

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

**Part Number:** [043860002](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Low Profile, Inverted, 6/6

**Documents:**

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

**Agency Certification**

CSA	LR19980
UL	E107635

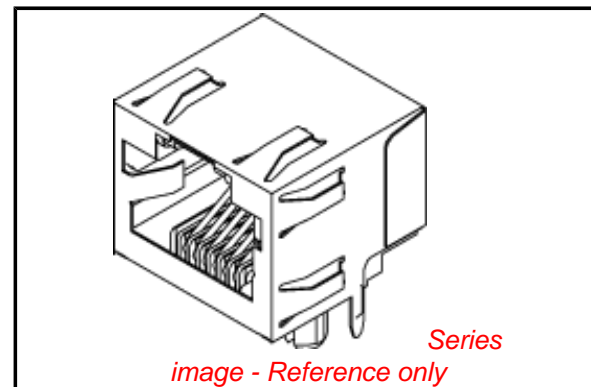
**General**

Product Family	Modular Jacks/Plugs
Series	<a href="#">43860</a>
Component Type	PCB Jack
Magnetic	No
Overview	<a href="#">modular_plugs_jacks</a>
Performance Category	3
Power over Ethernet (PoE)	N/A
Product Name	RJ11

**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	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	Tube
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating 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	6/6
Surface Mount Compatible (SMC)	No
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**

[43860Series](#)

**Mates With**

FCC 68 Plugs

Current - Maximum per Contact	1.5A
Shielded	No
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**

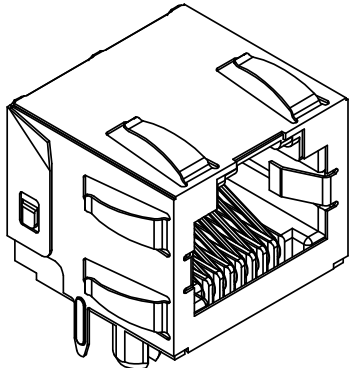
#### **Reference - Drawing Numbers**

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

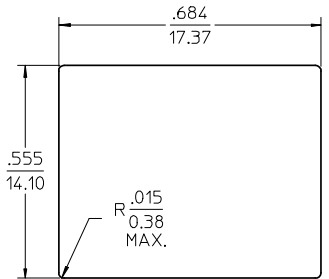
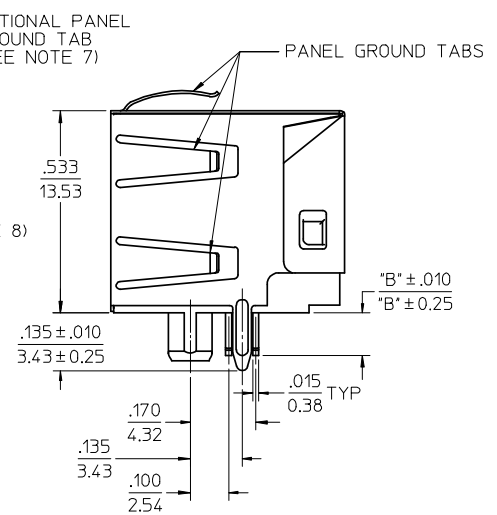
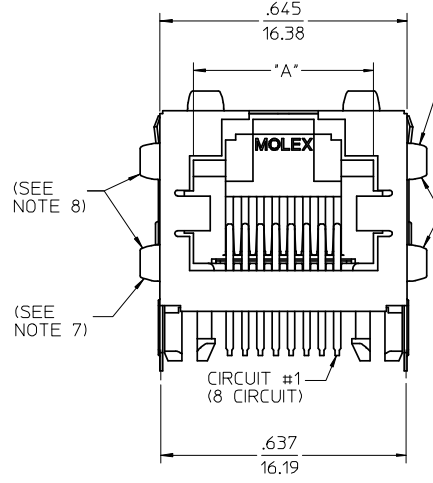
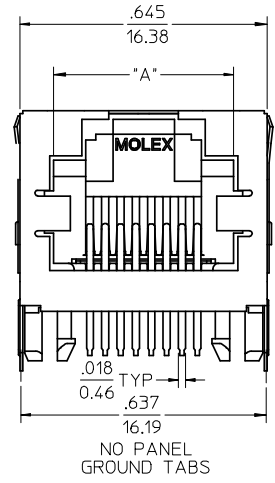
This document was generated on 06/07/2010

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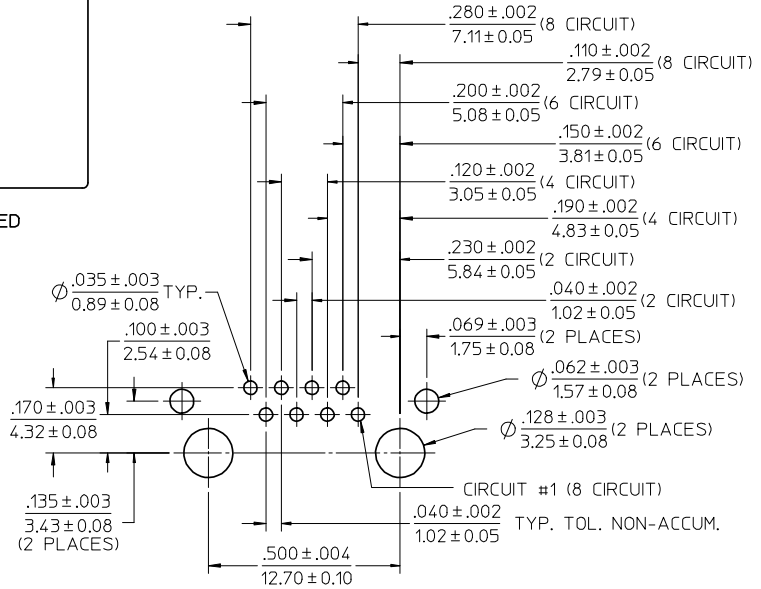




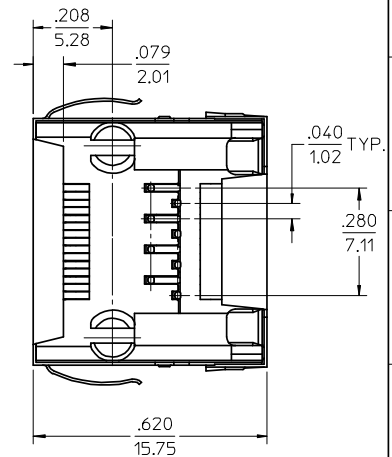
- NOTES:
- MATERIAL:  
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0,  
COLOR: BLACK  
TERMINALS: PHOSPHOR BRONZE  
SHIELD: BRASS
  - FINISH:  
TERMINALS:  
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES/  
1.27 MICROMETERS MIN.  
\*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES/  
2.54 MICROMETERS MIN.,  
WITH 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: PS-43860-003.
  - PACKAGING SPECIFICATION:  
CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS  
PER MOLEX PACKAGING SPECIFICATION PK-43860-005.  
43860-5025 CONNECTOR ASSEMBLIES PACKAGED IN TAPE AND  
REEL PER MOLEX PACKAGING SPECIFICATION PK-70873-700\*
  - 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.
  - AVAILABLE WITH TOP PANEL GROUND TABS ONLY, PER THE  
ASSEMBLY MATERIAL NUMBER TABLE.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC  
SPECIFICATION PS-45499-002.



RECOMMENDED  
PANEL  
OPENING



PC BOARD LAYOUT  
COMPONENT SIDE OF BOARD  
RECOMMENDED PCB THICKNESS .062 ± .005/1.57 ± 0.13

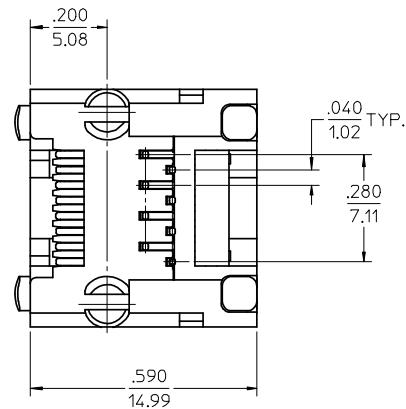
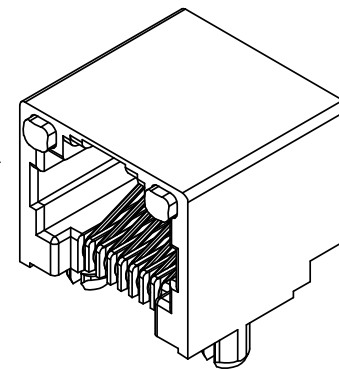
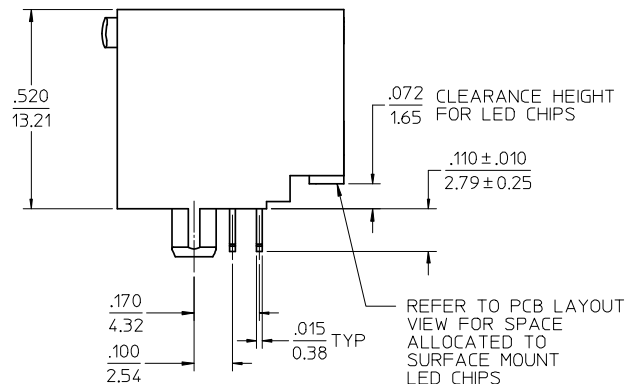
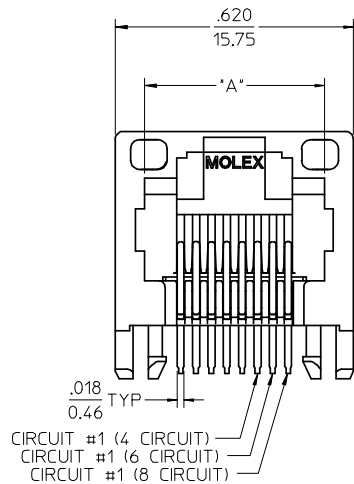


ASSEMBLY MAT. NUM.	CONNECTOR SIZE	DIM "A"	DIM "B"	CIRCUITS	PANEL GROUND TABS	PACKAGING OPTION
43860-0004	8	.469/11.91	.110/2.79	8	ALL	TRAY
43860-2004	8	.469/11.91	.080/2.03	8	ALL	TRAY
43860-0005	6	.389/9.88	.110/2.79	6	ALL	TRAY
43860-0006	6	.389/9.88	.110/2.79	4	ALL	TRAY
43860-0013	8	.469/11.91	.110/2.79	8	SEE NOTE #7	TRAY
43860-0014	6	.389/9.88	.110/2.79	6	SEE NOTE #7	TRAY
43860-0015	6	.389/9.88	.110/2.79	4	SEE NOTE #7	TRAY
43860-0024	6	.389/9.88	.110/2.79	2	ALL	TRAY
43860-0025	8	.469/11.91	.110/2.79	8	NONE	TRAY
43860-0026	6	.389/9.88	.110/2.79	6	NONE	TRAY
43860-0027	6	.389/9.88	.110/2.79	4	NONE	TRAY
43860-0031	8	.469/11.91	.110/2.79	8	SEE NOTE #8	TRAY
43860-5025	8	.469/11.91	.110/2.79	8	NONE	TAPE

ADD 43860-5025 EC NO: UCP2008-3111 DRAWN: SCHMIDT 2008/06/20 CHKD: JEBEL 2008/06/27 APPR: FSM/TH 2008/07/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			IN/MM	4:1	INCH	DRAWN BY DATE TALEND 1997/02/13 CHECKED BY DATE ROBERTS 1997/03/03 APPROVED BY DATE FRY 1997/03/04	TITLE INVERTED MODULAR JACK ASSEMBLY
				MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
				SEE CHART	SD-43860-001	2 OF 5	

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

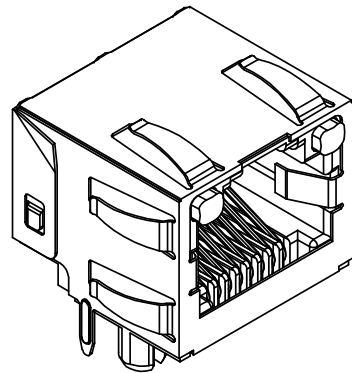


NOTES:

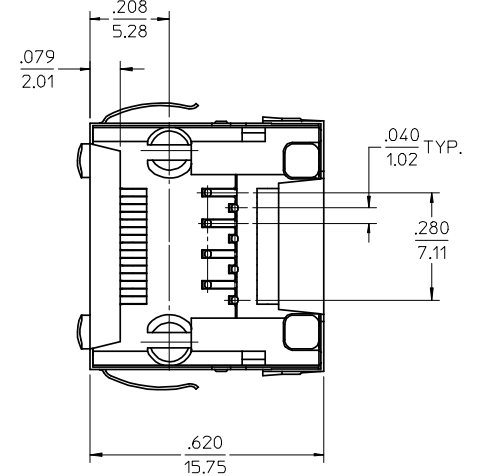
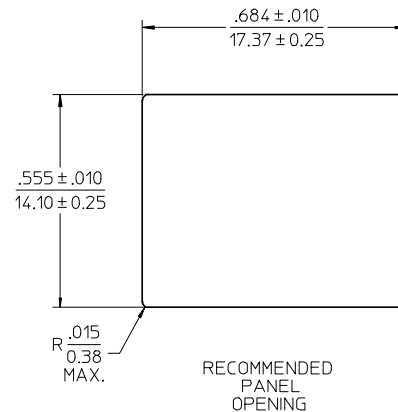
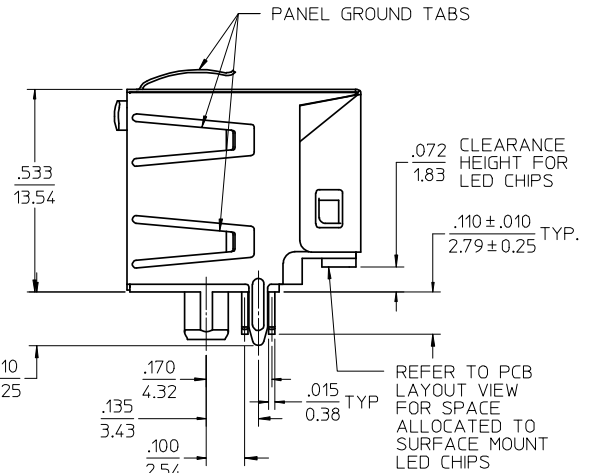
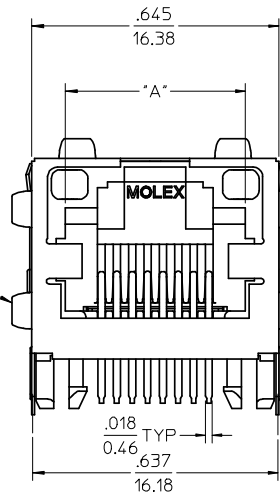
- 1) MATERIAL:  
 HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK  
 TERMINALS: PHOSPHOR BRONZE  
 LIGHT PIPES: POLYCARBONATE - WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)  
 POLYSULFONE - MAXIMUM REFLOW TEMPERATURE 400°F (205°C)
- 2) FINISH:  
 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) APPLICATION SPECIFICATION: AS-43860-001
- 6) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
- 7) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
- 8) REFER TO SHEET (5) OF (5) FOR RECOMMENDED PCB LAYOUT.
- 9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

ASSEMBLY MAT. NUM.	LIGHT PIPE MATERIAL	CONNECTOR SIZE	DIM "A"	CIRCUITS
43860-0007	POLYCARBONATE	8	.469/11.91	8
43860-0008	POLYCARBONATE	6	.389/9.88	6
43860-0009	POLYCARBONATE	6	.389/9.88	4
43860-0021	POLYSULFONE	8	.469/11.91	8
43860-0022	POLYSULFONE	6	.389/9.88	6
43860-0023	POLYSULFONE	6	.389/9.88	4

SEE SHEET 1 EC NO: UCP2008-3111 DRWNL: SCHMIDT CHKD: JEBEL APPR: FSMITH 2008/06/20 2008/06/27 2008/07/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION																	
		<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <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> </tbody> </table>			mm	INCH	4 PLACES	± .010	± .0004	3 PLACES	± .010	± .0004	2 PLACES	± 0.25	± .010	1 PLACE	± .010	± .0004	DRAWN BY TALEND		DATE 1997/02/13	TITLE INVERTED MODULAR JACK ASSEMBLY			
			mm	INCH																					
		4 PLACES	± .010	± .0004																					
3 PLACES	± .010	± .0004																							
2 PLACES	± 0.25	± .010																							
1 PLACE	± .010	± .0004																							
CHECKED BY ROBERTS		DATE 1997/03/03																							
APPROVED BY FRY		DATE 1997/03/04	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43860-001	SHEET NO. 3 OF 5		MOLEX INCORPORATED																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					



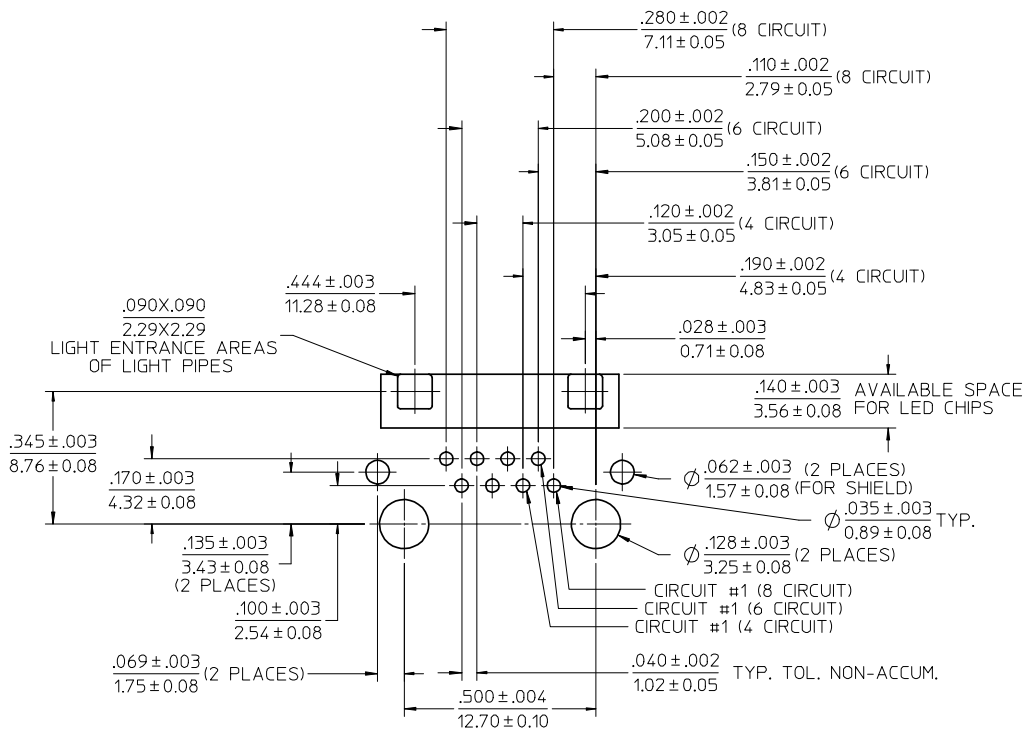
OPTIONAL PANEL GROUND TAB (SEE NOTE 8)



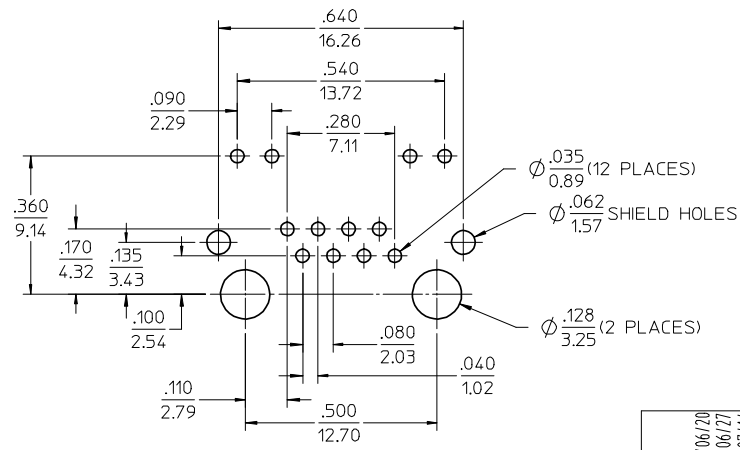
- NOTES:
- MATERIAL:
    - HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
    - TERMINALS: PHOSPHOR BRONZE
    - SHIELD: BRASS
    - LIGHT PIPES:
      - POLYCARBONATE - WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)
      - POLYSULFONE - MAXIMUM 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 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.
  - 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.
  - REFER TO SHEET (5) OF (5) FOR RECOMMENDED PCB LAYOUT.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

ASSEMBLY MAT. NUM.	LIGHT PIPE MATERIAL	CONNECTOR SIZE	DIM "A"	CIRCUITS	PANEL GROUND TABS
43860-0010	POLYCARBONATE	8	.469/11.91	8	ALL
43860-0011	POLYCARBONATE	6	.389/9.88	6	ALL
43860-0012	POLYCARBONATE	6	.389/9.88	4	ALL
43860-0016	POLYCARBONATE	8	.469/11.91	8	SEE NOTE #8
43860-0017	POLYCARBONATE	6	.389/9.88	6	SEE NOTE #8
43860-0018	POLYCARBONATE	6	.389/9.88	4	SEE NOTE #8
43860-1010	POLYSULFONE	8	.469/11.91	8	ALL
43860-1011	POLYSULFONE	6	.389/9.88	6	ALL
43860-1012	POLYSULFONE	6	.389/9.88	4	ALL
43860-1016	POLYSULFONE	8	.469/11.91	8	SEE NOTE #8
43860-1017	POLYSULFONE	6	.389/9.88	6	SEE NOTE #8
43860-1018	POLYSULFONE	6	.389/9.88	4	SEE NOTE #8

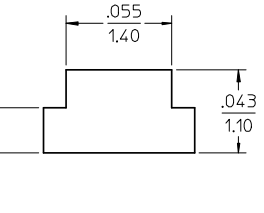
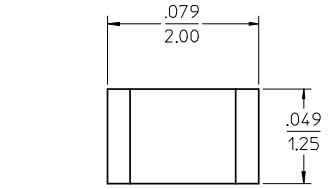
SEE SHEET 1 EC NO: UCP2008-3111 DRAWN: SCHMIDT 2008/06/20 CHKD: JEBEL 2008/06/27 APPR: FSM/TH 2008/07/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	DRAWN BY TALEND DATE 1997/02/13 CHECKED BY ROBERTS DATE 1997/03/03 APPROVED BY FRY DATE 1997/03/04	TITLE <b>INVERTED MODULAR JACK ASSEMBLY</b> MOLEX INCORPORATED	SHEET NO. 4 OF 5	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. SD-43860-001	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



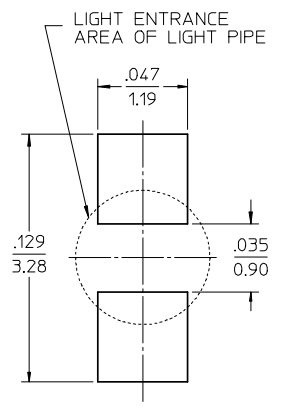
MOLEX RECOMMENDED PC BOARD LAYOUT COMPONENT SIDE OF BOARD RECOMMENDED PCB THICKNESS .062±.005/1.57±0.13



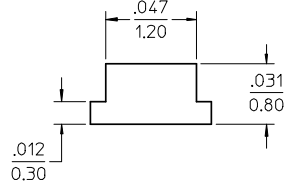
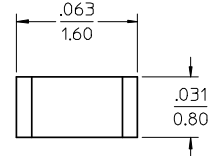
TYPICAL COMPETITION PCB LAYOUT WITH INTEGRAL LED'S (SHOWN FOR REFERENCE ONLY)



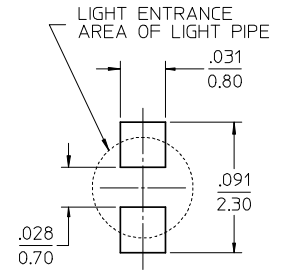
RECOMMENDED SMT 0805 LED DIMENSIONS SCALE 20:1 (SEE NOTE 1)



RECOMMENDED SMT 0805 LED SOLDER PATTERN SCALE 20:1 (SEE NOTE 1)



RECOMMENDED SMT 0603 LED DIMENSIONS SCALE 20:1 (SEE NOTE 1)



RECOMMENDED SMT 0603 LED SOLDER PATTERN SCALE 20:1 (SEE NOTE 1)

NOTES:  
1. FOR CROSS REFERENCE OF RECOMMENDED LED'S SEE MOLEX WEB SITE

SEE SHEET 1 EC NO: UCP2008-3111 DRAWN: SCHMIDT 2008/06/20 CHKD: JEBEL 2008/06/27 APPR: FSMITH 2008/07/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
H6	REV	DRAWN BY TALEND		DATE 1997/02/13		TITLE INVERTED MODULAR JACK ASSEMBLY				
		CHECKED BY ROBERTS		DATE 1997/03/03						
		APPROVED BY FRY		DATE 1997/03/04		MOLEX INCORPORATED DOCUMENT NO. SD-43860-001 SHEET NO. 5 OF 5				
		MATERIAL NO. SEE CHART								
		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				