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**Part Number:** [0365090003](#)  
**Status:** **Active**  
**Overview:** [din\\_41612](#)  
**Description:** 2.54mm (.100") Pitch DIN 41612 R Style Female Receptacle, Right Angle, Through Hole, 0.30µm (12µ") Selective Gold (Au) Plating, 96 Circuits, without Mounting Clips or Sealing Strip, Lead Free

**Documents:**

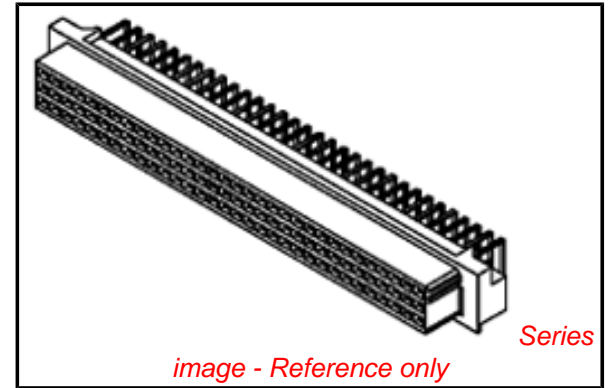
[3D Model](#) [Product Specification PS-36509-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

|                |  |
|----------------|--|
| Product Family | Backplane Connectors   |
| Series         | <a href="#">36509</a>  |
| Application    | Daughtercard   |
| Comments       | No Mounting Clips, Secured with Tubular Rivets/<br>Cheesehead Screws. No Sealing Strip |
| Component Type | PCB Receptacle   |
| Overview       | <a href="#">din_41612</a>  |
| Product Name   | IEC 603-2/DIN 41612  |
| Style          | R  |

**Physical**

|                                |                    |
|--------------------------------|--------------------|
| Circuits (Loaded)              | 96                 |
| Circuits (maximum)             | 96                 |
| Circuits Detail                | 1,2,3,...32; a+b+c |
| Color - Resin                  | Gray               |
| Durability (mating cycles max) | 50                 |
| First Mate / Last Break        | No                 |
| Guide to Mating Part           | No                 |
| Keying to Mating Part          | Yes                |
| Material - Metal               | Phosphor Bronze    |
| Material - Plating Mating      | Gold               |
| Material - Plating Termination | Tin                |
| Material - Resin               | Polyester          |
| Number of Columns              | 32                 |
| Number of Pairs                | Open Pin Field     |
| Number of Rows                 | 3                  |
| Orientation                    | Right Angle        |
| PC Tail Length (in)            | 0.118 In           |
| PC Tail Length (mm)            | 3.00 mm            |
| PCB Locator                    | No                 |
| PCB Retention                  | Yes                |
| PCB Thickness Recommended (in) | 0.063 In           |
| PCB Thickness Recommended (mm) | 1.60 mm            |
| Packaging Type                 | Carton             |
| Pitch - Mating Interface (in)  | 0.100 In           |
| Pitch - Mating Interface (mm)  | 2.54 mm            |
| Pitch - Term. Interface (in)   | 0.100 In           |
| Pitch - Term. Interface (mm)   | 2.54 mm            |
| Plating min: Mating (µin)      | 12                 |
| Plating min: Mating (µm)       | 0.30               |
| Plating min: Termination (µin) | 98                 |
| Plating min: Termination (µm)  | 2.5                |
| Polarized to PCB               | Yes                |
| Stackable                      | No                 |



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
Status**

**China RoHS**



**Not Reviewed**

**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**

[36509Series](#)

|                                |                 |
|--------------------------------|-----------------|
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -55°C to +125°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

|                               |               |
|-------------------------------|---------------|
| Current - Maximum per Contact | 1A            |
| Data Rate                     | 622.0 Mbps    |
| Voltage - Maximum             | 250V AC (RMS) |

**Solder Process Data**

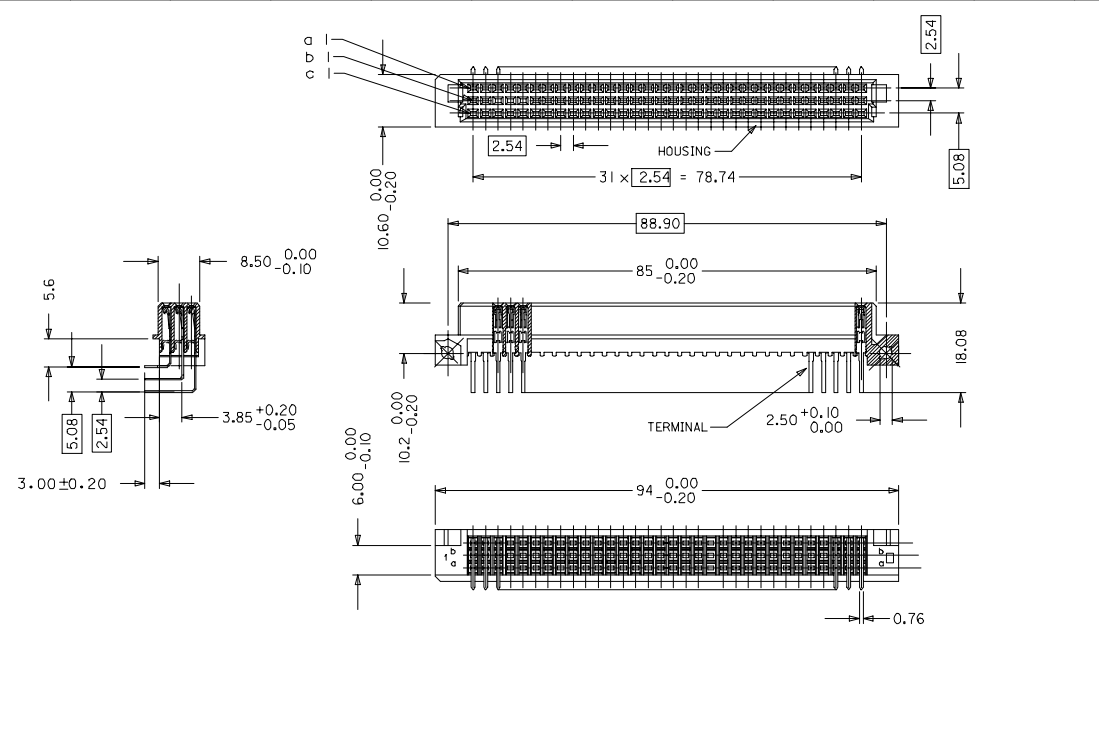
|                              |                        |
|------------------------------|------------------------|
| Lead-free Process Capability | Wave Capable (TH only) |
|------------------------------|------------------------|

**Material Info****Reference - Drawing Numbers**

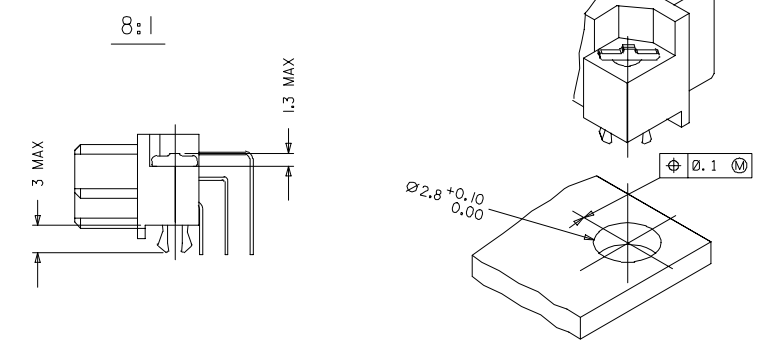
|                       |              |
|-----------------------|--------------|
| Product Specification | PS-36509-001 |
| Sales Drawing         | SD-36509-001 |

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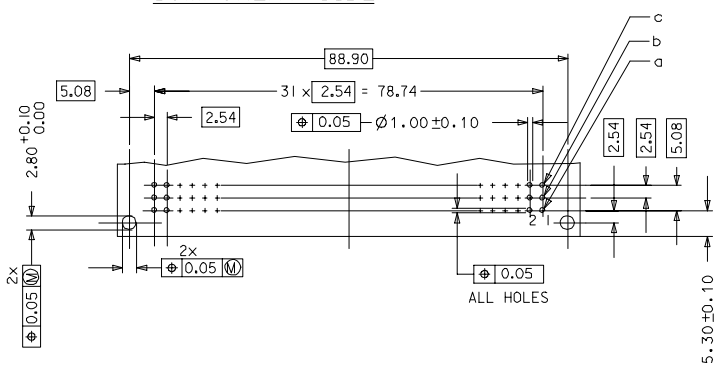
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WITH MOUNTING CLIPS



RECOMMENDED PCB LAYOUT  
COMPONENT SIDE

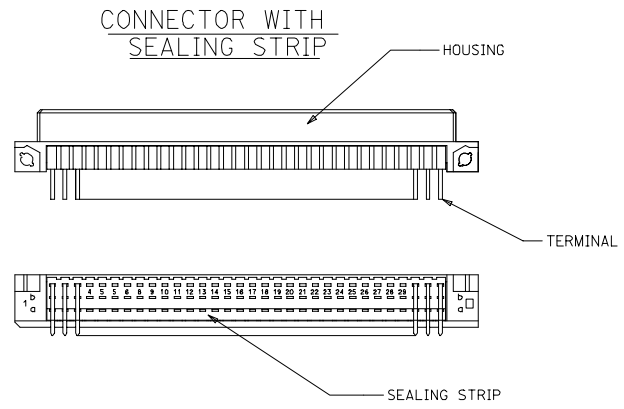


- NOTES:
- MATERIALS: THERMOPLASTIC POLYESTER, GLASS FILLED, UL94V-0, COLOUR: PEBBLE GREY RAL 7032  
TERMINAL - PHOSPHOR BRONZE  
MOUNTING CLIP: STEEL
  - FINISH: TERMINAL:-  
CONTACT AREA  
1. PERFORMANCE LEVEL 1: SELECTIVE GOLD (Au), THICKNESS = 1.1 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER  
2. PERFORMANCE LEVEL 2: SELECTIVE GOLD (Au), THICKNESS = 0.6 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER  
3. PERFORMANCE LEVEL 3: SELECTIVE GOLD (Au), THICKNESS = 0.3 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER  
TERMINATION AREA:  
SELECTIVE TIN, THICKNESS = 2.5 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER OVERALL
  - MOUNTING CLIP:-  
TIN (Sn), THICKNESS = 5-10 MICROMETER, OVER NICKEL (Ni), THICKNESS = 2.5 MICROMETER
  - FOR NON MOUNTING CLIP OPTION, CONNECTOR TO BE SECURED WITH RIVETS: 2 TUBULAR RIVETS 2.5 x 0.3 ... DIN 7340  
SCREWS: 2 CHEESEHEAD SCREWS M2.5 x ... DIN 84 AND 2 HEXAGONAL NUTS M2.5 DIN 934
  - MATERIAL NUMBER, BATCH CODE, UL AND CSA MARKING TO BE PRINTED ON THE CONNECTOR
  - CUT FACE OF TIP WITHOUT PLATING PERMITTED
  - PRODUCT SPECIFICATION : PS 36509-001

RoHS COMPLIANT

|  |                               |   |                                 |                              |                    |  |                        |   |  |
|--|-------------------------------|---|---------------------------------|------------------------------|--------------------|--|------------------------|---|--|
| EC No: P007-0044<br>DRAWN BY: DRINGSATTI/MARCO 2006/10/10<br>CHECKED BY: CHIKKOSUDHIR 2006/10/11<br>APPROVED BY: APPR/SSUDHIR 2006/10/17 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |                                 | DIMENSION STYLE<br>MM ONLY   |                    | SCALE<br>2:1                                     | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION  |  |
|  |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± 0.05 ± ---<br>2 PLACES ± 0.1 ± ---<br>1 PLACE ± 0.15 ± --- | INCH<br>± ---<br>± ---<br>± --- | DRAWN BY<br>SS               | DATE<br>1999/09/24 | TITLE<br>ASSEMBLY, DIN1612<br>R FEMALE<br>96 POS |                        | MOLEX INCORPORATED  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | SIZE<br>A 1                   | MATERIAL NO.<br>SEE CHART   |                                 | DOCUMENT NO.<br>SD-36509-001 |                    | SHEET NO.<br>1 OF 2                              |                        | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |

| MATERIAL No | MOLEX ENG No      | PERF LEVEL | PLATING | CONTACT SEQUENCE/ROW | MOUNTING CLIP | SEALING STRIP |
|-------------|-------------------|------------|---------|----------------------|---------------|---------------|
| 36509-0001  | MM-B2400-R960     | 1          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | NO            |
| 36509-0002  | MM-B2500-R960     | 2          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | NO            |
| 36509-0003  | MM-B2600-R960     | 3          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | NO            |
| 36509-0007  | MM-B2400-R910     | 1          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | NO            |
| 36509-0008  | MM-B2500-R910     | 2          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | NO            |
| 36509-0009  | MM-B2600-R910     | 3          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | NO            |
| 36509-0013  | MM-B2400-R960-101 | 1          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | YES           |
| 36509-0014  | MM-B2500-R960-101 | 2          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | YES           |
| 36509-0015  | MM-B2600-R960-101 | 3          | Au+Ni   | 1,2,3....32 a+b+c    | NO            | YES           |
| 36509-0019  | MM-B2400-R910-101 | 1          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | YES           |
| 36509-0020  | MM-B2500-R910-101 | 2          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | YES           |
| 36509-0021  | MM-B2600-R910-101 | 3          | Au+Ni   | 1,2,3....32 a+b+c    | YES           | YES           |



RoHS COMPLIANT

| EC No: 2007/0044<br>DRAWN BY: DRINGSATTI/MARCO 2006/10/10<br>CHECKED BY: CHIKKOSUDHAR 2006/10/11<br>APPROVED BY: APPR/SSUDHAR 2006/10/16 | QUALITY SYMBOLS<br>▽=0<br>▽=0  | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± 0.15</td> <td>± 0.006</td> </tr> <tr> <td>3 PLACES</td> <td>± 0.05</td> <td>± 0.002</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.1</td> <td>± 0.004</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.15</td> <td>± 0.006</td> </tr> </tbody> </table> |                           | mm                           | INCH                | 4 PLACES  | ± 0.15 | ± 0.006 | 3 PLACES | ± 0.05 | ± 0.002 | 2 PLACES | ± 0.1 | ± 0.004 | 1 PLACE | ± 0.15 | ± 0.006 | DIMENSION STYLE<br>MM ONLY | SCALE<br>2:1 | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |
|--|--|---|---------------------------|------------------------------|---------------------|---|--------|---------|----------|--------|---------|----------|-------|---------|---------|--------|---------|----------------------------|--------------|------------------------|------------------------|
|  |  | mm  | INCH                      |                              |                     |   |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |
| 4 PLACES   | ± 0.15   | ± 0.006   |                           |                              |                     |   |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |
| 3 PLACES   | ± 0.05   | ± 0.002   |                           |                              |                     |   |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |
| 2 PLACES   | ± 0.1  | ± 0.004   |                           |                              |                     |   |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |
| 1 PLACE  | ± 0.15   | ± 0.006   |                           |                              |                     |   |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | DRAWN BY: SS 1999/09/24<br>CHECKED BY: G.J.LOWE 1999/09/24<br>APPROVED BY: G.J.LOWE 1999/09/24 | TITLE<br>ASSEMBLY, DIN41612 R FEMALE 96 POS   | MATERIAL NO.<br>SEE CHART | DOCUMENT NO.<br>SD-36509-001 | SHEET NO.<br>2 OF 2 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |        |         |          |        |         |          |       |         |         |        |         |                            |              |                        |                        |