

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0438600020](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, Inverted, 6/2

Documents:

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

Agency Certification

CSA LR19980
 UL E107635

General

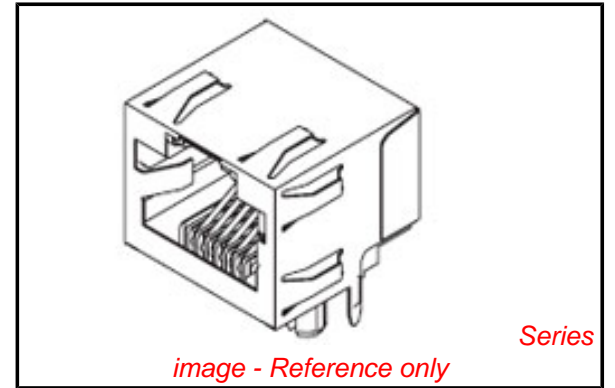
Product Family Modular Jacks/Plugs
 Series [43860](#)
 Component Type PCB Jack
 Magnetic No
 Overview [modular_plugs_jacks](#)
 Performance Category 3
 Power over Ethernet (PoE) N/A
 Product Name RJ11

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
 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 6/2
 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

Current - Maximum per Contact 1.5A
 Shielded No



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
 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

Voltage - Maximum

150V AC (RMS)

Solder Process Data

Lead-free Process Capability

Wave Capable (TH only)

Material Info

Reference - Drawing Numbers

Packaging Specification

Product Specification

PK-43860-004

PS-43860-003, RPS-43860-004, RPS-43860-007,

RPS-43860-008, RPS-43860-013

Sales Drawing

SD-43860-001

Test Summary

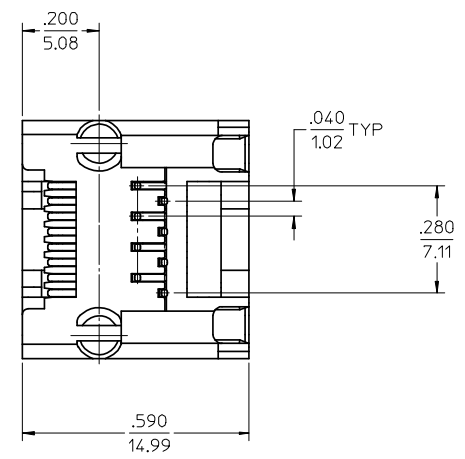
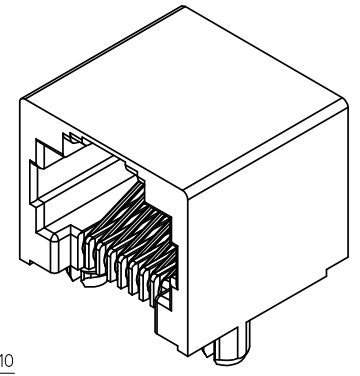
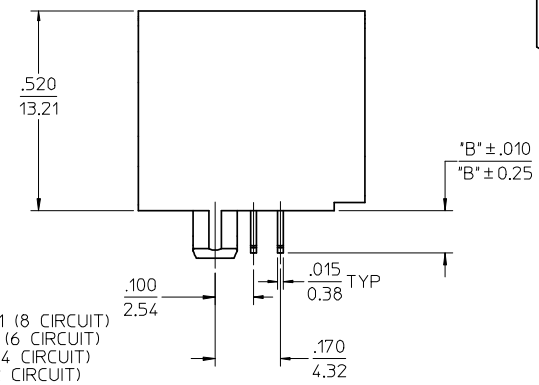
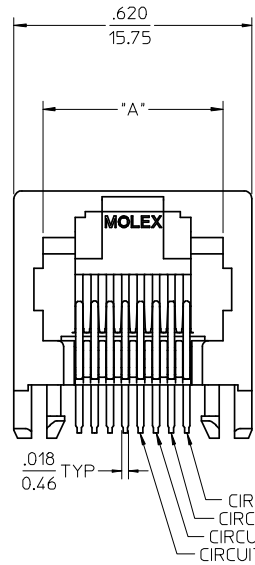
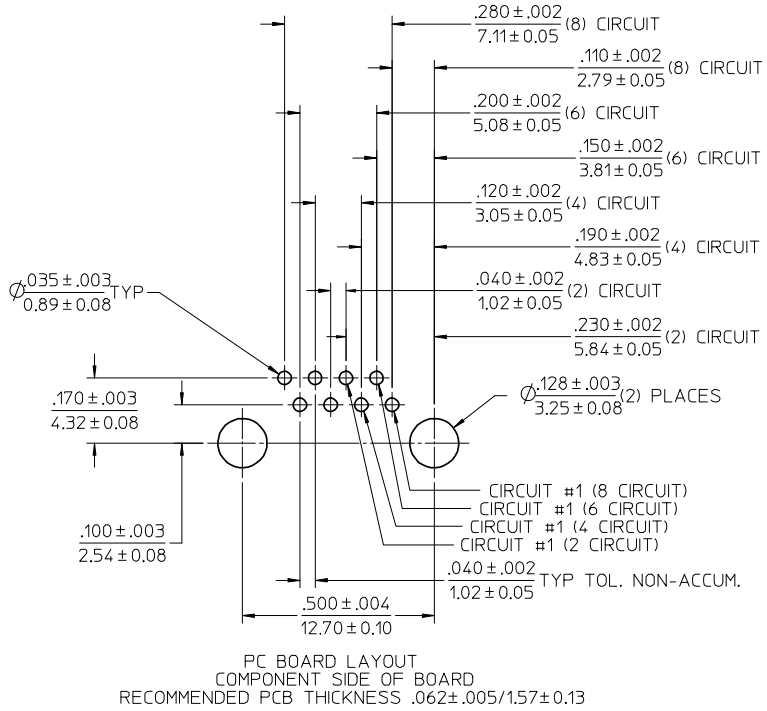
TS-43860-001

This document was generated on 06/07/2010

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NOTES:

- 1) MATERIAL:
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: SEE CHART
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.

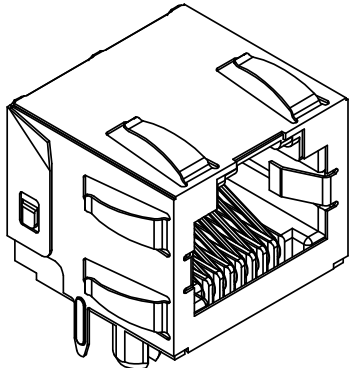


ASSEMBLY MAT. NUM.	CONNECTOR SIZE	DIM "A"	DIM "B"	CIRCUITS	HOUSING COLOR
43860-0001	8	.469/11.91	.110/2.79	8	BLACK
43860-2001	8	.469/11.91	.080/2.03	8	BLACK
43860-0002	6	.389/9.88	.110/2.79	6	BLACK
43860-0003	6	.389/9.88	.110/2.79	4	BLACK
43860-0019	8	.469/11.91	.110/2.79	4	BLACK
43860-0020	6	.389/9.88	.110/2.79	2	BLACK

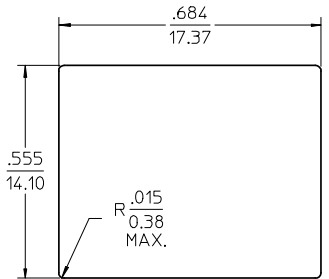
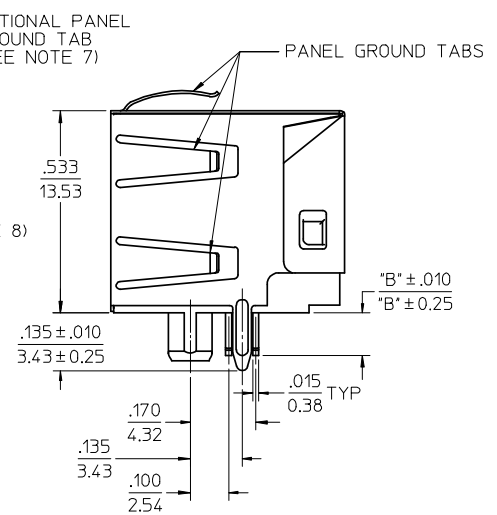
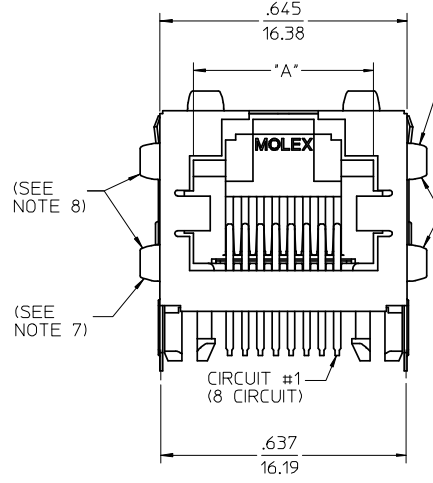
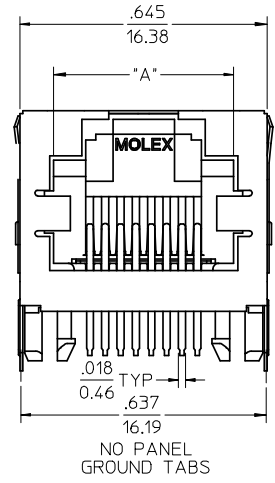
ADD PART #, SHT 2 EC NO: UCP2008-3111 DRAWN: SCHMIDT 2008/06/20 CHKD: BELL 2008/06/27 APPR: FSMITH 2008/07/14	QUALITY SYMBOLS
DESCRIPTION	
REV	H6

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
	4 PLACES ± ---	± ---
	3 PLACES ± ---	± .010
	2 PLACES ± 0.25	± ---
	1 PLACE ± ---	± ---
ANGULAR ± 1/2°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

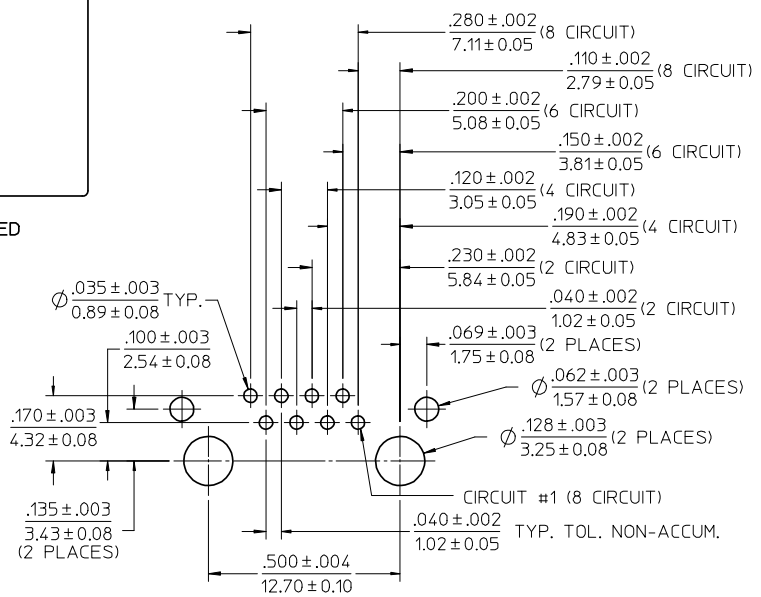
DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
IN/MM		4:1	INCH	
DRAWN BY	DATE	TITLE		
TALEND	1997/02/13	INVERTED MODULAR JACK ASSEMBLY		
CHECKED BY	DATE	MOLEX INCORPORATED		
ROBERTS	1997/03/03	MATERIAL NO. SEE CHART		
APPROVED BY	DATE	DOCUMENT NO. SD-43860-001		
FRY	1997/03/04	SHEET NO. 1 OF 5		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



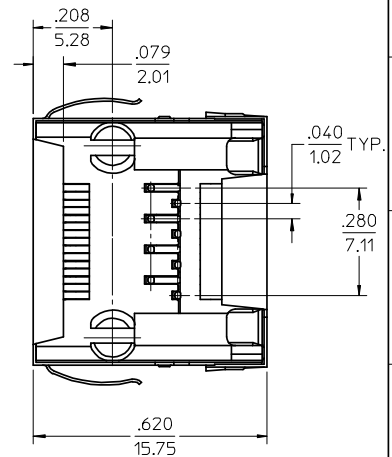
- NOTES:
 1) MATERIAL:
 HOUSING: NYLON(PA), GLASS FILLED, UL94V-0,
 COLOR: BLACK
 TERMINALS: PHOSPHOR BRONZE
 SHIELD: BRASS
 2) FINISH:
 TERMINALS:
 SELECT GOLD IN CONTACT AREA: 50 MICROINCHES/
 1.27 MICROMETERS MIN.
 *SELECT TIN IN PC TAIL AREA: 100 MICROINCHES/
 2.54 MICROMETERS MIN.,
 WITH OVERALL NICKEL UNDERPLATE: 50 MICROINCHES/
 1.27 MICROMETERS MIN.
 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: PS-43860-003.
 4) 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*
 5) ALL UNTOLERANCED DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
 6) CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
 7) AVAILABLE WITH THE (2) SPECIFIED PANEL GROUND TABS
 OMITTED FOR SIDE TO SIDE STACKABILITY, PER THE ASSEMBLY
 MATERIAL NUMBER TABLE.
 8) AVAILABLE WITH TOP PANEL GROUND TABS ONLY, PER THE
 ASSEMBLY MATERIAL NUMBER TABLE.
 9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC
 SPECIFICATION PS-45499-002.



RECOMMENDED
 PANEL
 OPENING

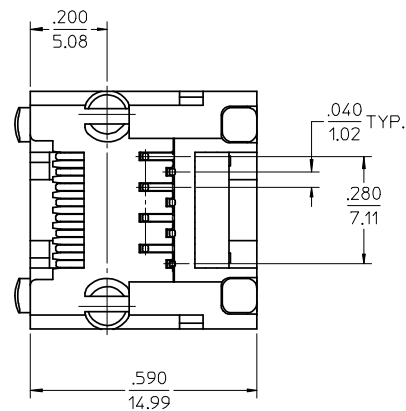
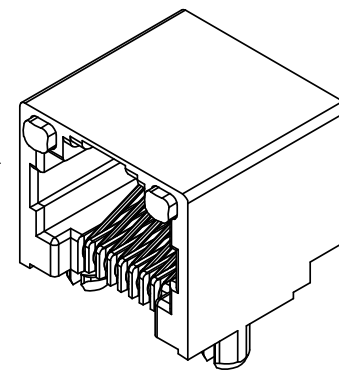
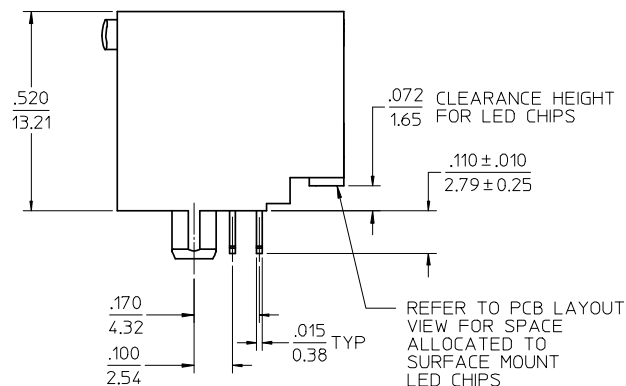
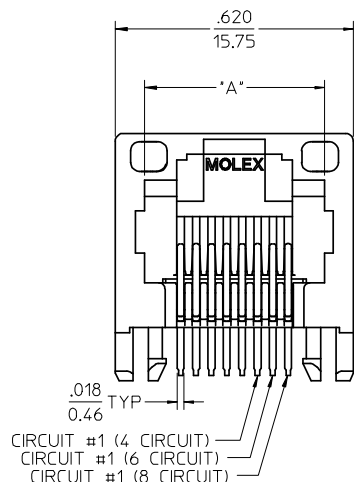


PC BOARD LAYOUT
 COMPONENT SIDE OF BOARD
 RECOMMENDED PCB THICKNESS .062 ± .005/1.57 ± 0.13



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 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE TALEND 1997/02/13 CHECKED BY DATE ROBERTS 1997/03/03 APPROVED BY DATE FRY 1997/03/04	SCALE 4:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE INVERTED MODULAR JACK ASSEMBLY	MATERIAL NO. SEE CHART DOCUMENT NO. SD-43860-001 SHEET NO. 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					
	MOLEX MOLEX INCORPORATED					

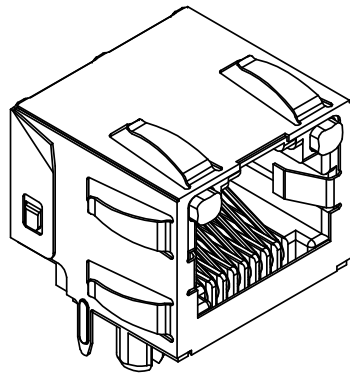


NOTES:

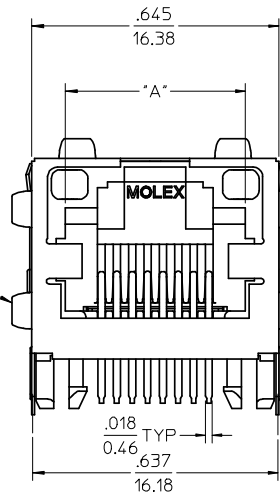
- 1) MATERIAL:
 HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
 TERMINALS: PHOSPHOR BRONZE
 LIGHT PIPES: POLYCARBONATE - WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)
 POLYSULFONE - MAXIMUM REFLOW TEMPERATURE 400°F (205°C)
- 2) FINISH:
 TERMINALS:
 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

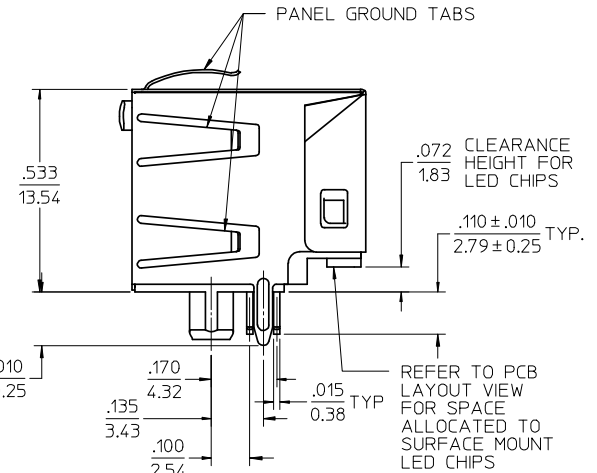
SEE SHEET 1 EC NO: UCP2008-3111 DRAWN: SCHMIDT CHKD: JEBEL APPR: FSMITH	2008/06/20 2008/06/27 2008/07/14	DESCRIPTION H6	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
			4 PLACES ± --- ± ---	DRAWN BY TALEND	DATE 1997/02/13	TITLE INVERTED MODULAR JACK ASSEMBLY		
			3 PLACES ± --- ± .010	CHECKED BY ROBERTS	DATE 1997/03/03	MOLEX MOLEX INCORPORATED		
			2 PLACES ± 0.25 ± ---	APPROVED BY FRY	DATE 1997/03/04	DOCUMENT NO. SD-43860-001	SHEET NO. 3 OF 5	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				ANGULAR ±1/2°	SEE CHART	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



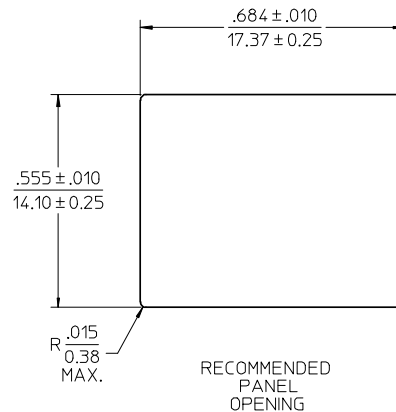
OPTIONAL PANEL GROUND TAB (SEE NOTE 8)



OPTIONAL PANEL GROUND TAB (SEE NOTE 8)



REFER TO PCB LAYOUT VIEW FOR SPACE ALLOCATED TO SURFACE MOUNT LED CHIPS

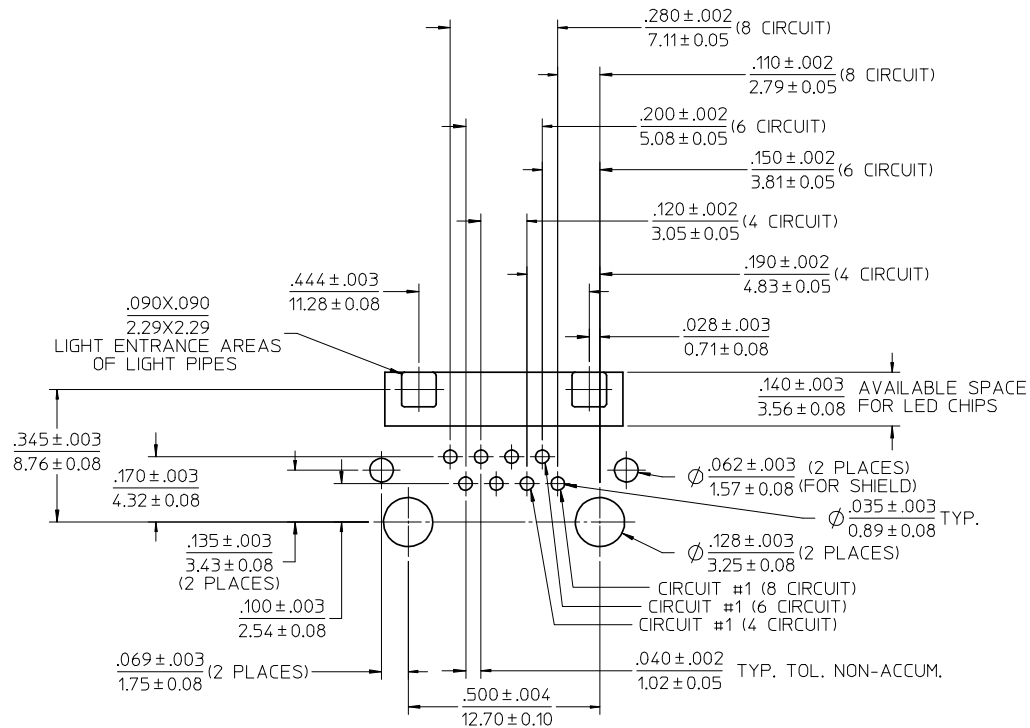


RECOMMENDED PANEL OPENING

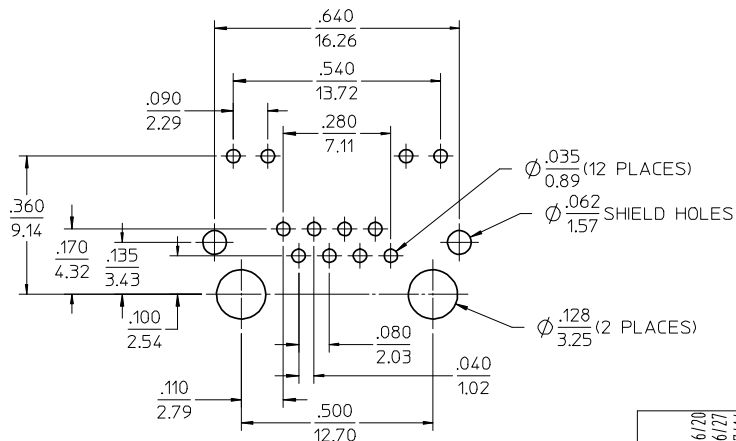
- NOTES:
- MATERIAL: HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS: PHOSPHOR BRONZE
SHIELD: BRASS
LIGHT PIPES: POLYCARBONATE - WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES), POLYSULFONE - MAXIMUM REFLOW TEMPERATURE 400° F (205° C)
 - 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

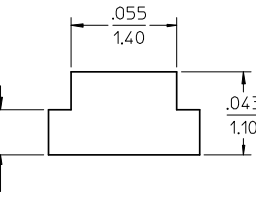
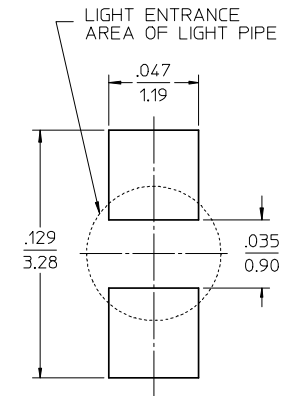
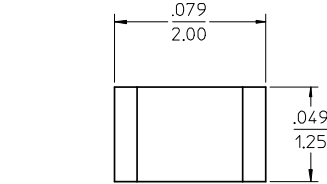
SEE SHEET 1 EC NO: UCP2008-3111 DRAWN: SCHMIDT 2008/06/20 CHKD: JEBEL 2008/06/27 APPR: FSM/TH 2008/07/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±</td> <td>---</td> <td>±---</td> </tr> <tr> <td>3 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>		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 ±	---	±---																			
3 PLACES ±	---	±.010																			
2 PLACES ±	0.25	±---																			
1 PLACE ±	---	±---																			
DRAWN BY TALEND	DATE 1997/02/13	CHECKED BY ROBERTS	DATE 1997/03/03	APPROVED BY FRY	DATE 1997/03/04	TITLE INVERTED MODULAR JACK ASSEMBLY															
MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43860-001		SHEET NO. 4 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																					



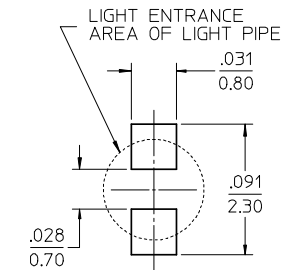
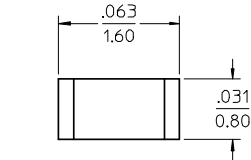
MOLEX RECOMMENDED
PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS .062±.005/1.57±0.13



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
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		
			mm	INCH	DRAWN BY TALEND	DATE 1997/02/13	TITLE INVERTED MODULAR JACK ASSEMBLY			
		4 PLACES ±	---	±	CHECKED BY ROBERTS	DATE 1997/03/03				
			APPROVED BY FRY	DATE 1997/03/04	MOLEX INCORPORATED					
		ANGULAR ±1/2°		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43860-001			SHEET NO. 5 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								