

# 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](http://www.3M.com/Interconnects) for compliance information (RIA E1 & C1 apply)

Date Modified: February 2, 2010

TS-2307-E  
Sheet 1 of 3

## Physical

### Insulation:

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

### Contact:

Material: Copper Alloy

### Plating:

Underplating: 50  $\mu$ ” 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:  $\leq 20$  m $\Omega$   
Insulation Resistance:  $\geq 1,000$  M $\Omega$ , 100V<sub>DC</sub>  
Withstanding Voltage: 1,000 V<sub>AC</sub> 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 1

| Contact Quantity | Part Number         | A              | B              | D              | E             |
|------------------|---------------------|----------------|----------------|----------------|---------------|
| 16               | DIN-016RPA-XXX-XXXX | 54.40 [2.142]  | 44.60 [1.756]  | 50.00 [1.969]  | 38.10 [1.500] |
| 32               | DIN-032RPB-XXX-XXXX | 54.40 [2.142]  | 44.60 [1.756]  | 50.00 [1.969]  | 38.10 [1.500] |
| 48               | DIN-048RPC-XXX-XXXX | 54.40 [2.142]  | 44.60 [1.756]  | 50.00 [1.969]  | 38.10 [1.500] |
| 32               | DIN-032RPD-XXX-XXXX | 54.40 [2.142]  | 44.60 [1.756]  | 50.00 [1.969]  | 38.10 [1.500] |
| 16               | DIN-016RPE-XXX-XXXX | 54.40 [2.142]  | 44.60 [1.756]  | 50.00 [1.969]  | 38.10 [1.500] |
| 32               | DIN-032RPA-XXX-XXXX | 95.00 [3.740]  | 85.20 [3.354]  | 90.00 [3.543]  | 78.74 [3.100] |
| 64               | DIN-064RPB-XXX-XXXX | 95.00 [3.740]  | 85.20 [3.354]  | 90.00 [3.543]  | 78.74 [3.100] |
| 96               | DIN-096RPC-XXX-XXXX | 95.00 [3.740]  | 85.20 [3.354]  | 90.00 [3.543]  | 78.74 [3.100] |
| 64               | DIN-064RPD-XXX-XXXX | 95.00 [3.740]  | 85.20 [3.354]  | 90.00 [3.543]  | 78.74 [3.100] |
| 32               | DIN-032RPE-XXX-XXXX | 95.00 [3.740]  | 85.20 [3.354]  | 90.00 [3.543]  | 78.74 [3.100] |
| 40               | DIN-040RPA-XXX-XXXX | 115.40 [4.543] | 105.52 [4.154] | 110.32 [4.343] | 99.06 [3.900] |
| 80               | DIN-080RPB-XXX-XXXX | 115.40 [4.543] | 105.52 [4.154] | 110.32 [4.343] | 99.06 [3.900] |
| 120              | DIN-120RPC-XXX-XXXX | 115.40 [4.543] | 105.52 [4.154] | 110.32 [4.343] | 99.06 [3.900] |
| 80               | DIN-080RPD-XXX-XXXX | 115.40 [4.543] | 105.52 [4.154] | 110.32 [4.343] | 99.06 [3.900] |
| 40               | DIN-040RPE-XXX-XXXX | 115.40 [4.543] | 105.52 [4.154] | 110.32 [4.343] | 99.06 [3.900] |



mm  
[inch]

| Tolerance Unless Noted |        |        |        |
|------------------------|--------|--------|--------|
|                        | X.     | .X     | .XX    |
| mm                     | ± 0.50 | ± 0.25 | ± 0.15 |

[ ] Dimension for Reference Only



R1 with Retention Clip

TS-2307-E  
Sheet 2 of 3

# 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

- 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)

Termination Options:  
SEE TABLE 2

Plating Options:

- SH = 1 - 3  $\mu$ " Gold on Contact  
120 - 200  $\mu$ " Matte Tin on Terminal
- FJ = 10 - 20  $\mu$ " Gold on Contact  
120 - 200  $\mu$ " Matte Tin on Terminal
- KR = 30 - 40  $\mu$ " Gold on Contact  
120 - 200  $\mu$ " Matte Tin on Terminal
- HM = 3  $\mu$ " Gold on Contact, 7  $\mu$ " Min. PdNi  
120 - 200  $\mu$ " Matte Tin on Terminal
- KV = 30  $\mu$ " Gold on contact area, 1 - 3  $\mu$ " Gold  
on Board Termination

**TABLE 2**

| SOLDER TERMINATION OPTION NO.    | DIM "C" mm ( in ) | Comment        |
|----------------------------------|-------------------|----------------|
| R1                               | 3.75 (.148)       | with retention |
| S1                               | 3.75 (.148)       | no retention   |
| W                                | 14.70 (.579)      | no retention   |
| PRESS-FIT TERMINATION OPTION NO. |                   |                |
| DPS                              | 5.00 (.197)       |                |
| DPW1                             | 13.25 (.522)      |                |

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.**

**3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnector.com](http://www.3Mconnector.com)

Please recycle. Printed in USA.  
© 3M 2010. All rights reserved.  
RIA-2217B-E

3M is a trademark of 3M Company.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)