

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0438600013](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, Inverted, Shielded, Offset Panel Grounding Tabs, 8/8

Documents:

Packaging Specification (PDF)	Application Specification (PDF)
3D Model	Product Specification PS-43860-003 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (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	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
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
Waterproof / Dustproof	No
Wire/Cable Type	N/A

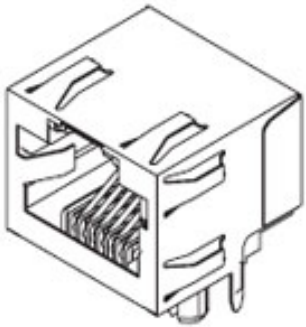


image - Reference only

Series

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
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

Electrical

Current - Maximum per Contact	1.5A
Grounding to PCB	Yes
Grounding to Panel	Offset Panel Ground Tabs
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-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.

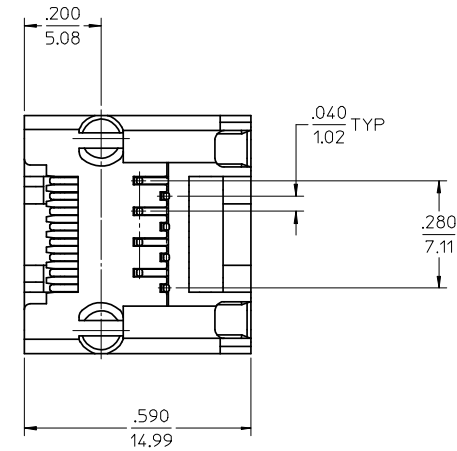
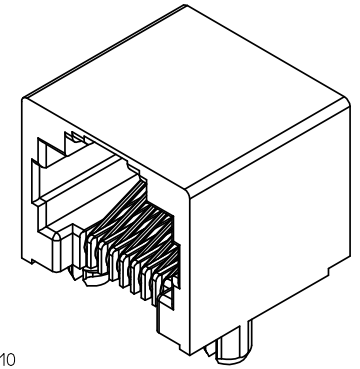
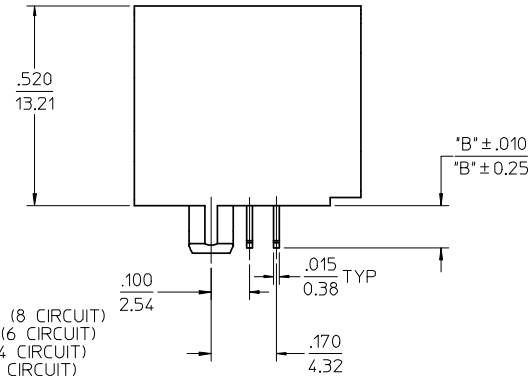
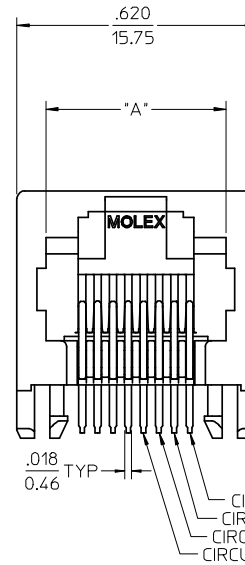
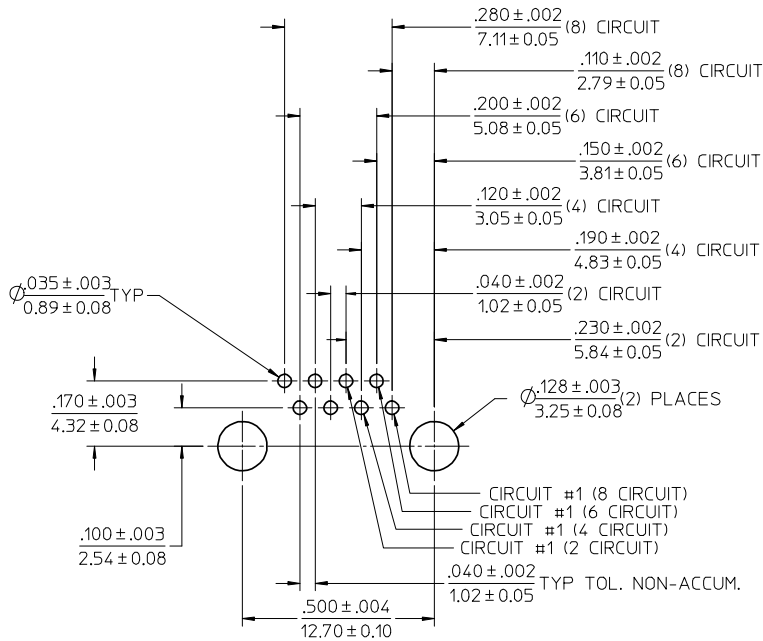
4) PACKAGING SPECIFICATION:

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.



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
DRWN: SCHMIDT 2008/06/20
CHKD: JEBEL 2008/06/27
APPR: FSMITH 2008/07/14

QUALITY
SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES ±	---	---
3 PLACES ±	---	±.010
2 PLACES ±	±.025	---
1 PLACE ±	---	---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

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

MATERIAL NO.
SEE CHART

SIZE
C

SCALE
4:1

DESIGN UNITS
INCH

THIRD ANGLE
PROJECTION

TITLE
INVERTED MODULAR JACK
ASSEMBLY

MOLEX INCORPORATED

DOCUMENT NO.
SD-43860-001

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.



NO PANEL
GROUND TABS

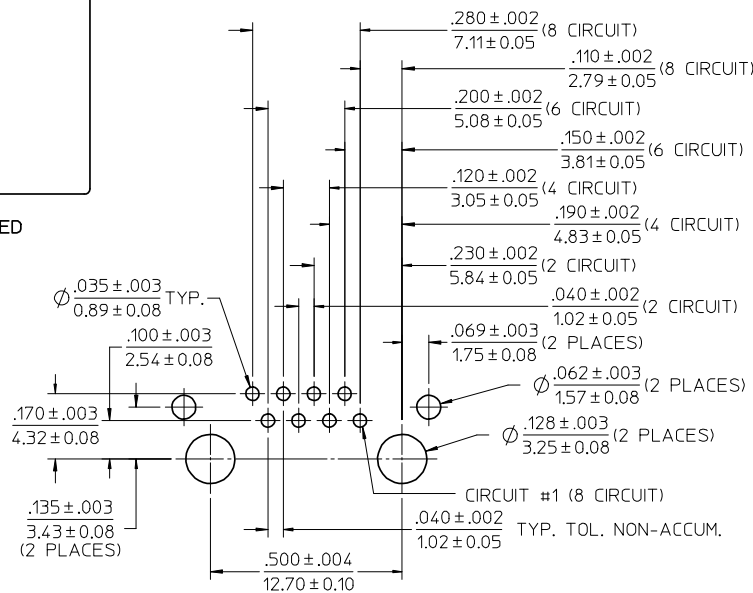


RECOMMENDED
PANEL
OPENING



OPTIONAL PANEL
GROUND TAB
(SEE NOTE 7)

PANEL GROUND TABS



PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS .062±.005/1.57±.013



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: JELL 2008/06/27
APPR: FSMITH 2008/07/14
REV H6

QUALITY
SYMBOLS
▽=0
▽=0

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
IN/MM

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

SIZE
C

SCALE
4:1

DESIGN UNITS
INCH

THIRD ANGLE
PROJECTION

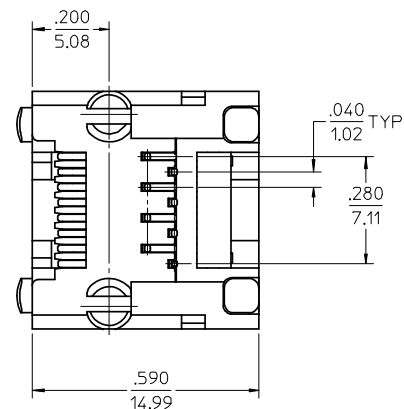
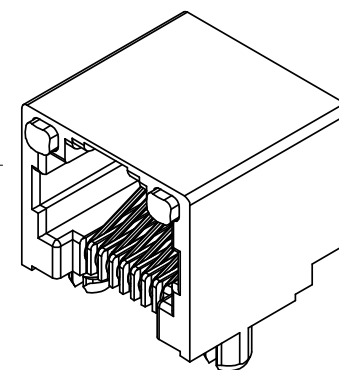
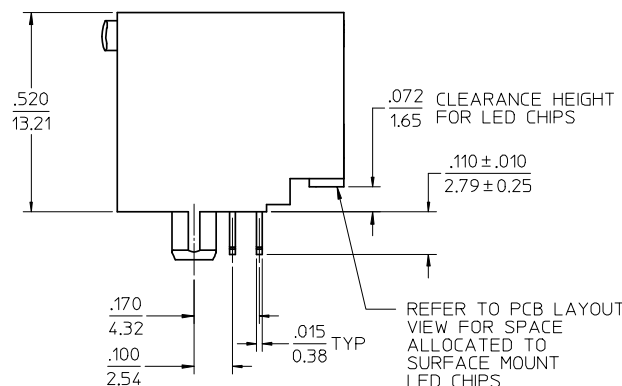
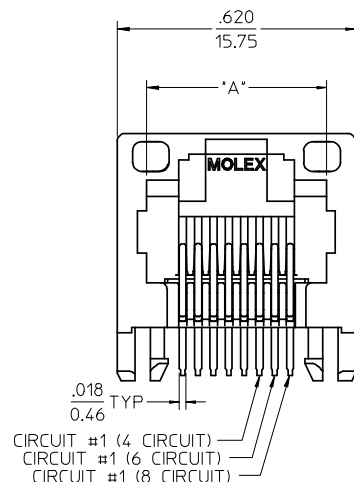
INVERTED MODULAR JACK
ASSEMBLY

MOLEX INCORPORATED

DOCUMENT NO.
SD-43860-001

SHEET NO.
2 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

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

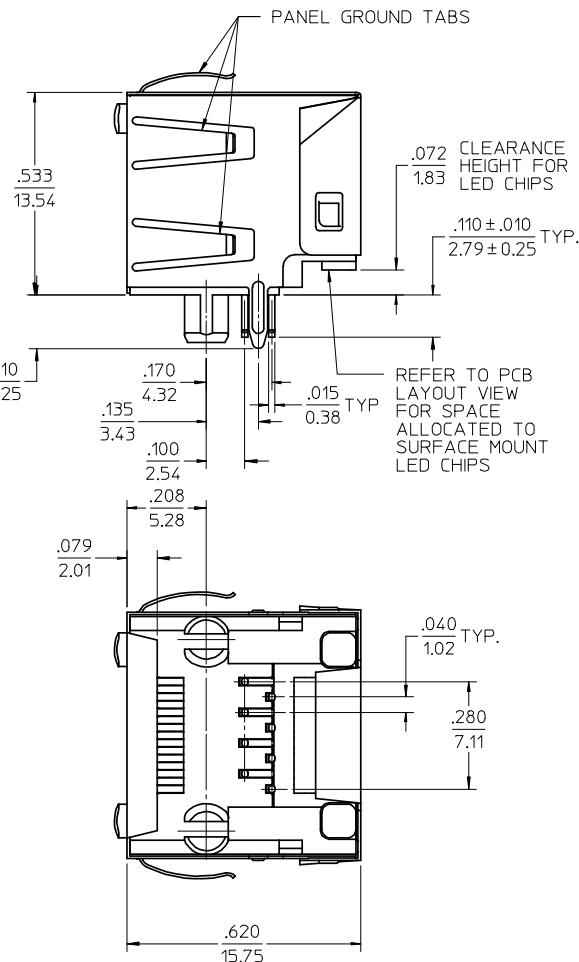
SEE SHEET 1 EC NO: UCP2008-3111 DRAWN: SCHMIDT CHKD: JEBEL APPR: F. SMITH 2008/06/20 2008/06/27 2008/07/14	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		▽=0 ▽=0		mm	INCH	DRAWN BY TALEND	DATE 1997/02/13	TITLE INVERTED MODULAR JACK ASSEMBLY	MOLEX MOLEX INCORPORATED	SHEET NO. 3 OF 5
			4 PLACES	±---	±---	CHECKED BY ROBERTS	DATE 1997/03/03			
			3 PLACES	±---	±.010	APPROVED BY	DATE			
			2 PLACES	±0.25	±---	FRY	1997/03/04			
1 PLACE	±---	±---	ANGULAR ±1/2°		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43860-001			
H6	REV	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						



OPTIONAL PANEL
GROUND TAB
(SEE NOTE 8)



OPTIONAL PANEL
GROUND TAB
(SEE NOTE 8)



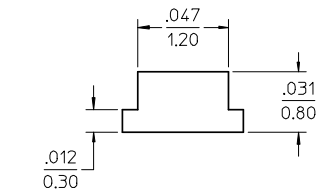
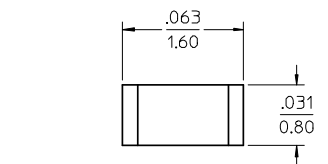
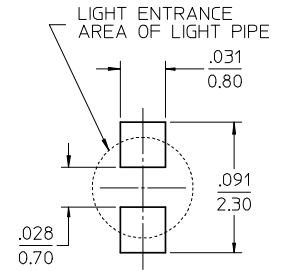
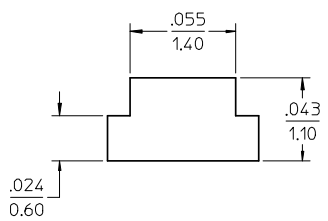
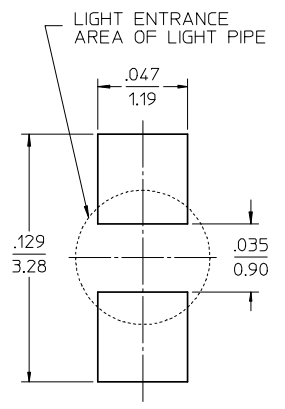
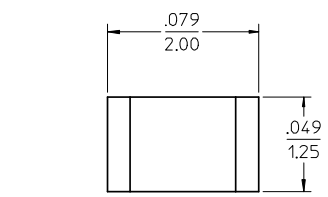
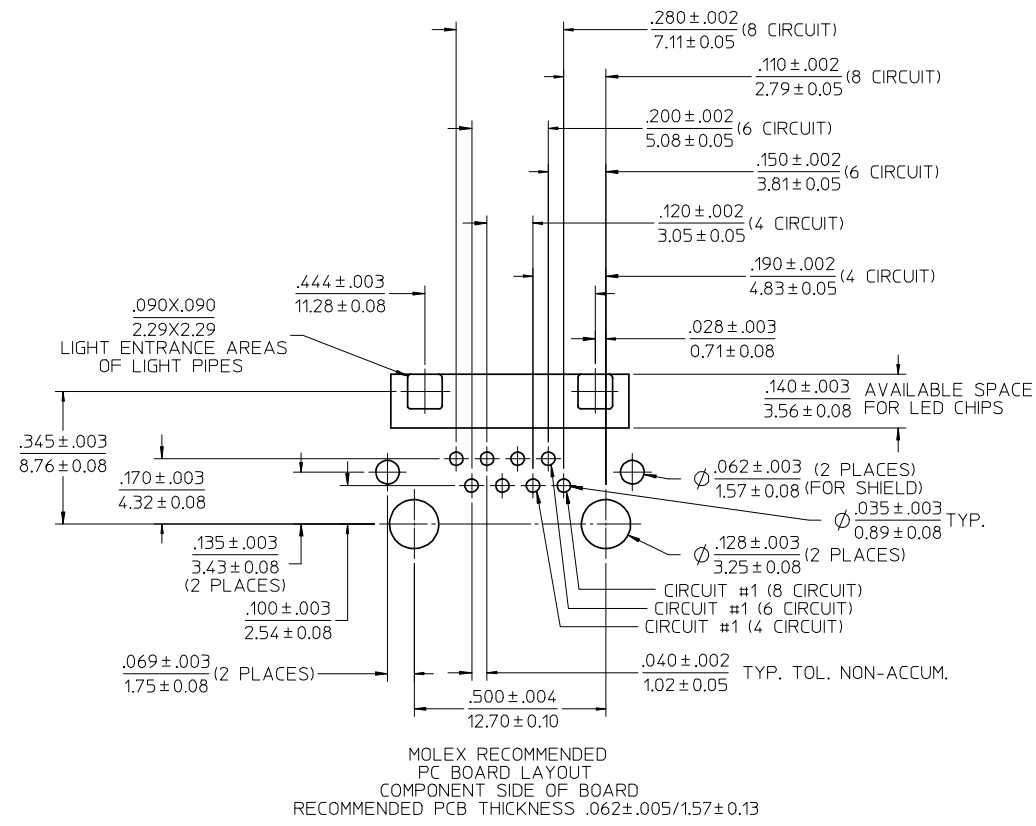
- NOTES:
- MATERIAL:
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS: PHOSPHOR BRONZE
SHIELD: BRASS
LIGHT PIPES:
POLYCARBONATE - WAVE OR HAND SOLDER ONLY
(NOT DESIGNED FOR I/R REFLOW OR
CONVECTION REFLOW SOLDER PROCESSES)
POLYSULFONE - MAXIMUM REFLOW TEMPERATURE 400°F (205°C)
 - FINISH: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



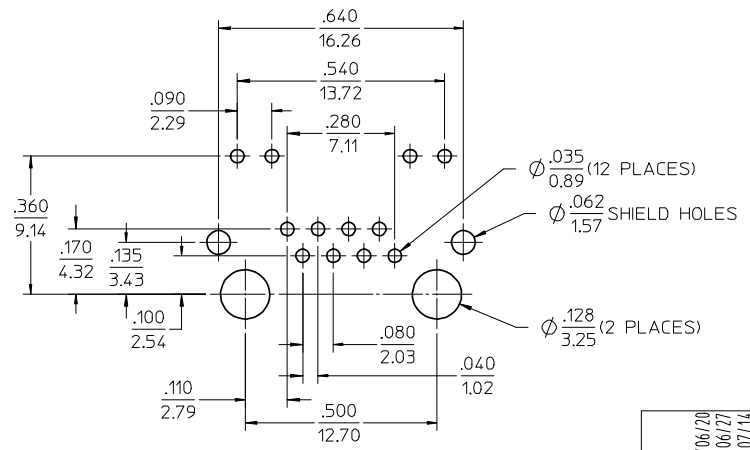
RECOMMENDED
PANEL
OPENING

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 CHKD: JEBEL APPR: FSM/TH H6	DESCRIPTION REV	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	INVERTED MODULAR JACK ASSEMBLY			
		3 PLACES ± --- ± .010	CHECKED BY ROBERTS	DATE 1997/03/03				
		2 PLACES ± .025 ± ---	APPROVED BY FRY	DATE 1997/03/04				
1 PLACE ± --- ± ---	ANGULAR ± 1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SD-43860-001	
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 CHKD: JEBEL APPR: FSMITH REV H6	DESCRIPTION 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			
				mm	INCH	DRAWN BY TALEND	DATE 1997/02/13	TITLE INVERTED MODULAR JACK ASSEMBLY				
			4 PLACES	± .---	± .---	CHECKED BY ROBERTS	DATE 1997/03/03					
			3 PLACES	± .---	± .010	APPROVED BY FRY	DATE 1997/03/04					
			2 PLACES	± 0.25	± .---	MOLEX MOLEX INCORPORATED						
			1 PLACE	± .---	± .---							
			ANGULAR ±1/2°			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							

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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