

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

**Part Number:** [0549442070](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch Cradlecon™ I/O Receptacle, SMT, Right Angle, Through Hole Shell Tabs, 20 Circuits

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	I/O Connectors
Series	<a href="#">54944</a>
Application	Board-to-Board
Component Type	Receptacle
Product Name	CradleCon™
Type	N/A

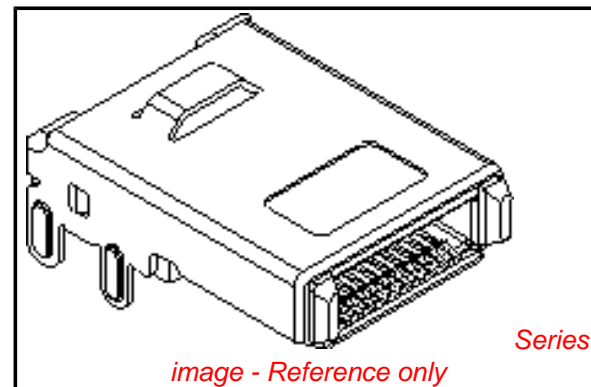
**Physical**

Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
Lock to Mating Part	Yes
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Orientation	Right Angle
PCB Retention	Yes
PCB Thickness Recommended (in)	0.031 In, 0.040 In
PCB Thickness Recommended (mm)	0.80 mm, 1.00 mm
Packaging Type	Embossed Tape on Reel
Panel Mount	No
Pitch - Mating Interface (in)	0.020 In
Pitch - Mating Interface (mm)	0.50 mm
Plating min: Mating (µin)	8
Plating min: Mating (µm)	0.2
Plating min: Termination (µin)	80
Plating min: Termination (µm)	2
Polarized to Mating Part	Yes
Temperature Range - Operating	-20°C to +60°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	0.5A
Shield Type	Full Shield
Shielded	Yes
Voltage - Maximum	30V

**Material Info**



*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](#)

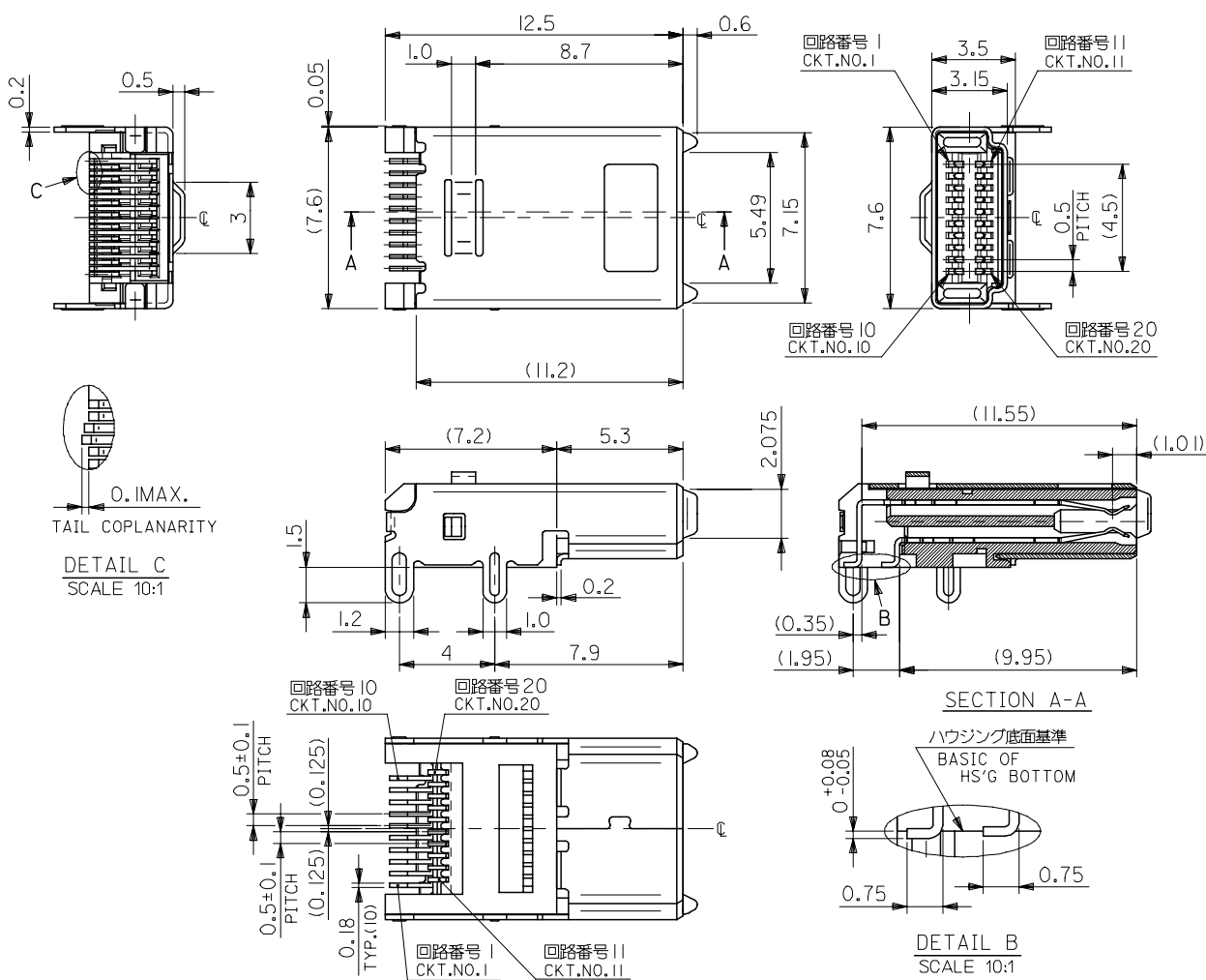
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[54944Series](#)

**Mates With**

[501014-2071](#)

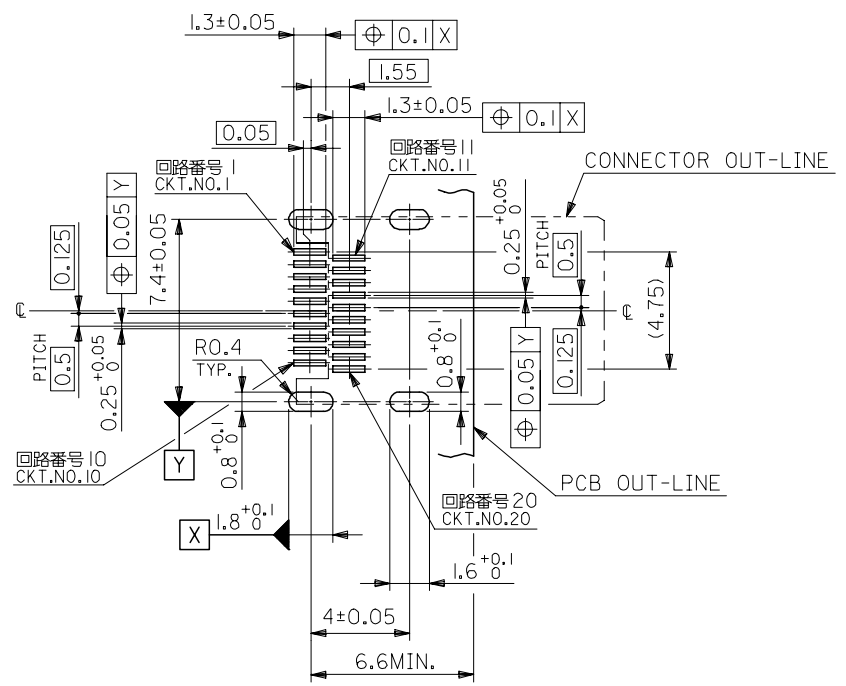
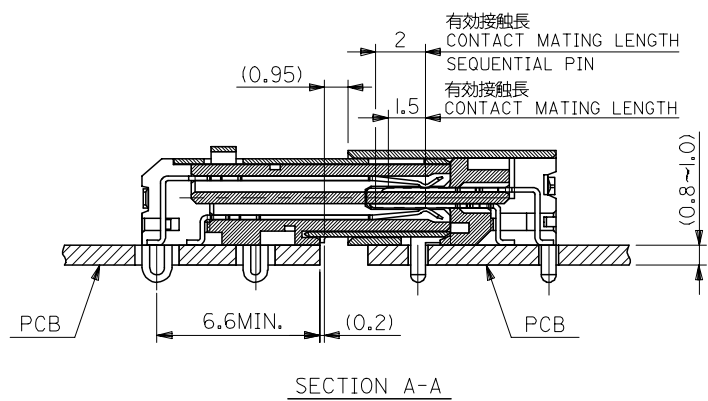
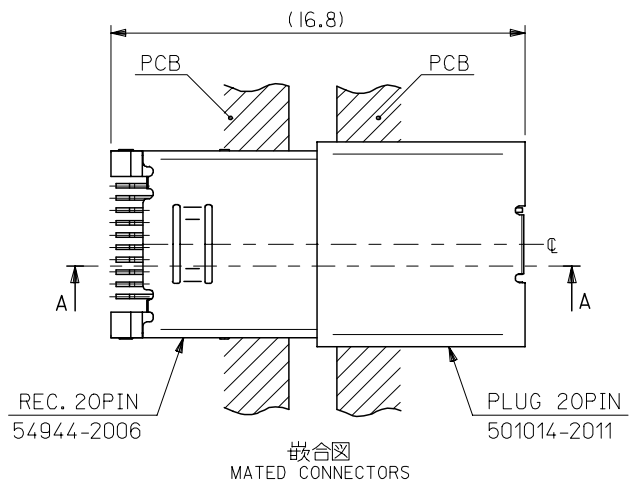


**NOTE:**

- 適合プラグ番号: 501014-20\*\*  
APPLICABLE PLUG NO.:
- 材質  
MATERIAL
  - ハウジング: ガラス入り耐熱樹脂  
94V-0, 黒色  
HOUSING: G.F.HEAT RESISTANT PLASTIC  
94V-0, BLACK COLOR
  - ターミナル: 銅合金  
TERMINAL COPPER ALLOY
  - リセ シールド: ステンレス鋼  
REC. SHIELD STAINLESS STEEL
- メッキ仕様  
PLATING
  - ターミナル  
TERMINAL
    - 接点部 : 金メッキ 0.1umMIN.  
CONTACT AREA GOLD
    - 半田付け部 : 錫メッキ 1.0um MIN.  
SOLDER TAIL AREA TIN
    - 下地メッキ : ニッケルメッキ 1.5 ~ 3um  
UNDER-PLATING NICKEL
  - リセ シールド  
REC. SHIELD
    - 金コート処理  
GOLD COATING
    - 下地メッキ : ニッケルメッキ 1.0 ~ 2um  
UNDER-PLATING NICKEL
- 本製品は 54944-2001 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 54944-2001.

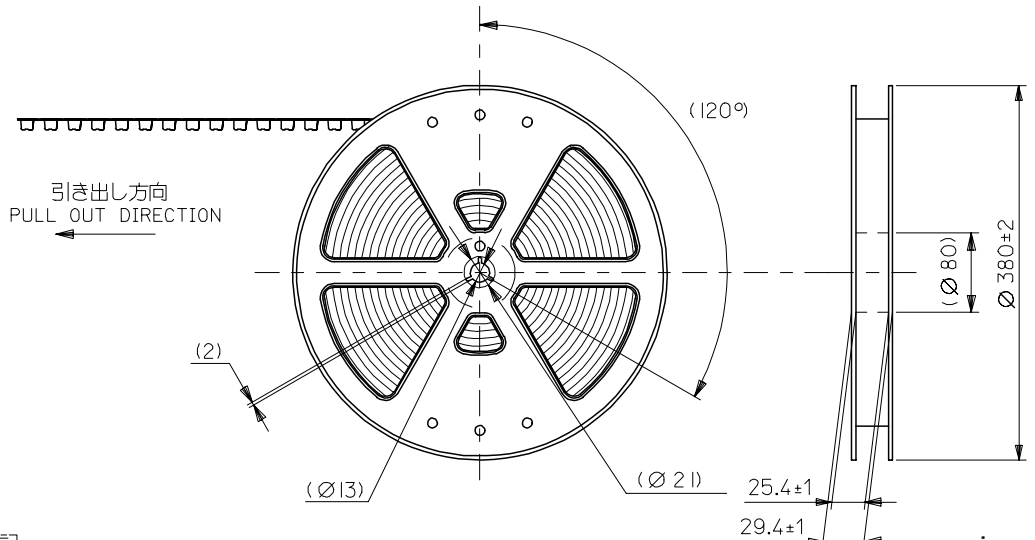
54944-2006	54944-20**
MATERIAL NO.	MODEL NO.

RELEASED EC NO: J2005-0621 2004/09/13 DRAWN: MNABE1 2004/09/13 CHKD: KTOJO 2004/09/17 APPR: NUKITA	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABE1	DATE '04/08/31	TITLE 0.5 I/O CONN. REC. HSG ASSY 20CKT. -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/08/31			
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/08/31			
	ANGULAR	±3 °	MATERIAL NO.	SEE CHART	DOCUMENT NO. SD-54944-029	SHEET NO. 1 OF 2	MOLEX INCORPORATED
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				

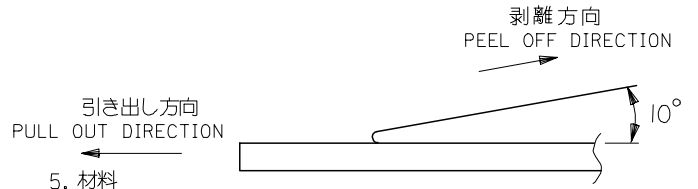


基板穴推奨寸法 (部品実装側)  
RECOMMENDED P.C.B LAYOUT (MOUNTING SIDE)

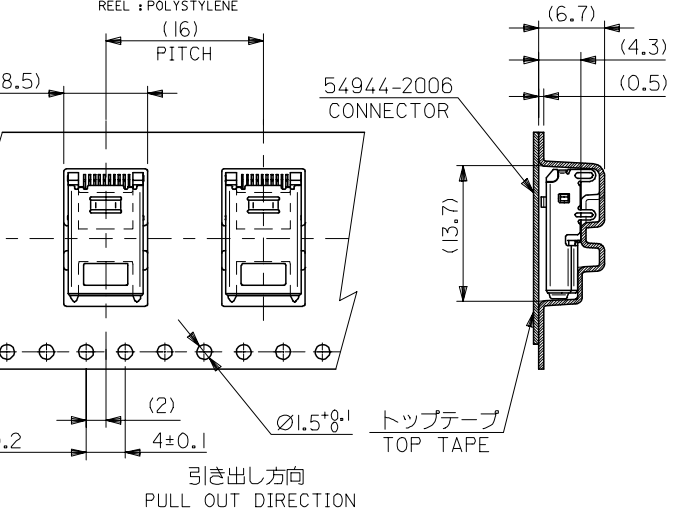
RELEASED EC NO: J2005-0621 DRAWN: MNABE 2004/09/13 CHKD: KTOJO 2004/09/13 APPR: NUKITA 2004/09/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABE I		DATE '04/08/31		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO		DATE '04/08/31		
	30 OVER	±0.3	APPROVED BY NUKITA		DATE '04/08/31		
	ANGULAR	±3 °	MATERIAL NO.		DOCUMENT NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		SEE CHART		SD-54944-029	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				TITLE 0.5 I/O CONN. REC.HSG ASSY 20CKT. -LEAD FREE-		SHEET NO. 2 OF 2	



4. トップテープの剥離強度：(剥離方向は下図参照)  
 PEELING OFF FORCE OF TOP TAPE (PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
 0.1~1.3N (10~130gf)  
 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事。)  
 THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
 (PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION)

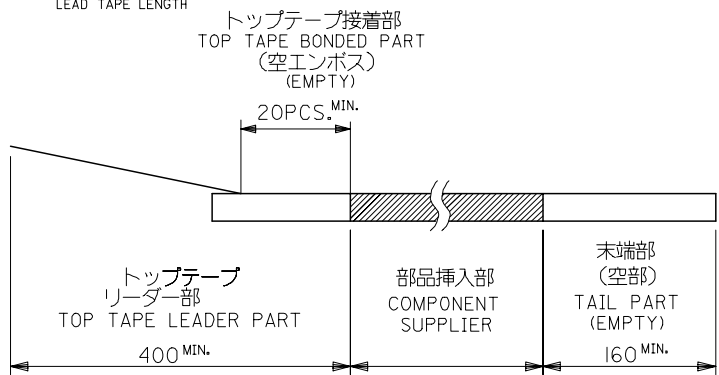


5. 材料  
 MATERIAL  
 キャリアテープ：ポリプロピレン (PP)  
 CARRIER TAPE : POLYPROPYLENE (PP)  
 トップテープ：PET, PE, PEF  
 TOP TAPE : PET, PE, PEF  
 リール：ポリスチレン  
 REEL : POLYSTYLENE



20	54944-2006	54944-2070	54944-***7*
CKT.	CONNECTOR	MATERIAL NO.	MODEL NO.

- 注記  
 NOTES
- 製品番号 54944-2006 の詳細寸法については、SD-54944-029 を参照下さい。  
 IN THE PACKAGE, PART NO. 54944-2006 RE DETAILED DIMENSIONS, SEE SD-54944-029
  - 梱包数量：800個/リール  
 NUMBER OF CONNECTORS : 800 PCS/REEL
  - リードテープ長さ  
 LEAD TAPE LENGTH



RELEASED EC NO: J2005-0621 DRAWN: MNABE CHKD: KTOJO APPR: NUKITA 2004/09/13 2004/09/13 2004/09/17	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY MNABE I	DATE '04/08/31	TITLE EMBOSSD TAPE PACKAGE FOR 54944 -LEAD FREE-		
	10 OVER 30 UNDER	±0.25	CHECKED BY KTOJO	DATE '04/08/31			
	30 OVER	±0.3	APPROVED BY NUKITA	DATE '04/08/31	MOLEX INCORPORATED		
	ANGULAR	±3 °	MATERIAL NO.	DOCUMENT NO. SD-54944-030			
0	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			