

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

**Part Number:** [0749603018](#)  
**Status:** **Active**  
**Overview:** [tdp\\_triad\\_differential\\_pair](#)  
**Description:** 1.27mm (.050") Pitch TDP® (Triad® Differential Pair) PCIe x 1 Receptacle, Right Angle, Surface Mount, with PCB Press-Fit Pegs, 18 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-74960-000 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [74960](#)  
 Application Wire-to-Board  
 Component Type Receptacle  
 MolexKits Yes  
 Overview [tdp\\_triad\\_differential\\_pair](#)  
 Product Name PCI Express\*, TDP®  
 Type N/A

**Physical**

Circuits (Loaded) 18  
 Circuits (maximum) 18  
 Color - Resin Black  
 Flammability 94V-0  
 Lock to Mating Part Yes  
 Material - Metal Beryllium Copper  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Panel Mount Yes  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 15  
 Plating min: Mating (µm) 0.38  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.5  
 Polarized to Mating Part Yes  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -20°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire Size AWG N/A

**Electrical**

Current - Maximum per Contact 1.5A  
 Grounding to Panel Screw Hole  
 Shielded Yes  
 Voltage - Maximum 40V



**EU RoHS** **China RoHS**

**RoHS Compliant by Exemption**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free Status**  
**Halogen-Free**



**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**

[74960Series](#)

**Mates With**

[75000 Plug](#)

**Use With**

[74962 Jack Posts](#)

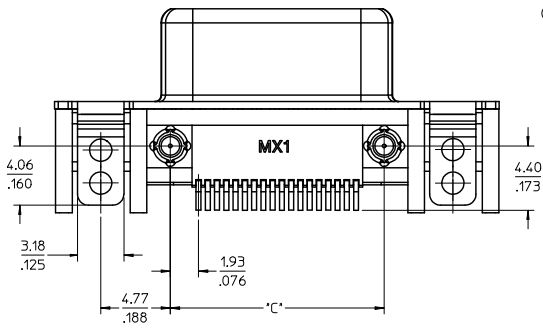
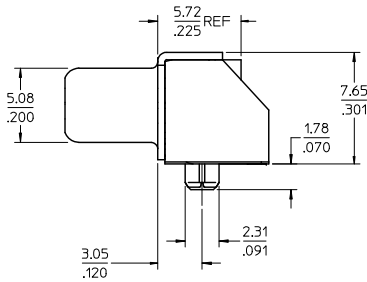
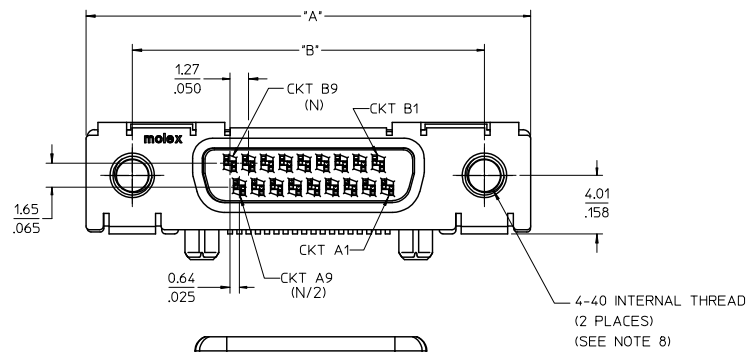
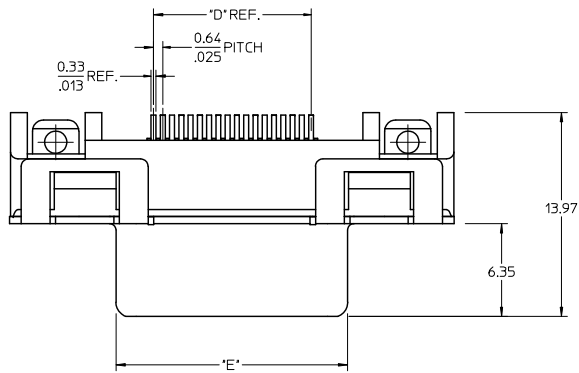
**Material Info**

**Reference - Drawing Numbers**

Application Specification	AS-74960-100
Packaging Specification	PK-74960-995
Product Specification	PS-74960-000
Sales Drawing	SD-74960-010

This document was generated on 06/07/2010

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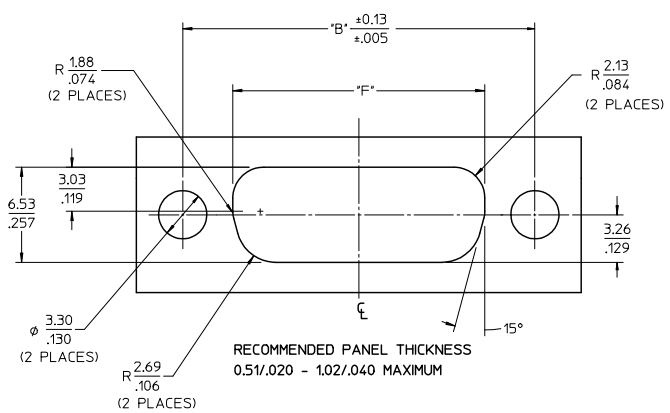
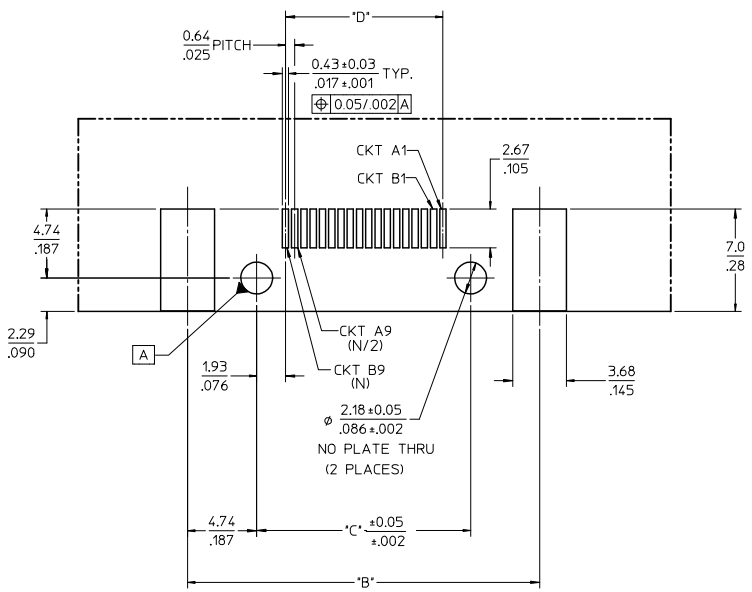


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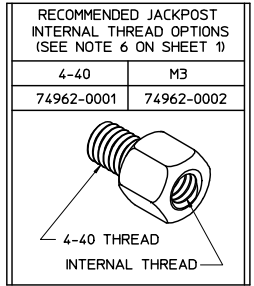
- MATERIALS:  
SHIELD - DEEP DRAWN STEEL  
HOUSING - GLASS FILLED POLYMER, BLACK, UL 94V-0  
CONTACTS - COPPER ALLOY
- PLATING:  
TERMINALS - SELECTIVE GOLD (Au) THICKNESS IN CONTACT AREA, 0.38 MICROMETERS/15 MICROINCHES MINIMUM, SELECTIVE MATTE TIN (Sn) THICKNESS IN PC TAIL AREA, 2.54 MICROMETERS/100 MICROINCHES MINIMUM, OVER NICKEL (Ni) UNDERPLATE OVERALL.  
SHIELD - 2.54 MICROMETERS/100 MICROINCHES MINIMUM MATTE TIN (Sn) OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL (Ni) OVER COPPER (Cu) UNDERPLATE OVERALL.
- PC SMT TAILS AND 2 GROUND TABS ARE TO BE COPLANAR WITHIN 0.127/0.005.
- PARTS TO BE PACKAGED IN TAPE AND REEL. SEE CHART ON SHEET 2 FOR PACKAGING SPECIFICATION.
- REFER TO SHEET 2 FOR RECOMMENDED PCB LAYOUT AND PANEL CUT-OUT.
- RECOMMENDED JACK POST MOUNTING HARDWARE (QTY 2 PER ASSEMBLY), SEE CHART FOR ITEM NUMBERS AND SALES DRAWING SD-74962-000.
- PRODUCT CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74960-000.
- FOR TDP RECEPTACLE WITH M3 INTERNAL THREAD OPTION CONTACT PRODUCT MARKETING.

REVISED PIN OUT EC NO: UCP2009-3097 DRAWN: JJANTELEZ 6/22/09 CHKD: 2009/08/14 APPR: MBANAKIS 2009/08/14	QUALITY SYMBOLS ▽ 0 ▽ 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 5:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DIMENSION STYLE MM/IN		TITLE SALES DRAWING - PCIE/TDP SMT RECEPTACLE ASSEMBLY	
		4 PLACES ± .010	± .010	DRAWN BY JJANTELEZ DATE 07/15/2008		MATERIAL NO. SEE CHART DOCUMENT NO. SD-74960-010 SHEET NO. 1 OF 2	
		3 PLACES ± .015	± .015	CHECKED BY TMCLELL DATE 07/15/2008		MATERIAL NO. SEE CHART DOCUMENT NO. SD-74960-010 SHEET NO. 1 OF 2	
		2 PLACES ± 0.25	± .015	APPROVED BY BANAKIS DATE 07/15/2008		MATERIAL NO. SEE CHART DOCUMENT NO. SD-74960-010 SHEET NO. 1 OF 2	
		1 PLACE ± 0.38	± .015	APPROVED BY BANAKIS DATE 07/15/2008		MATERIAL NO. SEE CHART DOCUMENT NO. SD-74960-010 SHEET NO. 1 OF 2	
		ANGULAR ± 1/2°		MATERIAL NO. SEE CHART DOCUMENT NO. SD-74960-010 SHEET NO. 1 OF 2			

NOTES:  
 1. ALL DIMENSIONS ON THIS SHEET ARE  $\pm 0.13/0.005$  TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 2. DIMENSIONS SHOWN ABOUT A CENTERLINE ARE SYMMETRICAL ABOUT THAT CENTERLINE WITHIN HALF THE SPECIFIED TOLERANCE.



NOT TOOLED	MATERIAL NUMBER	CIRCUIT SIZE	*A* DIMENSION	*B* DIMENSION	*C* DIMENSION	*D* DIMENSION	*E* DIMENSION	*F* DIMENSION	PACKAGING SPECIFICATION
	74960-3018	18	30.48 1.200	24.13 .950	14.66 .577	10.80 .425	15.87 .625	17.27 .680	PK-74960-995
	74960-3028	28	36.83 1.450	30.48 1.200	21.01 .827	17.15 .675	22.17 .873	23.62 .930	PK-74960-995
X	74960-3038	38	43.18 1.700	36.83 1.450	27.36 1.077	23.50 .925	28.52 1.123	29.97 1.180	N/A CONTACT PRODUCT MARKETING
	74960-3048	48	49.53 1.950	43.18 1.700	33.71 1.327	29.85 1.175	34.87 1.373	36.32 1.430	PK-74960-996
X	74960-3072	72	64.77 2.550	58.42 2.300	48.95 1.927	45.09 1.775	50.11 1.973	51.56 2.030	N/A CONTACT PRODUCT MARKETING



SEE SHEET 1 EC NO: UCP2009-3097 DRWN: JJANTELEZ 6/22/08 CHKD: MBANAKIS 2009/08/14 APPR: MBANAKIS 2009/08/14	QUALITY SYMBOLS ▽ - 0 ▽ - 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 5:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		DIMENSION STYLE MM/IN	DRAWN BY JJANTELEZ	DATE 07/15/2008	TITLE SALES DRAWING - PCIE/TDP SMT RECEPTACLE ASSEMBLY	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± 0.10 2 PLACES ± 0.25 ± 0.15 1 PLACE ± 0.38 ± ---		CHECKED BY TMCLELL	DATE 07/15/2008	MOLEX INCORPORATED
		ANGULAR ± 1/2°		APPROVED BY BANAKIS	DATE 07/15/2008	MATERIAL NO. SEE CHART
		DRAFT WHERE APPLICABLE				DOCUMENT NO. SD-74960-010
		MUST REMAIN WITHIN DIMENSIONS				SHEET NO. 2 OF 2
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION