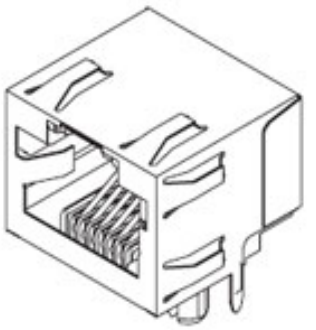
This document was generated on 05/24/2010

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

**Part Number:** 0446200003
**Status:** Active
**Overview:** modular_plugs_jacks
**Description:** Modular Jack, Right Angle, Low Profile, Inverted, 8/8



*Series image - Reference only*

**Documents:**

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

## Agency Certification

| | |
|---|---|
| CSA | LR19980 |
| UL | E107635 |

## General

| | |
|---|---|
| Product Family | Modular Jacks/Plugs |
| Series | 44620 |
| Comments | RJ-11 Keepout Feature |
| 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 |
| 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) | Yes |
| 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**
Not Halogen-Free

**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**
44620Series

**Mates With**
FCC 68 Plugs

| | |
|---|---|
| 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 |

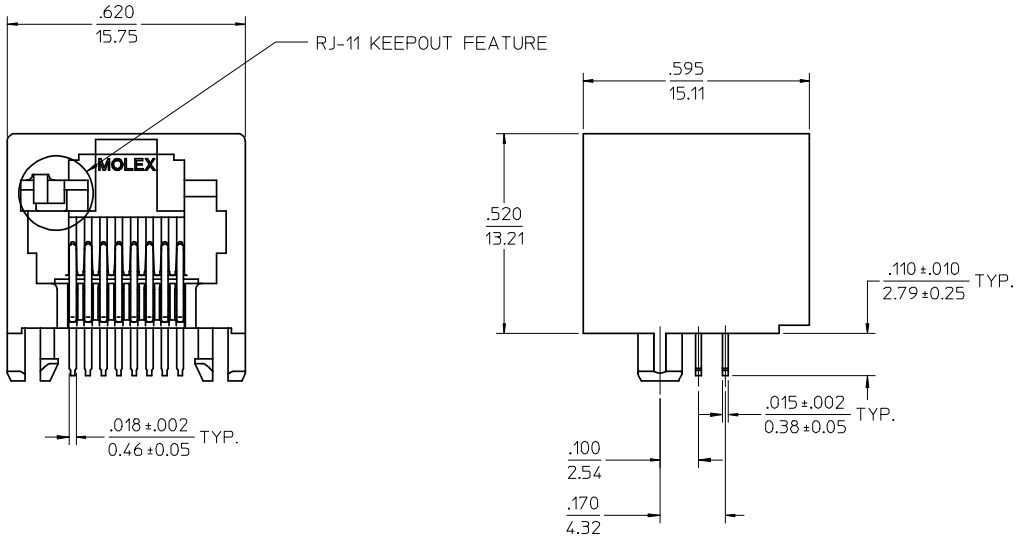
## Material Info

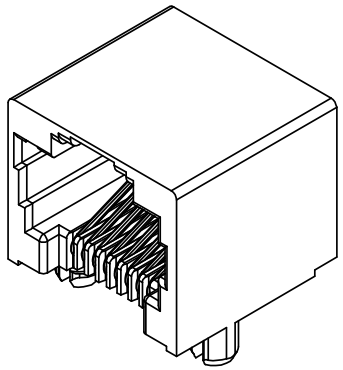
## Reference - Drawing Numbers

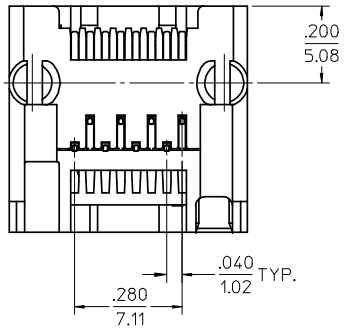
| | |
|---|---|
| Packaging Specification | PK-43860-005 |
| Product Specification | PS-43860-003, RPS-43860-004, RPS-43860-007, RPS-43860-008, RPS-43860-013 |
| Sales Drawing | SD-44620-001 |
| Test Summary | TS-43860-001 |

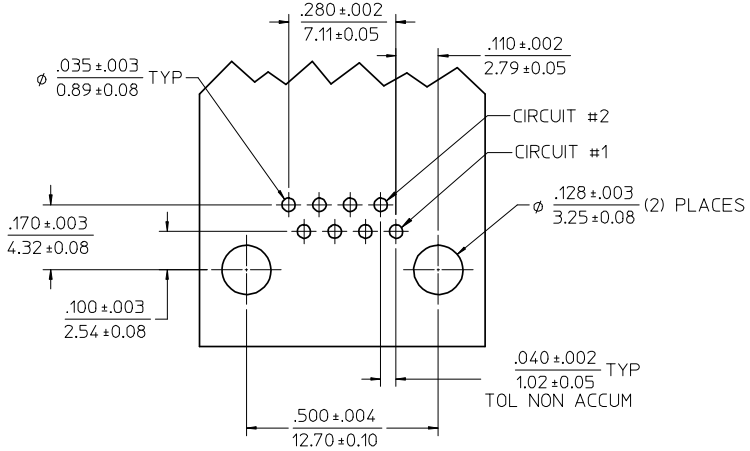
This document was generated on 05/24/2010

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






PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS: .062/1.57

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

| DESCRIPTION | DATE |
|---|---|
| ADD NOTE 7 | 2007/11/08 |
| EC NO: UCP2008-0965 | 2007/12/04 |
| DRWN: JBELL | 2007/12/05 |
| CH'KD: LSCHMIDT | |
| APPR: FSMITH | |
| REV: D2 | |

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

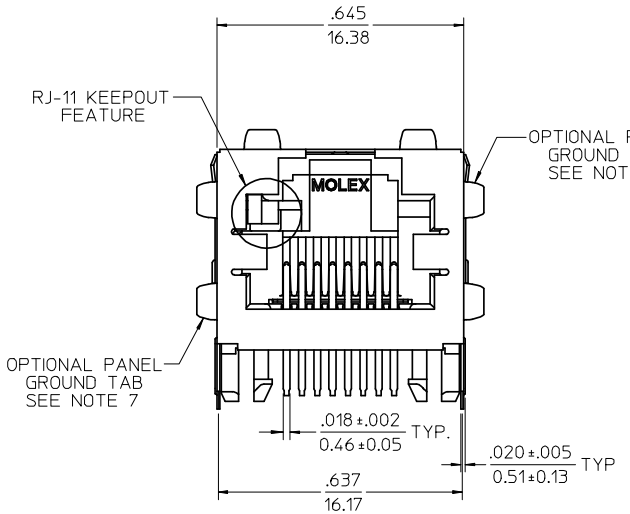
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

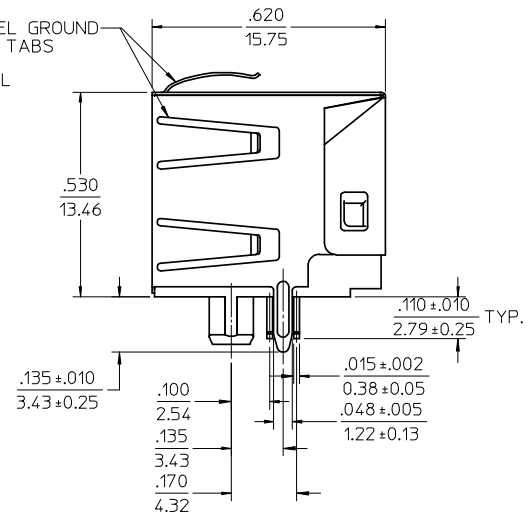
| | |
|---|---|
| DIMENSION STYLE | IN/MM |
| SCALE | 4:1 |
| DESIGN UNITS | INCH |
| | THIRD ANGLE PROJECTION |
| DRAWN BY / DATE | MKAMAR 00/03/07 |
| CHECKED BY / DATE | MKAMAR 00/03/07 |
| APPROVED BY / DATE | JROBERTS 00/03/07 |
| MATERIAL NO. | 446200001 |
| DOCUMENT NO. | SD-44620-001 |
| SHEET NO. | 1 OF 4 |
| SIZE | C |

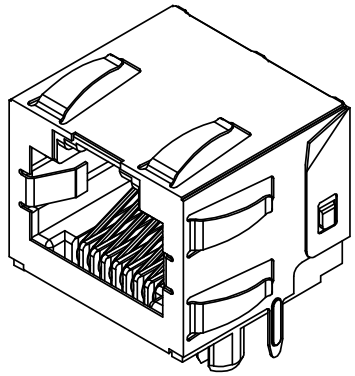
TITLE: RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE

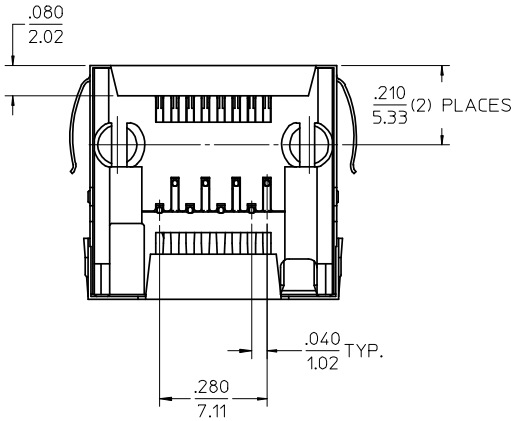
MOLEX INCORPORATED

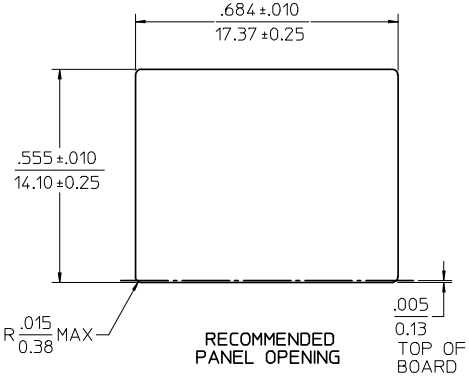
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



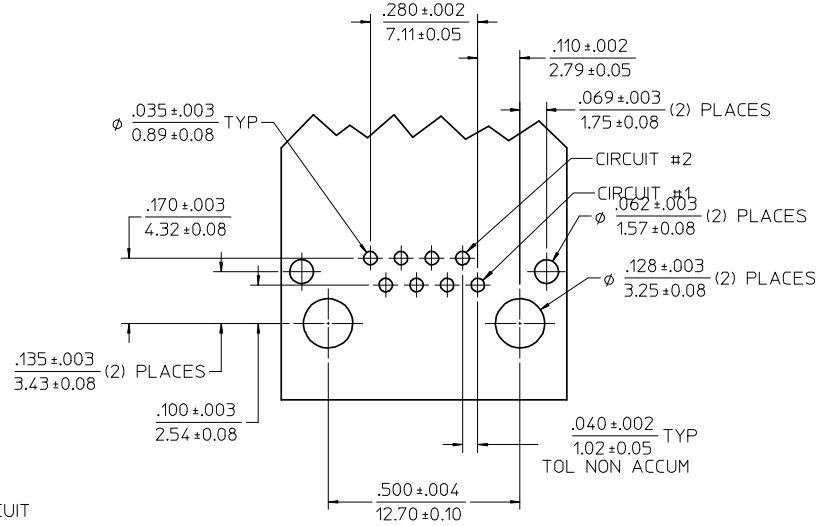






RECOMMENDED PANEL OPENING




PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS: .062/1.57

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 AND PROCESSING PARAMETERS: PS-43860-003.
4) PACKAGING SPECIFICATION:
   CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-43860-005.
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) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

| ASSEMBLY MATERIAL NUMBER | PANEL GROUND TABS |
|---|---|
| 446200002 | ALL |
| 446200003 | SEE NOTE 7 |

ADD NOTE 8
EC NO: UCP2008-0965 2007/11/08
DRWN: JBELL 2007/12/04
CHKD: LSCHMIDT 2007/12/05
APPR: FSMITH
DESCRIPTION
D2
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

| | | |
|---|---|---|
| DRAWN BY | MKAMAR | DATE 00/03/07 |
| CHECKED BY | MKAMAR | DATE 00/03/07 |
| APPROVED BY | JROBERTS | DATE 00/03/07 |

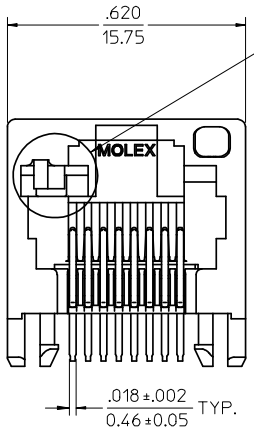
TITLE: RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE

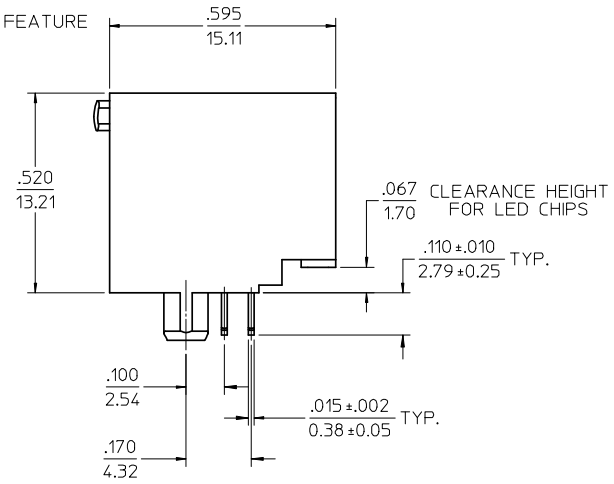
molex MOLEX INCORPORATED

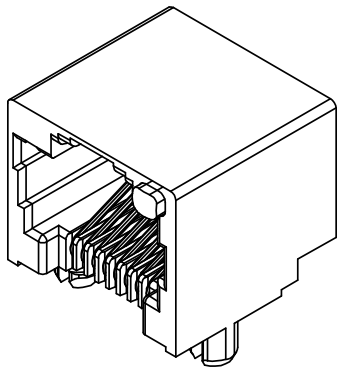
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-44620-001
SHEET NO.: 2 OF 4

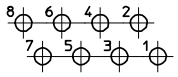
SIZE C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

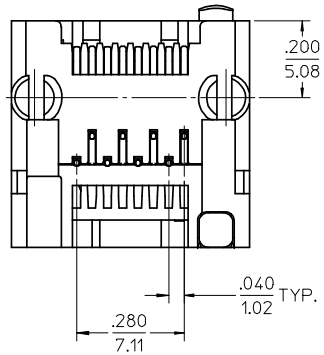


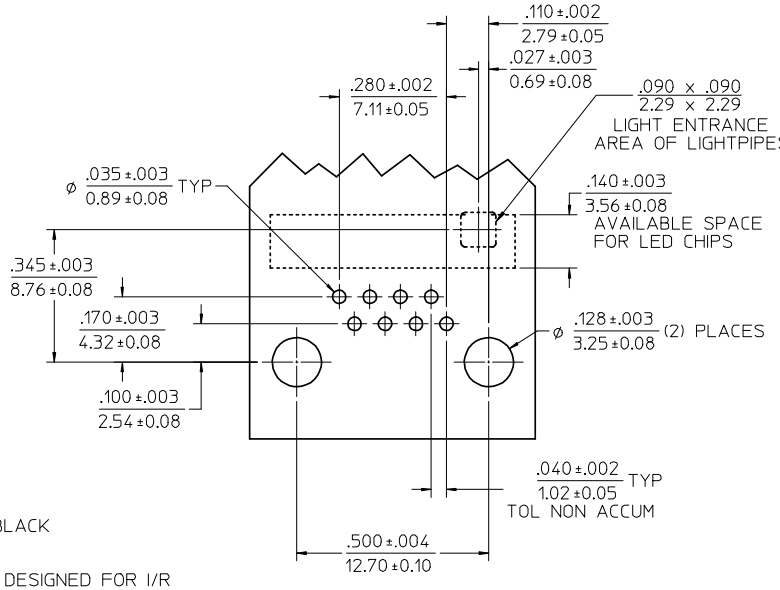



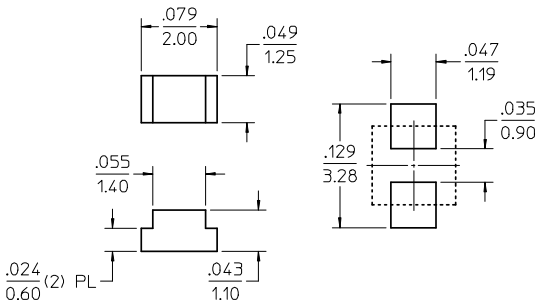



TYPICAL PC TERMINAL HOLE LAYOUT
SCALE 5:1




PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS: .062/1.57




RECOMMENDED SMT
LED SOLDER PATTERN
SCALE 10:1
(SEE NOTE 8)

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) FOR CROSS REFERENCE OF RECOMMENDED LED'S, SEE MOLEX WEBSITE.
9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

| ASSEMBLY MATERIAL NUMBER | LIGHT PIPE MATERIAL |
|---|---|
| 446201004 | POLYCARBONATE |
| 446201005 | POLYSULFONE |

| DESCRIPTION | DATE |
|---|---|
| ADD NOTE 5 & 9 | 2007/11/08 |
| EC NO: UCP2008-0965 | 2007/12/04 |
| DRWN: JBELL | 2007/12/05 |
| CH'KD: LSCHMIDT | |
| APPR: FSMITH | |
| REV: D2 | |

QUALITY SYMBOLS
▼=0
▽C=0

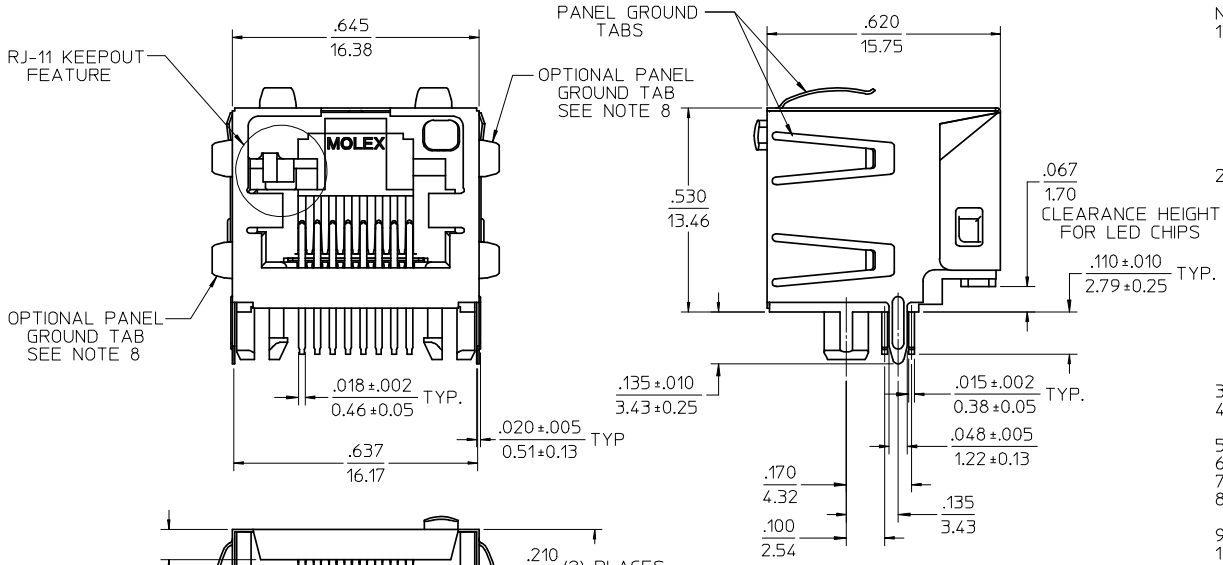
GENERAL TOLERANCES (UNLESS SPECIFIED)

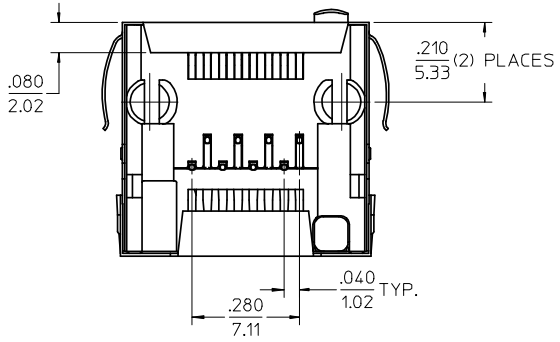
| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

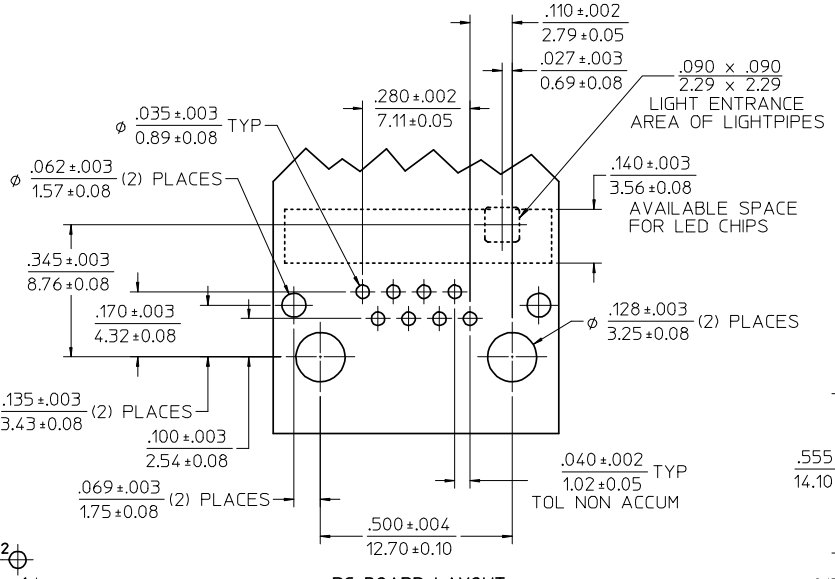
| | |
|---|---|
| DIMENSION STYLE | IN/MM |
| SCALE | 4:1 |
| DESIGN UNITS | INCH |
| | THIRD ANGLE PROJECTION |
| DRAWN BY / DATE | MKAMAR 00/03/07 |
| CHECKED BY / DATE | MKAMAR 00/03/07 |
| APPROVED BY / DATE | JROBERTS 00/03/07 |
| MATERIAL NO. | SEE CHART |
| TITLE | RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE |
| | MOLEX INCORPORATED |
| DOCUMENT NO. | SD-44620-001 |
| SHEET NO. | 3 OF 4 |
| SIZE | C |

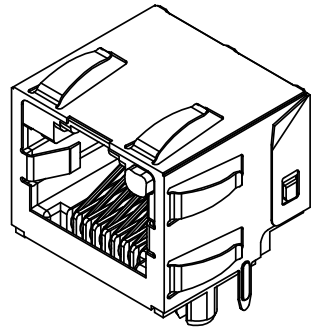
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

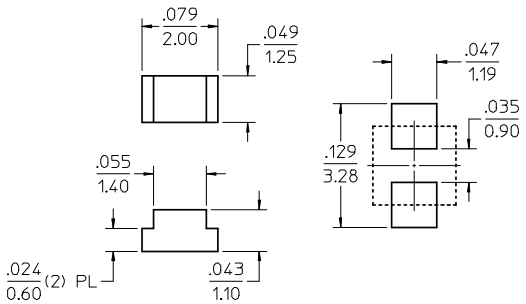


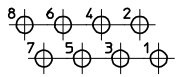

NOTES:
1) MATERIAL:
HOUSING: NYLON(PA), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS: PHOSPHOR BRONZE
SHIELD: BRASS
LIGHT PIPES:
POLYCARBONATE-WAVE OR HAND SOLDER ONLY (NOT DESIGNED FOR I/R REFLOW OR CONVECTION REFLOW SOLDER PROCESSES)
POLYSULFONE-MAXIMUM REFLOW TEMPERATURE: 400°F (205°C)
2) FINISH:
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.
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 AND PROCESSING PARAMETERS: PS-43860-003.
4) PACKAGING SPECIFICATION: CONNECTOR ASSEMBLIES PACKAGED IN THERMOFORMED TRAYS PER MOLEX PACKAGING SPECIFICATION PK-43860-005.
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) AVAILABLE WITH THE (2) SPECIFIED PANEL GROUND TABS OMITTED FOR SIDE TO SIDE STACKABILITY, PER THE ASSEMBLY MATERIAL NUMBER TABLE.
9) FOR CROSS REFERENCE OF RECOMMENDED LED'S, SEE MOLEX WEBSITE.
10) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



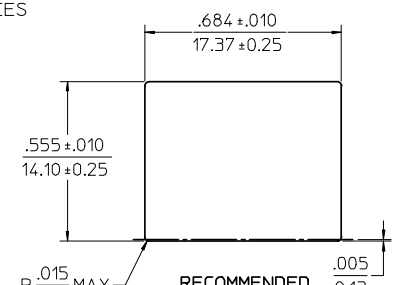



RECOMMENDED SMT
LED SOLDER PATTERN
SCALE 10:1
(SEE NOTE 9)




TYPICAL PC TERMINAL HOLE LAYOUT
SCALE 5:1

PC BOARD LAYOUT
COMPONENT SIDE OF BOARD
RECOMMENDED PCB THICKNESS: .062/1.57




RECOMMENDED
PANEL OPENING
SCALE: NTS

| ASSEMBLY MATERIAL NUMBER | LIGHT PIPE MATERIAL | PANEL GROUND TABS |
|---|---|---|
| 446201006 | POLYCARBONATE | ALL |
| 446201007 | POLYCARBONATE | SEE NOTE 8 |
| 446201008 | POLYSULFONE | ALL |
| 446201009 | POLYSULFONE | SEE NOTE 8 |

ADD NOTE 5 & 10 — 2007/11/08
EC NO: UCP2008-0965 — 2007/12/04
DRWN: JBELL — 2007/12/05
CH'KD: LSCHMIDT
APPR: FSMITH
DESCRIPTION
D2
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |
| ANGULAR ±1/2° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | MKAMAR | 00/03/07 |
| CHECKED BY | MKAMAR | 00/03/07 |
| APPROVED BY | JROBERTS | 00/03/07 |

TITLE: RJ-45 INVERTED MODULAR JACK ASSEMBLY WITH RJ-11 KEEPOUT FEATURE

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-44620-001
SHEET NO.: 4 OF 4

SIZE: C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION