

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

**Part Number:** [0546840244](#)  
**Status:** **Active**  
**Description:** 0.40mm (.016") Pitch Board-to-Board SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical Stacking, 4.00mm (.157") Stacking Height, 24 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-54684-008 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-54684-006 \(PDF\)](#)

**General**

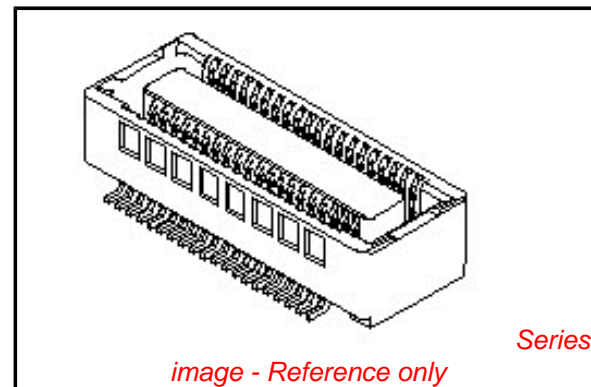
Product Family	PCB Receptacles
Series	54684
Application	Board-to-Board
Product Name	SlimStack™

**Physical**

Circuits (Loaded)	24
Circuits (maximum)	24
Color - Resin	Brown
Durability (mating cycles max)	30
Glow-Wire Compliant	No
Mated Height (in)	0.157 In
Mated Height (mm)	4.00 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.000 In
PC Tail Length (mm)	0.00 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.000 In
PCB Thickness Recommended (mm)	0.00 mm
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.016 In
Pitch - Mating Interface (mm)	0.40 mm
Pitch - Term. Interface (in)	0.016 In
Pitch - Term. Interface (mm)	0.40 mm
Plating min: Mating (µin)	4
Plating min: Mating (µm)	0.1
Plating min: Termination (µin)	2
Plating min: Termination (µm)	0.05
Polarized to Mating Part	No
Polarized to PCB	No
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-25°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	0.3A
Voltage - Maximum	30V AC (RMS)/DC



**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**

54684Series

**Mates With**

501017 PCB Header

**Material Info**

**Reference - Drawing Numbers**

Product Specification

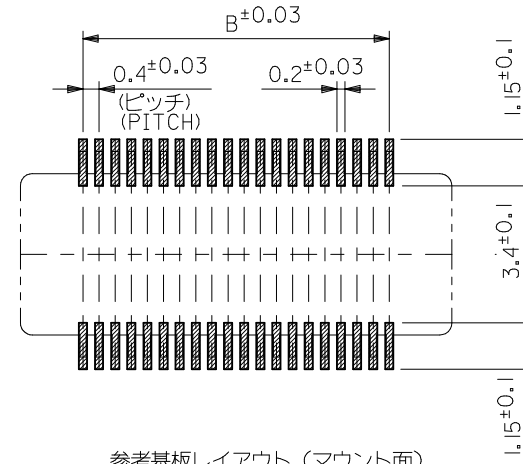
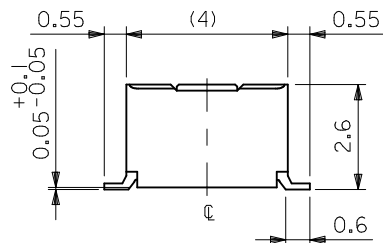
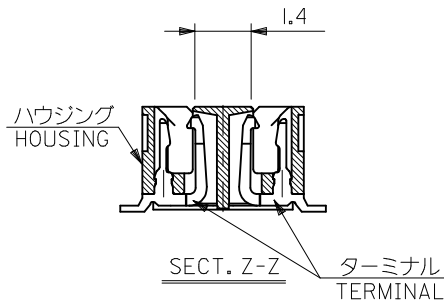
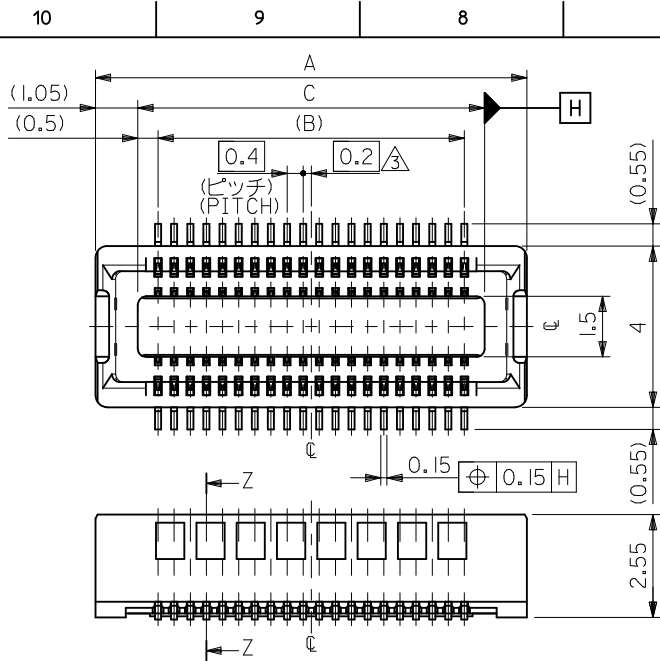
Sales Drawing

PS-54684-006, PS-54684-008, RPS-54684-014

SD-54684-011, SD-54684-012

This document was generated on 04/07/2010

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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)

24.6	23.6	26.7	54684-1203	120
20.6	19.6	22.7	54684-1003	100
18.6	17.6	20.7	54684-0903	90
16.6	15.6	18.7	54684-0803	80
14.6	13.6	16.7	54684-0703	70
12.6	11.6	14.7	54684-0603	60
10.6	9.6	12.7	54684-0503	50
5.4	4.4	7.5	54684-0243	24
C	B	A	MATERIAL NO.	CIRCUIT

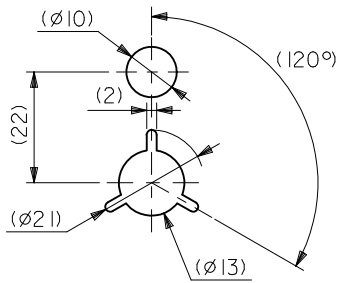
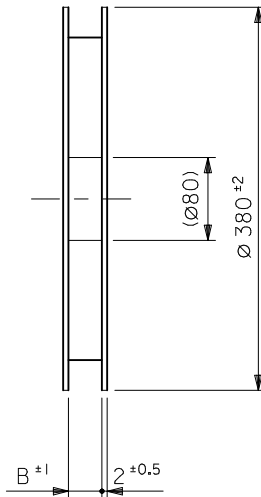
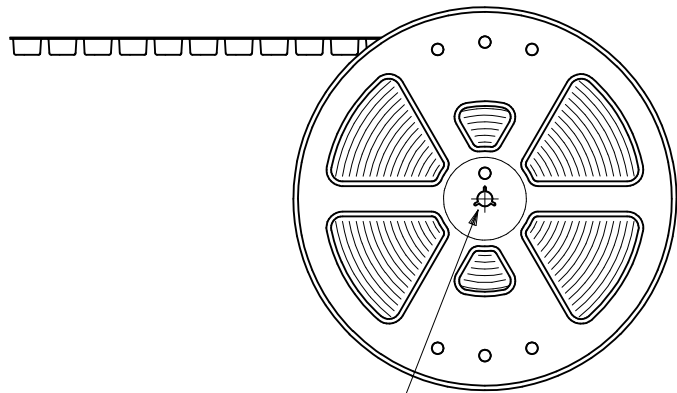
注記 NOTES:

1. 使用材料 MATERIAL  
ハウジング: 液晶ポリマー ガラス充填 UL94V-0 茶色  
HOUSING: LIQUID CRYSTAL POLYMER  
GLASS FILLED UL94V-0  
COLOR BROWN  
ターミナル: リン青銅 (t=0.15)  
TERMINAL: PHOSPHOR BRONZE (t=0.15)
2. メッキ仕様 PLATING  
金メッキ 0.10 マイクロメートル以上 (コンタクト部)  
GOLD 0.10 MICROMETER MINIMUM (CONTACT AREA)  
金メッキ 0.4 マイクロメートル以下 (テール部)  
GOLD 0.4 MICROMETER MAXIMUM (TAIL AREA)  
下地メッキ: ニッケルメッキ 1.5 マイクロメートル以上  
UNDER PLATING: NICKEL 1.5 MICROMETER MINIMUM  
\* コンタクト部とテール部はニッケルメッキによって分断されている  
金メッキで9。  
DIVIDE INTO PARTS THE GOLD PLATING OF THE  
CONTACT PART AND THE TAIL PART BY THE  
NICKEL PLATING.

3. (全極数/2) = 偶数の場合に適用。  
APPLY FOR (CIRCUIT/2) = EVEN.
4. 嵌合相手: 55526シリーズ, 501017シリーズ。  
MATE WITH: 55526 SERIES AND 501017 SERIES.
5. テール平坦度は、0.08MAX。  
TAIL COPLANARITY TO BE 0.08MAX.

REVISED EC NO.: J2010-2361 DRWN: MKATO 2010/05/21 CHKD: THIRATA 2010/05/24 APPR: MSASAO 2010/06/09	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO.   54684-***3	
		10 UNDER	±0.2	DRAWN BY T. KAIHO		TITLE 0.4BB CONN.REC HSGASSY NO BOSS NI BARRIER -LEAD FREE-		THIRD ANGLE PROJECTION	
		10 OVER 30 UNDER	±0.25	DATE 2003/07/15		MOLEX INCORPORATED		SHEET NO. 1 OF 1	
		30 OVER	±0.3	DATE 2003/07/15		DOCUMENT NO. SD-54684-011			
		ANGULAR ±3 °	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		

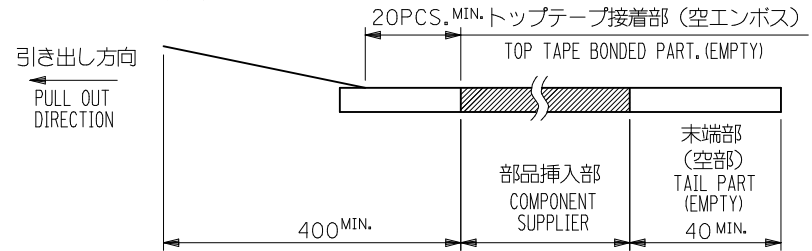
引き出し方向  
PULL OUT  
DIRECTION



DETAIL "F"

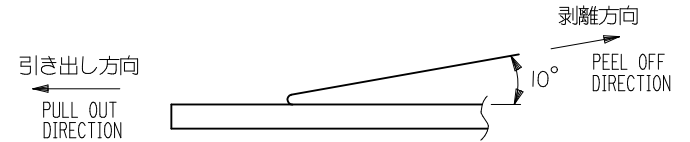
NOTES

- 製品詳細寸法については図面 SD-54684-011 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-54684-011
- 梱包数量：1500個/リール  
NUMBER OF CONNECTORS：1500PCS/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 ~ 0.7N(10.2gf ~ 71.4gf)  
(剥離方向は下図参照)

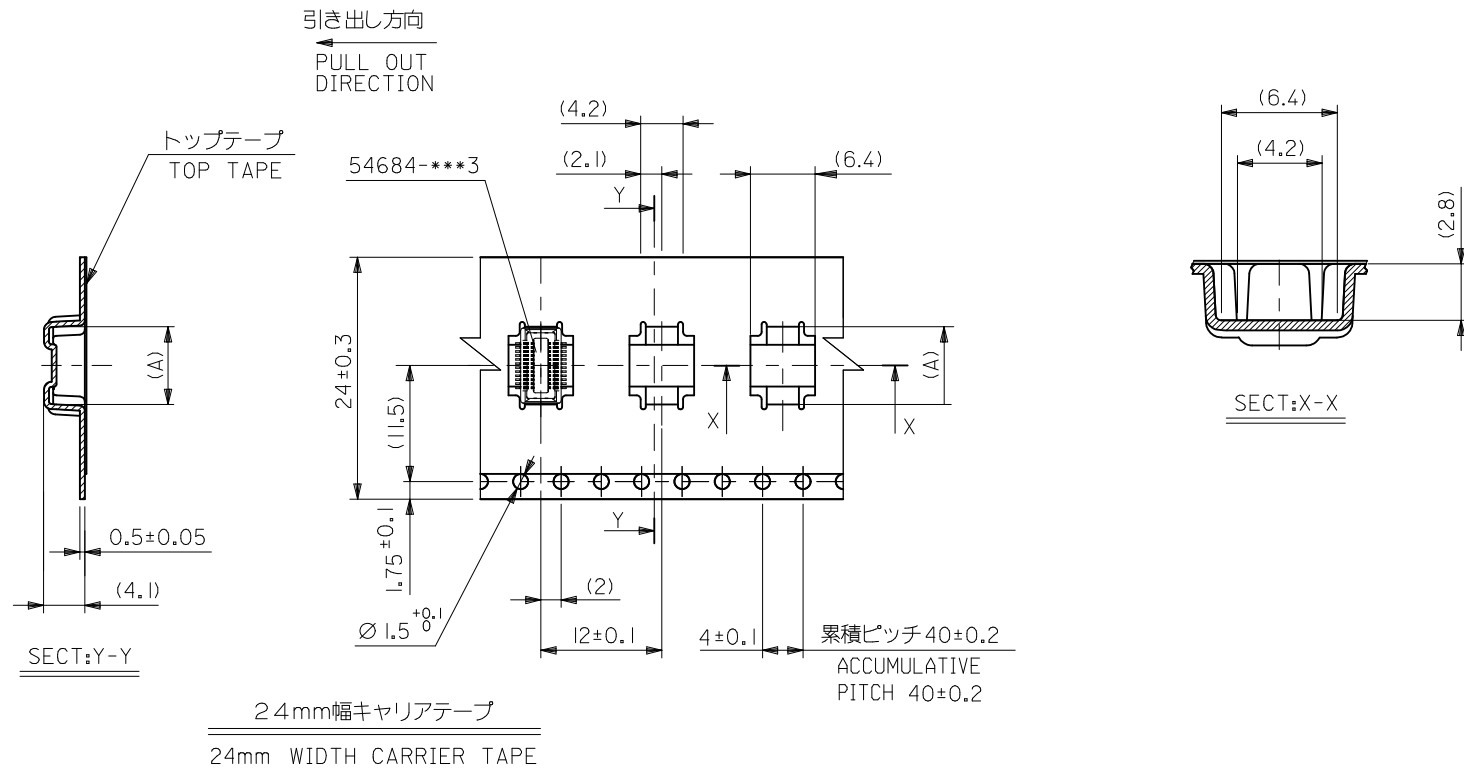
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE：0.1N ~ 0.7N(10.2gf ~ 71.4gf)  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



- 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(P.S) <リサイクル材を含む>  
POLYSTYREN(PS) <RECYCLE MATERIAL CONTAINED>

MODEL NO. 54684-\*\*\*4

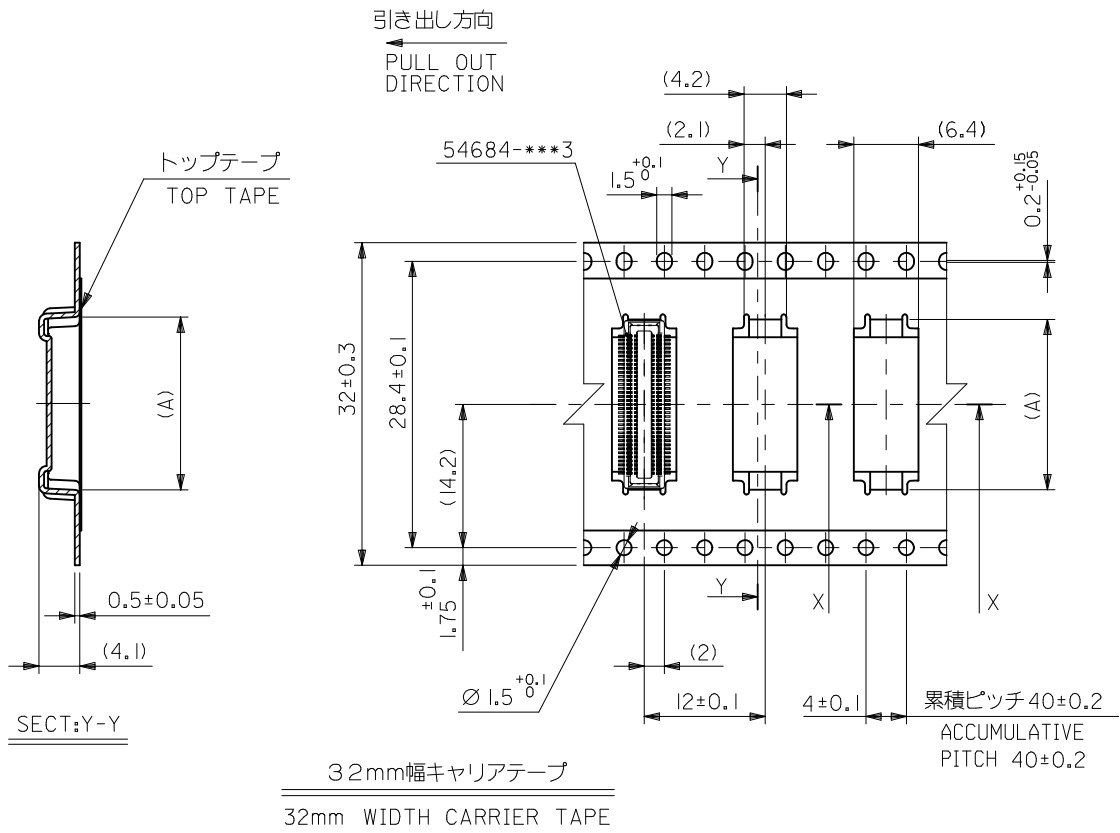
REVISED EC NO: J2010-2361 DRWN:KATO 2010/05/21 CHKD:HIRATA 2010/05/24 APPR:MSASAO 2010/06/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. KAIHO	DATE 2003/07/15	TITLE 0.4BB CON.EMBSTP PKG FOR 54684-***3 -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY T. ITO	DATE 2003/07/15	MOLEX INCORPORATED			
	30 OVER	±0.3	APPROVED BY T. YAMAGU	DATE 2003/07/15				
	ANGULAR	±3 °	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-54684-012		SHEET NO. 1 OF 4	
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						



24	25.5	7.7	54684-0244	24
キャリアテープ幅 CARRIER TAPE WIDTH	B	(A)	MATERIAL NO.	極数 CKT.

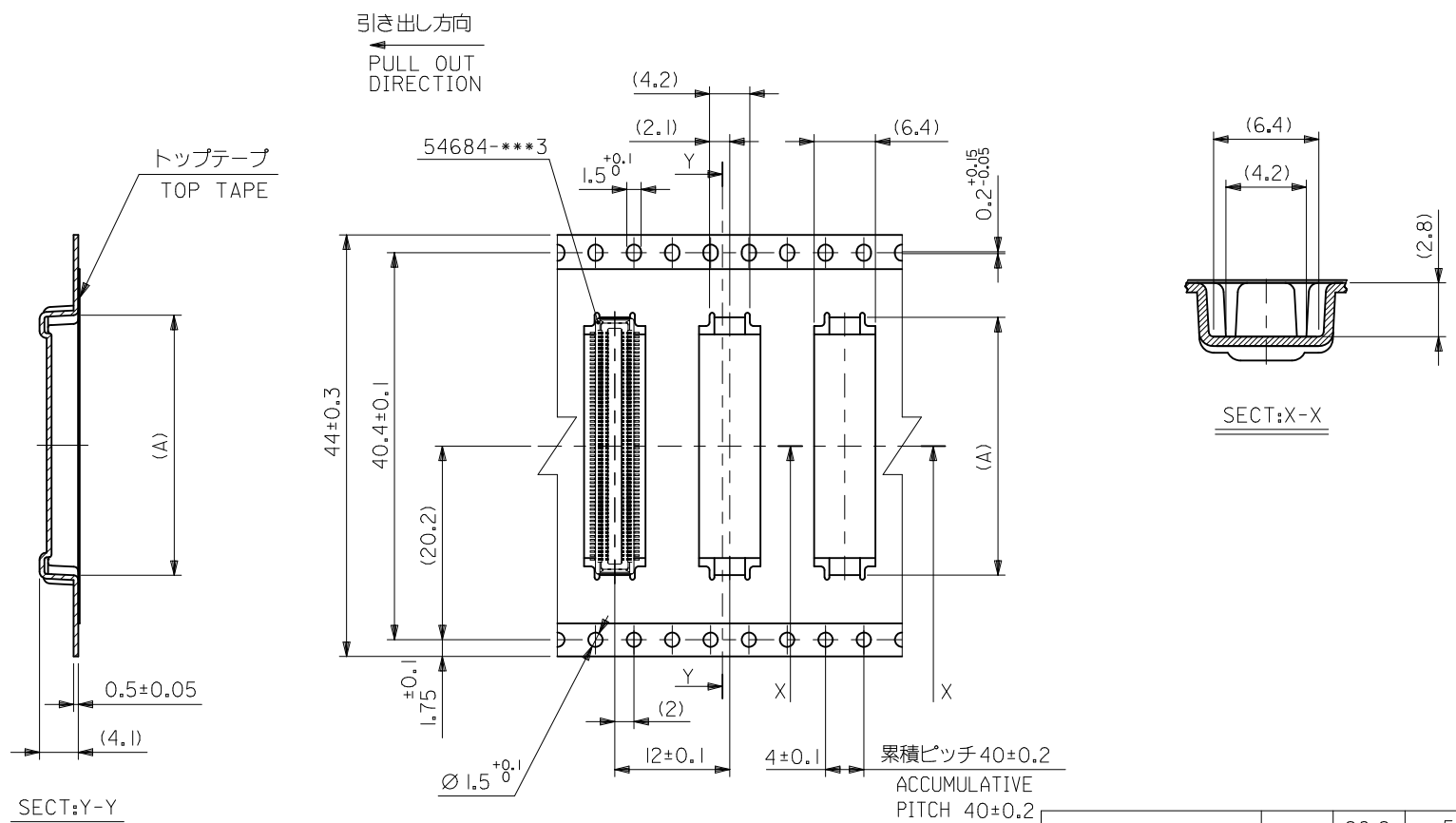
MODEL NO. 54684-\*\*\*4

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	10 UNDER	±0.2	DRAWN BY T. KAIHO	DATE 2003/07/15	TITLE 0.4BB CON.EMBSTP PKG FOR 54684-***3 -LEAD FREE-					
	10 OVER 30 UNDER	±0.25	CHECKED BY T. ITO	DATE 2003/07/15	APPROVED BY T. YAMAGU					
	30 OVER	±0.3	APPROVED BY T. YAMAGU 2003/07/15		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MOLEX INCORPORATED		SD-54684-012		
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



32	33.5	20.9	54684-0904	90
		18.9	54684-0804	80
		16.9	54684-0704	70
		14.9	54684-0604	60
		12.9	54684-0504	50
キャリアテープ幅 CARRIER TAPE WIDTH	B	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2010-2361 DRWN:MKATO 2010/05/21 CHKD:THIRATA 2010/05/24 APPR:MSASAO 2010/06/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	MODEL NO. 54684-***4
	10 UNDER	±0.2	DRAWN BY T. KAIHO	DATE 2003/07/15	TITLE 0.4BB CON.EMBSTP PKG FOR 54684-***3 -LEAD FREE-	
	10 OVER 30 UNDER	±0.25	CHECKED BY T. ITO	DATE 2003/07/15	MOLEX INCORPORATED	
	30 OVER	±0.3	APPROVED BY T. YAMAGU	DATE 2003/07/15	DOCUMENT NO. SD-54684-012	SHEET NO. 3 OF 4
	ANGULAR ±3 °		MATERIAL NO.	SEE CHART	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3			



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

44	45.5	26.9	54684-1204	120
		22.9	54684-1004	100
キャリアテープ幅 CARRIER TAPE WIDTH	B	(A)	MATERIAL NO.	極数 CKT.

REVISED EC NO: J2010-2361 DRWN:MKATO 2010/05/21 CHKD:THIRATA 2010/05/24 APPR:MSASAO 2010/06/09	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO.   54684-***4
	10 UNDER	±0.2	DRAWN BY T.KAIHO	DATE 2003/07/15	TITLE 0.4BB CON.EMBSTP PKG FOR 54684-***3 -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY T.ITO	DATE 2003/07/15	APPROVED BY T.YAMAGU 2003/07/15		
	30 OVER	±0.3	MATERIAL NO.		DOCUMENT NO.		
	ANGULAR ±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MOLEX INCORPORATED SD-54684-012	
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			