

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0438600010](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, Inverted, Shielded, All Panel Grounding Tabs, Lightpipes, 8/8

Documents:

Drawing (PDF)	Application Specification (PDF)
Packaging Specification (PDF)	Product Specification PS-43860-003 (PDF)
3D Model	RoHS Certificate of Compliance (PDF)

Agency Certification

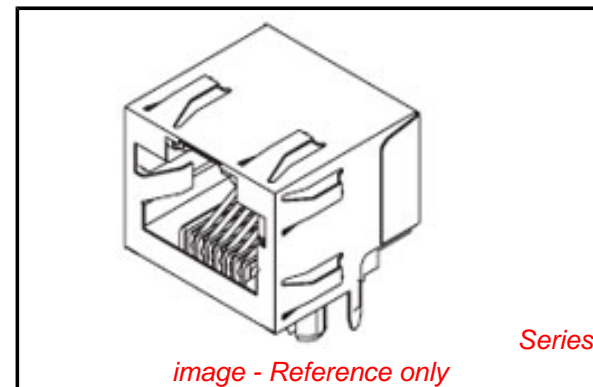
CSA	LR19980
UL	E107635

General

Product Family	Modular Jacks/Plugs
Series	43860
Comments	Lightpipes will withstand soldering temperature of 160 degrees C
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
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)	1.60 mm
Packaging Type	Tray
Panel Mount	With Flange
Pitch - Mating Interface (in)	0.040 In
Pitch - Mating 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 Halogen-Free

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.

China RoHS



Search Parts in this Series

[43860Series](#)

Mates With

FCC 68 Plugs

Waterproof / Dustproof	No
Wire/Cable Type	N/A
Electrical	
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

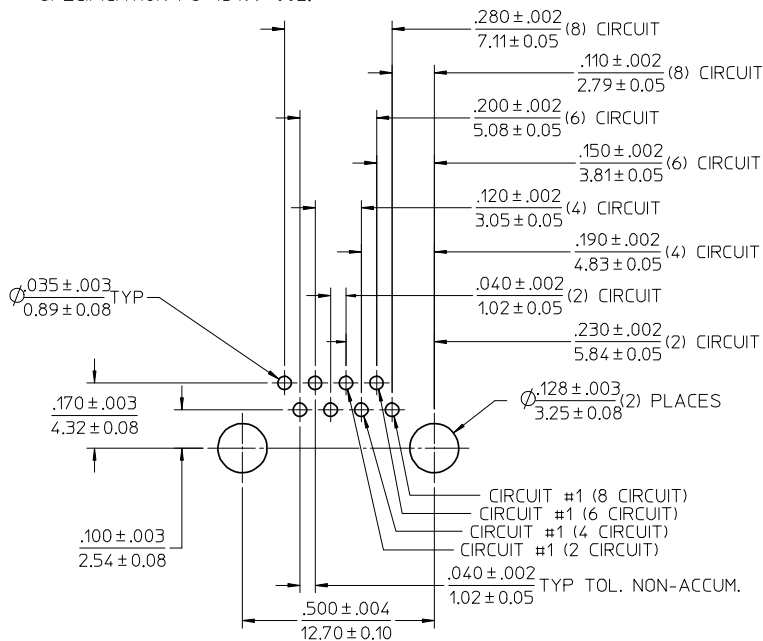
Application Specification	AS-43860-001
Packaging Specification	PK-43860-005
Product Specification	PS-43860-003, RPS-43860-004, RPS-43860-007, RPS-43860-008, RPS-43860-011, RPS-43860-012, RPS-43860-013
Sales Drawing	SD-43860-001
Test Summary	TS-43860-001

This document was generated on 06/07/2010

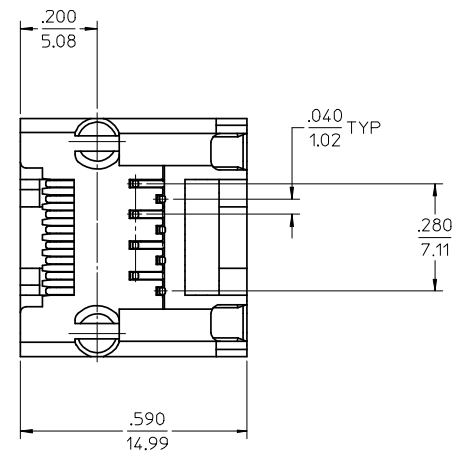
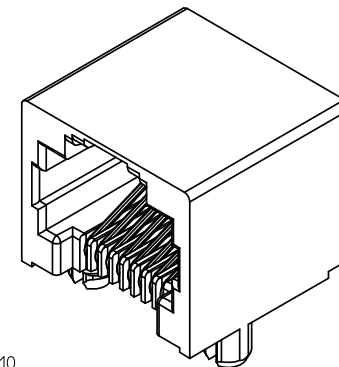
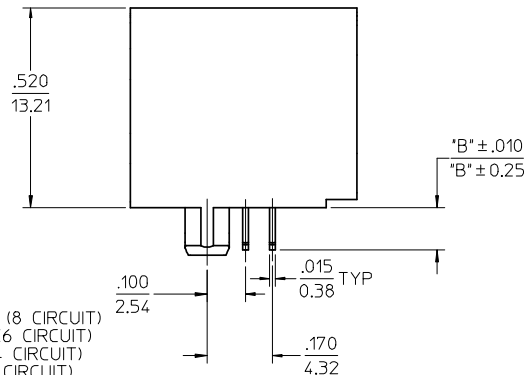
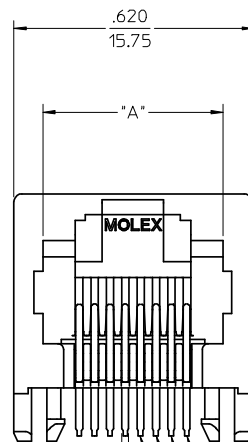
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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.



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



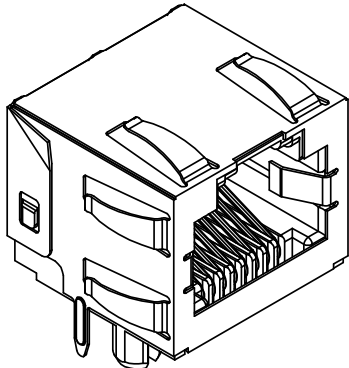
ASSEMBLY MAT. NUM.	CONNECTOR SIZE	DIM "A"	DIM "B"	CIRCUITS	HOUSING COLOR
43860-0001	8	.469/11.91	.110/2.79	8	BLACK
43860-2001	8	.469/11.91	.080/2.03	8	BLACK
43860-0002	6	.389/9.88	.110/2.79	6	BLACK
43860-0003	6	.389/9.88	.110/2.79	4	BLACK
43860-0019	8	.469/11.91	.110/2.79	4	BLACK
43860-0020	6	.389/9.88	.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
	<p>▽=0</p> <p>▽=0</p>
DESCRIPTION	
REV	H6

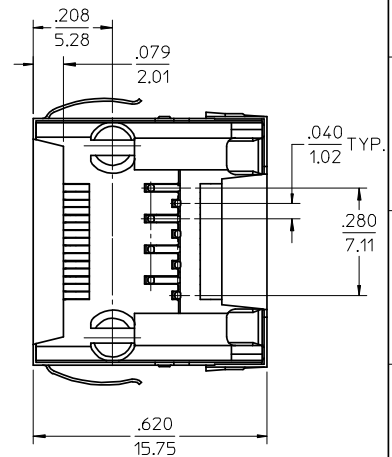
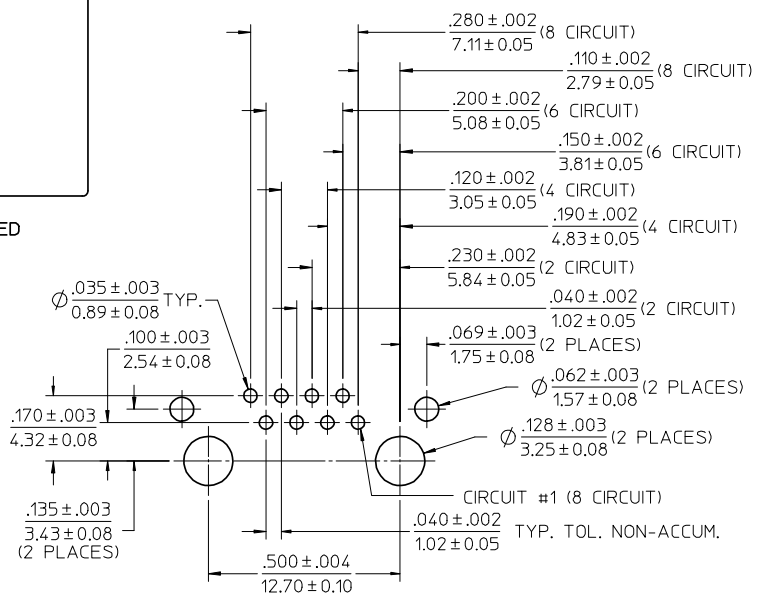
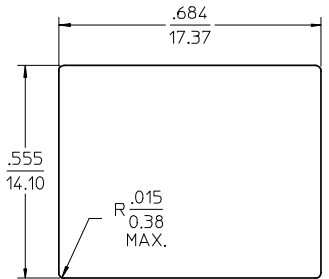
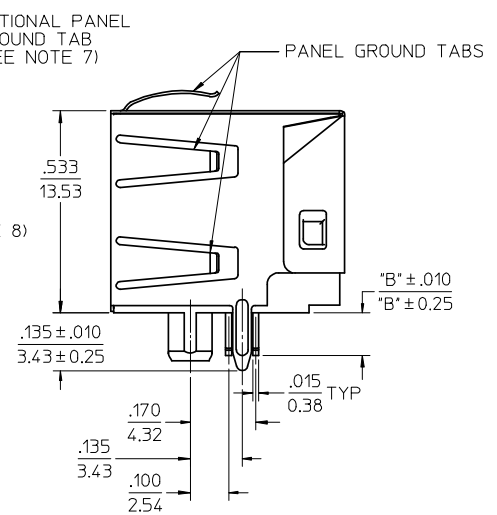
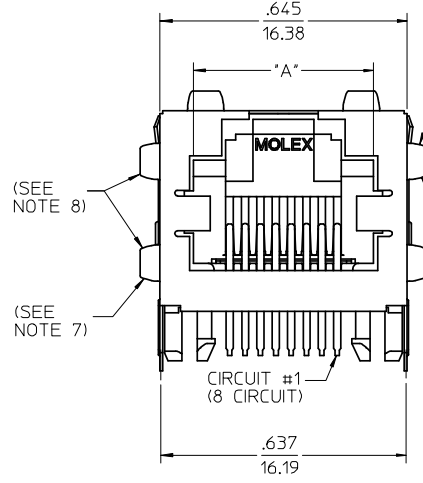
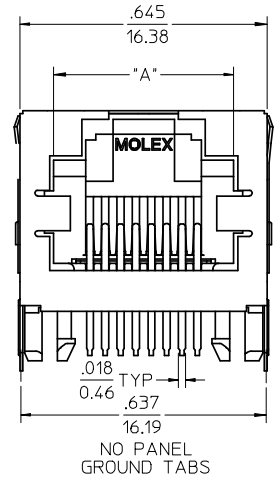
GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM																											
<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ± ---</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES ± ---</td> <td>± .010</td> <td>± ---</td> </tr> <tr> <td>2 PLACES ± 0.25</td> <td>± ---</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 ± ---	± ---	± ---	<table border="1"> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> <tr> <td>TALEND</td> <td>1997/02/13</td> </tr> <tr> <th>CHECKED BY</th> <th>DATE</th> </tr> <tr> <td>ROBERTS</td> <td>1997/03/03</td> </tr> <tr> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>FRY</td> <td>1997/03/04</td> </tr> </table>	DRAWN BY	DATE	TALEND	1997/02/13	CHECKED BY	DATE	ROBERTS	1997/03/03	APPROVED BY	DATE	FRY	1997/03/04
	mm	INCH																										
4 PLACES ± ---	± ---	± ---																										
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APPROVED BY	DATE																											
FRY	1997/03/04																											
ANGULAR ±1/2°																												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																												

MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE CHART	SD-43860-001	1 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
TITLE INVERTED MODULAR JACK ASSEMBLY		
MOLEX MOLEX INCORPORATED		

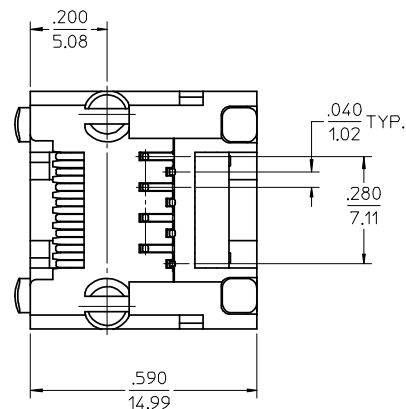
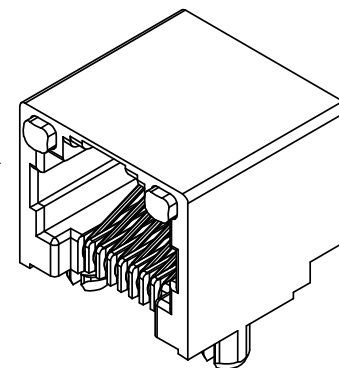
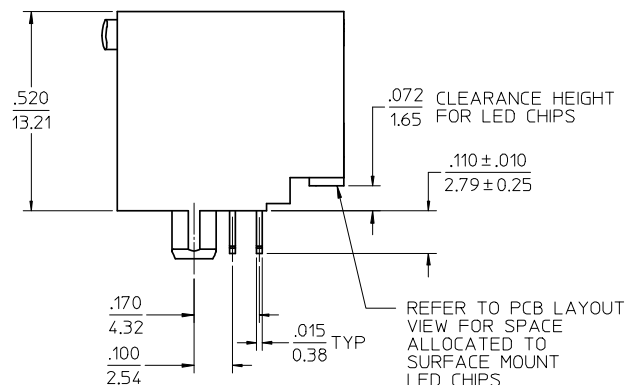
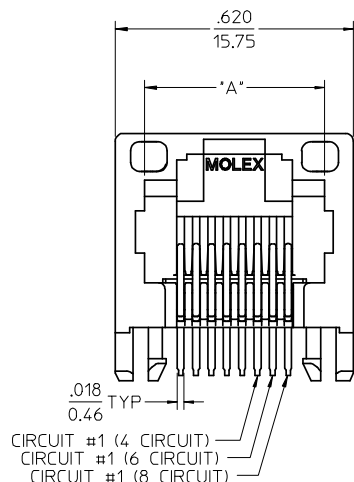


- NOTES:
- MATERIAL:
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0,
COLOR: BLACK
TERMINALS: PHOSPHOR BRONZE
SHIELD: BRASS
 - FINISH:
TERMINALS:
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES/
1.27 MICROMETERS MIN.
*SELECT TIN IN PC TAIL AREA: 100 MICROINCHES/
2.54 MICROMETERS MIN.,
WITH OVERALL NICKEL UNDERPLATE: 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.



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)	DIMENSION STYLE IN/MM	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
	▽=0 ▽=0	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			
	H6	MATERIAL NO. SEE CHART DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DOCUMENT NO. SD-43860-001 SHEET NO. 2 OF 5	MOLEX MOLEX INCORPORATED			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

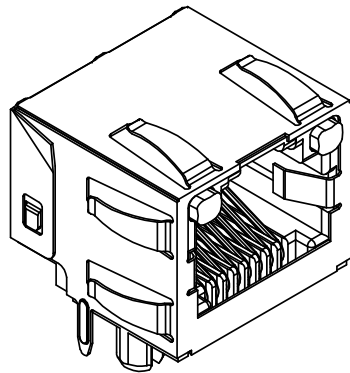


NOTES:

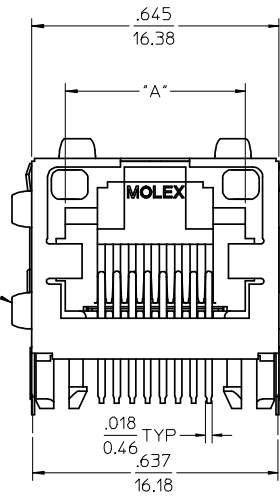
- 1) MATERIAL:
 HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
 TERMINALS: PHOSPHOR BRONZE
 LIGHT PIPES: POLYCARBONATE - WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)
 POLYSULFONE - MAXIMUM REFLOW TEMPERATURE 400°F (205°C)
- 2) FINISH:
 TERMINALS: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

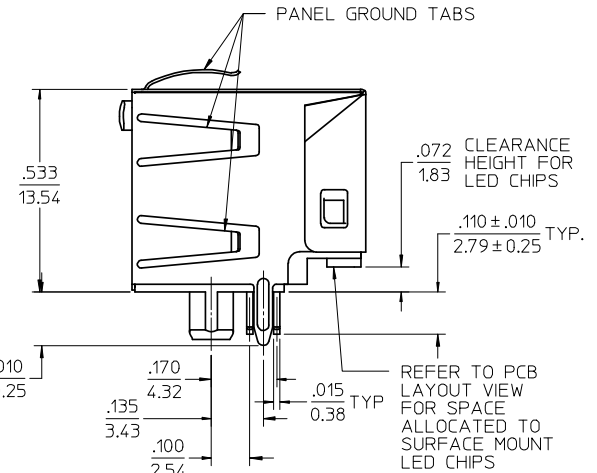
SEE SHEET 1 EC NO: UCP2008-3111 DRWNL: SCHMIDT 2008/06/20 CHKD: JEBEL 2008/06/27 APPR: FSMITH 2008/07/14 H6	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
				DRAWN BY DATE TALEND 1997/02/13		TITLE INVERTED MODULAR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



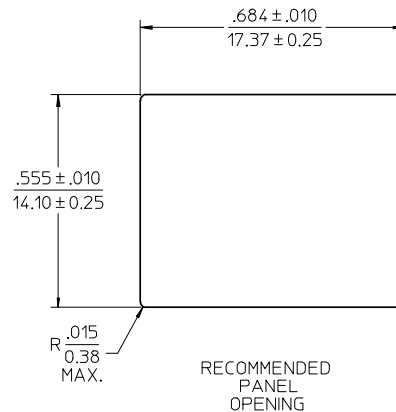
OPTIONAL PANEL GROUND TAB (SEE NOTE 8)



OPTIONAL PANEL GROUND TAB (SEE NOTE 8)



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

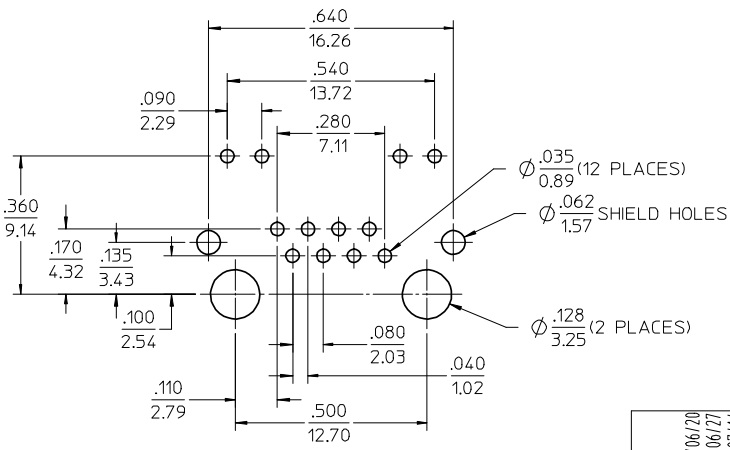
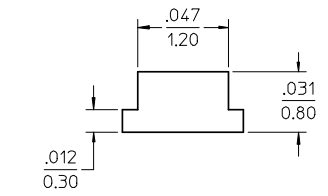
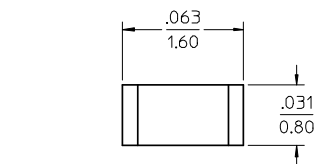
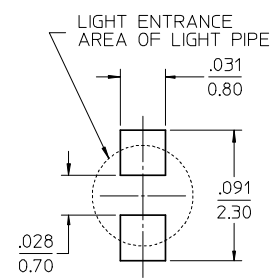
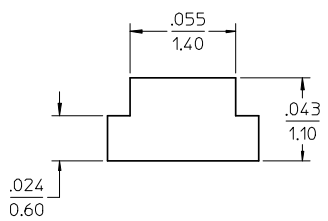
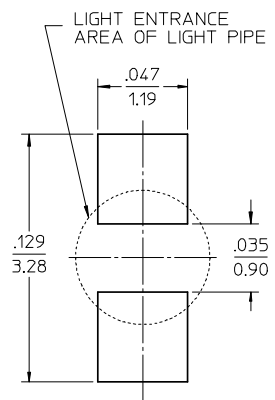
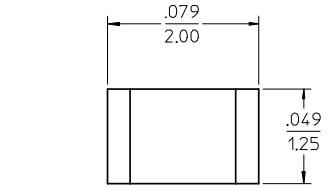
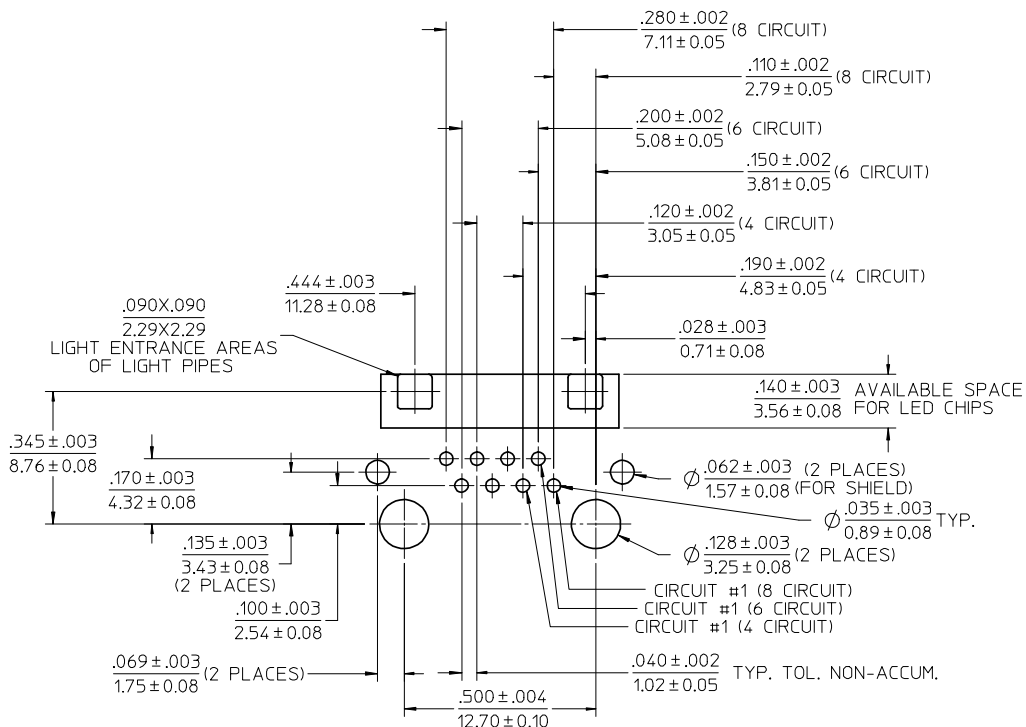


RECOMMENDED PANEL OPENING

- 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)	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	TITLE INVERTED MODULAR JACK ASSEMBLY	
H6	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHART	DATE 1997/03/04	MOLEX INCORPORATED		SHEET NO. 4 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



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	
						TITLE INVERTED MODULAR JACK ASSEMBLY			
H6	REV			DRAWN BY DATE TALEND 1997/02/13		CHECKED BY DATE ROBERTS 1997/03/03		APPROVED BY DATE FRY 1997/03/04	
				MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43860-001		SHEET NO. 5 OF 5	
		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			