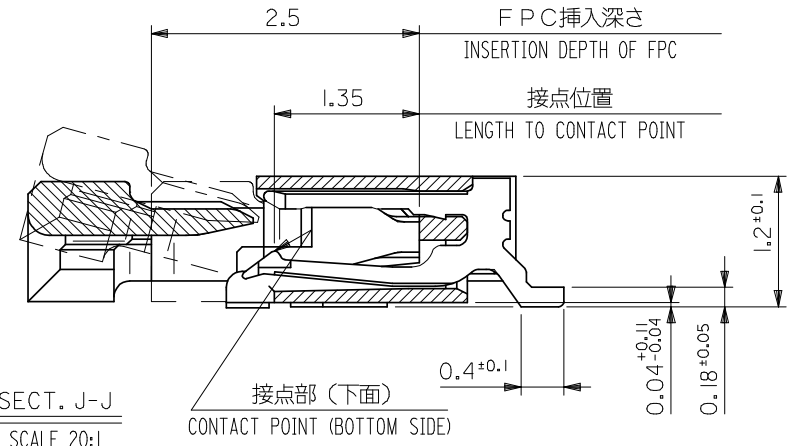
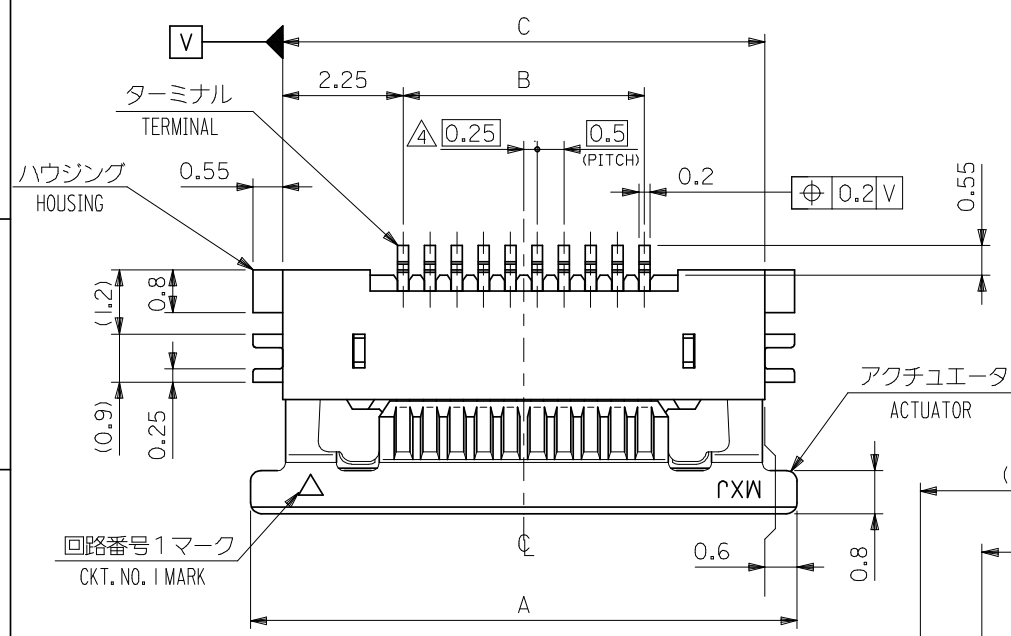
**Need more information on product  
 environmental compliance?**

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**

[54548Series](#)

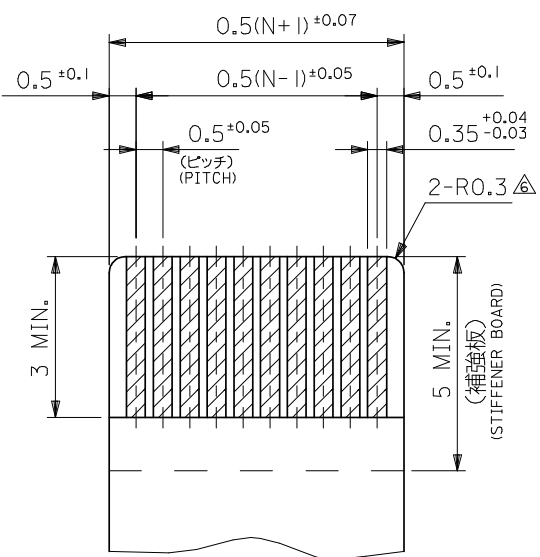


0.28±0.03	13.65	17.0	12.5	18.2	54548-2671	54548-2629	26
	12.65	16.0	11.5	17.2	54548-2471	54548-2429	24
	12.15	15.5	11.0	16.7	54548-2371	54548-2329	23
	11.65	15.0	10.5	16.2	54548-2271	54548-2229	22
	11.15	14.5	10.0	15.7	54548-2171	54548-2129	21
	10.65	14.0	9.5	15.2	54548-2071	54548-2029	20
	10.15	13.5	9.0	14.7	54548-1971	54548-1929	19
	9.65	13.0	8.5	14.2	54548-1871	54548-1829	18
	9.15	12.5	8.0	13.7	54548-1771	54548-1729	17
	8.65	12.0	7.5	13.2	54548-1671	54548-1629	16
	8.15	11.5	7.0	12.7	54548-1571	54548-1529	15
	7.65	11.0	6.5	12.2	54548-1471	54548-1429	14
	7.15	10.5	6.0	11.7	54548-1371	54548-1329	13
6.65	10.0	5.5	11.2	54548-1271	54548-1229	12	
6.15	9.5	5.0	10.7	54548-1171	54548-1129	11	
5.65	9.0	4.5	10.2	54548-1071	54548-1029	10	
5.15	8.5	4.0	9.7	54548-0971	54548-0929	9	
4.65	8.0	3.5	9.2	54548-0871	54548-0829	8	
4.15	7.5	3.0	8.7	54548-0771	54548-0729	7	
3.65	7.0	2.5	8.2	54548-0671	54548-0629	6	
3.15	6.5	2.0	7.7	54548-0571	54548-0529	5	
2.65	6.0	1.5	7.2	54548-0471	54548-0429	4	
FPC THICKNESS	D	C	B	A	EMBOSSED TAPE ORDER No. オータ-番別	製品番号 MATERIAL No.	極数 Ck+

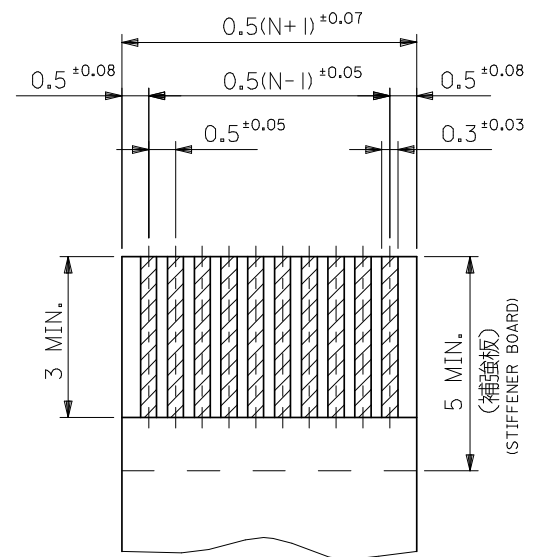
REVISED EC NO: J2008-4048 DRWN:MNABEI 2008/06/13 CH'KD:THARUYAMA 2008/06/16 APPR:NUKITA 2008/06/16	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			MM ONLY	10:1	METRIC		
	10 UNDER	±0.2	DRAWN BY	DATE	TITLE		
	10 OVER 30 UNDER	±0.25	HSHIMABUKURO	'04/02/10	0.5 FPC CONN ZIF HSG ASSY FOR SMT RA BTM CONT -LEAD FREE-		
	30 OVER	±0.3	KTOJO	'04/02/10			
ANGULAR ±3°		APPROVED BY	DATE	MOLEX INCORPORATED			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MSASAO	'04/02/10	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		SEE TABLE		SD-54548-039	1 OF 2		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



参考基板レイアウト  
RECOMMENDED P.C.B. BOARD  
PATTERN DIMENSION (REF.)  
(マウント面)  
(MOUNTING SIDE)



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ:表参照)  
(THICKNESS:SEE CHART)



適合FFC推奨寸法  
APPLICABLE FFC  
RECOMMENDED DIMENSION  
(仕上がり厚さ:表参照)  
(THICKNESS:SEE CHART)

注記 NOTES

- I. 使用材料 MATERIAL
- ハウジング : LCP, UL94V-0
  - アクチュエータ : PPS, UL94V-0
  - ターミナル : リン青銅 (t=0.2)
  - メッキ : 接点部:金メッキ
  - テール部: 鍍メッキ
  - 金具 : リン青銅、鍍メッキ (t=0.2)

- △パターンはくり止め用金具
- △RO.3はFPC導体部にかからないこと
- 7.本製品は54548-\*\*-21の鉛フリー(部分金メッキ)品である。
- 8. N: 極数 N: CIRCUIT.

2. 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。
- △ソルダーテール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 Z に対し上方向 OMAX.、下方向 0.15MAX.とし
- △偶数極に適用。

FPC/FFC について:

打ち抜き方向は導体側から補強板側を推奨します。  
導体部については軟銅箔35μmまたは50μmを推奨します。

ABOUT FPC/FFC  
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.

FPC について:

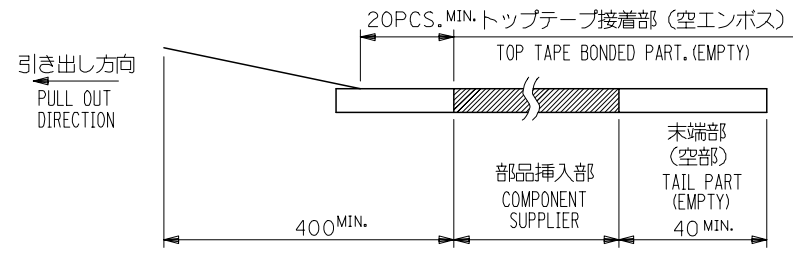
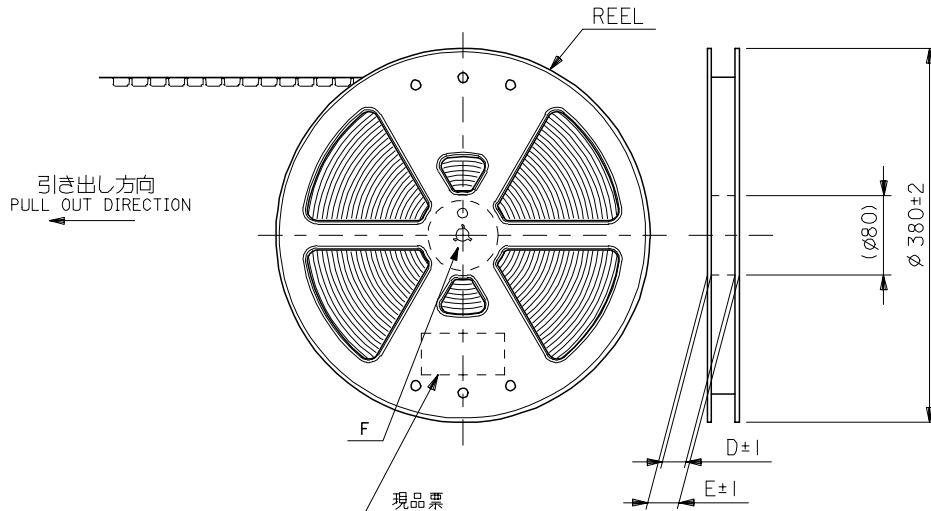
補強フィルム材質はポリイミドを推奨します。ベースフィルムは25μmを推奨します。  
接着剤は熱硬化接着剤を推奨します。  
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様、お願い致します。

ABOUT FPC  
RECOMMENDED MATERIAL/THICKNESS.  
STIFFENER FILM : POLYIMIDE  
BASE FILM THICKNESS : 25μm  
BONDING AGENT : THERMOSETTING BONDING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON THE CONTACT AREA BECAUSE THE EXTRA ADHESIVE MAY CAUSE THE DEFECT IN ELECTRICAL CONTINUITY.

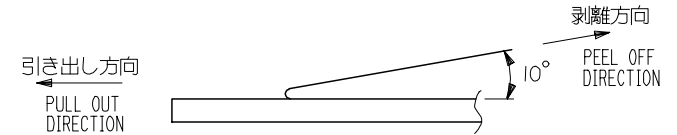
REVISED EC NO: J2008-4048 DRWN:WABEI CHKD:THARYAMA APPR:NUKITA	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL No. 54548-**-29	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY HSHIMABUKURO	DATE '04/02/10	TITLE 0.5 FPC CONN ZIF HSG ASSY FOR SMT RA BTM CONT -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/02/10	APPROVED BY MSASAO			
	30 OVER	±0.3	DATE '04/02/10	MATERIAL NO. SEE SHEET 1				
	ANGULAR	±3	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DOCUMENT NO. SD-54548-039		SHEET NO. 2 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				MOLEX INCORPORATED				

NOTES

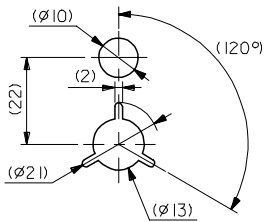
- 製品詳細寸法については図面 SD-54548-039 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-54548-039
- 梱包数量：3000個/リール  
NUMBER OF CONNECTORS : 3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- トップテープの剥離強度：0.1N ~ 1.3N(10gf ~ 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 : 0.1N ~ 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.



- 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>  
POLYSTYRENE(PS) <RECYCLE MATERIAL CONTAINED>
- 本製品は 54548-\*\*91 の鉛フリー(部分金メッキ)品である。  
THIS PRODUCT IS LEAD FREE OF 54548-\*\*91 (SELECTIVE GOLD).



DETAIL F

REVISED EC NO: J2006-3468 DRAWN: HSHIMABUKURO 2006/05/17 CHECKED: KTOJO 2006/05/19 APPR: MSASAO 2006/05/25	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	54548-**71 DESIGN UNITS METRIC	MODEL No. THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY DATE HSHIMABUKURO '04/02/10		TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY DATE KTOJO '04/02/10				
	30 OVER	±0.3	APPROVED BY DATE MSASAO '04/02/10		MOLEX INCORPORATED		
ANGULAR	±3 °	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-54548-040		SHEET NO. 1 OF 4	
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			

10 9 8 7 6 5 4 3 2 1

F

E

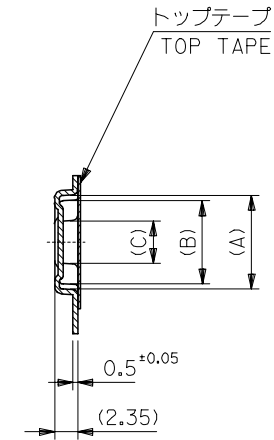
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C

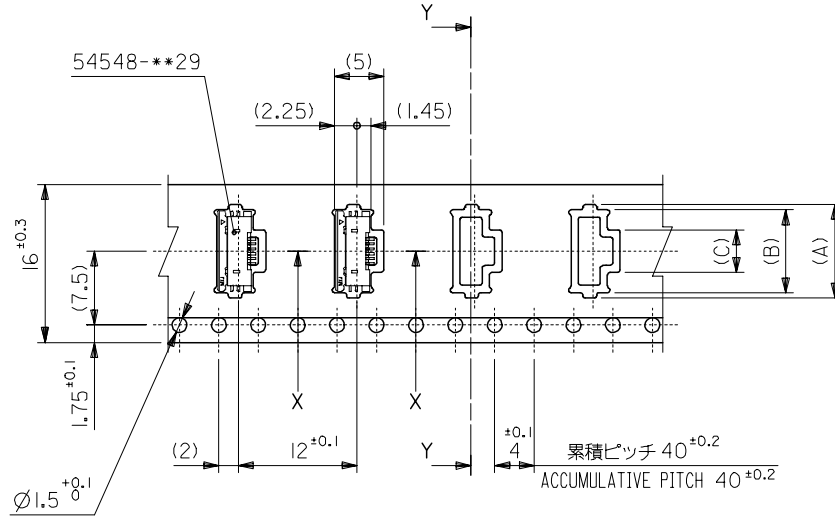
B

A

引き出し方向  
PULL OUT DIRECTION



SECT. Y-Y



SECT. X-X

16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

16	21.4	17.4	4.3	8.4	9.5	54548-0671	6
			3.8	7.9	9.0	54548-0571	5
			3.3	7.4	8.5	54548-0471	4
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	製品番号 MATERIAL No.	極数 Ck+

REVISED EC NO: J2006-3468 DRW: MNABEI 2006/05/17 CHK: KTOYODA 2006/05/19 APPR: NUKITA 2006/05/25	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY HSHIMABUKURO	DATE '04/02/10	TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE-		
	10 OVER 30 UNDER	± 0.25	CHECKED BY KTOJO	DATE '04/02/10	MOLEX INCORPORATED		
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE '04/02/10	DOCUMENT NO. SD-54548-040		
	ANGULAR	± 3 °	MATERIAL NO. SEE CHART		SHEET NO. 2 OF 4		
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			

9

8

7

6

5

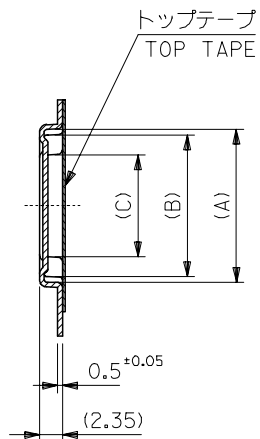
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3

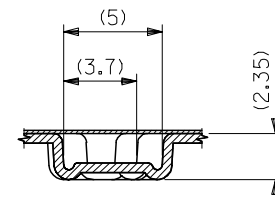
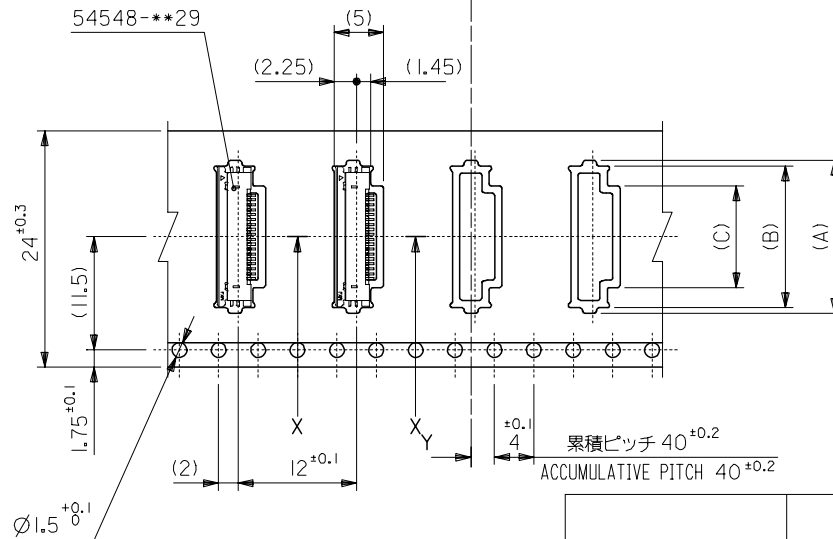
2

10 9 8 7 6 5 4 3 2 1

引き出し方向  
PULL OUT DIRECTION



SECT. Y-Y



SECT. X-X

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

24	29.4	25.4	12.3	16.4	17.5	54548-2271	22		
			11.8	15.9	17.0	54548-2171	21		
			11.3	15.4	16.5	54548-2071	20		
			10.8	14.9	16.0	54548-1971	19		
			10.3	14.4	15.5	54548-1871	18		
			9.8	13.9	15.0	54548-1771	17		
			9.3	13.4	14.5	54548-1671	16		
			8.8	12.9	14.0	54548-1571	15		
			8.3	12.4	13.5	54548-1471	14		
			7.8	11.9	13.0	54548-1371	13		
			7.3	11.4	12.5	54548-1271	12		
			6.8	10.9	12.0	54548-1171	11		
			6.3	10.4	11.5	54548-1071	10		
			5.8	9.9	11.0	54548-0971	9		
5.3	9.4	10.5	54548-0871	8					
4.8	8.9	10.0	54548-0771	7					
キャリアテープ幅 CARRIER TAPE WIDTH			E	D	(C)	(B)	(A)	製品番号 MATERIAL No.	極数 Ck+

REVISED EC NO: J2006-3468 DRW: MABEI 2006/05/17 CHK: KTOYODA 2006/05/19 APPR: NUKITA 2006/05/25	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY HSHIMABUKURO	DATE '04/02/10	TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/02/10	MOLEX INCORPORATED			
	30 OVER	±0.3	APPROVED BY MSASAO	DATE '04/02/10	MATERIAL NO.		DOCUMENT NO. SD-54548-040	SHEET NO. 3 OF 4
	ANGULAR	±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART			

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

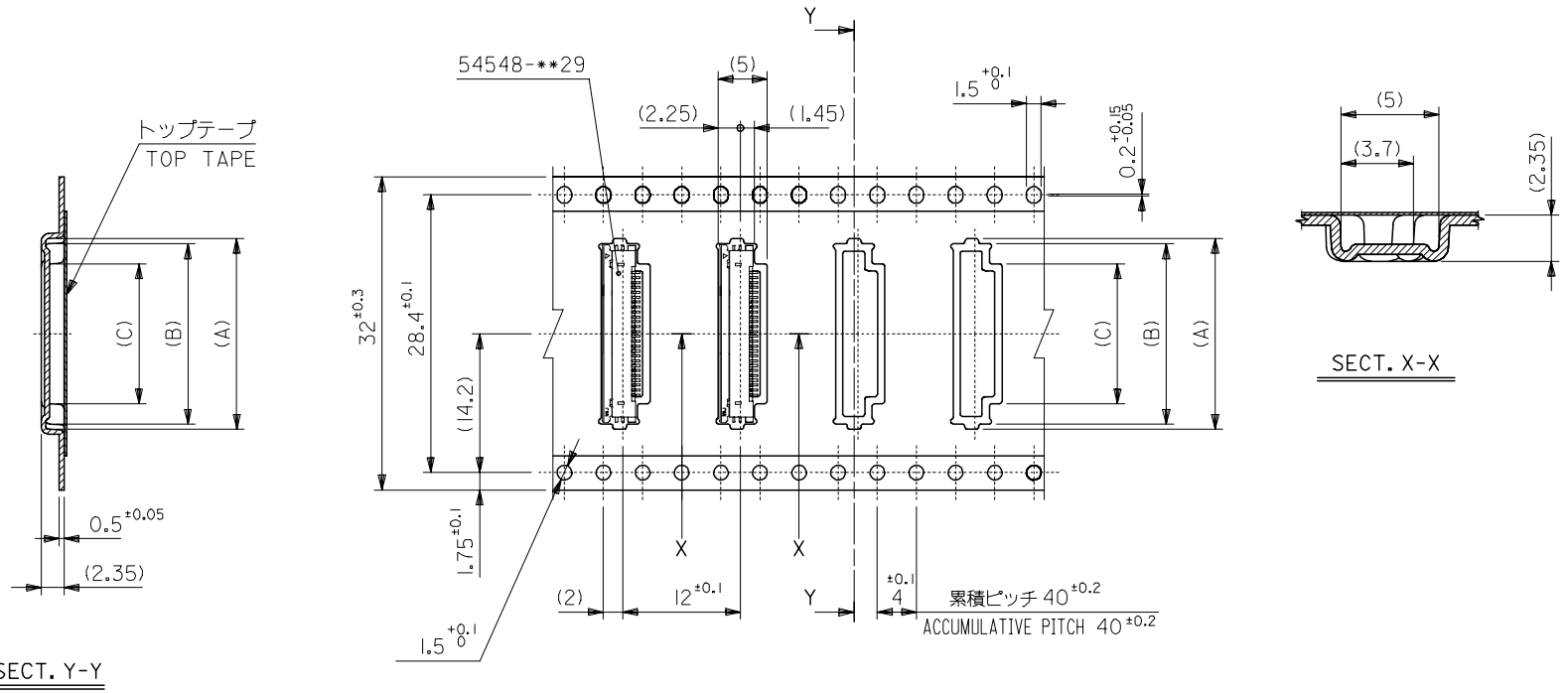
D

C

B

A

引き出し方向  
PULL OUT DIRECTION



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

32	37.4	33.4	14.3	18.4	19.5	54548-2671	26
			13.3	17.4	18.5	54548-2471	24
			12.8	16.9	18.0	54548-2371	23
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(C)	(B)	(A)	製品番号 MATERIAL No.	極数 Ck+

REVISED EC NO: J2006-3468 DRW: MNABEI 2006/05/17 CHK: KATOYODA 2006/05/19 APPR: NUKITA 2006/05/25	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY HSHIMABUKURO	DATE '04/02/10	TITLE 0.5 FPC CONN ZIF HSG ASSY RA BOTTOM CONTACT -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/02/10	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY MSASAO	DATE '04/02/10	DOCUMENT NO. SD-54548-040		
	ANGULAR	±3 °	MATERIAL NO. SEE CHART		SHEET NO. 4 OF 4		
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			