

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

**Part Number:** [0537480608](#)  
**Status:** **Active**  
**Overview:** [slimstack\\_050mm\\_020\\_pitch](#)  
**Description:** 0.50mm (.020") Pitch SlimStack™ Plug, Surface Mount, Dual Row, Vertical, 3.00mm (.118") Stack Height, 60 Circuits, without Vacuum Pick-up Tape

**Documents:**

[3D Model](#) [Product Specification PS-52991-003 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">53748</a>
Application	Board-to-Board
Overview	<a href="#">slimstack_050mm_020_pitch</a>
Product Name	SlimStack™

**Physical**

Breakaway	No
Circuits (Loaded)	60
Circuits (maximum)	60
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	None
Mated Height (in)	0.118 In
Mated Height (mm)	3.00 mm
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.020 In
Pitch - Mating Interface (mm)	0.50 mm
Plating min: Mating (µin)	4
Plating min: Mating (µm)	0.1
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

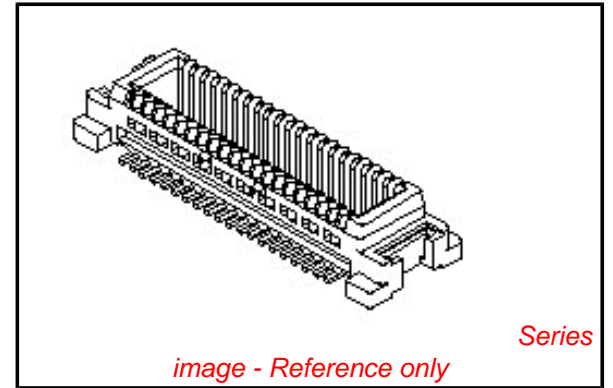
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	SPK-53748-001
Product Specification	PS-52991-003, RPS-52991-013, RPS-52991-019
Sales Drawing	SD-53748-002, SD-53748-005



**EU RoHS**

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

**China RoHS**



**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.

**Search Parts in this Series**

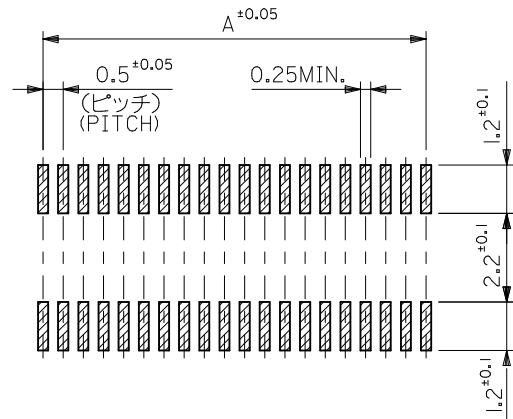
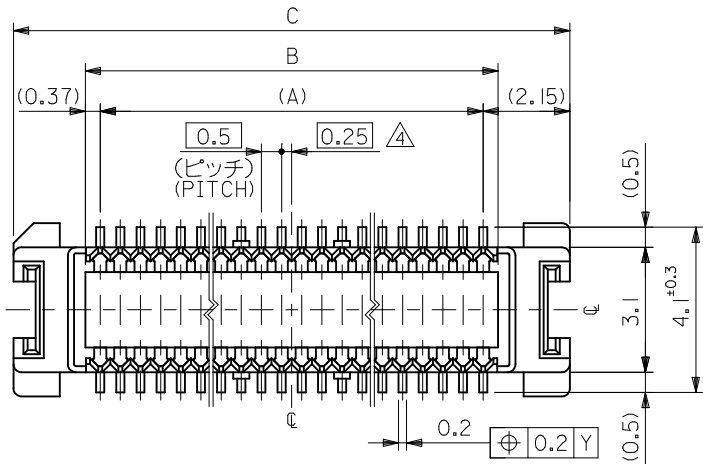
[53748Series](#)

**Mates With**

SlimStack™ Receptacle [52991](#) , [54167](#)

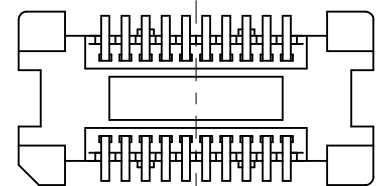
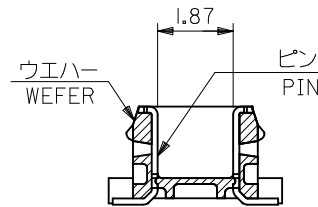
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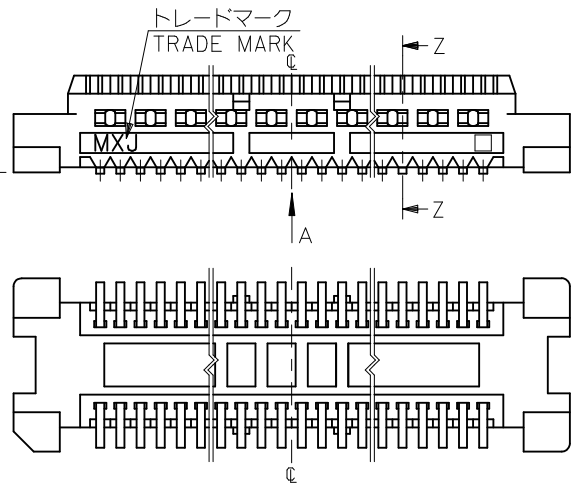


参考基板レイアウト (マウント面)

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



VIEW A (CASE OF 20-30CKT)



注記 NOTES:

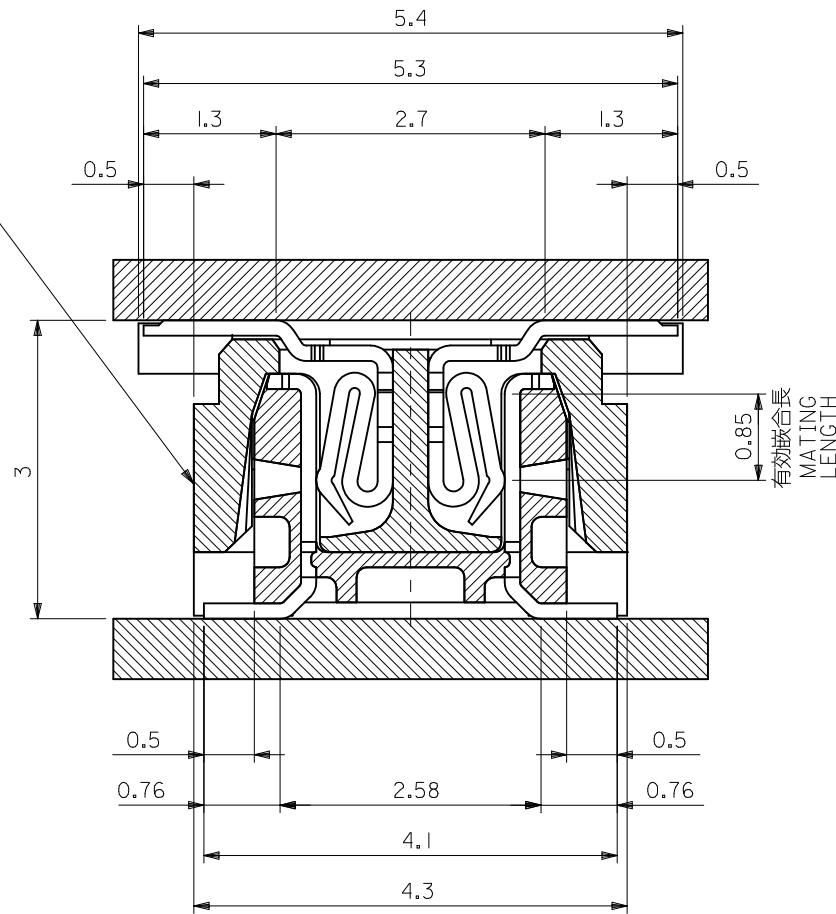
1. 使用材料 MATERIAL  
ハウジング: LCPガラス入り (白), UL94V-0  
HOUSING: LCP(G.F.)(COLOR:WHITE), UL94V-0  
ターミナル: 黄銅 (t=0.15)  
TERMINAL: BRASS (t=0.15)
2. メッキ仕様 PLATING  
全体仕上げ: 金メッキ 0.1 MICROMETER MIN.  
ALL OVER: GOLD 0.1 MICROMETER MIN.  
下地メッキ: ニッケルメッキ 1.5 MICROMETER MIN.  
UNDER PLATING: NICKEL 1.5 MICROMETER MIN.
3. 基準面 [X] からのソルダーテールの半田付け面のズレ量は、上方向 0 下方向 0.15MAX. とする。  
MISALIGNMENT OF SOLDER TAIL FROM [X]: UPPER DIRECTION 0, LOWER DIRECTION 0.15 MAX.
4. (全極数 / 2) = 偶数の場合に適用。  
APPLY FOR (CIRCUIT / 2) = EVEN.
5. 嵌合相手: 52991 シリーズ 54167 シリーズ  
MATE WITH: 52991 SERIES, 54167 SERIES.
6. テール平坦度は、0.1MAX.  
TAIL COPLANARITY TO BE 0.1MAX.
7. ELV 及び RoHS 適合品  
ELV AND RoHS COMPLIANT

23.8	20.24	19.5	53748-0808	53748-0800	80
21.3	17.74	17.0	53748-0708	53748-0700	70
18.8	15.24	14.5	53748-0608	53748-0600	60
13.8	10.24	9.5	53748-0408	53748-0400	40
11.3	7.74	7.0	53748-0308	53748-0300	30
8.8	5.24	4.5	53748-0208	53748-0200	20
C	B	A	EMBOSSED TAPE ORDER No.	MATERIAL NO.	極数 CIRCUIT

REVISED EC NO: J2010-1926 DRW: KTOYODA 2010/03/24 CHKD: SMARUYAMA 2010/03/26 APPR: MSASAO 2010/03/29	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 8:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER ±0.2	10 OVER 30 UNDER ±0.25	30 OVER ±0.3	DRAWN BY S. AIHARA	DATE '96/2/27	TITLE 0.5 B-TO-B CONN PLUG ASSY (W/O BOSS, W/O NAIL)	
		ANGULAR ±3 °			APPROVED BY M. SASAO	DATE '01/12/26	MOLEX INCORPORATED	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE TABLE	DATE '01/12/26	DOCUMENT NO. SD-53748-002	SHEET NO. 1 OF 2

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

嵌合相手 MATE WITH  
 5299I-\*\*\*0 (白 WHITE)  
 54167-\*\*\*1 (黒 BLACK)



嵌合断面図 (参考)  
 MATED DRAWING (REF.)

MODEL NO. 53748-\*\*\*0

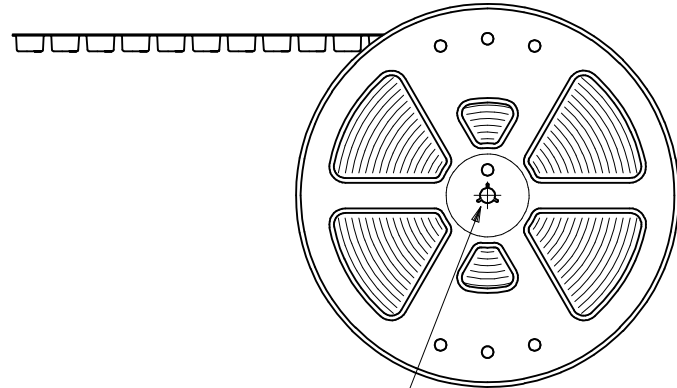
REVISED EC NO: J2010-1926 DRW:KTOYODA 2010/03/24 CHK:D.SMARUYAMA '01/12/26 APPR:MSASAO 2010/03/29	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>8:1</b>	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER ± ---	10 OVER 30 UNDER ± ---	DRAWN BY S. AIHARA	DATE '96/2/27	TITLE <b>0.5 B-TO-B CONN                  PLUG ASSY                  (W/O BOSS ,W/O NAIL)</b>		
	30 OVER ± ---	ANGULAR ± --- °	CHECKED BY M. SASAO	DATE '01/12/26	MOLEX INCORPORATED		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY M. SASAO	DATE '01/12/26	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-53748-002	SHEET NO. 2 OF 2

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

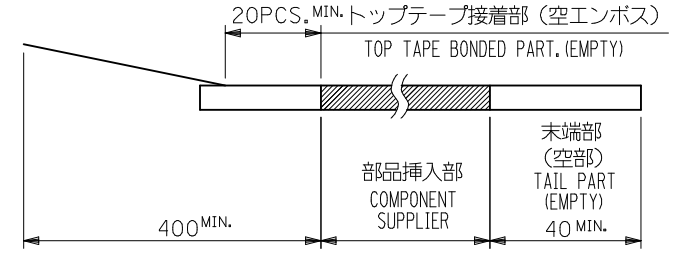
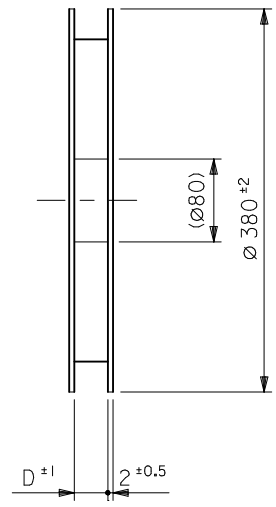
NOTES

- 製品詳細寸法については図面 SD-53748-002 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-53748-002
- 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

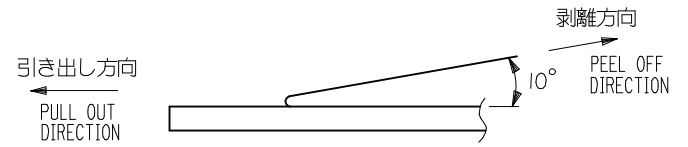
引き出し方向  
PULL OUT  
DIRECTION



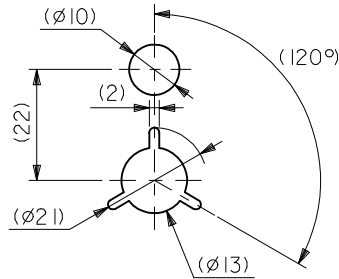
引き出し方向  
PULL OUT  
DIRECTION



- トップテープの剥離強度：0.1N ~ 0.7N(10.2gf ~ 71.4gf)  
(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 ~ 0.7N(10.2gf ~ 71.4gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED , DURING TRANSPORTATION.



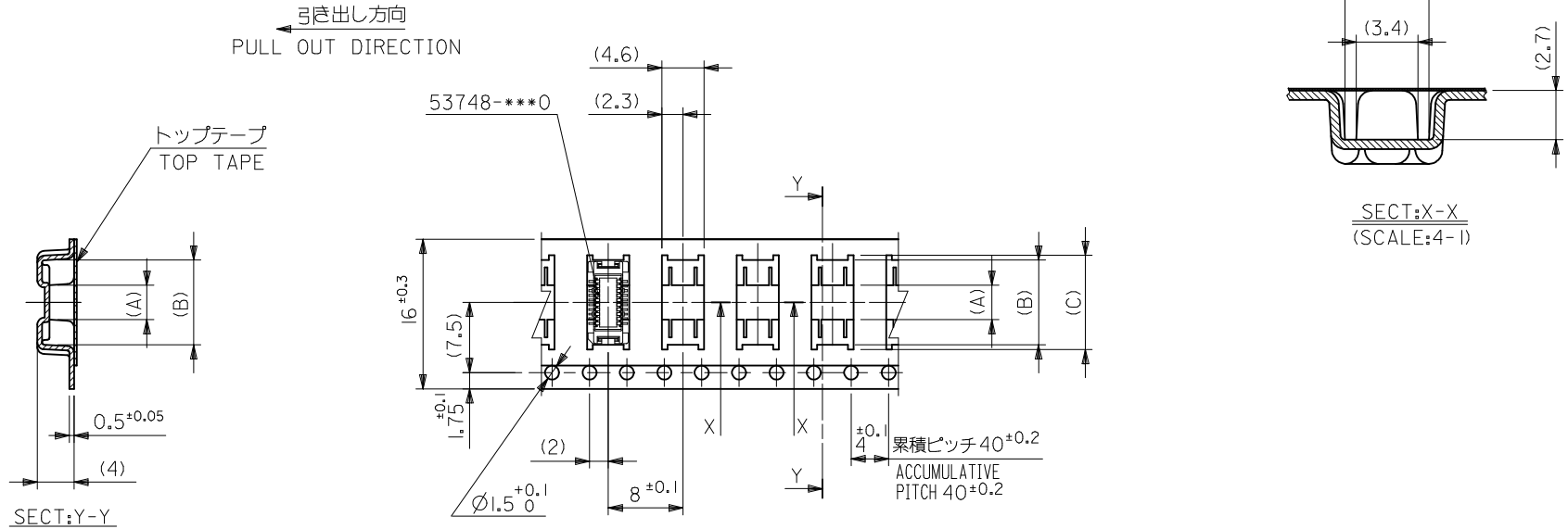
- 材料(MATERIAL)  
キャリアテープ(CARRIER TAPE)：ポリプロピレン(POLYPROPYLENE)  
トップテープ(TOPTAPE)：PET , PE , PEF  
リール(REEL)：ポリスチレン (PS) <リサイクル材を含む>  
POLYSTYREN(PS) <RECYCLE MATERIAL CONTAINED>



DETAIL "F"

MODEL NO. 53748-\*\*\*8

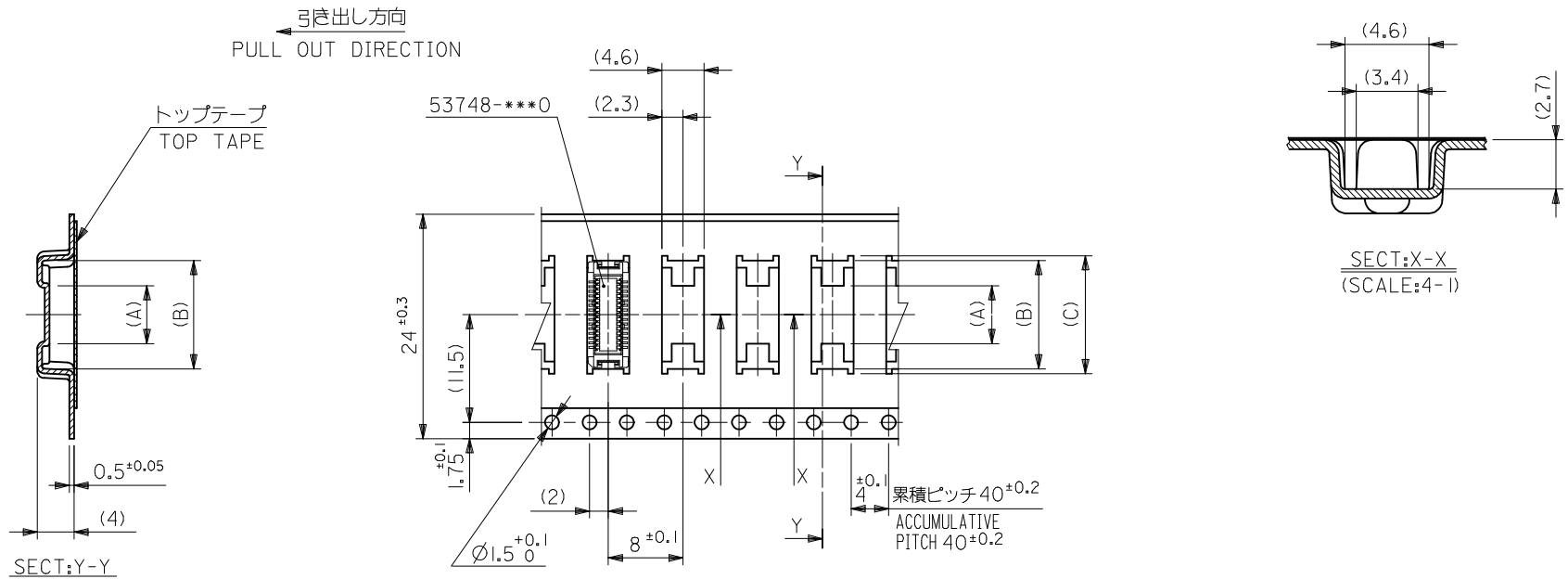
REVISED EC NO: J2009-0487 DRWN:NAKAMURA 2008/12/08 CHKD:T. HARUYAMA 2008/12/08 APPR:NUKITA 2009/01/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. NIITSU	DATE '95/10/17	TITLE 0.5 BTB CONN PLUG (BOSS,NAIL)EMBSTP PKG			
	10 OVER 30 UNDER	±0.25	CHECKED BY T. ITO	DATE '01/1/23				
	30 OVER	±0.3	APPROVED BY M. FUKUSHIMA	DATE '01/1/23	MOLEX INCORPORATED			
	ANGULAR	±3 °	MATERIAL NO. SEE TABLE					
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					



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

16	17.5	10.1	9.1	3.7	53748-0208	20
キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	MATERIAL NO.	種数 CKT.
					MODEL NO.	53748-***8

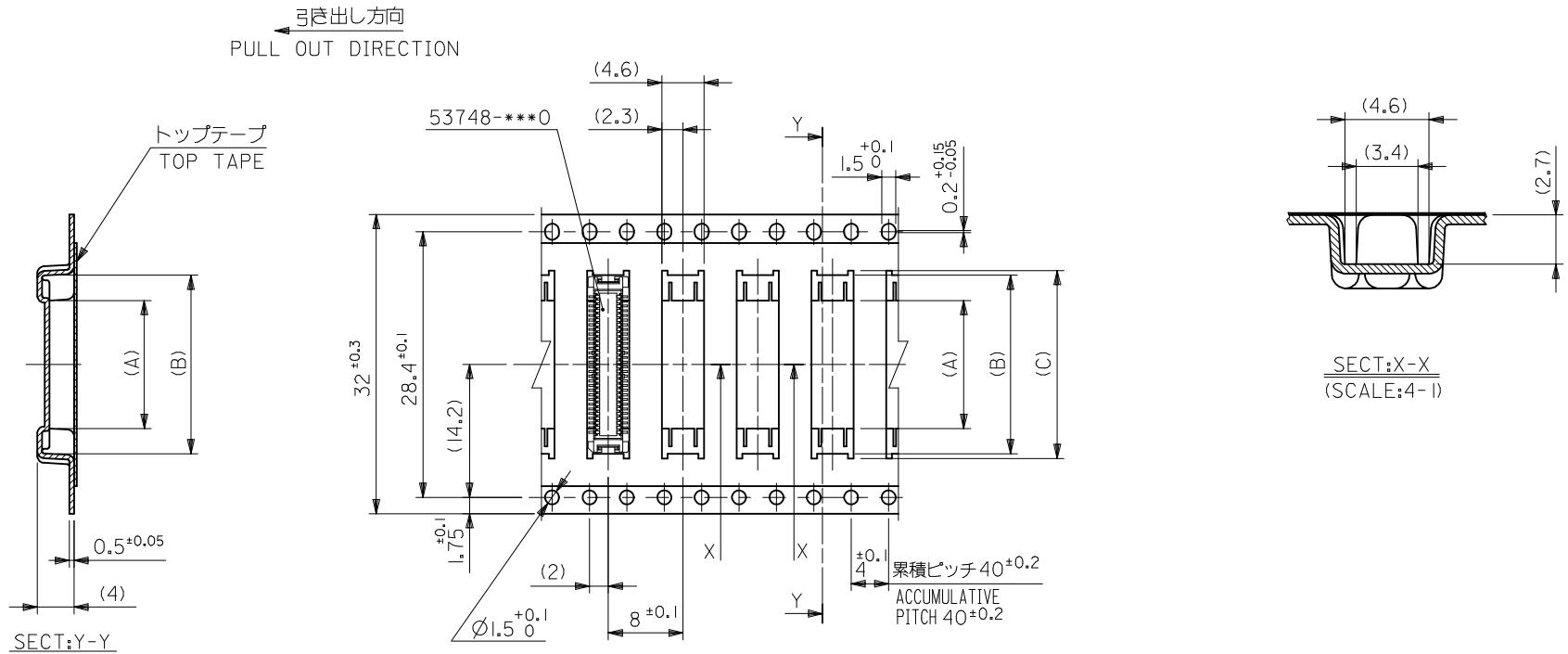
REVISED EC NO: J2009-0487 DRWN:NAKAMURA 2008/12/08 CHKD:T. HARUYAMA 2008/12/08 APPR:NUKITA 2009/01/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± ---	DRAWN BY T. NIITSU	DATE '95/10/17	TITLE 0.5 BTB CONN PLUG(W/O BOSS W/O NAIL)EMBSTP PKG				
		10 OVER 30 UNDER	± ---	CHECKED BY T. ITO	DATE '01/1/23	APPROVED BY M. FUKUSHIMA '01/1/23				
		30 OVER	± ---	MATERIAL NO. SEE TABLE		MOLEX INCORPORATED		DOCUMENT NO. SD-53748-005	SHEET NO. 2 OF 5	
ANGULAR ± --- °		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						



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

24	25.5	15.1	14.1	7.4	53748-0408	40
		12.6	11.6	4.9	53748-0308	30
キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	MATERIAL NO.	種数 CKT.
					MODEL NO.	53748-***8

REVISED EC NO: J2009-0487 DRWN:NAKAMURA 2008/12/08 CHKD:T. HARUYAMA 2008/12/08 APPR:NUKITA 2009/01/09	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± ---	DRAWN BY S. AIHARA	DATE '96/4/1	TITLE 0.5 BTB CONN PLUG(W/O BOSS W/O NAIL)EMBSTP PKG				
		10 OVER 30 UNDER	± ---	CHECKED BY T. ITO	DATE '01/1/23	APPROVED BY M. FUKUSHIMA '01/1/23				
		30 OVER	± ---	MATERIAL NO.		MOLEX INCORPORATED		DOCUMENT NO.	SHEET NO.	
ANGULAR ± --- °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-53748-005		3 OF 5		
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



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

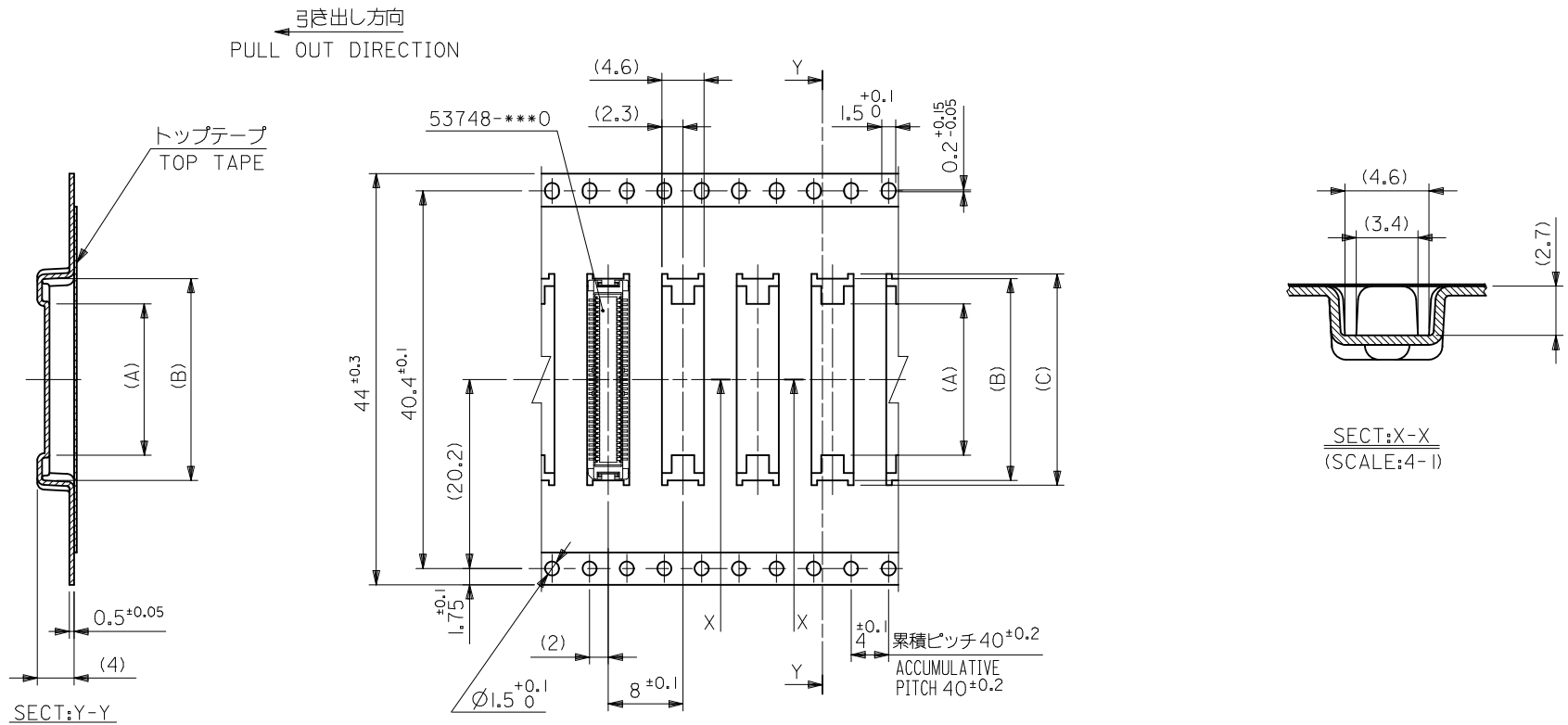
32	33.5	20.1	19.1	13.7	53748-0608	60
キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	MATERIAL NO.	種数 CKT.

MODEL NO. 53748-\*\*\*0

REVISED EC NO: J2009-0487 DRWN:NAKAMURA 2008/12/08 CHKD:T. HARUYAMA 2008/12/08 APPR:NUKITA 2009/01/09 D	DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) 10 UNDER ± --- 10 OVER 30 UNDER ± --- 30 OVER ± --- ANGULAR ± --- ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		DRAWN BY S. AIHARA	DATE '95/11/13	TITLE 0.5 BTB CONN PLUG (W/O BOSS W/O NAIL)ENBSTP PKG			
		CHECKED BY T. ITO	DATE '01/1/23	MOLEX INCORPORATED			
		APPROVED BY M. FUKUSHIMA	DATE '01/1/23	SEE TABLE	DOCUMENT NO. SD-53748-005	SHEET NO. 4 OF 5	

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

44	45.5	25.1	24.1	18.7	53748-0808	80
		22.6	21.6	16.2	53748-0708	70
キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	MATERIAL NO.	種数 CKT.
					MODEL NO.	53748-***8

REVISED EC NO: J2009-0487 DRWN:NAKAMURA 2008/12/08 CHKD:T. HARIYAMA 2008/12/08 APPR:NUKITA 2009/01/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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	10 OVER 30 UNDER	± ---	CHECKED BY T. ITO	DATE '01/1/23	MOLEX INCORPORATED		
	30 OVER	± ---	APPROVED BY M. FUKUSHIMA	DATE '01/1/23	DOCUMENT NO. SD-53748-005	SHEET NO. 5 OF 5	
	ANGULAR ± --- °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE			
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