3M™ DIN R-Form Plug  
Vertical, Solder Tail or Press-Fit Termination  
DIN 41612 Series

- Early mate late break (EMLB) grounding contacts for hot swapping
- Select load capability
- Expanded pin counts
- Optional press-fit or solder tail termination
- Mates with C-form and R-form sockets
- Optional retention clip
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3M.com/Interconnects for compliance information (RIA E1 & C1 apply)

**Physical**

**Insulation:**
- Material: Glass Filled Polyester (PBT)
- Flammability: UL 94V-0
- Color: Gray

**Contact:**
- Material: Copper Alloy

**Plating:**
- Underplating: 50 μ” Min.Nickel
- Wiping Area: See Ordering Information
- Termination: See Ordering Information

**Electrical**

- Current Rating: 3.0A at 30°C T-rise above Ambient
- Contact Resistance: ≤20 mΩ
- Insulation Resistance: ≥1,000 MΩ, 100VDC
- Withstanding Voltage: 1,000 VAC for 1 minute

**Environmental**

- Temperature Rating: -55°C to 125°C
- Process Temperature Rating: Maximum Insulator Temperature 191°C (solder wave process only)

UL File No.: E68080
# 3M™ DIN R-Form Plug

## Vertical, Solder Tail or Press-Fit Termination

### DIN 41612 Series

<table>
<thead>
<tr>
<th>Contact Quantity</th>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>DIN-016RPA-XXX-XXXX</td>
<td>54.40 [2.142]</td>
<td>44.60 [1.756]</td>
<td>50.00 [1.969]</td>
<td>38.10 [1.500]</td>
</tr>
<tr>
<td>32</td>
<td>DIN-032RPB-XXX-XXXX</td>
<td>54.40 [2.142]</td>
<td>44.60 [1.756]</td>
<td>50.00 [1.969]</td>
<td>38.10 [1.500]</td>
</tr>
<tr>
<td>48</td>
<td>DIN-048RPC-XXX-XXXX</td>
<td>54.40 [2.142]</td>
<td>44.60 [1.756]</td>
<td>50.00 [1.969]</td>
<td>38.10 [1.500]</td>
</tr>
<tr>
<td>64</td>
<td>DIN-064RPD-XXX-XXXX</td>
<td>95.00 [3.740]</td>
<td>85.20 [3.354]</td>
<td>90.00 [3.543]</td>
<td>78.74 [3.100]</td>
</tr>
</tbody>
</table>

**Table 1**

**Dimensions:**

- **A**: 2.80 [0.110]
- **B**: 5.08 [0.200]
- **C**: 11.60 [0.457]
- **D**: 5.08 [0.200]
- **E**: 10.00 [0.393]
- **X**: 2.54 [0.100]
- **X**: 11.10 [0.437]
- **XX**: 2.90 [0.114]
- **XX**: 5.89 [0.230]

**Tolerances:**

- **X**: ± 0.50
- **X**: ± 0.25
- **XX**: ± 0.15

**Position:**

- **A**: Ø 2.0 [0.079]
- **B**: Ø 2.80 [0.110]
- **C**: Ø 3.80 [0.150]

**Notes:**

- [ ] Dimension for Reference Only

---

3M is a trademark of 3M Company.

For technical, sales or ordering information call 800-225-5373

3M Electronic Solutions Division
Interconnect Solutions
http://www.3Mconnector.com
3M™ DIN R-Form Plug
Vertical, Solder Tail or Press-Fit Termination
DIN 41612 Series

**RECOMMENDED PCB LAYOUT**

### Ordering Information

**DIN - XXXRP X - XXX - XX**

- **Contact Quantity**: SEE TABLE 1
- **Termination Options**: SEE TABLE 2
- **Plating Options**:
  - **SH**: 1 - 3 μ" Gold on Contact, 120 - 200 μ" Matte Tin on Terminal
  - **FJ**: 10 - 20 μ" Gold on Contact, 120 - 200 μ" Matte Tin on Terminal
  - **KR**: 30 - 40 μ" Gold on Contact, 120 - 200 μ" Matte Tin on Terminal
  - **HM**: 3 μ" Gold on Contact, 7 μ" Min. PdNi, 120 - 200 μ" Matte Tin on Terminal
  - **KV**: 30 μ" Gold on contact area, 1 - 3 μ" Gold on Board Termination

- **A = A Row only (see note)**
- **B = Rows A & C Filled**
- **C = Rows A, B & C Filled**
- **D = Rows A & B Filled**
- **E = B Row only (see note)**

#### TABLE 2

<table>
<thead>
<tr>
<th>SOLDER TERMINATION OPTION NO.</th>
<th>DIM &quot;C&quot; mm (in)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>3.75 (.148)</td>
<td>with retention</td>
</tr>
<tr>
<td>S1</td>
<td>3.75 (.148)</td>
<td>no retention</td>
</tr>
<tr>
<td>W</td>
<td>14.70 (.579)</td>
<td>no retention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRESS-FIT TERMINATION OPTION NO.</th>
<th>DIM &quot;C&quot; mm (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPS</td>
<td>5.00 (.197)</td>
</tr>
<tr>
<td>DPW1</td>
<td>13.25 (.522)</td>
</tr>
</tbody>
</table>

Note: A and E options are currently not covered in UL File No. E68080.

- This diagram serves only for Part Number descriptive definitions.

PLEASE CONTACT YOUR LOCAL SALES REPRESENTATIVE FOR CUSTOMER SPECIFIC PRODUCT CONFIGURATIONS.

TS-2307-E
Sheet 3 of 3
Important Notice

All statements, technical information, and recommendations related to 3M’s products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M’s current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M’s option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.