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Part Number: [0855025012](#)
Status: **Active**
Overview: [modular_plugs_jacks](#)
Description: Modular Jack, Right Angle, Low Profile, SMT, 8/8, Pin-in-Hole- Reflow

Documents:

| | |
|---|--|
| 3D Model | Product Specification PS-85502-001 (PDF) |
| Drawing (PDF) | RoHS Certificate of Compliance (PDF) |
| Application Specification (PDF) | |

Agency Certification

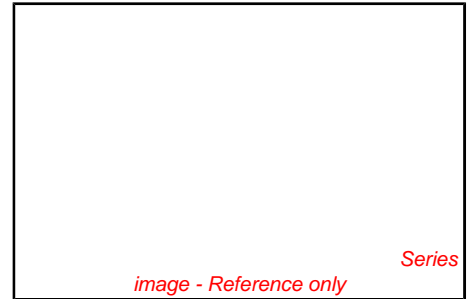
UL E107635

General

| | |
|---------------------------|-------------------------------------|
| Product Family | Modular Jacks/Plugs |
| Series | 85502 |
| Comments | Pin and Paste |
| 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 | No |
| Lightpipes/LEDs | None |
| Material - Metal | Brass |
| 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) | 1.57 mm |
| Packaging Type | Embossed Tape on Reel |
| Pitch - Mating Interface (in) | 0.040 In |
| Pitch - Mating Interface (mm) | 1.02 mm |
| Pitch - Term. Interface (in) | 0.050 In |
| Pitch - Term. Interface (mm) | 1.27 mm |
| Plating min: Mating (µin) | 120.00, 50.8 |
| Plating min: Mating (µm) | 1.27, 3.000 |
| Plating min: Termination (µin) | 120.00, 76 |
| Plating min: Termination (µm) | 1.9, 3.00 |
| Ports | 1 |
| Positions / Loaded Contacts | 8/8 |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -40°C to +80°C |
| Termination Interface: Style | Surface Mount |
| Waterproof / Dustproof | No |
| Wire/Cable Type | N/A |



| | |
|--|--------------------------|
| <p>EU RoHS ELV and RoHS Compliant REACH SVHC Contains SVHC: No Halogen-Free Status Halogen-Free</p> | <p>China RoHS</p> |
|--|--------------------------|

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
[85502Series](#)

Mates With
 FCC 68 Plugs

Electrical

| | |
|-------------------------------|---------------|
| Current - Maximum per Contact | 1.5A |
| Shielded | No |
| Voltage - Maximum | 125V AC (RMS) |

Solder Process Data

| | |
|--|---------------------------|
| Duration at Max. Process Temperature (seconds) | 45 |
| Lead-free Process Capability | Reflow Capable (SMT only) |
| Max. Cycles at Max. Process Temperature | 3 |
| Process Temperature max. C | 260 |

Material Info**Reference - Drawing Numbers**

| | |
|-------------------------|--------------|
| Packaging Specification | PK-85502 |
| Product Specification | PS-85502-001 |
| Sales Drawing | SD-85502-103 |

This document was generated on 06/07/2010

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NOTES:

1- MATERIAL:

HOUSING: LCP GLASS FILLED UL 94V0, COLOUR: BLACK
 TERMINAL: BRASS PLATED WITH:
 0.00127/.000050 MIN GOLD IN CONTACT AREA,
 0.00190/.000075 MIN PURE TIN IN TAIL AREA,
 BOTH OVER 0.00127/.000050 MIN NICKEL OVERALL.
 SOLDER PEGS: BRASS PLATED WITH 0.0020/.000078 MIN TIN.

2- JACK FOR MATING WITH F.C.C.68 PLUGS.
 (MOLEX 90075 SERIES).

3- PRODUCT SPECIFICATION: MOLEX PS-85502-001

4- POLYIMIDE ADHESIVE TAPE FOR PICK & PLACE SURFACE.
 THICKNESS: 125 μm/4921 μ'

5- PACKAGING SPECIFICATION: MOLEX PK-85502.
 (BLISTER PACKAGING).

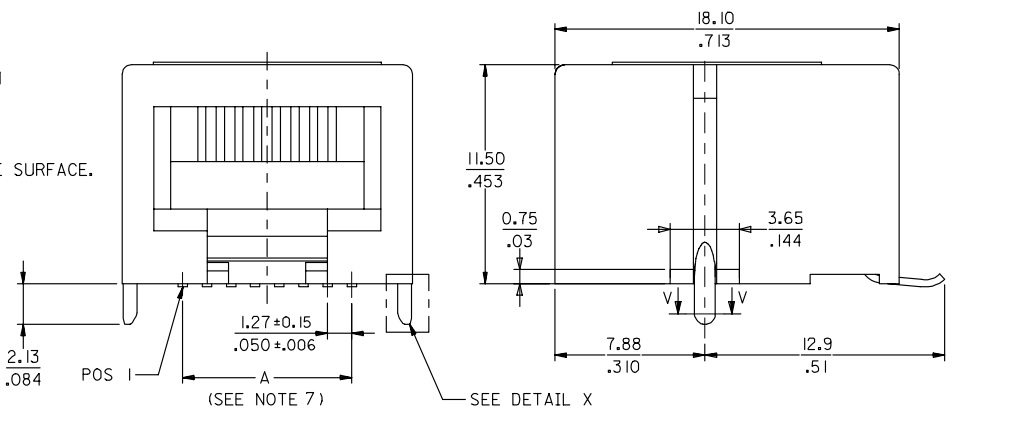
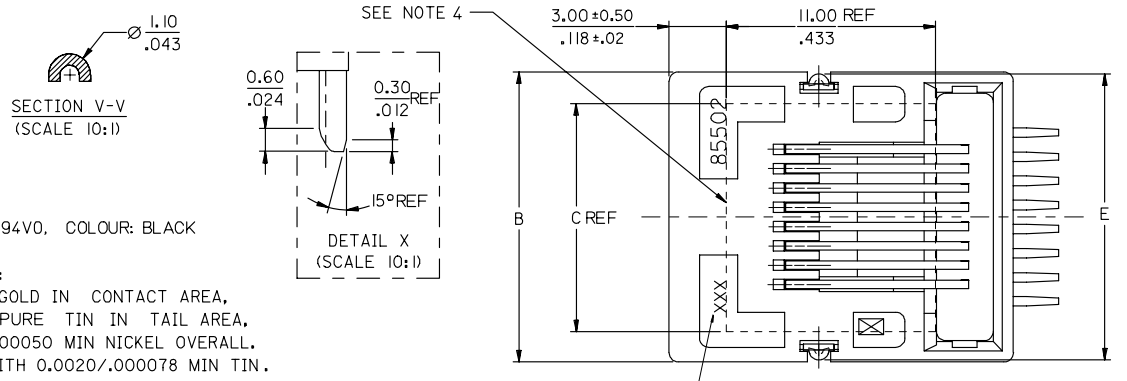
6- COPLANARITY OF SIGNAL LEADS: 0.10/.004

7- SEE DIMENSIONS IN CHART ON SHEET 2.

8- P.C. BOARD THICKNESS: 1.57/.062

9- MANUFACTURING I.D. CAN BE EITHER MG, MXF OR MXI.

10- APPLICATION SPEC: AS-85513-001

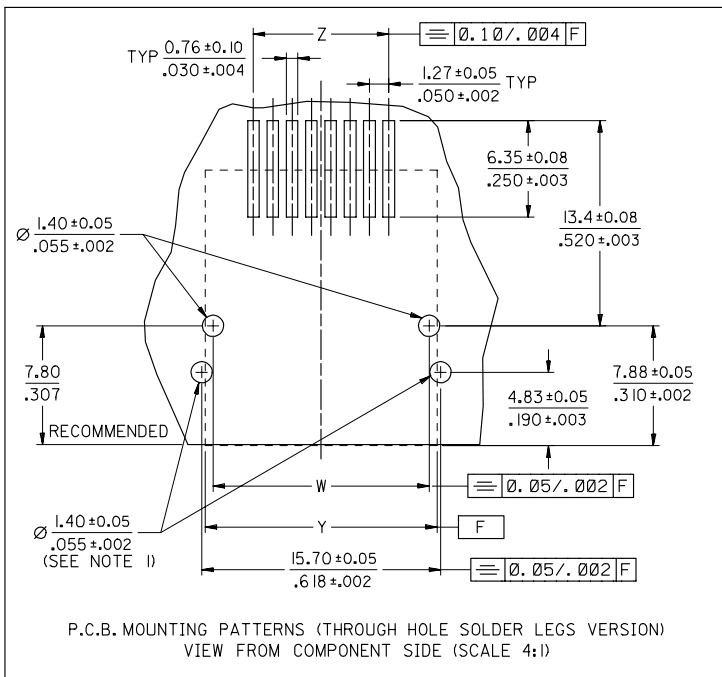


| | | | | | | | | | |
|---|-------------------------------|--|-----------------------|--------------------------|--------------------|---|------------------------|------------------------------|---------------------|
| MODIFIED MATL EC NO: E2007-0717 DRAWN BY: RYANES CHKD: CHIKO APPR: EOMAHONY 2007/02/15 2007/02/15 2007/02/15 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE MM/IN | | SCALE 5:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± .010 | DRAWN BY DB | DATE 2006/06/12 | TITLE R/A LOW PROFILE P.C.JACK SMT; 4,6 & 8 CKTS WITH THROUGH HOLE SOLDER PEGS | | | |
| | | 2 PLACES ± 0.25 ± .014 | 1 PLACE ± 0.35 ± --- | CHECKED BY EOMAHONY | DATE 2006/06/15 | MOLEX MOLEX INCORPORATED | | | |
| | | ANGULAR ± 2 ° | | APPROVED BY EOMAHONY | DATE 2006/06/15 | MATERIAL NO. SEE CHART SHT 2 | | DOCUMENT NO. SD-85502-103 | SHEET NO. 1 OF 2 |
| 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 | | | | | | | |

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

NOTE 1:
TWO OPTIONAL HOLES FOR THE 8 POSITION-VERSION FOR THE COMPATIBILITY WITH THE INTERNAL SHIELDED VERSION.



| PART NUMBERS FOR SMT JACK WITH THROUGH HOLE SOLDER PEGS | | | | | | |
|---|--------|------------|------------|------------|------------|--|
| HOUSING COLOR | POS 4 | POS 6 | POS 6 | POS 8 | | |
| | 4 CKTS | 4 CKTS | 6 CKTS | 8 CKTS | | |
| STANDARD VERSION | BLACK | 85502-5009 | 85502-5010 | 85502-5011 | 85502-5012 | |

| TYPE | DIM | | | |
|--------------|--------------|--------------|--------------|--------------|
| | POS 4 | POS 6 | POS 6 | POS 8 |
| A ±0.15/.006 | 3.81 / .150 | 3.81 / .150 | 6.35 / .250 | 8.89 / .350 |
| B | 11.18 / .440 | 13.21 / .520 | 13.21 / .520 | 15.24 / .600 |
| C (REF) | 8.50 / .335 | 8.50 / .335 | 8.50 / .335 | 12.00 / .472 |
| E | 11.08 / .436 | 13.11 / .516 | 13.11 / .516 | 15.14 / .596 |
| W ±0.05/.002 | 10.13 / .399 | 12.16 / .479 | 12.16 / .479 | 14.19 / .559 |
| Y (REF) | 11.18 / .440 | 13.21 / .520 | 13.21 / .520 | 15.24 / .600 |
| Z ±0.05/.002 | 3.81 / .150 | 3.81 / .150 | 6.35 / .250 | 8.89 / .350 |

P.C.B. MOUNTING PATTERNS (THROUGH HOLE SOLDER LEGS VERSION)
VIEW FROM COMPONENT SIDE (SCALE 4:1)

| | | |
|-------------------|------------|-----------------|
| SEE SHEET 1 | 2007/02/15 | QUALITY SYMBOLS |
| EC NO: E2007-0717 | 2007/02/15 | ▽=0 |
| DRW:DBYRNES | 2007/02/15 | ▽=0 |
| CHKD: EOMAHONY | 2007/02/15 | |
| APPR: EOMAHONY | 2007/02/15 | |
| DESCRIPTION | | |
| REV | | |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | |
|--|--------|-----------------|--------------|
| mm | INCH | MM/IN | |
| 4 PLACES ± .010 | ± .004 | DRAWN BY | DATE |
| 3 PLACES ± .010 | ± .004 | DB | 2006/06/12 |
| 2 PLACES ± 0.25 | ± .010 | CHECKED BY | DATE |
| 1 PLACE ± 0.35 | ± .010 | EOMAHONY | 2006/06/15 |
| ANGULAR ± 2° | | APPROVED BY | DATE |
| | | EOMAHONY | 2006/06/15 |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. | DOCUMENT NO. |
| | | SEE CHART | SD-85502-103 |

| | | | | |
|---|-----|--------------|--------------|------------------------|
| SCALE | 5:1 | DESIGN UNITS | METRIC | THIRD ANGLE PROJECTION |
| TITLE | | | | |
| RIGHT ANGLE LOW PROFILE SMT PC JACK WITH THROUGH HOLE SOLDER PEGS | | | | |
| MOLEX INCORPORATED | | | | |
| MATERIAL NO. | | | DOCUMENT NO. | SHEET NO. |
| SEE CHART | | | SD-85502-103 | 2 OF 2 |
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