

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

**Part Number:** [5015941211](#)  
**Status:** **Active**  
**Overview:** [slimstack\\_mm016\\_pitch](#)  
**Description:** 0.40mm (.016") Pitch SlimStack™ Board-to-Board Plug, SMT, Dual Row, Vertical Stacking, 0.90mm (.035") Stacking Height, With Solder Tabs, 12 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-501591-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">501594</a>
Application	Board-to-Board
Overview	<a href="#">slimstack_mm016_pitch</a>
Product Name	SlimStack™

**Physical**

Breakaway	No
Circuits (Loaded)	12
Color - Resin	Black
Durability (mating cycles max)	20
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Mated Height (in)	0.035 In
Mated Height (mm)	0.90 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	Yes
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.016 In
Pitch - Mating Interface (mm)	0.40 mm
Polarized to Mating Part	No
Polarized to PCB	No
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-25°C to +85°C
Termination Interface: Style	Surface Mount

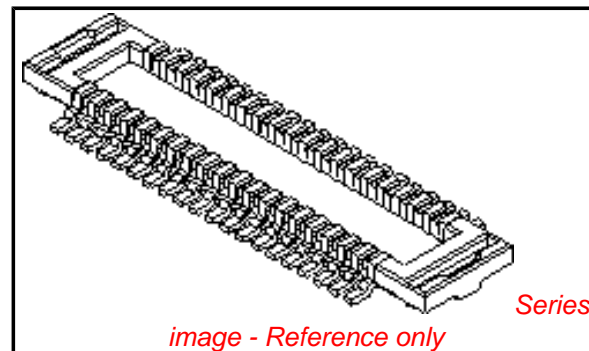
**Electrical**

Current - Maximum per Contact	0.3A
Voltage - Maximum	50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	SPK-501594-001
Product Specification	PS-501591-002, RPS-501591-010, RPS-501591-012, RPS-501591-016, RPS-501591-019, RPS-501591-020
Sales Drawing	SD-501594-005, SD-501594-006



**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.

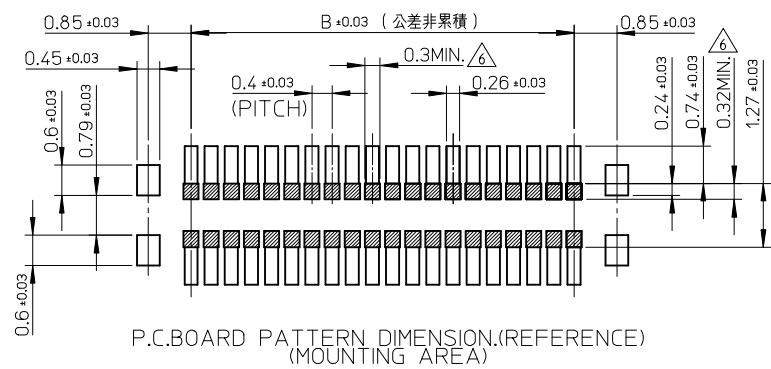
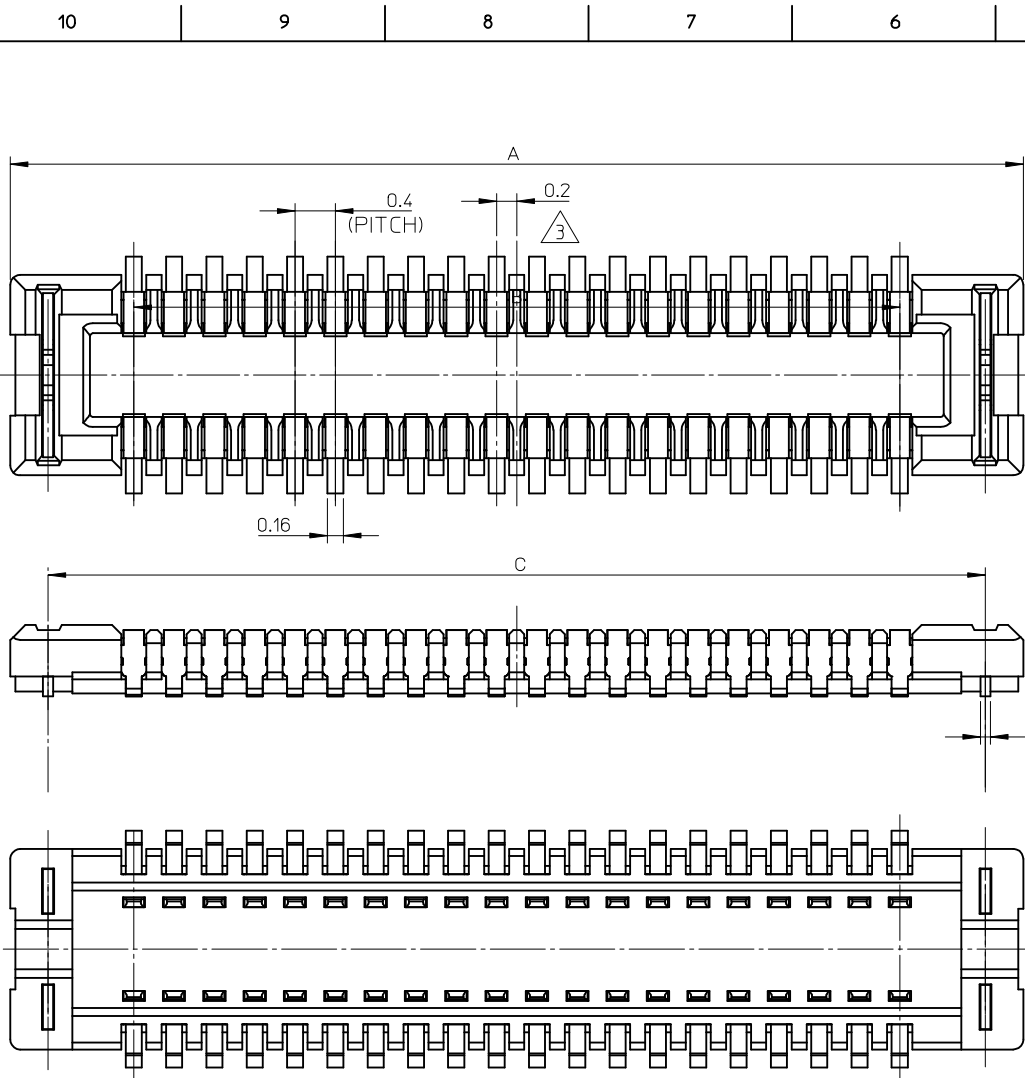
**Search Parts in this Series**

[501594Series](#)

**Mates With**

[501591 SlimStack™ Board-to-Board  
Receptacle](#)

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15.3	13.6	16.05	501594-7011	501594-7010	70
12.1	10.4	12.85	501594-5411	501594-5410	54
11.3	9.6	12.05	501594-5011	501594-5010	50
10.1	8.4	10.85	501594-4411	501594-4410	44
9.3	7.6	10.05	501594-4011	501594-4010	40
8.1	6.4	8.85	501594-3411	501594-3410	34
7.3	5.6	8.05	501594-3011	501594-3010	30
6.5	4.8	7.25	501594-2611	501594-2610	26
6.1	4.4	6.85	501594-2411	501594-2410	24
5.7	4.0	6.45	501594-2211	501594-2210	22
5.3	3.6	6.05	501594-2011	501594-2010	20
3.7	2.0	4.45	501594-1211	501594-1210	12
3.3	1.6	4.05	501594-1011	501594-1010	10
C	B	A	EMBOSSED TAPE PACKAGE	MATERIAL NO.	CIRCUIT
			ORDER No.		

<b>REVISED</b> EC NO: J2008-3370 DRW:KSEI 2008/06/17 CHK:D:MSASAO 2008/06/17 APPR:MSASAO 2008/06/25	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE ---	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY T. ASAKAWA	DATE 2006/07/10	TITLE <b>0.4MM PITCH B/B CONN. H=0.9 W=3.4 PLUG ASSY</b>		
	10 OVER 30 UNDER	± 0.25	CHECKED BY M. SASAO	DATE 2006/07/10	MOLEX INCORPORATED		
	30 OVER	± 0.3	APPROVED BY M. SASAO	DATE 2006/07/10	MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-501594-005</b>	SHEET NO. <b>1 OF 2</b>
	ANGULAR ± 3 °	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						

注記 NOTES

1.使用材料  
MATERIAL

ハウジング：液晶ポリマー (LCP) ガラス充填 UL-94V-0 (黒)  
HOSING : LIQUID CRYSTAL POLYMER (GLASS FILLED) UL94V-0 (COLOR:BLACK)

ターミナル：りん青銅 (t=0.08)  
TERMINAL : PHOSHOR BRONZE (t=0.08)

金具：りん青銅 (t=0.1)  
FITTING NAIL : PHOSHOR BRONZE (t=0.1)

2.メッキ仕様  
PLATING

ターミナル  
TERMINAL

金メッキ 0.1マイクロメートル以上 (コンタクト部)  
GOLD 0.1 MICROMETER MINIMUM (CONTACT AREA)

金メッキ 0.03マイクロメートル以上 (テール部)  
GOLD 0.03 MICROMETER MINIMUM (TAIL AREA)

下地メッキ：ニッケルメッキ 1.0 マイクロメートル以上  
UNDER PLATING : NICKEL 1.0 MICROMETER MINIMUM

金具  
FITTING NAIL

錫メッキ :1.0マイクロメートル以上  
TIN PLATING :1.0 MICROMETER MINIMUM

下地メッキ :ニッケル1.0マイクロメートル以上  
UNDER PLATING :NICKEL 1.0 MICROMETER MINIMUM

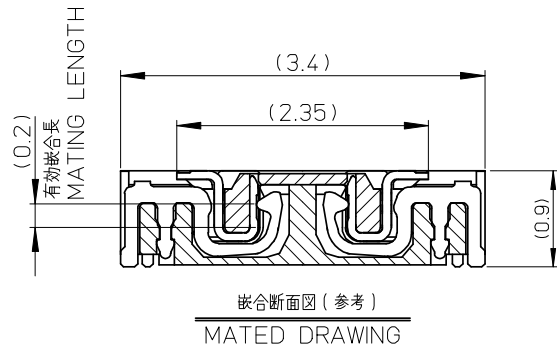
③ (全極数/2)=偶数の場合に適用  
APPLY FOR (CIRCUIT/2)=EVEN

4.嵌合相手 : 501591-\*\*10シリーズ  
WITH MATE : 501591-\*\*10SERIES

5.テール及び金具の平坦度は、0.1以下  
TAIL AND FITTING NAIL COPLANARITY TO BE 0.1 MAXIMUM

⑥ 斜線部はパターン書き込み禁止範囲と半田禁止範囲を示す。  
ただし、斜線部に同一配線を配置する場合はレジストを施し、この部分に半田は無きこと。  
NO PATTERN CIRCUIT AND NO SOLDER ALLOWED IN THE SHADED AREA.  
HOWEVER, IF NEEDED TO ADD A TRACE OF THE SAME CIRCUIT, PUT THE SOLDER-RESIST,  
YET NO SOLDER ALLOWED IN THE AREA.

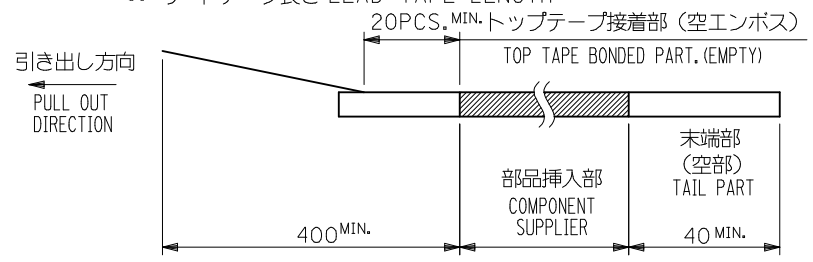
7.ELV AND RoHS COMPLIANT.



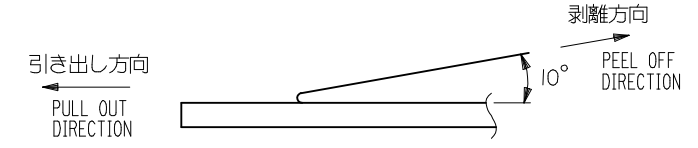
REVISED EC NO: J2008-3370 DRW:KSETO 2008/06/17 CHK:MSASAO 2008/06/17 APPR:MSASAO 2008/06/25 DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY T. ASAKAWA	DATE 2006/07/10	TITLE 0.4MM PITCH B/B CONN. H=0.9 W=3.4 PLUG ASSY			
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE 2006/07/10				
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2006/07/10	MOLEX INCORPORATED			
	ANGULAR ±3 °		MATERIAL NO. SEE SHEET 1					
	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				

NOTES

- 製品詳細寸法については製品単体図面を参照下さい。  
RE DETAILED DIMENSION, SEE PRODUCT DRAWING.
- 梱包数量：3000個/リール  
NUMBER OF CONNECTORS : 3000 PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH

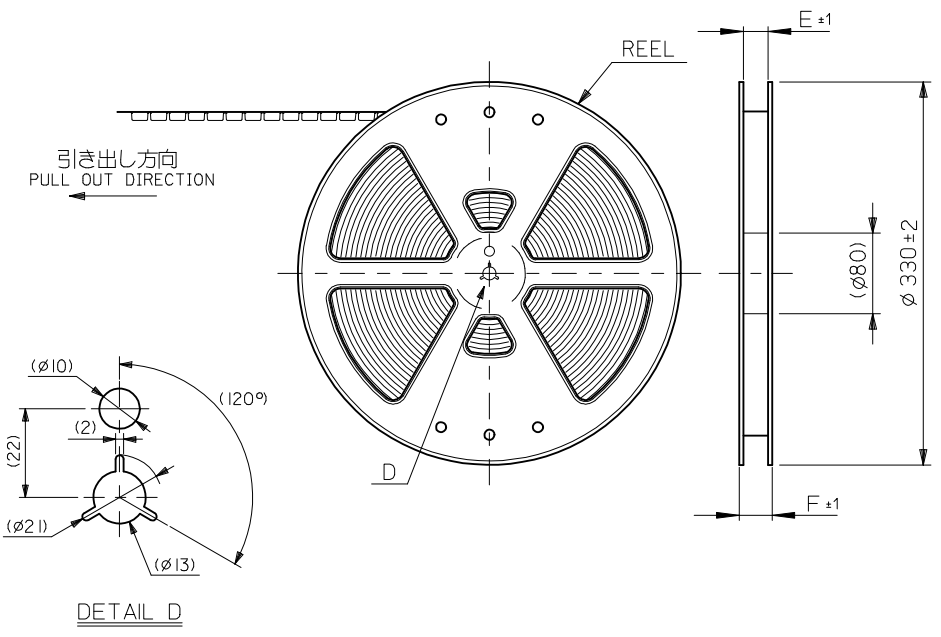


- トップテープの剥離強度：JES-59 参照  
剥離方向は下図参照。  
PEELING OFF STRENGTH OF TOP TAPE : REFER TO JES-59  
PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE.



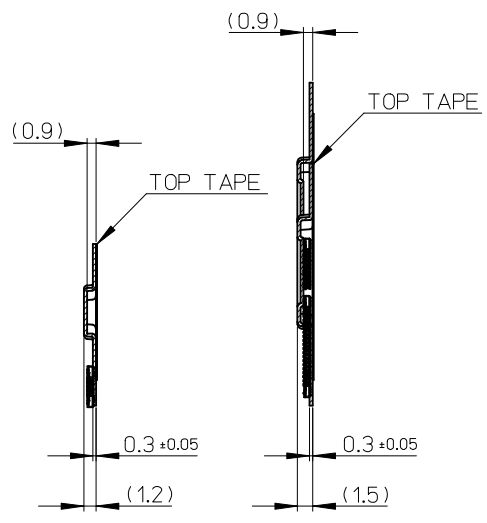
- 材料 MATERIAL  
キャリアテープ (CARRIER TAPE) : ポリスチレン (POLYSTYRENE)  
トップテープ (TOPTAPE) : PET , PE , PEF  
リール (REEL) : ポリスチレン (PS) <リサイクル材を含む>  
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>

6.ELV AND RoHS COMPLIANT.



REVISED EC NO.: J2008-3370 2008/06/17 DRW:KSETO 2008/06/17 CHKD:MSASAO 2008/06/17 APPR:MSASAO 2008/06/25	DESCRIPTION D	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	501594-**11	MODEL NO.	
		10 UNDER ±0.2		DRAWN BY TASAKAWA		DATE 2006/07/10	THIRD ANGLE PROJECTION		
		10 OVER 30 UNDER ±0.25		CHECKED BY MSASAO		DATE 2006/07/10	TITLE 0.4MM PITCH B/B CONN. PLUG ASSY (HGT=0.9) EMBSTP PKG		
		30 OVER ±0.3		APPROVED BY MSASAO		DATE 2006/07/10	MOLEX INCORPORATED		
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 1		DOCUMENT NO. SD-501594-006	SHEET NO. 1 OF 2		
SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

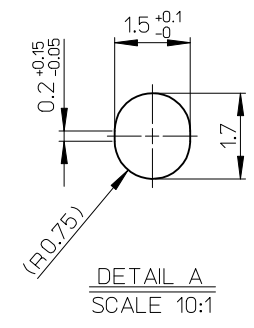
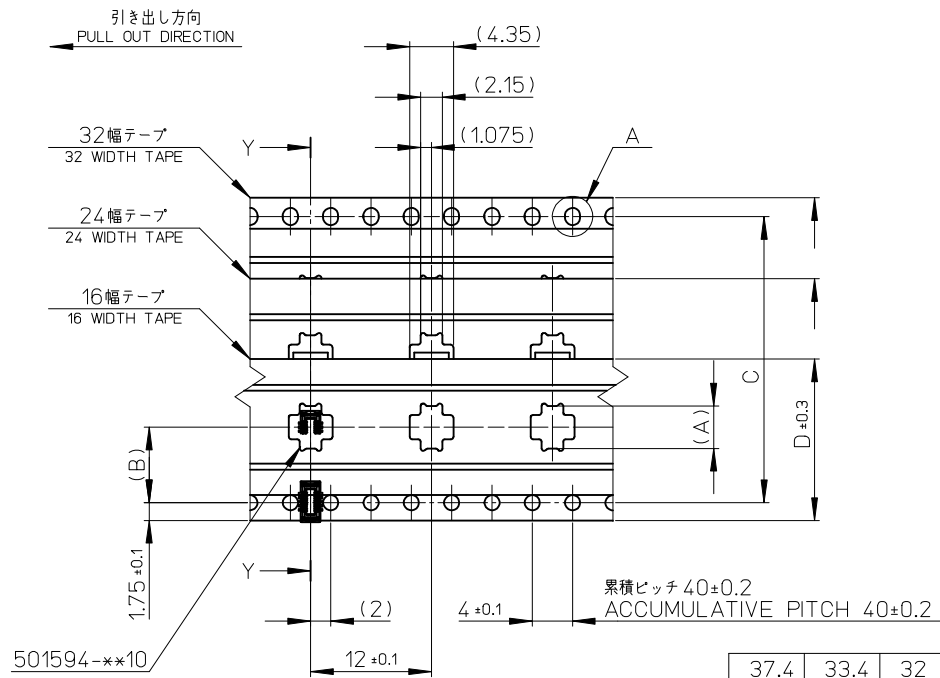
10 9 8 7 6 5 4 3 2 1



SECT Y-Y  
(FOR 16 WIDTH TAPE)

SECT Y-Y  
(FOR 24 WIDTH TAPE  
AND 32 WIDTH TAPE)

引き出し方向  
PULL OUT DIRECTION



37.4	33.4	32	28.4	14.2	16.21	501594-7011	70
					13.01	501594-5411	54
					12.21	501594-5011	50
					11.01	501594-4411	44
					10.21	501594-4011	40
29.4	25.4	24	—	11.5	9.01	501594-3411	34
					8.21	501594-3011	30
					7.41	501594-2611	26
					7.01	501594-2411	24
					6.61	501594-2211	22
21.4	17.4	16	—	7.5	6.21	501594-2011	20
					4.61	501594-1211	12
F	E	D	C	(B)	4.21	501594-1011	10
					(A)	MATERIAL NO.	極数 CKT.

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	ANGULAR ± 3 °		MATERIAL NO. SEE TABLE		SHEET NO. 2 OF 2			
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						