

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

**Part Number:** [0446200002](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Low Profile, Inverted, 8/8

**Documents:**

<a href="#">Packaging Specification (PDF)</a>	<a href="#">Application Specification (PDF)</a>
<a href="#">3D Model</a>	<a href="#">Product Specification PS-43860-003 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>

**Agency Certification**

CSA	LR19980
UL	E107635

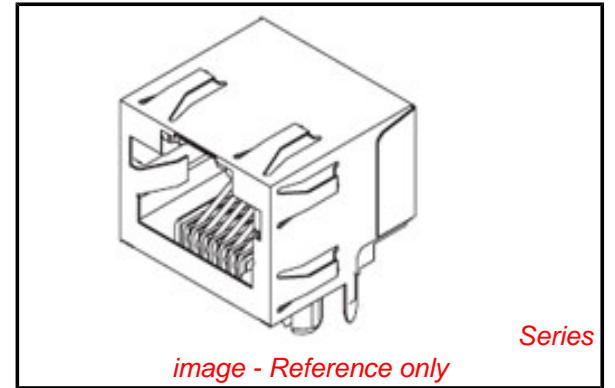
**General**

Product Family	Modular Jacks/Plugs
Series	<a href="#">44620</a>
Comments	RJ-11 Keepout Feature
Component Type	PCB Jack
Magnetic	No
Overview	<a href="#">modular_plugs_jacks</a>
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	Yes
Lightpipes/LEDs	None
Material - Metal	Brass, 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)	1.60 mm
Packaging Type	Tray
Panel Mount	With Flange
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	8/8
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +85°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No
Wire/Cable Type	N/A

**Electrical**



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC  
Contains SVHC: No**  
**Halogen-Free  
Status**

**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**

[44620Series](#)

**Mates With**

FCC 68 Plugs

Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Grounding to Panel	Yes
Shielded	Yes
Voltage - Maximum	150V AC (RMS)

#### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

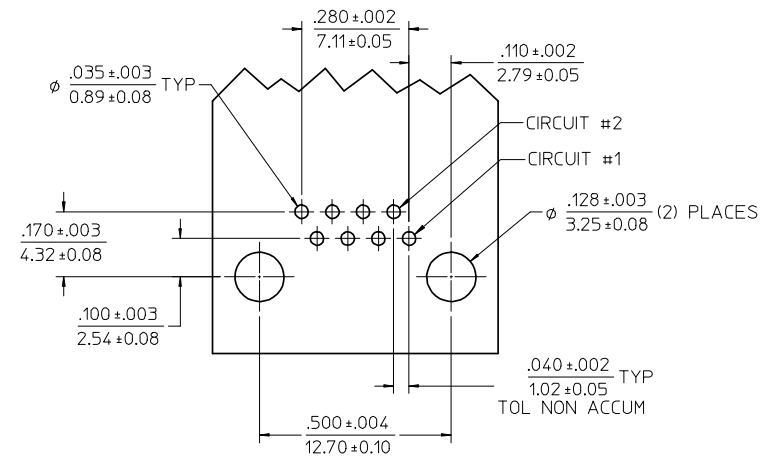
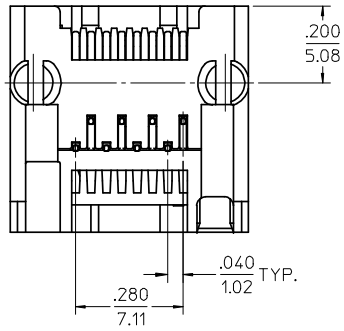
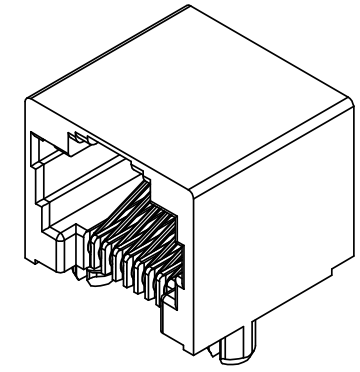
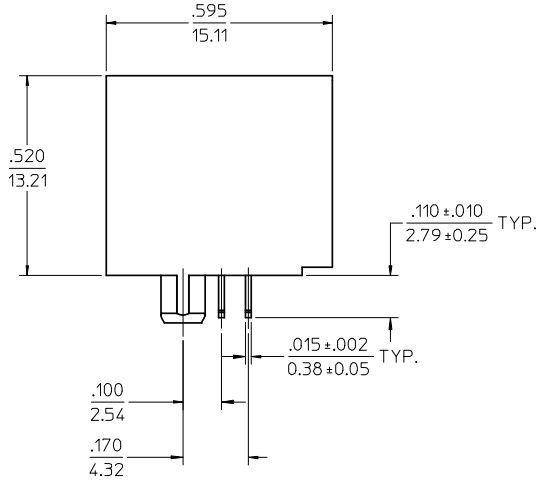
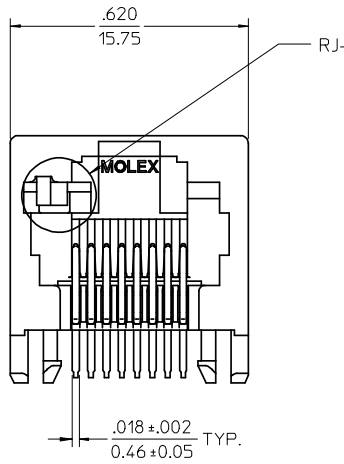
#### **Material Info**

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

Packaging Specification	PK-43860-005
Product Specification	PS-43860-003, RPS-43860-004, RPS-43860-007, RPS-43860-008, RPS-43860-013
Sales Drawing	SD-44620-001
Test Summary	TS-43860-001

This document was generated on 05/24/2010

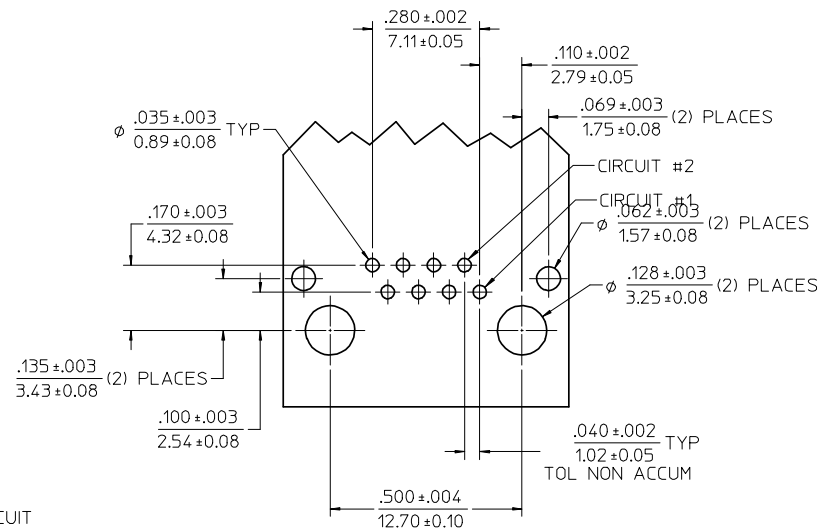
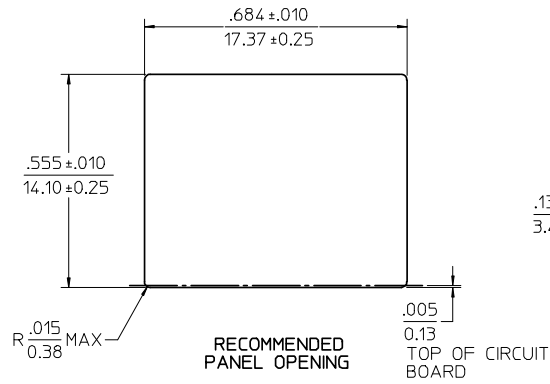
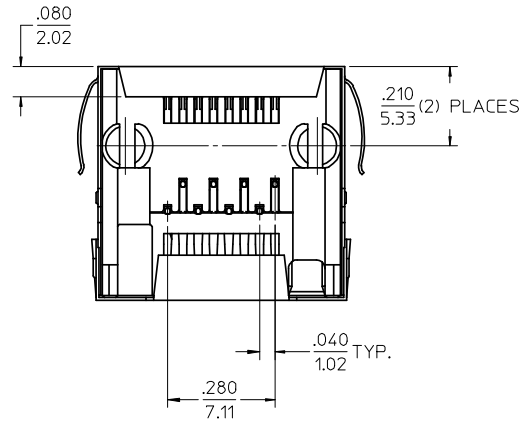
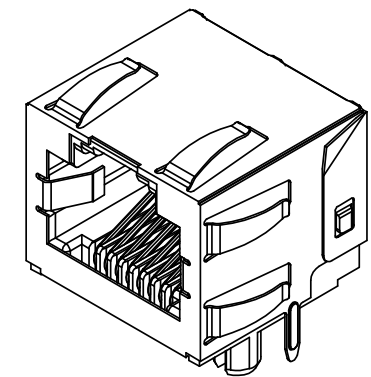
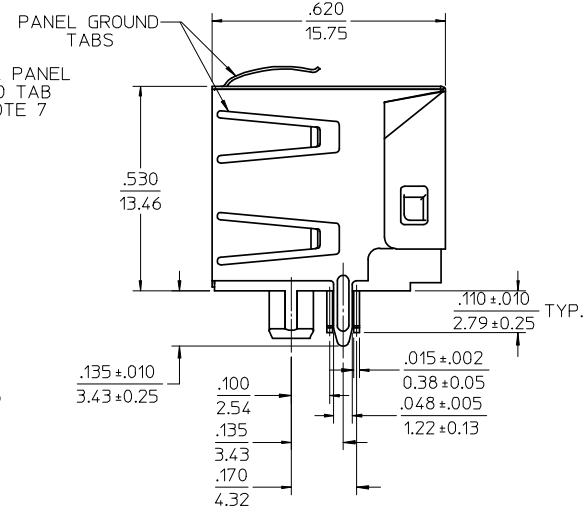
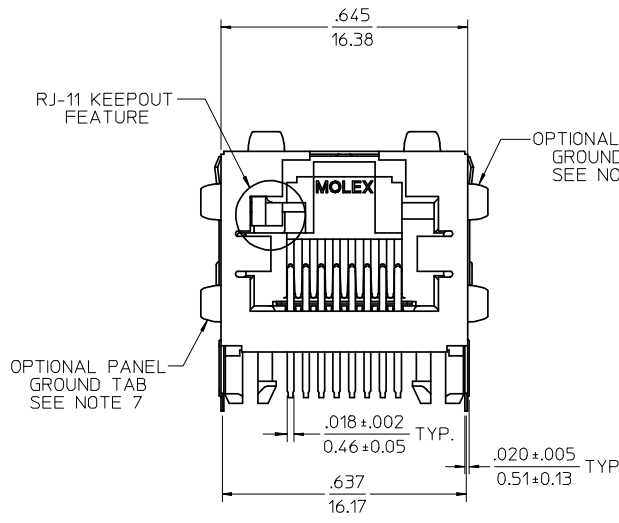
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PC BOARD LAYOUT  
COMPONENT SIDE OF BOARD  
RECOMMENDED PCB THICKNESS: .062/1.57

- NOTES:
- 1) MATERIAL:  
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE
  - 2) FINISH:  
TERMINALS:  
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.  
\*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.
  - 3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43860-003.
  - 4) PACKAGING SPECIFICATION:  
CONNECTOR ASSEMBLIES PACKAGED IN EXTRUDED TUBES PER MOLEX PACKAGING SPECIFICATION PK-43860-004.
  - 5) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
  - 6) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
  - 7) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

ADD NOTE 7 EC NO: UCP2008-0965 DRWN: BELL 2007/11/08 CHKD: SCHMIDT 2007/12/04 APPR: FSMITH 2007/12/05	DESCRIPTION RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
		$\nabla=0$ $\nabla=0$	<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>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	IN/MM	4:1	INCH	
			mm	INCH																		
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2 PLACES	± ---	± ---																				
1 PLACE	± ---	± ---																				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY MKAMAR DATE 00/03/07	CHECKED BY MKAMAR DATE 00/03/07	APPROVED BY JROBERTS DATE 00/03/07	MATERIAL NO. <b>446200001</b>	DOCUMENT NO. <b>SD-44620-001</b>	TITLE <b>RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE</b>	SHEET NO. <b>1 OF 4</b>															
REV: D2	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	<b>MOLEX INCORPORATED</b>																				

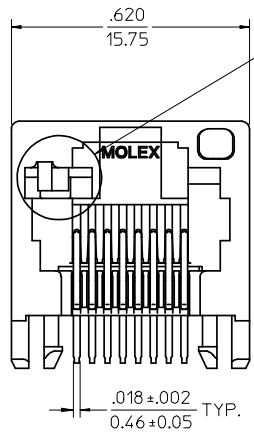


PC BOARD LAYOUT  
COMPONENT SIDE OF BOARD  
RECOMMENDED PCB THICKNESS: .062/1.57

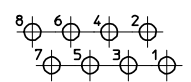
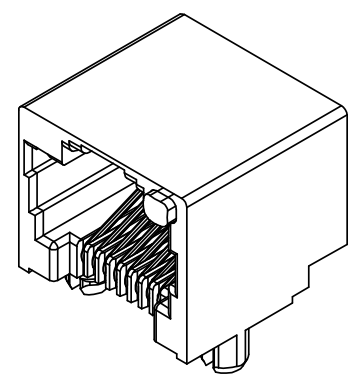
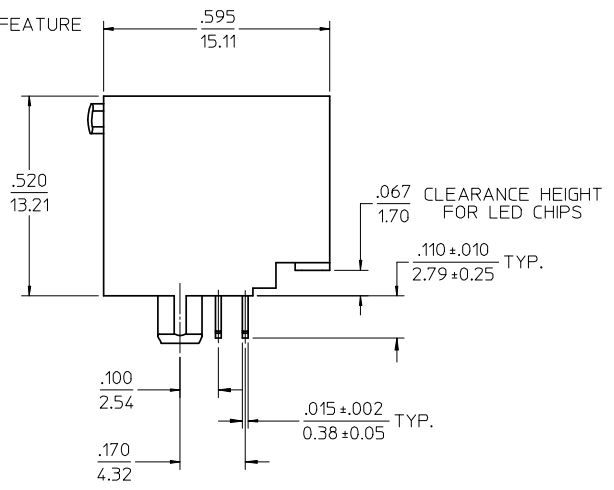
- NOTES:
- MATERIAL:  
HOUSING: NYLON(IPA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE  
SHIELD: BRASS
  - FINISH:  
TERMINALS:  
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES (1.27 MICROMETERS) MIN.,  
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SHIELD:  
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(1.27 MICROMETERS) COPPER UNDERPLATE, PCB GROUND TABS DIPPED IN TIN  
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  - PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43860-003.
  - PACKAGING SPECIFICATION:  
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PACKAGING SPECIFICATION PK-43860-005.
  - ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
  - CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
  - AVAILABLE WITH THE (2) SPECIFIED PANEL GROUND TABS OMITTED FOR  
SIDE TO SIDE STACKABILITY, PER THE ASSEMBLY MATERIAL NUMBER TABLE.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC  
SPECIFICATION PS-45499-002.

ASSEMBLY MATERIAL NUMBER	PANEL GROUND TABS
446200002	ALL
446200003	SEE NOTE 7

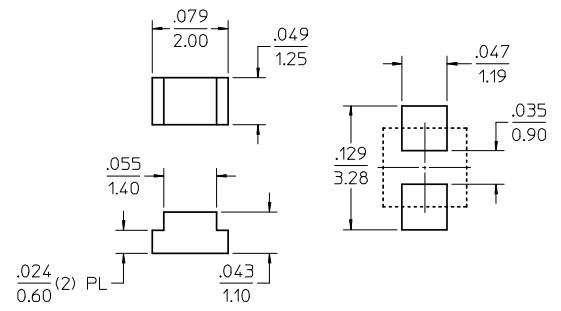
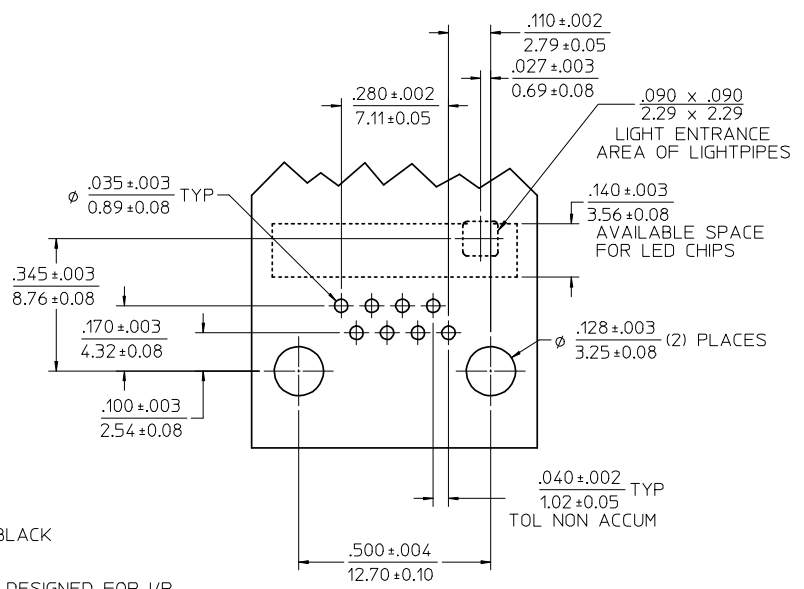
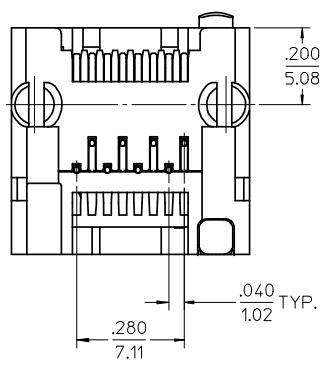
<b>ADD NOTE 8</b> EC NO: UCP2008-0965 DRWN: BELL 2007/11/08 CHKD: LSCM/DT 2007/12/04 APPR: FSM/TH 2007/12/05	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	mm INCH DRAWN BY DATE MKAMAR 00/03/07 CHECKED BY DATE MKAMAR 00/03/07 APPROVED BY DATE JROBERTS 00/03/07	TITLE <b>RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE</b>		MOLEX MOLEX INCORPORATED		DOCUMENT NO. <b>SD-44620-001</b>
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



RJ-11 KEEPUT FEATURE



TYPICAL PC TERMINAL HOLE LAYOUT  
SCALE 5:1



RECOMMENDED SMT  
LED SOLDER PATTERN  
SCALE 10:1  
(SEE NOTE 8)

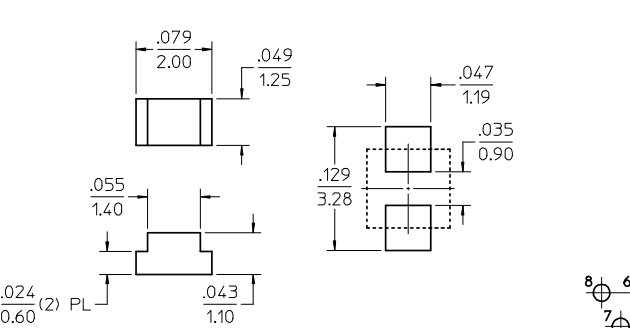
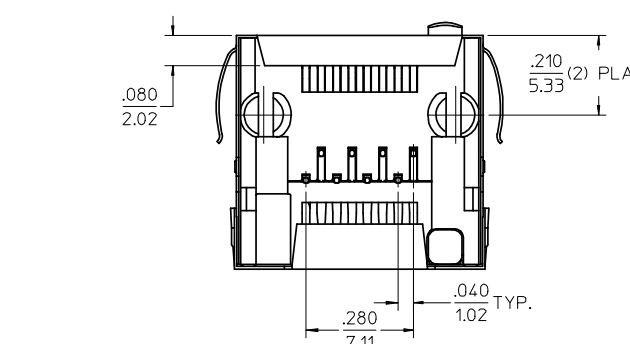
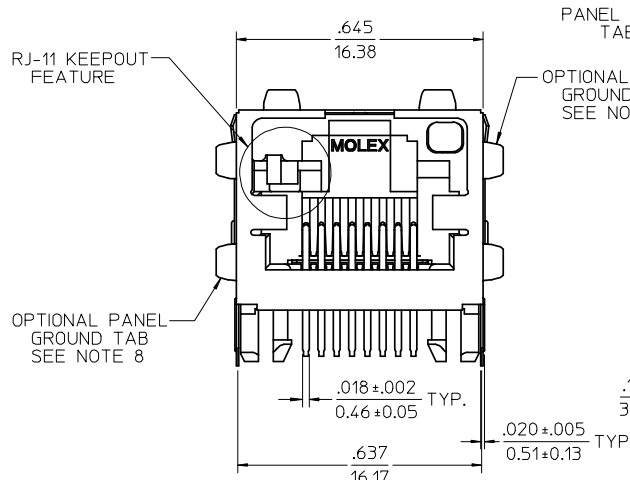
PC BOARD LAYOUT  
COMPONENT SIDE OF BOARD  
RECOMMENDED PCB THICKNESS: .062/1.57

- NOTES:
- MATERIAL:  
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE  
LIGHT PIPES:  
POLYCARBONATE-WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR 1/8 REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)  
POLYSULFONE-MAXIMUM REFLOW TEMPERATURE: 400°F (205°C)
  - FINISH:  
TERMINALS:  
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES (1.27 MICROMETERS) MIN.,  
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  - CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
  - FOR CROSS REFERENCE OF RECOMMENDED LED'S, SEE MOLEX WEBSITE.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

ASSEMBLY MATERIAL NUMBER	LIGHT PIPE MATERIAL
446201004	POLYCARBONATE
446201005	POLYSULFONE

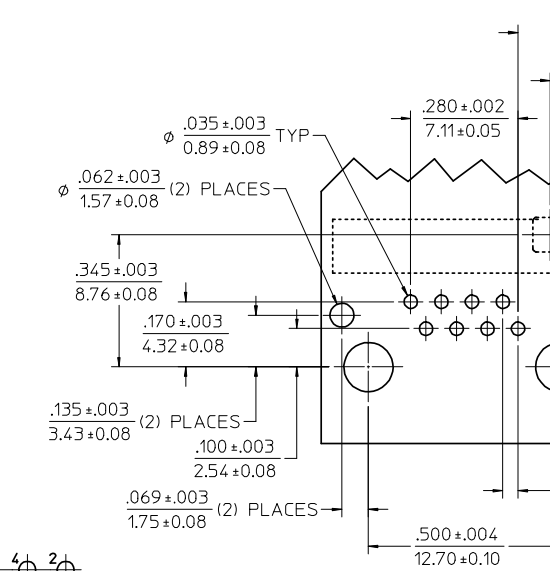
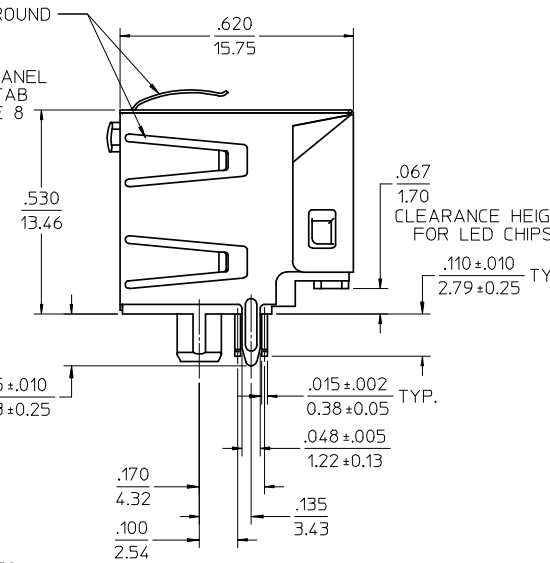
<b>ADD NOTE 5 &amp; 9</b> EC NO: UCP2008-0965 DRWN: BELL 2007/11/08 CHKD: SCHMIDT 2007/12/04 APPR: FSMITH 2007/12/05 D2	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>IN/MM</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	mm INCH DRAWN BY <b>MKAMAR</b>	DATE <b>00/03/07</b>	TITLE <b>RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPUT FEATURE</b>	<b>MOLEX MOLEX INCORPORATED</b>			
		ANGULAR ± 1/2°	CHECKED BY <b>MKAMAR</b>	DATE <b>00/03/07</b>					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY <b>JROBERTS</b>	DATE <b>00/03/07</b>	MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. <b>SD-44620-001</b>	SHEET NO. <b>3 OF 4</b>		

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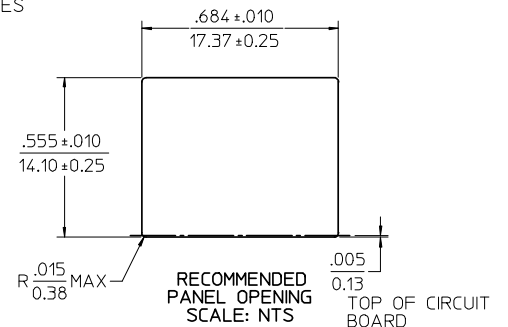
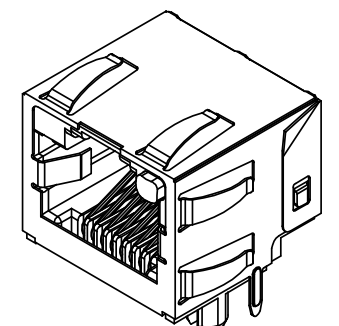
RECOMMENDED SMT LED SOLDER PATTERN SCALE 10:1 (SEE NOTE 9)

TYPICAL PC TERMINAL HOLE LAYOUT SCALE 5:1



PC BOARD LAYOUT COMPONENT SIDE OF BOARD RECOMMENDED PCB THICKNESS: .062/1.57

- NOTES:
- MATERIAL:  
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE  
SHIELD: BRASS  
LIGHT PIPES: POLYCARBONATE-WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)  
POLYSULFONE-MAXIMUM REFLOW TEMPERATURE: 400°F (205°C)
  - FINISH:  
TERMINALS:  
\*SELECT GOLD IN CONTACT AREA: 50 MICROINCHES (1.27 MICROMETERS) MIN.  
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  - PACKAGING SPECIFICATION: CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-43860-005.
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  - FOR CROSS REFERENCE OF RECOMMENDED LED'S, SEE MOLEX WEBSITE.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



RECOMMENDED PANEL OPENING SCALE: NTS TOP OF CIRCUIT BOARD

ASSEMBLY MATERIAL NUMBER	LIGHT PIPE MATERIAL	PANEL GROUND TABS
446201006	POLYCARBONATE	ALL
446201007	POLYCARBONATE	SEE NOTE 8
446201008	POLYSULFONE	ALL
446201009	POLYSULFONE	SEE NOTE 8

ADD NOTE 5 & 10	QUALITY SYMBOLS
EC NO: UCP2008-0965	▽=0
DRWN: BELL 2007/11/08	▽=0
CHKD: SCHMIDT 2007/12/04	
APPR: FSMITH 2007/12/05	
REV	DESCRIPTION
D2	

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	
	mm	INCH
4 PLACES ± --- ± ---	IN/MM	DRAWN BY DATE
3 PLACES ± --- ± ---		DATE
2 PLACES ± --- ± ---		CHECKED BY DATE
1 PLACE ± --- ± ---		DATE
ANGULAR ±1/2°		APPROVED BY DATE
		DATE
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.
		SEE CHART
		DOCUMENT NO.
		SD-44620-001
		SHEET NO.
		4 OF 4

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	INCH	THIRD ANGLE PROJECTION
MOLEX INCORPORATED		
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