

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

**Part Number:** [0744410010](#)  
**Status:** **Active**  
**Overview:** [sfp\\_sfp host connectors](#)  
**Description:** 0.80mm (.031") Pitch SFP, SFP Plus (SFP+) Host Connector, Z-Axis Pluggable, Right Angle, SMT, 20 Circuits, 0.76µm (30µ") Gold (Au)

**Documents:**

[3D Model](#) [Product Specification PS-74441-001 \(PDF\)](#)  
[Application Specification \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family I/O Connectors  
 Series [74441](#)  
 Application Module-to-Board  
 Component Type Receptacle  
 Overview [sfp\\_sfp host connectors](#)  
 Product Name Z-Axis Pluggable  
 Type N/A

**Physical**

Boot Color N/A  
 Circuits (Loaded) 20  
 Circuits (maximum) 20  
 Circuits Detail 20  
 Color - Resin Black  
 Durability (mating cycles max) 200  
 Flammability 94V-0  
 Gender Receptacle  
 Keying to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Panel Mount No  
 Pitch - Mating Interface (in) 0.031 In  
 Pitch - Mating Interface (mm) 0.80 mm  
 Pitch - Term. Interface (in) 0.031 In  
 Pitch - Term. Interface (mm) 0.80 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB No  
 Ports 1  
 Surface Mount Compatible (SMC) Yes

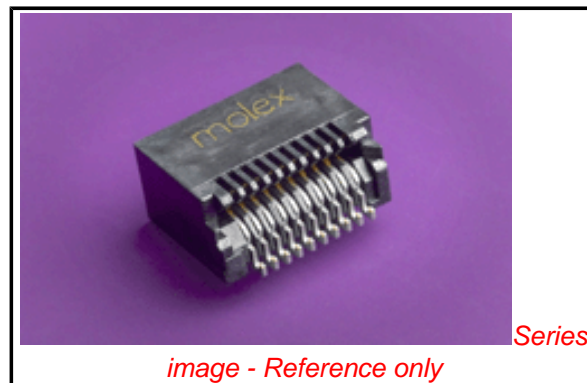


image - Reference only

Series

**EU RoHS**

**ELV and RoHS  
Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Halogen-Free**

**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**

[74441Series](#)

**Mates With**

SFP Modules

**Use With**

EMI Shield, [73927](#) SFP Cage, [86025](#) LC Duplex Cable Assembly, Guide Frame, [73939](#) HSSDC2 Cable Assembly

Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Surface Mount
Waterproof / Dustproof	No
Wire Size AWG	N/A

### **Electrical**

Current - Maximum per Contact	0.5A
Grounding to Panel	Yes
Shielded	No
Voltage - Maximum	30V AC (RMS)/DC

### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	40
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

### **Material Info**

#### **Reference - Drawing Numbers**

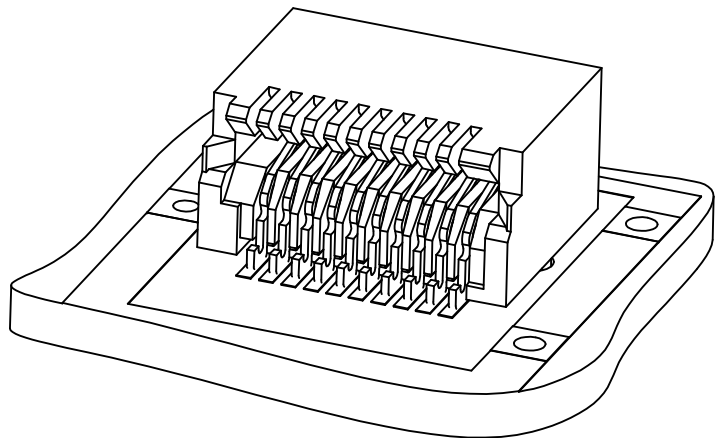
Application Specification	AS-74441-001
Product Specification	PS-74441-001
Sales Drawing	SD-74441-001
Test Summary	TS-74441-002, TS-74441-004, TS-74441-010

This document was generated on 05/19/2010

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SALES ASSEMBLY DRAWINGS FOR SMALL FORM-FACTOR AND Z AXIS PLUGGABLE CONNECTORS

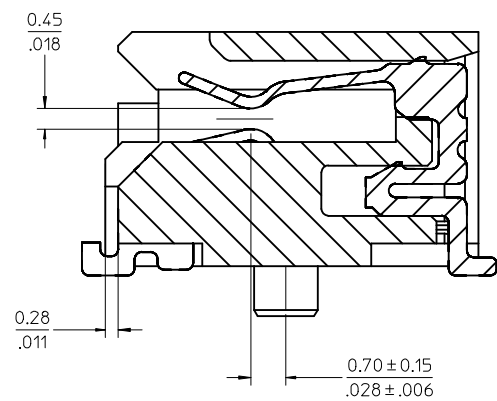
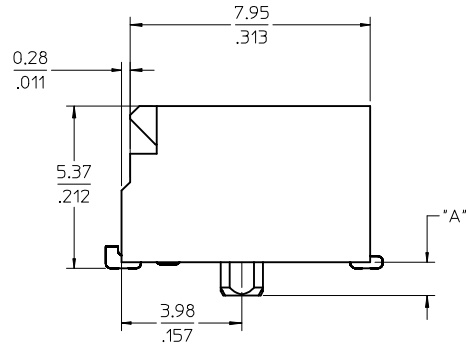
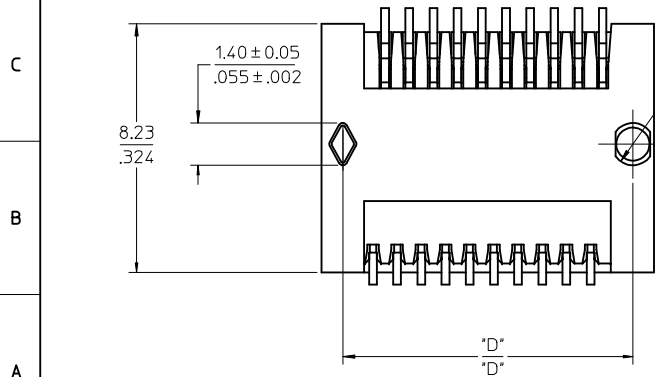
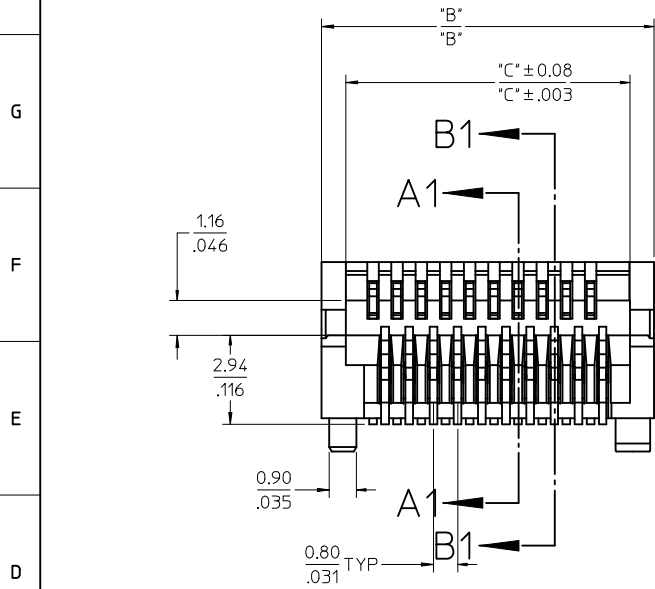
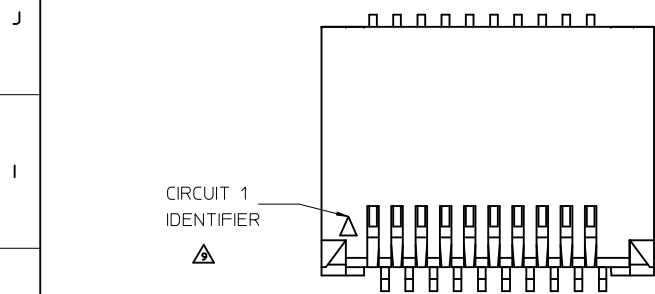
CKT SIZE	PART NUMBER	TOOLED	DESCRIPTION	"A"	"B"	"C"	"D"	MULTI-SOURCE AGREEMENT	CONNECTOR DRAWING	CIRCUIT BOARD DRAWING
20	74441-0001	YES	PLATED PER NOTE 2	1.10/.043	11.00/.433	9.40/.370	9.60/.378	SFP	PAGE 2	PAGE 3
	74441-0004	NO*	PLATED PER NOTE 2	0.76/.030						
	74441-0010	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0014	NO*	PLATED PER NOTE 3	0.76/.030						
	74441-0021	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0031	YES	PLATED PER NOTE 5	1.10/.043						
30	74441-0007	YES	PLATED PER NOTE 2	1.10/.043	15.00/.591	13.40/.528	13.60/.535	XFP	PAGE 2	PAGE 4
	74441-0017	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0027	YES	PLATED PER NOTE 4	1.10/.043						
40	74441-0005	YES	PLATED PER NOTE 2	1.10/.043	19.00/.748	17.40/.685	17.60/.693		PAGE 2	PAGE 5
	74441-0015	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0025	YES	PLATED PER NOTE 4	1.10/.043						
50	74441-0008	YES	PLATED PER NOTE 2	1.10/.043	23.00/.906	21.40/.843	21.60/.850		PAGE 2	PAGE 6
	74441-0018	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0028	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0038	YES	PLATED PER NOTE 5	1.10/.043						
70	74441-0003	YES	PLATED PER NOTE 2	1.10/.043	31.00/1.220	29.40/1.157	29.60/1.165	XENPAK XPAK X2	PAGE 2	PAGE 7
	74441-0013	YES	PLATED PER NOTE 3	1.10/.043						
	74441-0023	YES	PLATED PER NOTE 4	1.10/.043						
	74441-0033	YES	PLATED PER NOTE 5	1.10/.043						



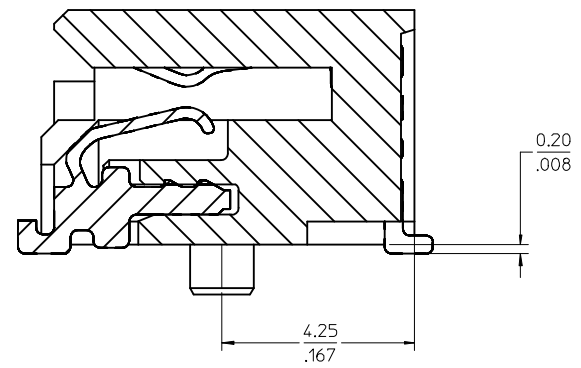
NOTES

- MATERIAL:  
HOUSING - HIGH TEMPERATURE THERMOPLASTIC GLASS FILLED, UL 94V-0, BLACK  
TERMINALS - COPPER ALLOY
- PLATING:  
CONTACT AREA - 0.38 μm MIN GOLD OVER 2.54 μm MIN NICKEL  
SOLDER FOOT AREA - 2.54 - 5.09 μm TIN OVER 2.54 μm MIN NICKEL.
- PLATING:  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL  
SOLDER AREA - 2.54 -5.09 μm TIN OVER 2.54 μm MIN NICKEL
- PLATING:  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL, LUBRICATED  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- PLATING:  
CONTACT AREA - 0.76 μm MIN GOLD OVER 2.54 μm NICKEL,  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- PLATING:  
CONTACT AREA - 0.38 μm MIN GOLD OVER 2.54 μm NICKEL,  
SOLDER AREA: GOLD FLASH OVER 2.54 μm MIN NICKEL.
- TERMINAL SOLDER FEET TO BE COPLANAR WITHIN 0.10/.004 FOR 20, 30 AND 40 CIRCUIT CONNECTORS  
TERMINAL SOLDER FEET TO BE COPLANAR WITHIN 0.15/.006 FOR 70 CIRCUIT CONNECTOR
- \* CONTACT PLANT FOR MORE INFORMATION
- DATE CODE: 4 DIGIT (3 DIGIT DATE, 1 DIGIT YEAR)
- CIRCUIT 1 IDENTIFIER LOCATED ON ALL PART NUMBERS

ADD -0041 EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0	mm INCH	MM/IN	1:1	METRIC	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± .005 1 PLACE ± 0.25 ± .010 ANGULAR ± 1/2°	DRAWN BY DATE HAVERY 00/04/06 CHECKED BY DATE KSWEENEY 00/04/06 APPROVED BY DATE MBANAKIS 00/04/06	TITLE	SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE MATERIAL NO. DOCUMENT NO.	MOLEX INCORPORATED SD-74441-001		SHEET NO.	1 OF 7

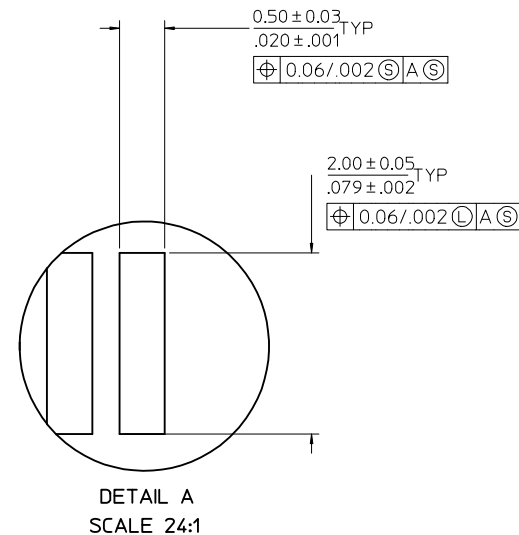
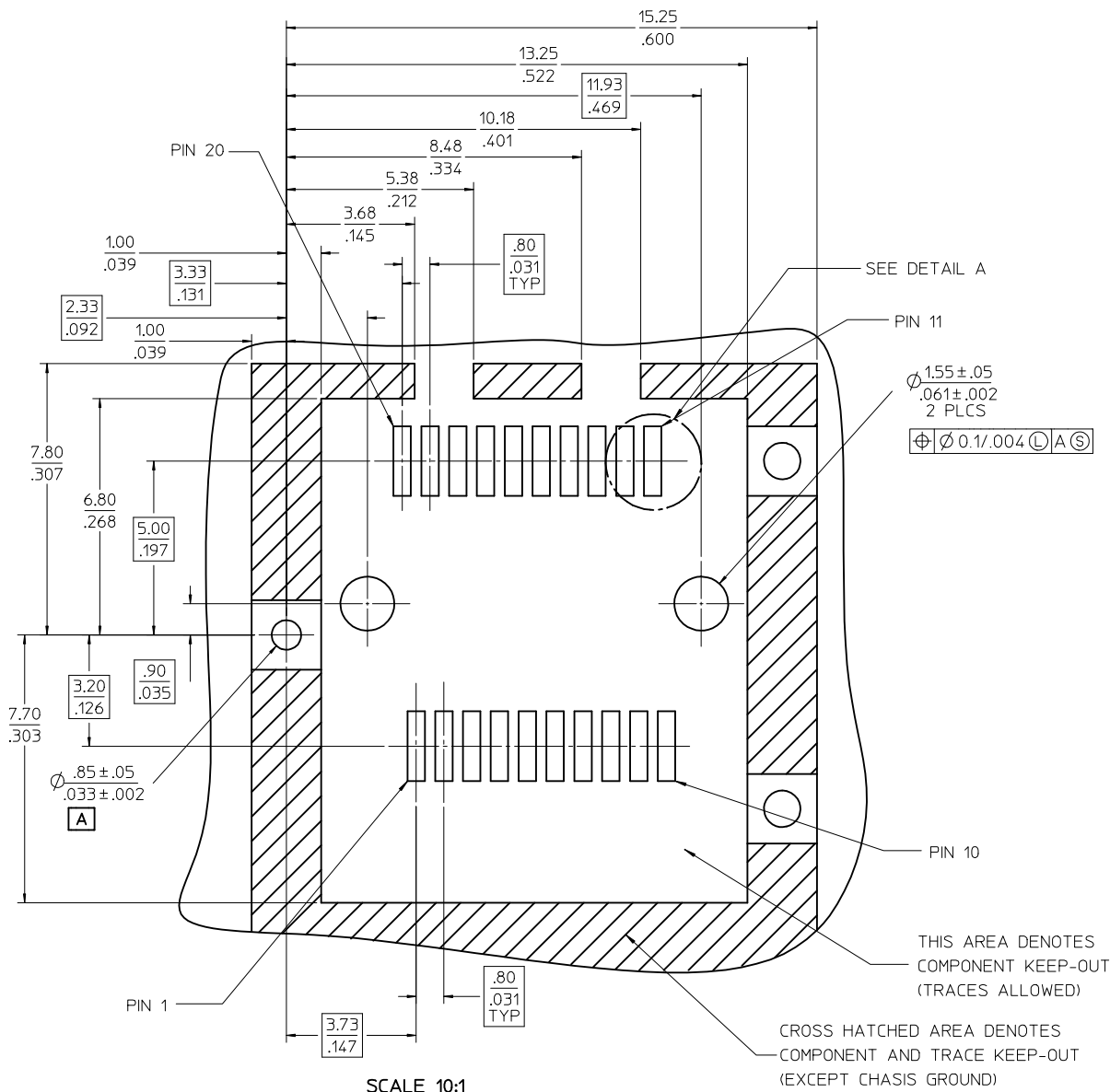


SECTION A1-A1  
SCALE 12:1



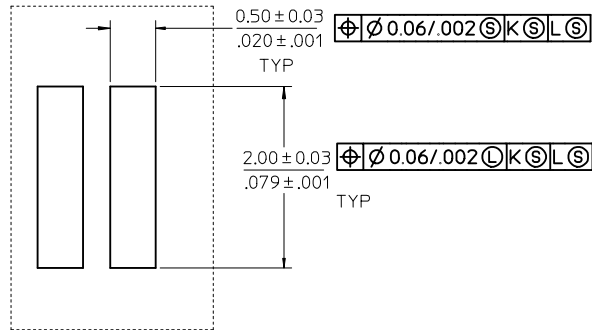
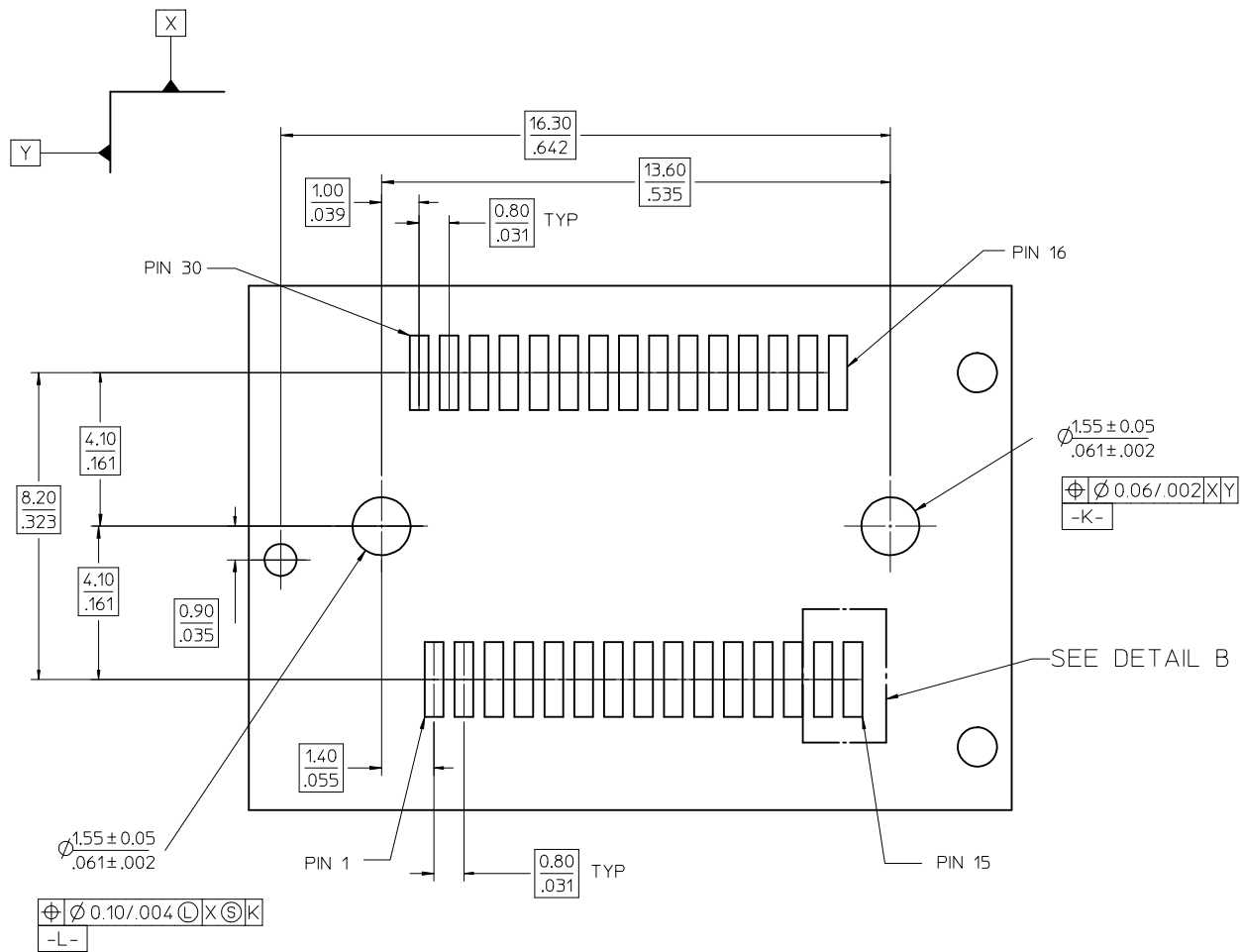
SECTION B1-B1  
SCALE 12:1

SEE SHEET 1 EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .13	± .005	3 PLACES	± .13	± .005	2 PLACES	± 0.13	± .005	1 PLACE	± 0.25	± .010	DIMENSION STYLE MM/IN DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE: 6:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR
		mm	INCH																	
	4 PLACES	± .13	± .005																	
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MOLEX INCORPORATED DOCUMENT NO. SD-74441-001	SHEET NO. 2 OF 7																	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				



20 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

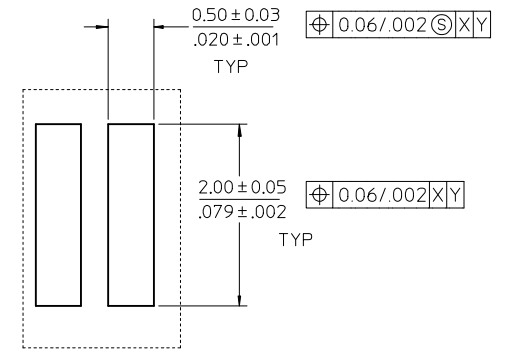
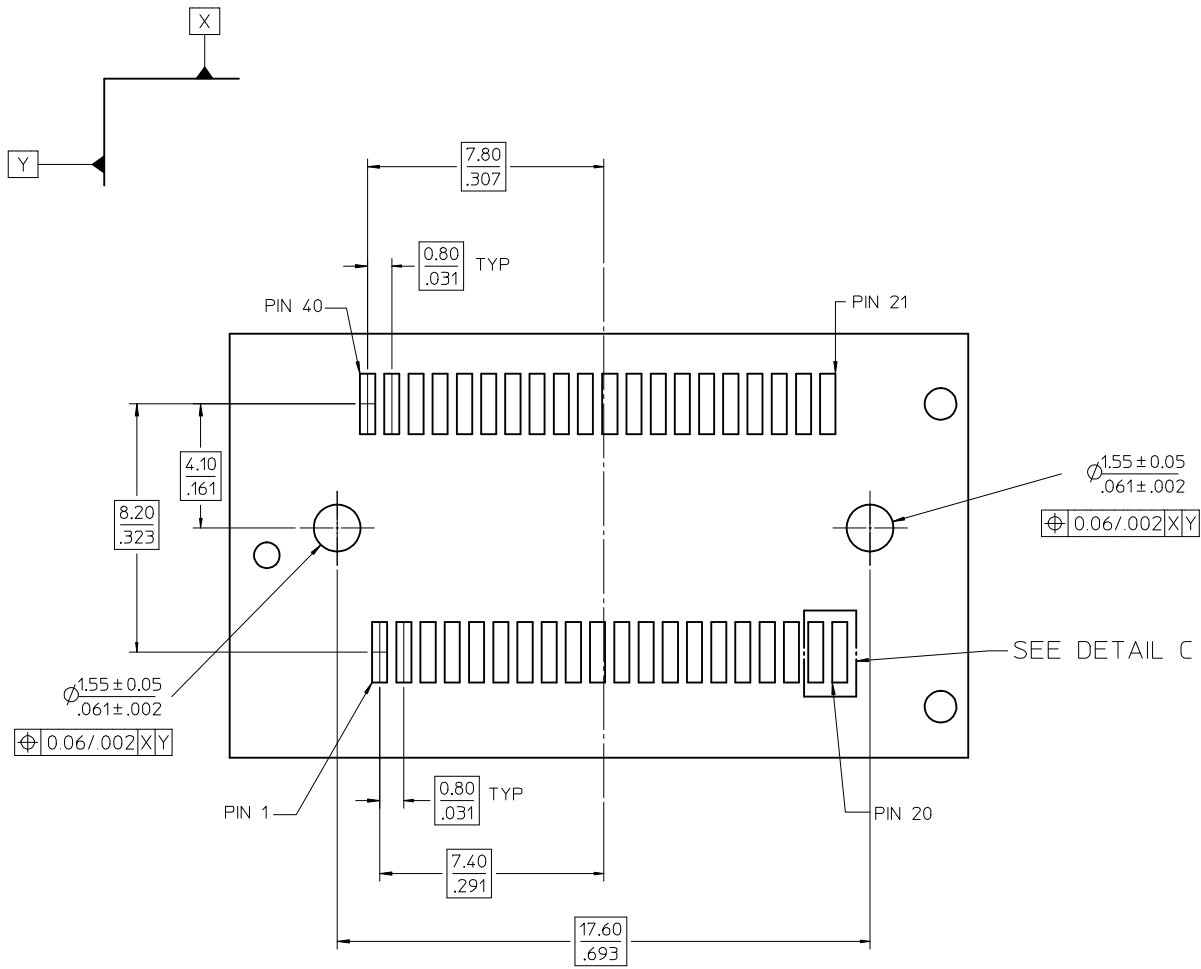
<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRAWN BY: BARRA CHKD BY: SMART APPR: MILLER	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM/IN</b>	SCALE <b>8:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY HAVERY	DATE 00/04/06	TITLE <b>SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR</b>		
		2 PLACES ± 0.13 ± .005	1 PLACE ± 0.25 ± .010	CHECKED BY KSWEENEY	DATE 00/04/06	<b>MOLEX INCORPORATED</b>		
		ANGULAR ± 1/2°		APPROVED BY MBANAKIS	DATE 00/04/06	MATERIAL NO.	DOCUMENT NO. <b>SD-74441-001</b>	SHEET NO. <b>3 OF 7</b>
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE <b>C</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



DETAIL B  
SCALE 24:1

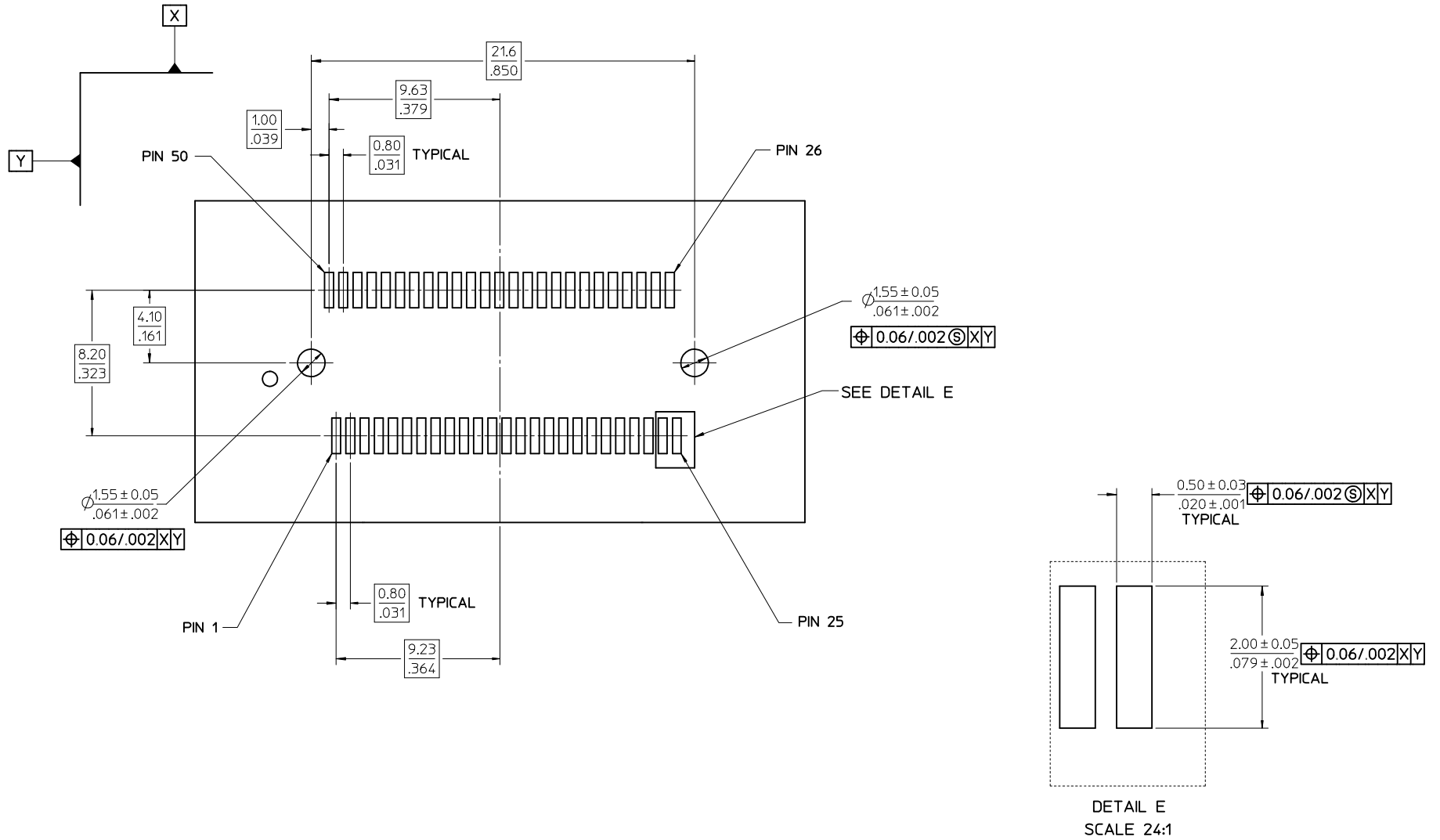
# 30 CIRCUIT MOTHER BOARD RECOMMENDED PCB LAYOUT

<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRWN:MS BARRA 2009/01/15 CHYK:HSWART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .01</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .02</td> <td>± .0008</td> </tr> <tr> <td>2 PLACES</td> <td>± .03</td> <td>± .0012</td> </tr> <tr> <td>1 PLACE</td> <td>± .05</td> <td>± .0020</td> </tr> </table>		mm	INCH	4 PLACES	± .01	± .0004	3 PLACES	± .02	± .0008	2 PLACES	± .03	± .0012	1 PLACE	± .05	± .0020	DIMENSION STYLE <b>MM/IN</b> DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE <b>6:1</b> DESIGN UNITS <b>METRIC</b> THIRD ANGLE PROJECTION	TITLE <b>SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR</b> <b>MOLEX INCORPORATED</b> MATERIAL NO. SD-74441-001 DOCUMENT NO. SD-74441-001 SHEET NO. 4 OF 7
		mm	INCH																	
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40 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

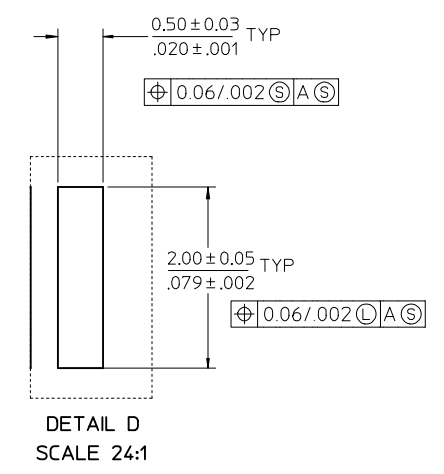
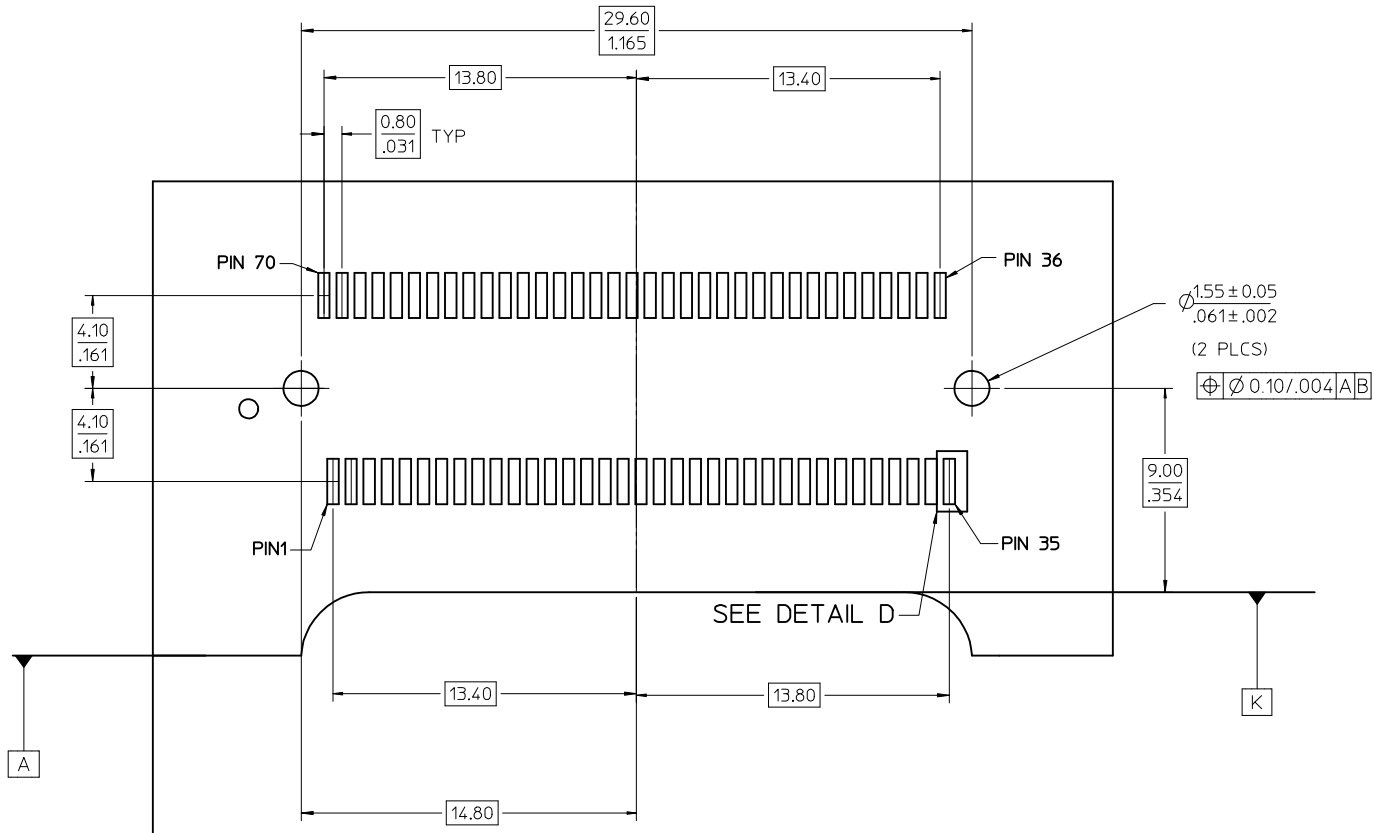
<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRWN:MSI BARRA 2009/01/15 CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± .13	± .005	3 PLACES	± .13	± .005	2 PLACES	± 0.25	± .010	1 PLACE	± 0.25	± .010	DIMENSION STYLE <b>MM/IN</b>	SCALE <b>6:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
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DRAWN BY HAVERY	DATE 00/04/06	CHECKED BY KSWEENEY	DATE 00/04/06	<b>MOLEX INCORPORATED</b> SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR																	
APPROVED BY MBANAKIS	DATE 00/04/06	MATERIAL NO. <b>SEE TABLE</b>					DOCUMENT NO. <b>SD-74441-001</b>	SHEET NO. <b>5 OF 7</b>													
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																			



50 CIRCUIT MOTHER BOARD  
RECOMMENDED PCB LAYOUT

SEE SHEET 1 EC NO: UCP2009-1455 DRAWN BY: IBARRA 2009/01/15 CHECKED BY: SMART 2009/01/15 APPR: MILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .13</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .005</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </tbody> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .13	± .005	3 PLACES	± .13	± .005	2 PLACES	± 0.13	± .005	1 PLACE	± 0.25	± .010	DIMENSION STYLE MM/IN DRAWN BY: HAVERY DATE: 00/04/06 CHECKED BY: KSWEENEY DATE: 00/04/06 APPROVED BY: MBANAKIS DATE: 00/04/06	SCALE 6:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																		
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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	TITLE SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR	MOLEX INCORPORATED	DOCUMENT NO. SD-74441-001	SHEET NO. 6 OF 7																
	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			





# 70 CIRCUIT MOTHER BOARD RECOMMENDED PCB LAYOUT

<b>SEE SHEET 1</b> EC NO: UCP2009-1455 DRAWN BY: DRWN:MS.BARRA 2009/01/15 CHECKED BY: CHKD:BSMART 2009/01/15 APPR:SMILLER 2009/01/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM/IN</b>		SCALE <b>6:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± .005 1 PLACE ± 0.25 ± .010	mm INCH ± --- ± --- ± 0.13 ± .005 ± 0.25 ± .010	DRAWN BY HAVERY	DATE 00/04/06	TITLE SALES ASSEMBLY Z AXIS PLUGGABLE PCB CONNECTOR					
		ANGULAR ±1/2°		CHECKED BY KSWEENEY	DATE 00/04/06	APPROVED BY MBANAKIS		DATE 00/04/06	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-74441-001		SHEET NO. 7 OF 7			

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