

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

**Part Number:** [0432498119](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Low Profile, 8/4, Flangeless

**Documents:**

[3D Model](#) [Product Specification PSX-43249 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

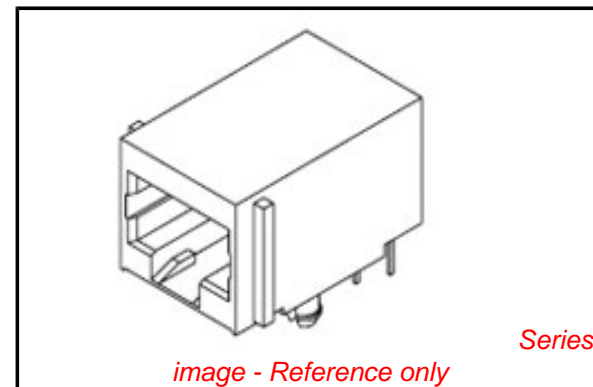
CSA LR19980  
 UL E107635

**General**

Product Family Modular Jacks/Plugs  
 Series [43249](#)  
 Component Type PCB Jack  
 Magnetic No  
 Overview [modular\\_plugs\\_jacks](#)  
 Performance Category 3  
 Power over Ethernet (PoE) N/A  
 Product Name RJ45

**Physical**

Boot Color N/A  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Inverted / Top Latch No  
 Keying to Mating Part None  
 Lightpipes/LEDs None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Orientation Right Angle (Side Entry)  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.57 mm  
 Packaging Type Tray  
 Panel Mount Without Flange  
 Pitch - Mating Interface (in) 0.040 In  
 Pitch - Mating Interface (mm) 1.02 mm  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 50  
 Plating min: Mating (µm) 1.25  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.5  
 Ports 1  
 Positions / Loaded Contacts 8/4  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Through Hole  
 Waterproof / Dustproof No



*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**

[43249Series](#)

**Mates With**

FCC 68 Plugs

Wire/Cable Type	N/A
<b>Electrical</b>	
Current - Maximum per Contact	1.5A
Grounding to PCB	No
Grounding to Panel	None
Shielded	No
Voltage - Maximum	150V AC (RMS)

**Solder Process Data**

Lead-free Process Capability	Wave Capable (TH only)
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**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	PK-43249-004
Product Specification	PSX-43249
Sales Drawing	SDA-43249

This document was generated on 06/07/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

NOTES:

1) MATERIAL:

HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
 INSULATOR: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
 TERMINALS: PHOSPHOR BRONZE, .012/(0.30) THICK  
 SHIELD: BRASS, .007/(0.18) THICK

2) FINISH:

TERMINALS:

- A = SELECT GOLD IN CONTACT AREA: 50 MICROINCHES / 1.27 MICROMETERS MIN.,  
 \*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES / 2.54 MICROMETERS MIN.,  
 WITH OVERALL NICKEL UNDERPLATE: 50 MICROINCHES / 1.27 MICROMETERS MIN.
- B = SELECT GOLD IN CONTACT AREA: 30 MICROINCHES / 0.76 MICROMETERS MIN.,  
 \*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES / 2.54 MICROMETERS MIN.,  
 WITH OVERALL NICKEL UNDERPLATE: 50 MICROINCHES / 1.27 MICROMETERS MIN.

SHIELD:

- \*100 MICROINCHES / 2.54 MICROMETERS NICKEL OVER 50 MICROINCHES / 1.27 MICROMETERS COPPER UNDERPLATE, PCB GROUND TABS DIPPED IN TIN
- \*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD IN THE PC TAILS AND/OR SHIELD.

3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43249.

4) PACKAGING SPECIFICATION:

- UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-43249-004.
- UNSHIELDED CONNECTOR ASSEMBLIES PACKAGED IN TUBES PER MOLEX PACKAGING SPECIFICATION PK-43249-005.
- SHIELDED CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-44050-004.

5) MATES WITH: MODULAR PLUGS THAT CONFORM TO FCC REGULATION PART 68.5.

6) SEE SHEET 3 FOR SHIELDED JACK ASSEMBLY.

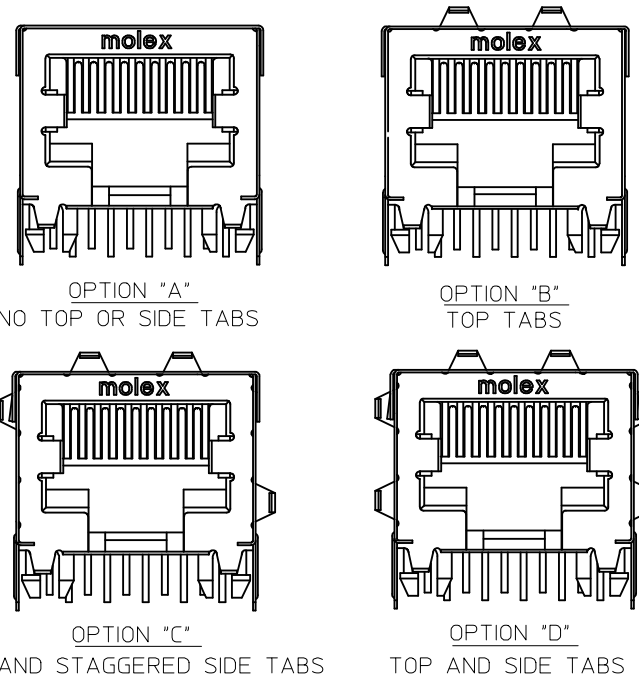
7) SEE SHEETS 5 & 6 FOR P.C. BOARD LAYOUTS.

8) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.

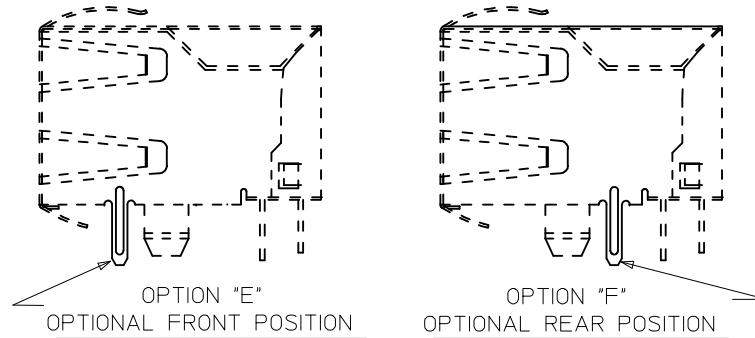
9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

10) THIS PART CONFORMS TO FCC REGULATION 68.5 AND TIA 1096 FOR MODULAR JACKS.

SIDE/TOP GROUND TAB OPTIONS FOR SHIELDS



BOTTOM PCB GROUND TAB OPTIONS FOR SHIELDS



NOTE: EITHER PCB GROUND TAB OPTION IS AVAILABLE ON ALL SIDE/TOP TAB CONFIGURATIONS

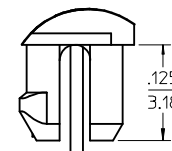
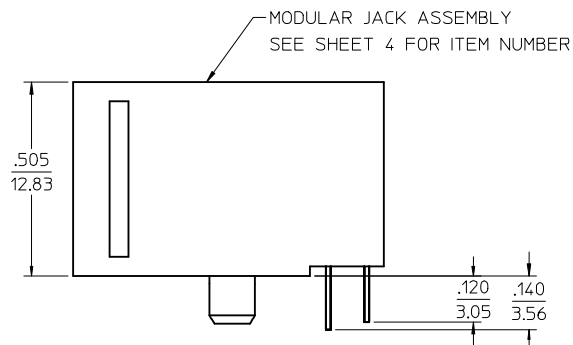
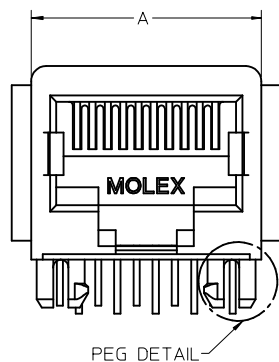
DRAWING LEGEND

- SHEET 1- NOTES, GROUND TAB OPTIONS
- SHEET 2- UNSHIELDED MODULAR JACK
- SHEET 3- SHIELDED MODULAR JACK WITH OPTIONAL SIDE/TOP GROUND TABS & BOTTOM GROUND TAB WITH OPTIONAL POSITION.
- SHEET 4- PART NUMBER CHARTS
- SHEET 5- FOOTPRINT LAYOUT FOR 8 POSITION HOUSING
- SHEET 6- FOOTPRINT LAYOUT FOR 6 POSITION HOUSING

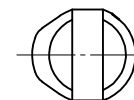
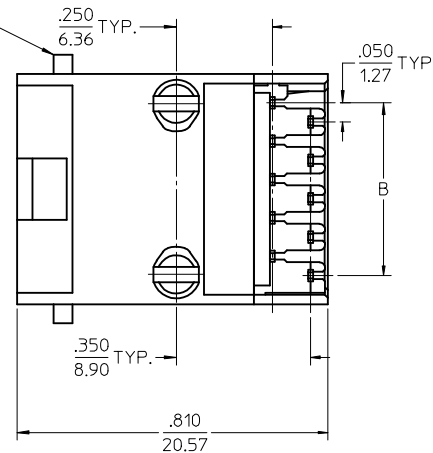
ADDED NOTE 10 EC NO: UCP2009-0740 DRWN:JKLOSTER/ER 2008/09/29 CHKD:JBELL 2008/10/03 APPR:FSMITH 2008/10/03 REV:	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>3 PLACES</td> <td>± .---</td> <td>± .010</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .---</td> </tr> <tr> <td>1 PLACE</td> <td>± .---</td> <td>± .---</td> </tr> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .---	± .---	3 PLACES	± .---	± .010	2 PLACES	± 0.25	± .---	1 PLACE	± .---	± .---	DIMENSION STYLE IN/MM DRAWN BY DATE JTR 1993/06/23 CHECKED BY DATE JTR 1993/06/23 APPROVED BY DATE RAS 1993/06/23	SCALE 4:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY
		mm	INCH																	
	4 PLACES	± .---	± .---																	
	3 PLACES	± .---	± .010																	
2 PLACES	± 0.25	± .---																		
1 PLACE	± .---	± .---																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 4	MOLEX INCORPORATED DOCUMENT NO. SDA-43249	SHEET NO. 1 OF 6																	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				

# UNSHIELDED MODULAR JACK

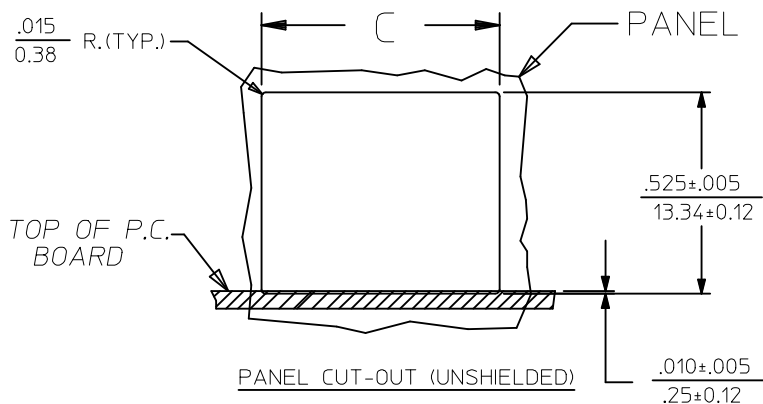
8 POSITION LOADED 10 SIZE SHOWN



OPTIONAL FLANGE USED FOR FLUSH MODULAR JACK



PEG DETAIL SCALE 8:1

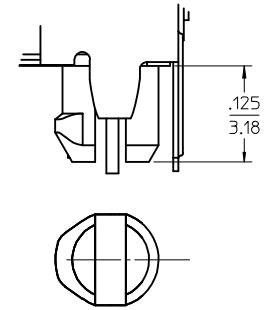
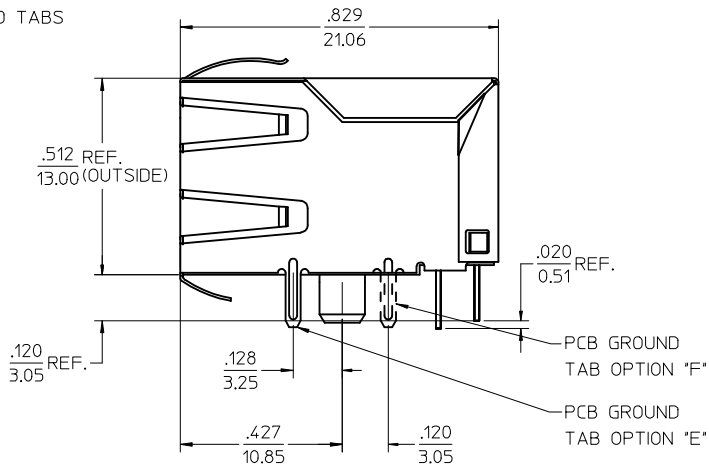
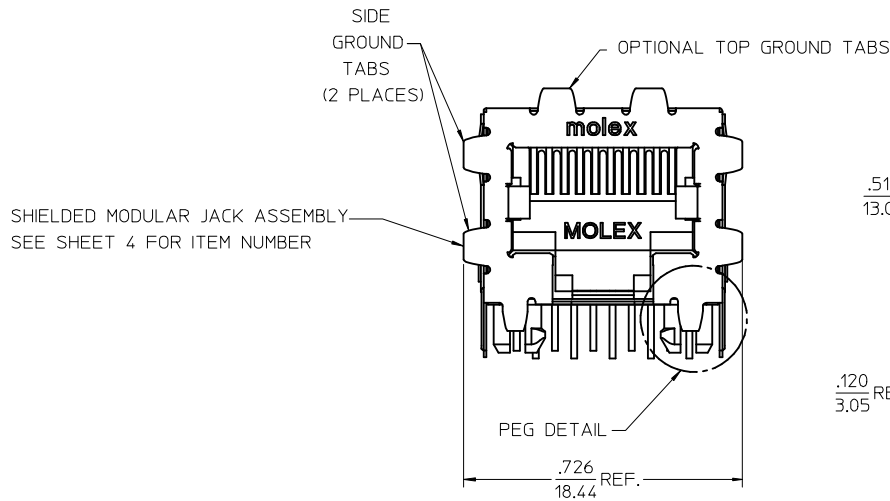


HOUSING SIZE	CIRCUIT SIZE	DIM. A	DIM. B	DIM. C
8	10	.600±.005 (15.24±0.13)	.450±.005 (11.43±0.13)	.620±.005 (15.75±0.13)
8	8	.600±.005 (15.24±0.13)	.350±.005 (8.89±0.13)	.620±.005 (15.75±0.13)
8	4	.600±.005 (15.24±0.13)	.150±.005 (3.81±0.13)	.620±.005 (15.75±0.13)
8	6	.600±.005 (15.24±0.13)	.250±.005 (6.35±0.13)	.620±.005 (15.75±0.13)
6	6	.520±.005 (13.21±0.13)	.250±.005 (6.35±0.13)	.540±.005 (13.72±0.13)
6	4	.520±.005 (13.21±0.13)	.150±.005 (3.81±0.13)	.540±.005 (13.72±0.13)
6	2	.520±.005 (13.21±0.13)	.050±.005 (1.27±0.13)	.540±.005 (13.72±0.13)

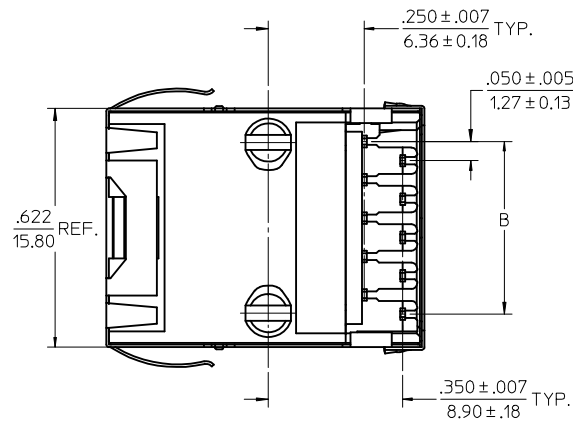
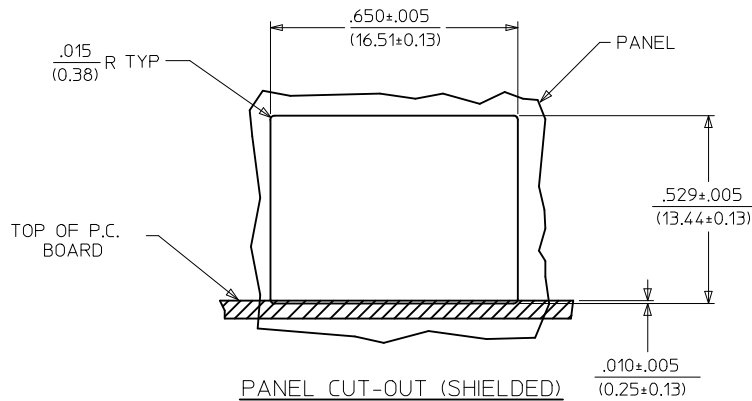
SEE SHEET 1 EC NO: UCP2009-0740 DRWN: KLOSTEMEIER 2008/09/29 CHKD: JEBEL 2008/10/03 APPR: FSMITH 2008/10/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°		DRAWN BY DATE JTR 1993/06/23 CHECKED BY DATE JTR 1993/06/23 APPROVED BY DATE RAS 1993/06/23		TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 4		DOCUMENT NO. SDA-43249		SHEET NO. 2 OF 6		Molex MOLEX INCORPORATED	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

# MODULAR JACK W/ .007" THICK SHIELD AND OPTIONAL GROUND TABS

8 LOADED 10 VERSION SHOWN WITH GROUND TAB OPTIONS "D" AND "E"



PEG DETAIL  
SCALE 8:1



DESCRIPTION OF GROUND TAB OPTIONS:  
(SEE SHEET 4 FOR AVAILABLE COMBINATIONS OF OPTIONS)

GROUND TAB OPTION	DESCRIPTION
A	NO GROUND TABS
B	TOP TABS ONLY
C	STAGGERED SIDE TABS
D	TOP AND SIDE TABS
E	PCB GROUND TAB IN FRONT POSITION
F	PCB GROUND TAB IN REAR POSITION

HOUSING SIZE	CIRCUIT SIZE	B
8	10	.450±.005 11.43±0.13
8	8	.350±.005 8.89±0.13

SEE SHEET 1 EC NO: UCP2009-0740 DRWN:KLOSTEMEIER 2008/09/29 CHKD:JELL 2008/10/03 APPR:FSMITH 2008/10/03	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>---</td> <td>---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>±.010</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.25</td> <td>---</td> </tr> <tr> <td>1 PLACE ±</td> <td>---</td> <td>---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES ±	---	---	3 PLACES ±	---	±.010	2 PLACES ±	0.25	---	1 PLACE ±	---	---	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES ±	---	---																		
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1 PLACE ±	---	---																			
		DRAWN BY JTR	DATE 1993/06/23	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY																	
		CHECKED BY JTR	DATE 1993/06/23	APPROVED BY RAS																	
		DATE 1993/06/23		MATERIAL NO. SEE SHEET 4																	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DOCUMENT NO. SDA-43249		SHEET NO. 3 OF 6														
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FLUSH MOUNT (UNSHIELDED)

ASSEMBLY ITEM NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION
43249-8001	8	10	A
43249-8004	8	8	A
43249-8010	8	6	A
43249-6001	6	6	A
43249-6004	6	4	A
43249-6007	6	2	A

FLANGELESS (UNSHIELDED)

ASSEMBLY ITEM NUMBER	CONNECTOR SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION
43249-8101	8	10	A
43249-8102	8	10	B
43249-8104	8	8	A
43249-8105	8	8	B
43249-8116	8	6	A
43249-8119	8	4	A
43249-6101	6	6	A
43249-6104	6	4	A
43249-6107	6	2	A

FLANGELESS (UNSHIELDED)

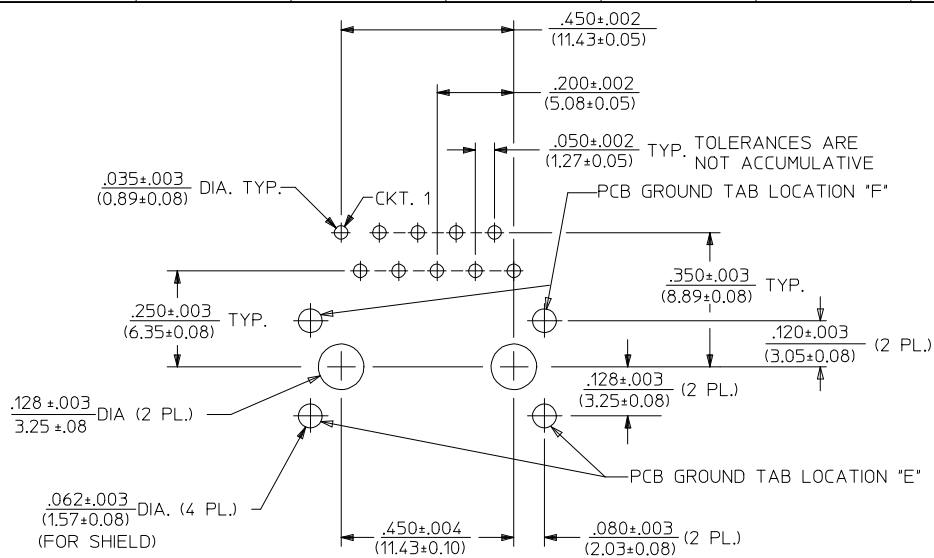
(SHIPPED IN TUBES)

43249-6501	6	6	A
43249-6504	6	4	A

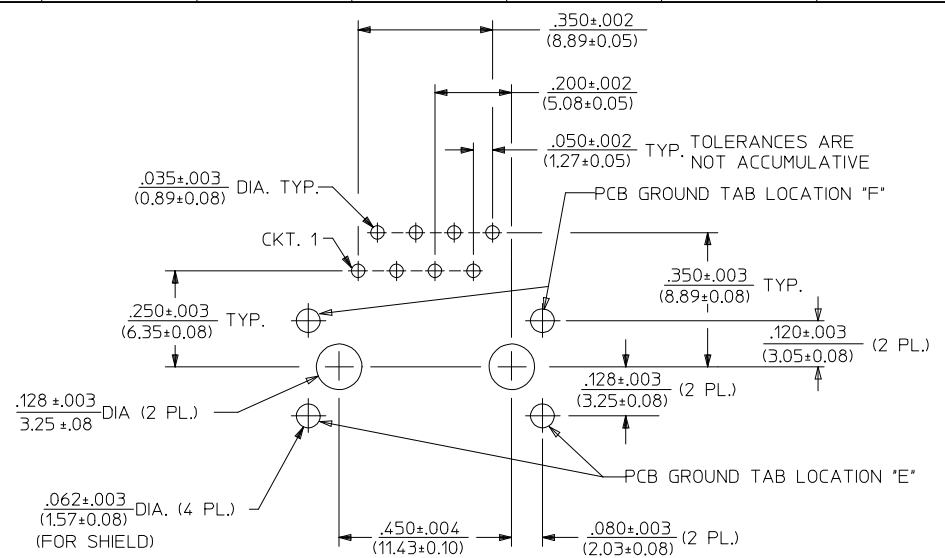
SHIELDED, .007" THICK

ASSEMBLY ITEM NUMBER	CONN. SIZE	NUMBER OF CIRCUITS	TERMINAL PLATING OPTION	SIDE/TOP PANEL GROUND TAB OPTION	PCB GROUND TAB OPTION	PACKAGING OPTION
43249-8900	8	10	A	A	E	TRAY
43249-8901	8	10	A	B	E	TRAY
43249-8902	8	10	A	C	E	TRAY
43249-8903	8	10	A	D	E	TRAY
43249-8908	8	10	A	A	F	TRAY
43249-8909	8	10	A	B	F	TRAY
43249-8910	8	10	A	C	F	TRAY
43249-8911	8	10	A	D	F	TRAY
43249-8916	8	8	A	A	E	TRAY
43249-8917	8	8	A	B	E	TRAY
43249-8918	8	8	A	C	E	TRAY
43249-8919	8	8	A	D	E	TRAY
43249-8920	8	8	B	A	E	TRAY
43249-8924	8	8	A	A	F	TRAY
43249-8925	8	8	A	B	F	TRAY
43249-8926	8	8	A	C	F	TRAY
43249-8927	8	8	A	D	F	TRAY

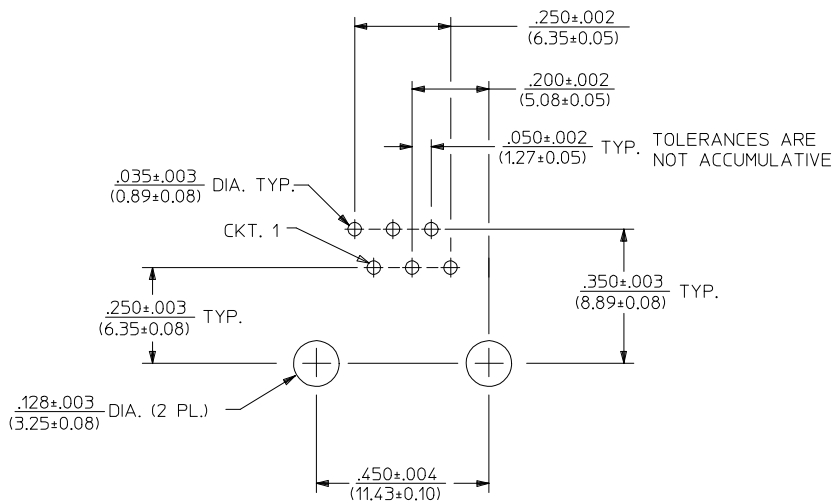
SEE SHEET 1 EC NO: UCP2009-0740 DRWN:KLOSTEMEIER 2008/09/29 CHKD:JBELL 2008/10/03 APPR:FSMTH 2008/10/03 K1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr><td>4 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>3 PLACES</td><td>± .005</td><td>± .010</td></tr> <tr><td>2 PLACES</td><td>± 0.25</td><td>± .010</td></tr> <tr><td>1 PLACE</td><td>± .005</td><td>± .005</td></tr> </tbody> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .010	2 PLACES	± 0.25	± .010	1 PLACE	± .005	± .005	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH																		
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1 PLACE	± .005	± .005																			
DRAWN BY JTR	DATE 1993/06/23	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY																			
CHECKED BY JTR	DATE 1993/06/23	APPROVED BY RAS		DATE 1993/06/23																	
MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-43249		SHEET NO. 4 OF 6																	
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															



PC BOARD LAYOUT FOR SIZE 8, 10 CIRCUIT  
(COMPONENT SIDE OF BOARD)



PC BOARD LAYOUT FOR SIZE 8, 8 CIRCUIT  
(COMPONENT SIDE OF BOARD)

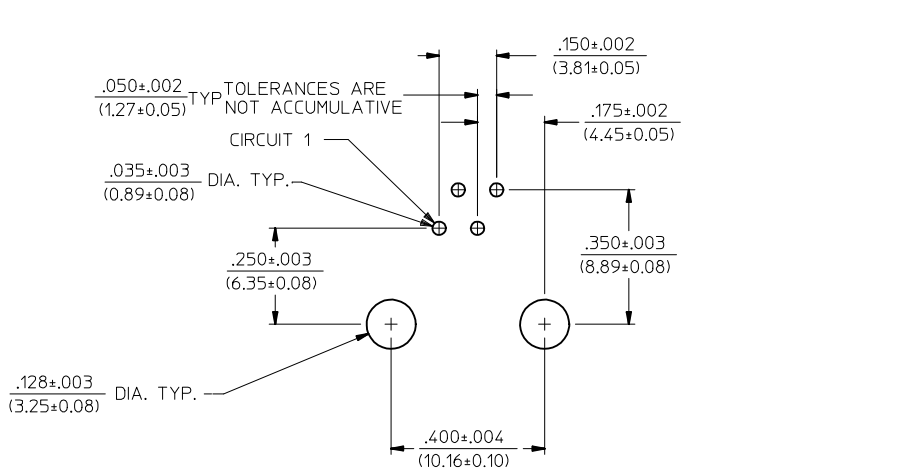
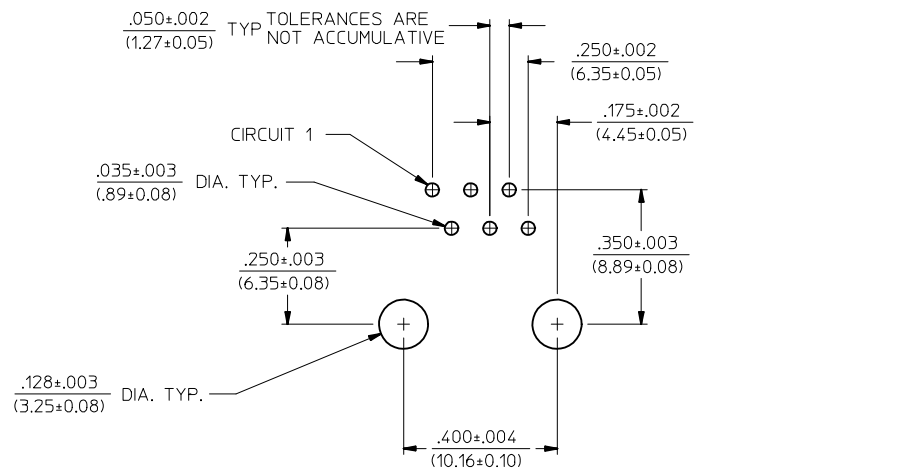


PC BOARD LAYOUT FOR SIZE 8, 6 CIRCUIT  
(COMPONENT SIDE OF BOARD)

NOTES:  
1. RECOMMENDED PCB THICKNESS: .062 ± .005 (1.57 ± 0.13)

SEE SHEET 1 EC NO: UCP2009-0740 DRAWN: KLOSTEMEIER 2008/09/29 CHKD: J.BELL 2008/10/03 APPR: F.SMITH 2008/10/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
	REV K1	DESCRIPTION	mm INCH	DRAWN BY JTR	DATE 1993/06/23	TITLE LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY
		4 PLACES ± --- ± ---		CHECKED BY JTR	DATE 1993/06/23	MOLEX INCORPORATED
		3 PLACES ± --- ± .010		APPROVED BY RAS	DATE 1993/06/23	
		2 PLACES ± 0.25 ± ---		MATERIAL NO. SEE SHEET 4	DOCUMENT NO. SDA-43249	SHEET NO. 5 OF 6
		1 PLACE ± --- ± ---		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		ANGULAR ± 1/2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

13 12 11 10 9 8 7 6 5 4 3 2 1

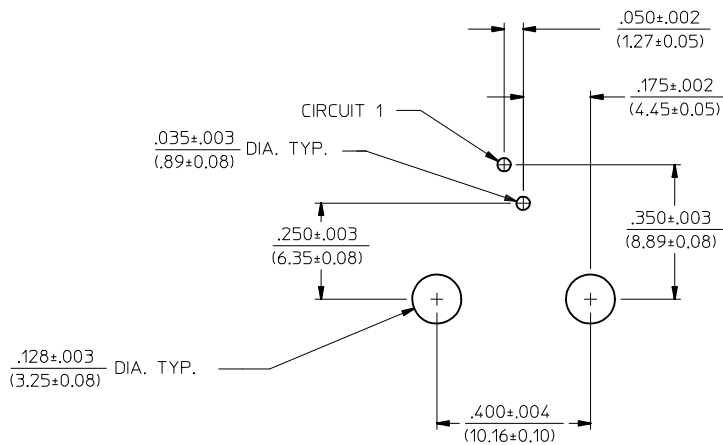


### PC BOARD LAYOUT FOR SIZE 6, 6 CIRCUIT

(COMPONENT SIDE OF BOARD)

### PC BOARD LAYOUT FOR SIZE 6, 4 CIRCUIT

(COMPONENT SIDE OF BOARD)



### PC BOARD LAYOUT FOR SIZE 6, 2 CIRCUIT

(COMPONENT SIDE OF BOARD)

NOTES:  
1. RECOMMENDED PCB THICKNESS: .062±.005/(1.57±0.13)

<b>SEE SHEET 1</b> IEC NO: UCP2009-0740 DRWN: KLOSTEMEIER 2008/09/29 CHKD: JELL 2008/10/03 APPR: FSMITH 2008/10/03	DESCRIPTION K1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± .010</td> <td>± .0004</td> </tr> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .010	± .0004	3 PLACES	± .010	± .0004	2 PLACES	± 0.25	± .010	1 PLACE	± .010	± .0004	DIMENSION STYLE <b>IN/MM</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION
				mm	INCH																	
		4 PLACES		± .010	± .0004																	
		3 PLACES		± .010	± .0004																	
2 PLACES	± 0.25	± .010																				
1 PLACE	± .010	± .0004																				
DRAWN BY JTR	DATE 1993/06/23	TITLE <b>LOW PROFILE RIGHT ANGLE MODULAR JACK ASSEMBLY</b>																				
CHECKED BY JTR	DATE 1993/06/23	MOLEX INCORPORATED																				
APPROVED BY RAS	DATE 1993/06/23	MATERIAL NO. <b>SEE SHEET 4</b>	DOCUMENT NO. <b>SDA-43249</b>	SHEET NO. <b>6 OF 6</b>																		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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