

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

**Part Number:** [0446201004](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Low Profile, Inverted, 8/8

**Documents:**

[3D Model](#) [Product Specification PS-43860-003 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Application Specification \(PDF\)](#)

**Agency Certification**

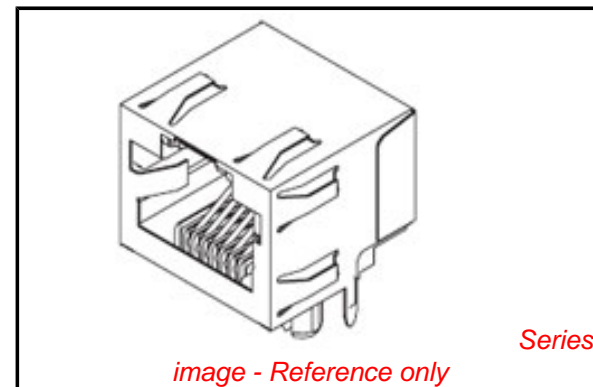
UL E107635

**General**

Product Family Modular Jacks/Plugs  
 Series [44620](#)  
 Comments RJ-11 Keepout Feature, Lightpipes  
 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, Clear  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Inverted / Top Latch Yes  
 Keying to Mating Part None  
 Lightpipes/LEDs Lightpipes  
 Material - Metal Brass, Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic, Polycarbonate  
 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 Tube  
 Panel Mount Without Flange  
 Pitch - Mating Interface (in) 0.040 In  
 Pitch - Mating Interface (mm) 1.02 mm  
 Pitch - Term. Interface (in) 0.040 In  
 Pitch - Term. Interface (mm) 1.02 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 8/8  
 Surface Mount Compatible (SMC) No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Through Hole



**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**

[44620Series](#)

**Mates With**

FCC 68 Plugs

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

**Solder Process Data**

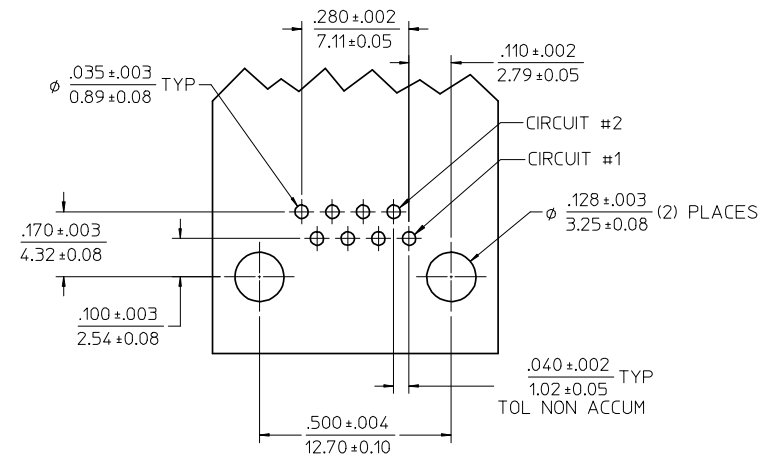
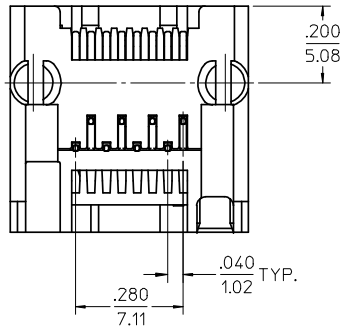
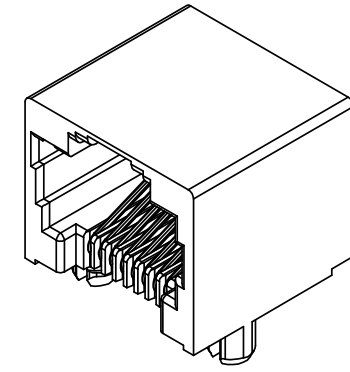
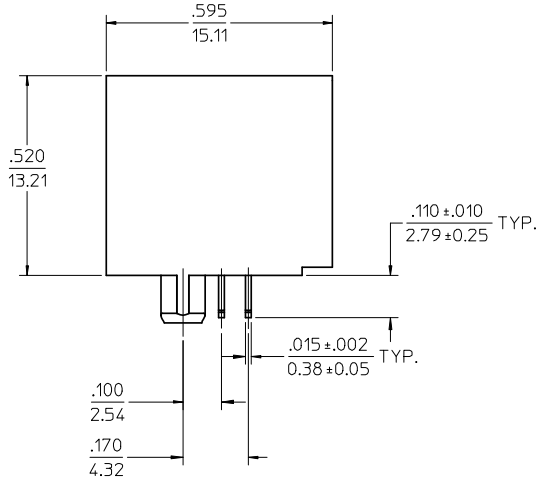
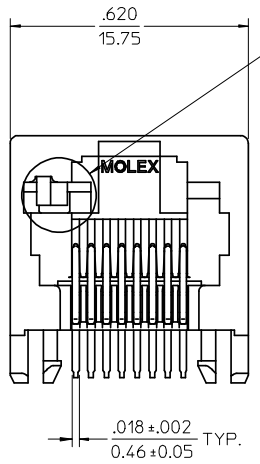
Lead-free Process Capability	Wave Capable (TH only)
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**Material Info****Reference - Drawing Numbers**

Application Specification	AS-43860-001
Packaging Specification	PK-43860-004
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

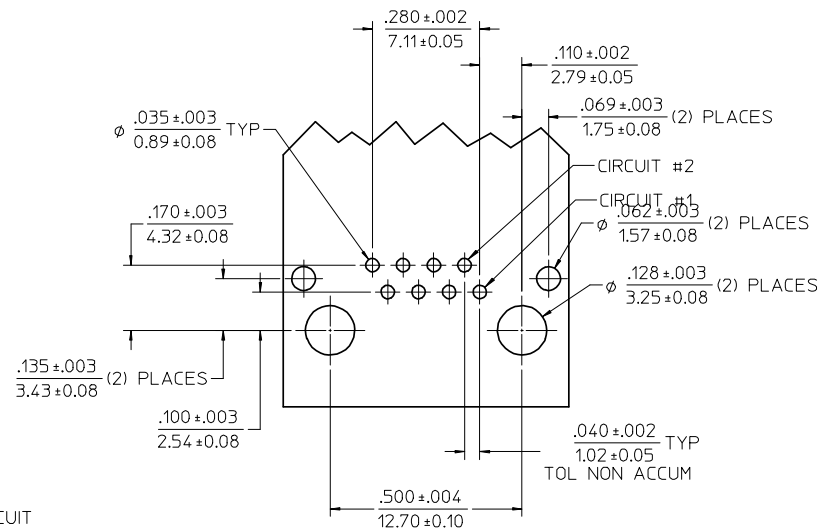
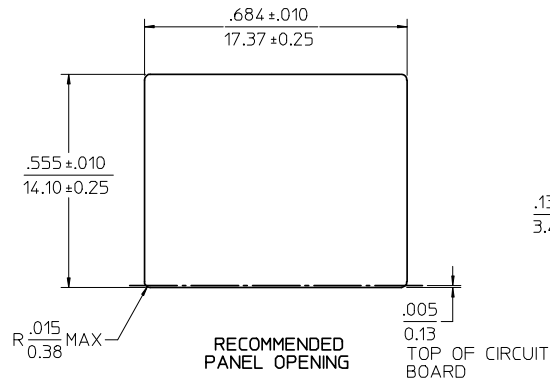
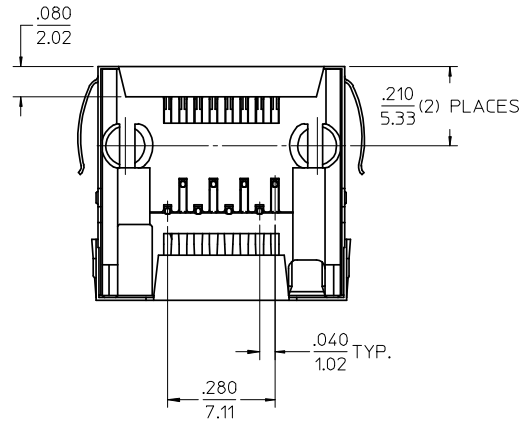
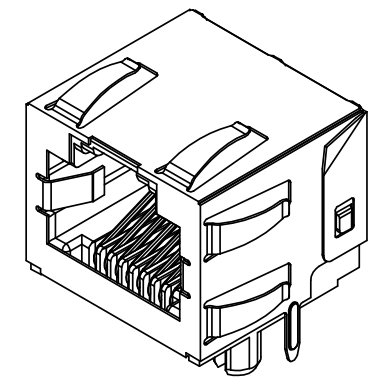
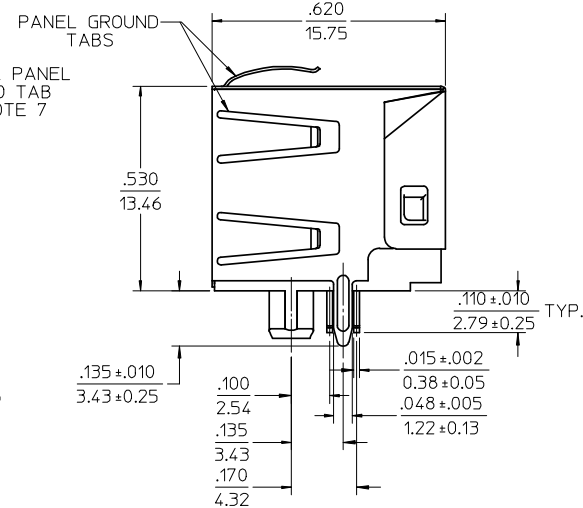
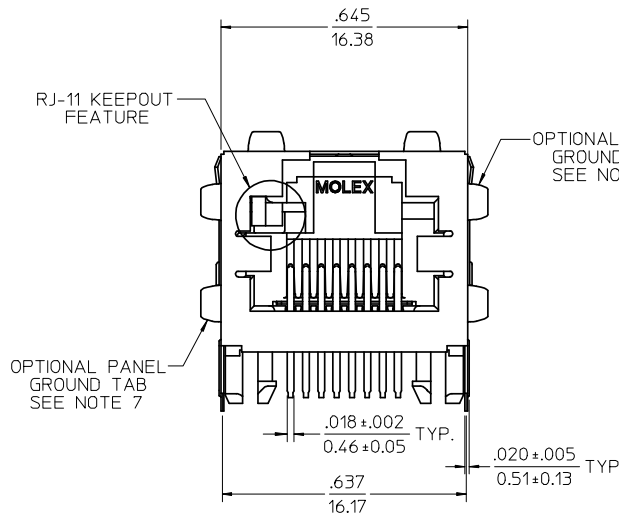
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



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 KEEPUT FEATURE	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		$\nabla=0$ $\nabla=0$	mm INCH	IN/MM	4:1	INCH	
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE MKAMAR 00/03/07 CHECKED BY DATE MKAMAR 00/03/07 APPROVED BY DATE JROBERTS 00/03/07	TITLE RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPUT FEATURE		
			ANGULAR ±1/2°	MATERIAL NO. 446200001 SIZE C	DOCUMENT NO. SD-44620-001	SHEET NO. 1 OF 4	
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				

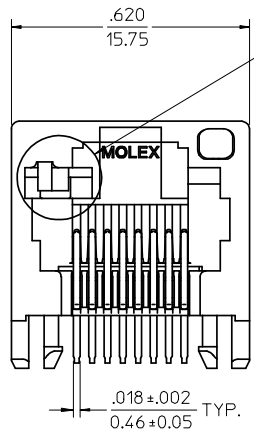


PC BOARD LAYOUT  
COMPONENT SIDE OF BOARD  
RECOMMENDED PCB THICKNESS: .062/1.57

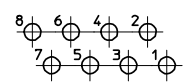
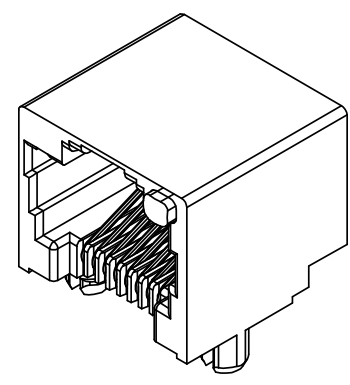
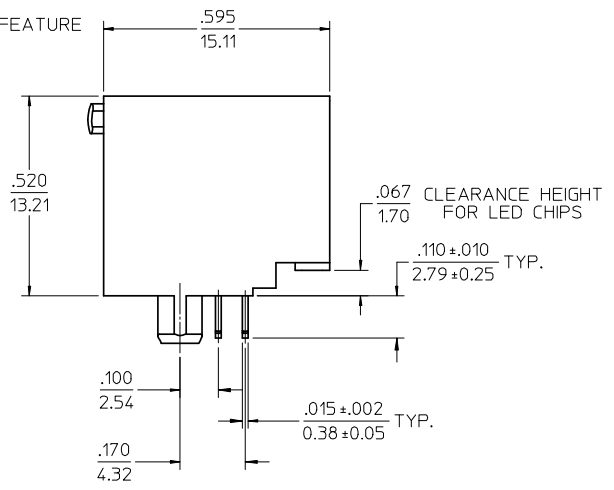
- NOTES:
- MATERIAL:  
HOUSING: NYLON(IPA), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE  
SHIELD: BRASS
  - FINISH:  
TERMINALS:  
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES (1.27 MICROMETERS) MIN.,  
\*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES (2.54 MICROMETERS) MIN.,  
WITH 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.
  - PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-43860-003.
  - PACKAGING SPECIFICATION:  
CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX  
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

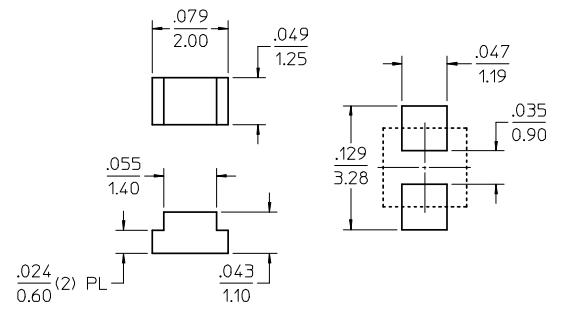
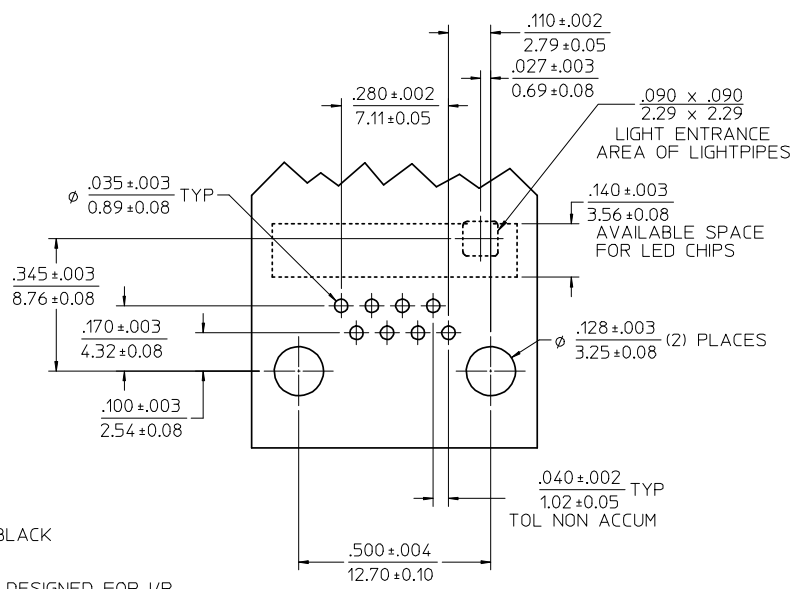
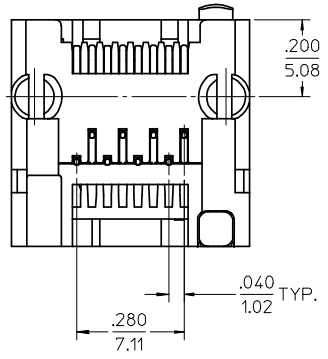
<b>ADD NOTE 8</b> EC NO: UCP2008-0965 DRWN: BELL 2007/11/08 CHKD: LSCM/DT 2007/12/04 APPR: FSM/TH 2007/12/05 REV: DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>2 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>1 PLACE ±</td> <td>---</td> <td>---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES ±	---	---	3 PLACES ±	---	---	2 PLACES ±	---	---	1 PLACE ±	---	---	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES ±	---	---																		
	3 PLACES ±	---	---																		
2 PLACES ±	---	---																			
1 PLACE ±	---	---																			
DRAWN BY MKAMAR		DATE 00/03/07		RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE																	
CHECKED BY MKAMAR		DATE 00/03/07																			
APPROVED BY JROBERTS		DATE 00/03/07		MOLEX INCORPORATED																	
MATERIAL NO. SEE CHART		DOCUMENT NO. SD-44620-001																			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C		SHEET NO. 2 OF 4																	
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RJ-11 KEEPUT FEATURE



TYPICAL PC TERMINAL HOLE LAYOUT  
SCALE 5:1



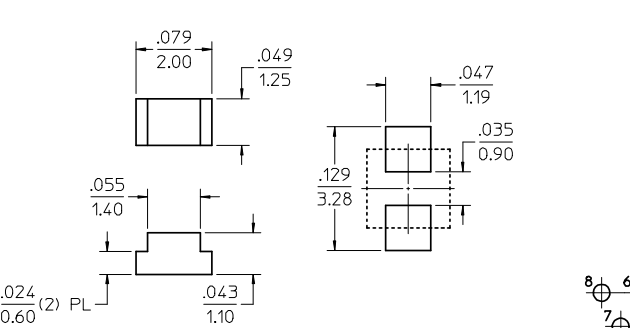
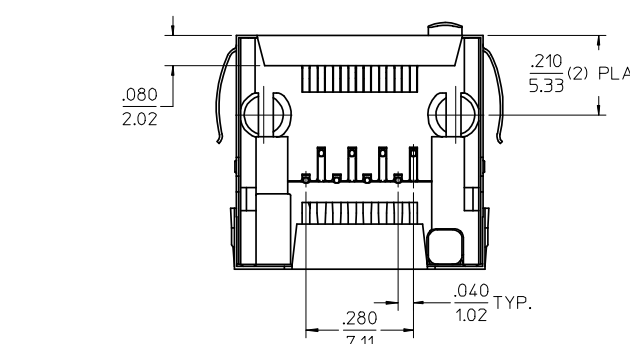
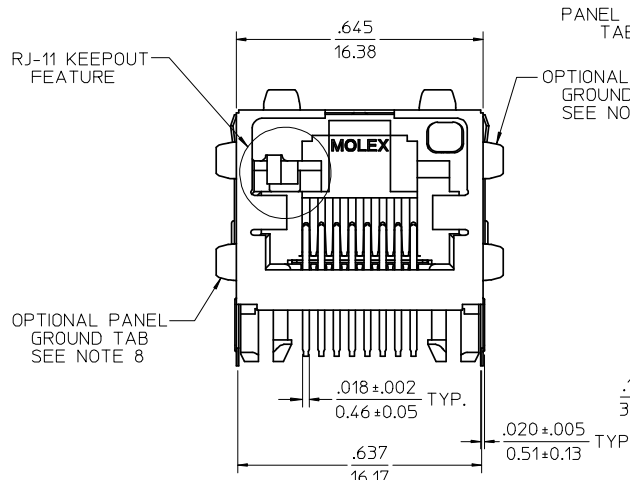
RECOMMENDED SMT  
LED SOLDER PATTERN  
SCALE 10:1  
(SEE NOTE 8)

- 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/ 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.,  
\*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES (2.54 MICROMETERS) MIN.,  
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  - APPLICATION SPECIFICATION: AS-43860-001.
  - ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
  - 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.

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

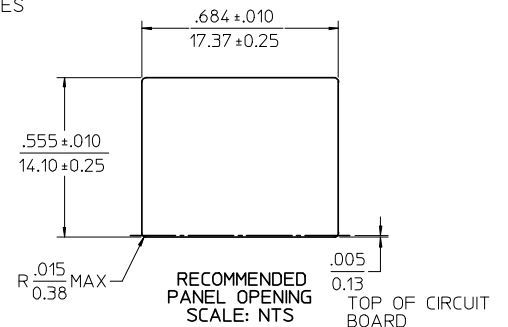
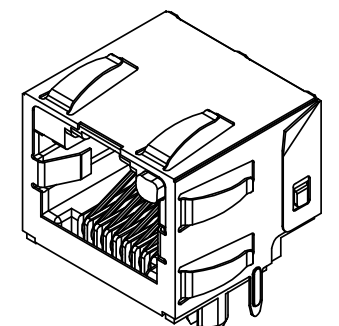
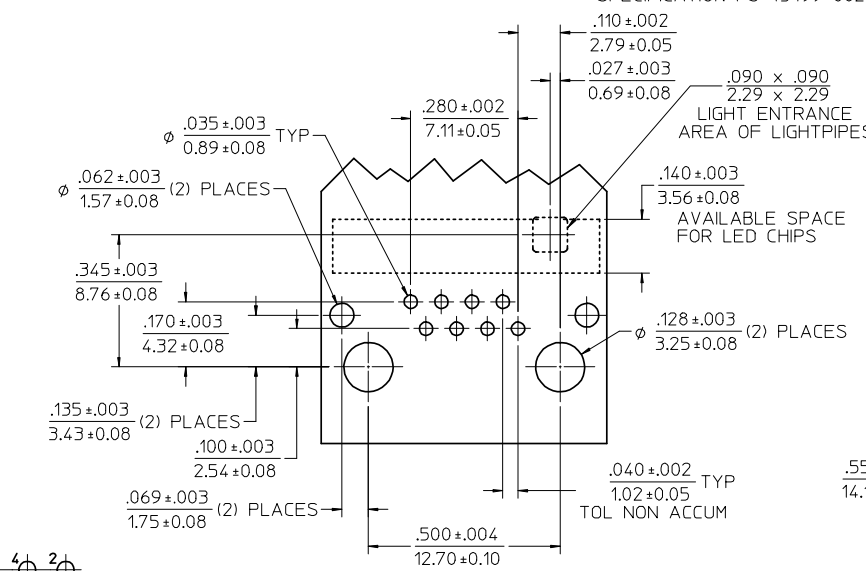
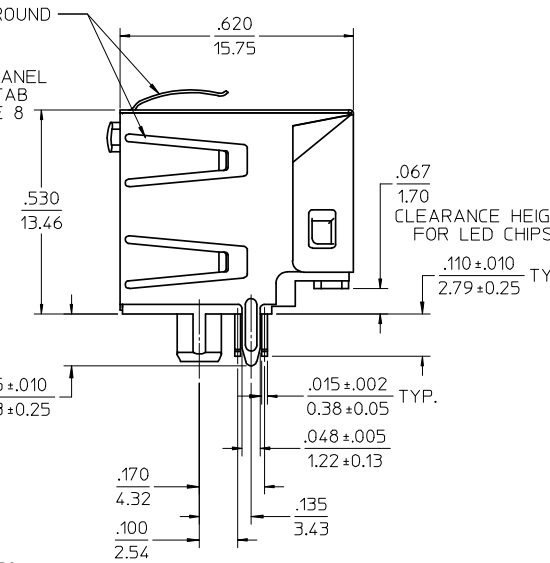
ASSEMBLY MATERIAL NUMBER	LIGHT PIPE MATERIAL
446201004	POLYCARBONATE
446201005	POLYSULFONE

<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 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 KEEPUT FEATURE</b>					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE CHART</b>		DOCUMENT NO. <b>SD-44620-001</b>		SHEET NO. <b>3 OF 4</b>	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



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

TYPICAL PC TERMINAL HOLE LAYOUT SCALE 5:1



- 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.  
\*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.
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  - PACKAGING SPECIFICATION: CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-43860-005.
  - APPLICATION SPECIFICATION: AS-43860-001
  - 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.
  - 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	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)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± ---	± ---
1 PLACE ± ---	± ---
ANGULAR ±1/2°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	
IN/MM	
DRAWN BY	DATE
MKAMAR	00/03/07
CHECKED BY	DATE
MKAMAR	00/03/07
APPROVED BY	DATE
JROBERTS	00/03/07
MATERIAL NO.	DOCUMENT NO.
SEE CHART	SD-44620-001

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	INCH	

RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE

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SHEET NO. 4 OF 4