

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

**Part Number:** [0441700002](#)  
**Status:** **Active**  
**Overview:** [modular\\_plugs\\_jacks](#)  
**Description:** Modular Jack, Right Angle, Shielded, Lightpipes, Stacked, 8/8, 12 Ports

**Documents:**

[3D Model](#) [Product Specification PS-44050-003 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Packaging Specification \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E107635

**General**

Product Family Modular Jacks/Plugs  
 Series [44170](#)  
 Comments High Speed|Multi-Port  
 Component Type PCB Jack  
 Magnetic No  
 Overview [modular\\_plugs\\_jacks](#)  
 Performance Category 5  
 Power over Ethernet (PoE) N/A  
 Product Name RJ45

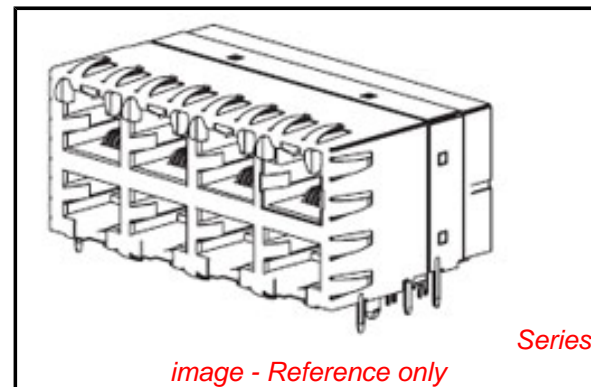
**Physical**

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 Polycarbonate, Polyester  
 Orientation Right Angle (Side Entry)  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Plating min: Mating (µin) 50  
 Plating min: Mating (µm) 1.25  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.5  
 Ports 12  
 Positions / Loaded Contacts 8/8  
 Surface Mount Compatible (SMC) No  
 Temperature Range - Operating -40°C to +80°C  
 Termination Interface: Style Through Hole  
 Wire/Cable Type N/A

**Electrical**

Current - Maximum per Contact 1.5A  
 Shielded Yes  
 Voltage - Maximum 125V

**Solder Process Data**



**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**

[44170Series](#)

**Mates With**

FCC 68 Plugs

Lead-free Process Capability

Wave Capable (TH only)

## Material Info

### Reference - Drawing Numbers

Application Specification	AS-43860-001
Packaging Specification	PK-44170-003
Product Specification	PS-44050-003
Sales Drawing	SD-44170-001
Test Summary	TS-44050-001

This document was generated on 06/07/2010

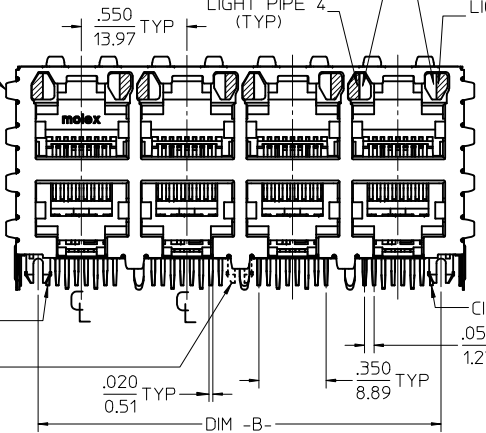
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.052  
1.32 TYP

DIM -A-

LIGHT PIPE 3 (TYP)  
LIGHT PIPE 2 (TYP)  
LIGHT PIPE 4 (TYP)  
LIGHT PIPE 1 (TYP)

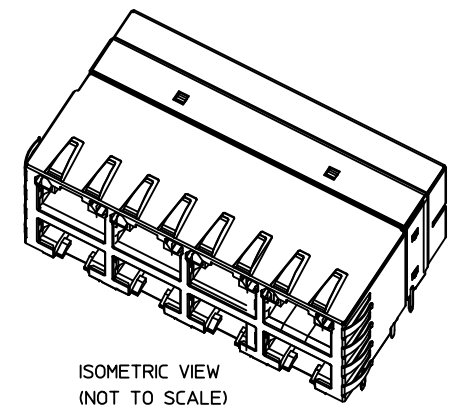
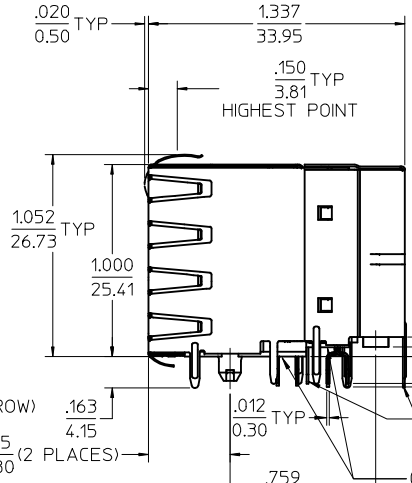
OPTIONAL  
SIDE PANEL  
GROUND TABS  
TYP (8)  
SEE NOTE 9



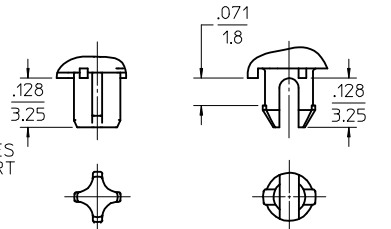
CIRCUIT #1 (BOTTOM ROW)  
SNAP-FIT CENTER PEG  
(16 PORT VERSIONS ONLY)

CIRCUIT #1 (TOP ROW)  
.050  
1.27 TYP  
.350  
8.89 TYP

DIM -B-



ISOMETRIC VIEW  
(NOT TO SCALE)



PRESS-FIT PEG  
STYLE (NOTE 6)

SNAP-FIT PEG  
STYLE (NOTE 6)

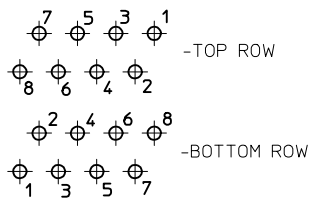
- NOTES:
- MATERIAL:  
HOUSING: POLYESTER(PBT), GLASS FILLED, UL94V-0, COLOR: BLACK  
LIGHT PIPES: POLYCARBONATE, UL-94HB, COLOR: CLEAR  
TERMINALS: PHOSPHOR BRONZE  
SHIELD: BRASS
  - FINISH:  
TERMINALS:  
SELECT GOLD IN CONTACT AREA: 50 MICROINCHES / 1.27 MICROMETERS MIN.  
\*SELECT TIN IN PC TAIL 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-44050-003.
  - PACKAGING SPECIFICATION: CONNECTOR PACKAGED IN THERMOFORMED TRAYS PER PK-44170-003.
  - APPLICATION SPECIFICATION: AS-43860-001
  - CONNECTORS AVAILABLE WITH EITHER SNAP-FIT OR PRESS-FIT PEGS.
  - CONFORMS TO FCC REGULATION PART 68.5 FOR MODULAR JACKS.
  - PCB LAYOUT AND PANEL CUT-OUT SHOWN ON SHEET (2) OF (2).
  - AVAILABLE WITH THE (8) PANEL GROUND TABS REMOVED ON EACH SIDE  
FOR SIDE TO SIDE STACKABILITY.
  - TERMINAL LENGTHS MAY BE DIFFERENT FROM TERMINAL TO TERMINAL.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC  
SPECIFICATION PS-45499-002 WITH THE EXCEPTION OF THE SURFACE  
INDICATED WHICH IS A CLASS C SURFACE.

ASSEMBLY MATERIAL NUMBER	NUMBER OF PORTS	PEG STYLE	DIM -A-	DIM -B-	SIDE PANEL GROUND TABS	INNER/REAR GROUND TABS
44170-0001	8 (2 X 4)	SNAP-FIT	2.330/59.18	2.100/53.34	YES	YES
44170-2001	8 (2 X 4)	SNAP-FIT	2.330/59.18	2.100/53.34	NO	YES
44170-3001	8 (2 X 4)	SNAP-FIT	2.330/59.18	2.100/53.34	YES	NO
44170-4001	8 (2 X 4)	SNAP-FIT	2.330/59.18	2.100/53.34	NO	NO
44170-0004	8 (2 X 4)	PRESS-FIT	2.330/59.18	2.100/53.34	YES	YES
44170-2004	8 (2 X 4)	PRESS-FIT	2.330/59.18	2.100/53.34	NO	YES
44170-3004	8 (2 X 4)	PRESS-FIT	2.330/59.18	2.100/53.34	YES	NO
44170-4004	8 (2 X 4)	PRESS-FIT	2.330/59.18	2.100/53.34	NO	NO
44170-0002	12 (2 X 6)	SNAP-FIT	3.430/87.12	3.200/81.28	YES	YES
44170-2002	12 (2 X 6)	SNAP-FIT	3.430/87.12	3.200/81.28	NO	YES
44170-3002	12 (2 X 6)	SNAP-FIT	3.430/87.12	3.200/81.28	YES	NO
44170-4002	12 (2 X 6)	SNAP-FIT	3.430/87.12	3.200/81.28	NO	NO
44170-0005	12 (2 X 6)	PRESS-FIT	3.430/87.12	3.200/81.28	YES	YES
44170-2005	12 (2 X 6)	PRESS-FIT	3.430/87.12	3.200/81.28	NO	YES
44170-3005	12 (2 X 6)	PRESS-FIT	3.430/87.12	3.200/81.28	YES	NO
44170-4005	12 (2 X 6)	PRESS-FIT	3.430/87.12	3.200/81.28	NO	NO
44170-0003	16 (2 X 8)	SNAP-FIT	4.530/115.06	4.300/109.22	YES	YES
44170-2003	16 (2 X 8)	SNAP-FIT	4.530/115.06	4.300/109.22	NO	YES
44170-3003	16 (2 X 8)	SNAP-FIT	4.530/115.06	4.300/109.22	YES	NO
44170-4003	16 (2 X 8)	SNAP-FIT	4.530/115.06	4.300/109.22	NO	NO
44170-0006	16 (2 X 8)	PRESS-FIT	4.530/115.06	4.300/109.22	YES	YES
44170-2006	16 (2 X 8)	PRESS-FIT	4.530/115.06	4.300/109.22	NO	YES
44170-3006	16 (2 X 8)	PRESS-FIT	4.530/115.06	4.300/109.22	YES	NO
44170-4006	16 (2 X 8)	PRESS-FIT	4.530/115.06	4.300/109.22	NO	NO

REVISED TITLE BLOCK  
EC NO: UCP2010-0464  
DRAWN: JAGUILAR 2009/08/20  
CHKD: BELL 2009/08/26  
APPR: FSMITH 2009/08/26

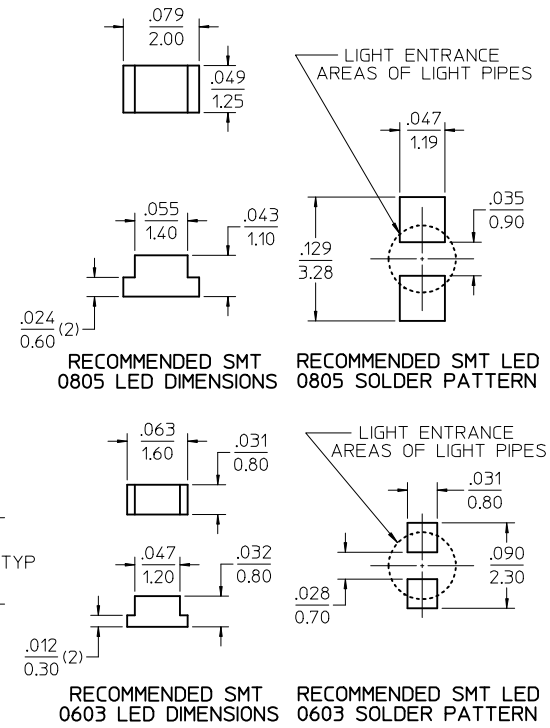
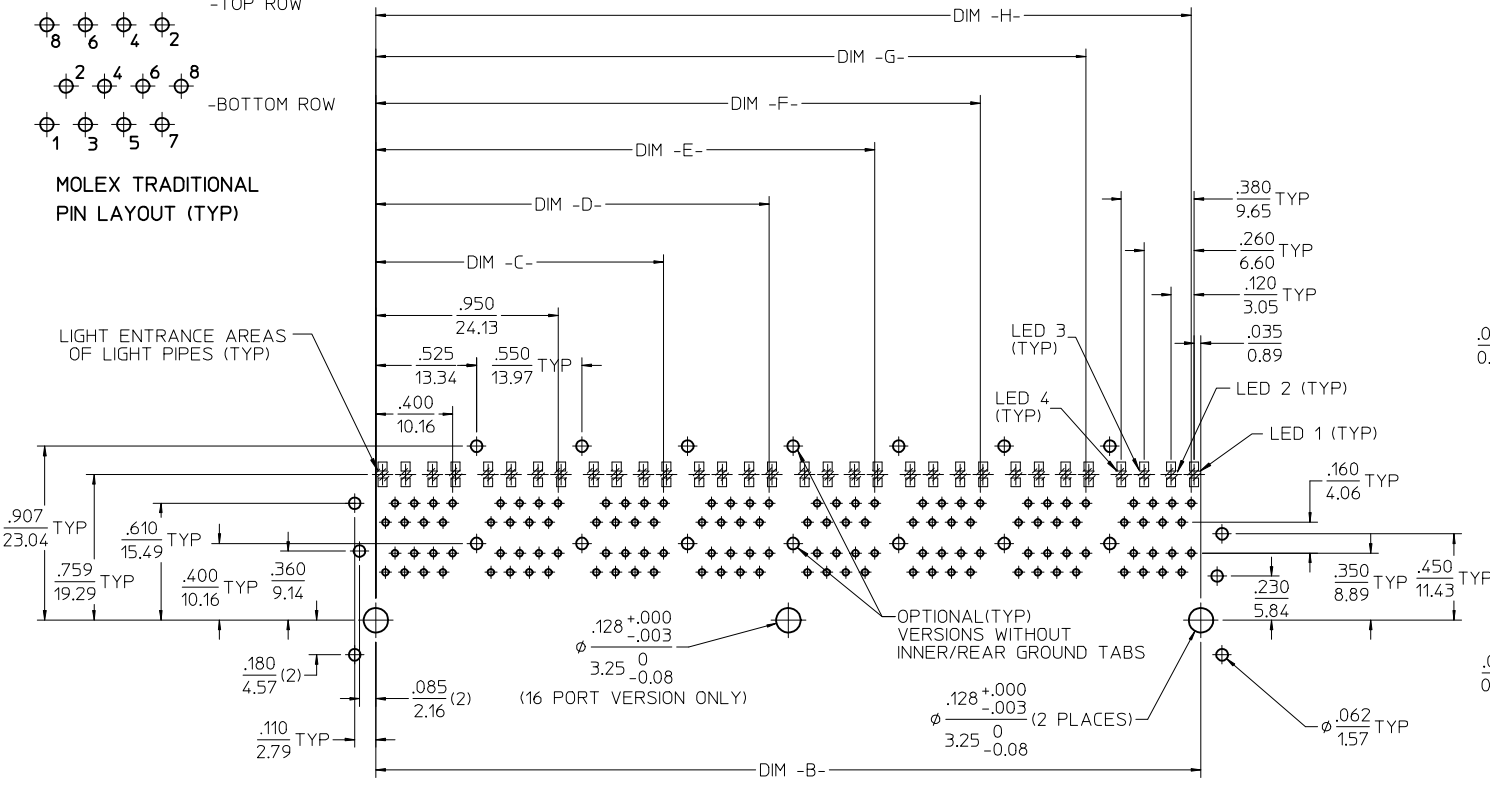
QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)
▽=0	
▽=0	
	mm
	INCH
	4 PLACES ± --- ± ---
	3 PLACES ± --- ± .010
	2 PLACES ± 0.25 ± ---
	1 PLACE ± --- ± ---
	ANGULAR ± 1/2°

DIMENSION STYLE		SCALE		DESIGN UNITS	
IN/MM		2:1		INCH	
DRAWN BY	DATE	TITLE			
MARGULIS	98/11/16	STACKED MODULAR JACK WITH LIGHT PIPES CAT 5			
CHECKED BY	DATE	MOLEX MOLEX INCORPORATED			
ROBERTS	98/11/16	MATERIAL NO. DOCUMENT NO. SHEET NO.			
APPROVED BY	DATE	SEE CHART		SD-44170-001	
ROBERTS	98/11/16	SIZE		1 OF 2	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

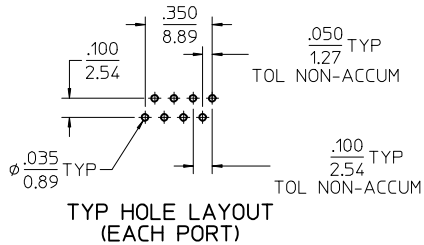


**MOLEX TRADITIONAL PIN LAYOUT (TYP)**

**LIGHT ENTRANCE AREAS OF LIGHT PIPES (TYP)**

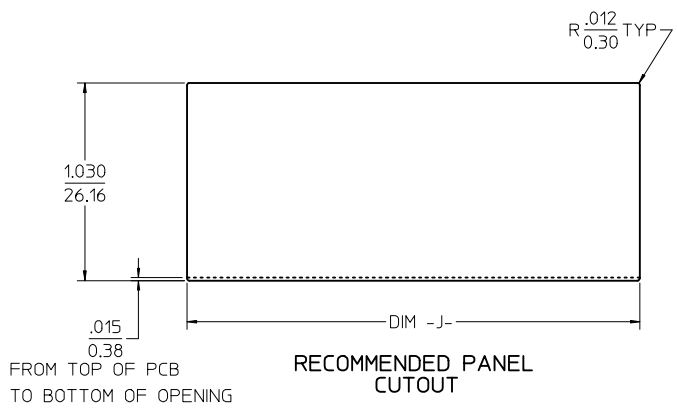


**PC BOARD LAYOUT: COMPONENT SIDE**  
**RECOMMENDED PCB THICKNESS: .062/1.57**  
**(16 PORT VERSION SHOWN)**



**NOTES:**

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



NUMBER OF PORTS	DIM -B-	DIM -C-	DIM -D-	DIM -E-	DIM -F-	DIM -G-	DIM -H-	DIM -J-
8 (2 X 4)	2.100/53.34	1.500/38.10	2.050/52.07					2.360/59.94
12 (2 X 6)	3.200/81.28	1.500/38.10	2.050/52.07	2.600/66.04	3.150/80.01			3.460/87.88
16 (2 X 8)	4.300/109.22	1.500/38.10	2.050/52.07	2.600/66.04	3.150/80.01	3.700/93.98	4.250/107.95	4.560/115.82

<b>SEE SHEET 1</b> EC NO: UCP2010-0464 DRWN: JAGUILAR CHKD: BELL APPR: FSMITH 2009/08/20 2009/08/26 2009/08/26	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>IN/MM</b>		SCALE <b>2:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY MARGULIS	DATE 98/11/16	TITLE <b>STACKED MODULAR JACK WITH LIGHT PIPES CAT 5</b>				
		3 PLACES ± --- ± .010	CHECKED BY ROBERTS	DATE 98/11/16	MOLEX INCORPORATED					
		2 PLACES ± 0.25 ± ---	APPROVED BY ROBERTS	DATE 98/11/16	MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. <b>SD-44170-001</b>	SHEET NO. <b>2 OF 2</b>			
1 PLACE ± --- ± ---	ANGULAR ±1/2°	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								