

# 3M™ DIN R-Form Socket

Right Angle, Solder Tail Termination

DIN 41612 Series



- Inverse boardmount connector
- Select load capability
- Expanded pin counts
- Optional retention clips
- Mates with C-form and R-form plugs
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: October 29, 2012

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## 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



Electronic Solutions Division  
Interconnect Solutions  
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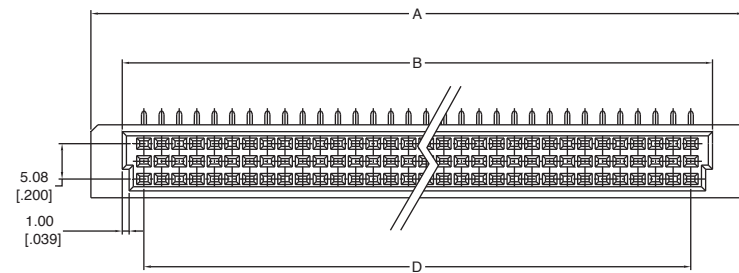
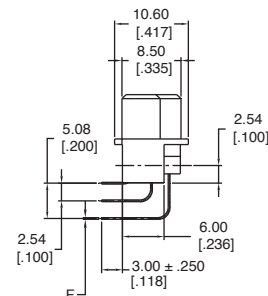
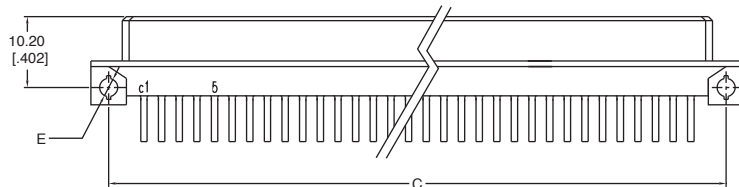
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DIN 41612 Series

Table 1

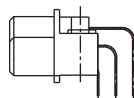
| Contact Quantity | Part Number         | A             | B             | C             | D            | E            | F          |
|------------------|---------------------|---------------|---------------|---------------|--------------|--------------|------------|
| 16               | DIN-016RSA-XXX-XXXX | 53.40[2.102]  | 44.40[1.748]  | 48.26[1.900]  | 38.10[1.500] | Ø2.60[Ø.102] | 0.25[.010] |
| 32               | DIN-032RSB-XXX-XXXX | 53.40[2.102]  | 44.40[1.748]  | 48.26[1.900]  | 38.10[1.500] | Ø2.60[Ø.102] | 0.25[.010] |
| 48               | DIN-048RSC-XXX-XXXX | 53.40[2.102]  | 44.40[1.748]  | 48.26[1.900]  | 38.10[1.500] | Ø2.60[Ø.102] | 0.25[.010] |
| 32               | DIN-032RSD-XXX-XXXX | 53.40[2.102]  | 44.40[1.748]  | 48.26[1.900]  | 38.10[1.500] | Ø2.60[Ø.102] | 0.25[.010] |
| 16               | DIN-016RSE-XXX-XXXX | 53.40[2.102]  | 44.40[1.748]  | 48.26[1.900]  | 38.10[1.500] | Ø2.60[Ø.102] | 0.25[.010] |
| 32               | DIN-032RSA-XXX-XXXX | 94.00[3.701]  | 85.00[3.346]  | 88.90[3.500]  | 78.74[3.100] | Ø2.60[Ø.102] | 0.25[.010] |
| 64               | DIN-064RSB-XXX-XXXX | 94.00[3.701]  | 85.00[3.346]  | 88.90[3.500]  | 78.74[3.100] | Ø2.60[Ø.102] | 0.25[.010] |
| 96               | DIN-096RSC-XXX-XXXX | 94.00[3.701]  | 85.00[3.346]  | 88.90[3.500]  | 78.74[3.100] | Ø2.60[Ø.102] | 0.25[.010] |
| 64               | DIN-064RSD-XXX-XXXX | 94.00[3.701]  | 85.00[3.346]  | 88.90[3.500]  | 78.74[3.100] | Ø2.60[Ø.102] | 0.25[.010] |
| 32               | DIN-032RSE-XXX-XXXX | 94.00[3.701]  | 85.00[3.346]  | 88.90[3.500]  | 78.74[3.100] | Ø2.60[Ø.102] | 0.25[.010] |
| 40               | DIN-040RSA-XXX-XXXX | 114.32[4.501] | 105.32[4.146] | 109.22[4.300] | 99.06[3.900] | Ø2.80[Ø.110] | 0.60[.024] |
| 80               | DIN-080RSB-XXX-XXXX | 114.32[4.501] | 105.32[4.146] | 109.22[4.300] | 99.06[3.900] | Ø2.80[Ø.110] | 0.60[.024] |
| 120              | DIN-120RSC-XXX-XXXX | 114.32[4.501] | 105.32[4.146] | 109.22[4.300] | 99.06[3.900] | Ø2.80[Ø.110] | 0.60[.024] |
| 80               | DIN-080RSD-XXX-XXXX | 114.32[4.501] | 105.32[4.146] | 109.22[4.300] | 99.06[3.900] | Ø2.80[Ø.110] | 0.60[.024] |
| 40               | DIN-040RSE-XXX-XXXX | 114.32[4.501] | 105.32[4.146] | 109.22[4.300] | 99.06[3.900] | Ø2.80[Ø.110] | 0.60[.024] |



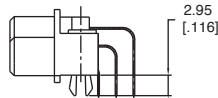
mm  
[inch]

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

[ ] Dimension for Reference Only



SR1  
WITHOUT RETENTION CLIP



RR1L  
WITH "B" RETENTION CLIPS  
for .062 PCB thickness

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3M

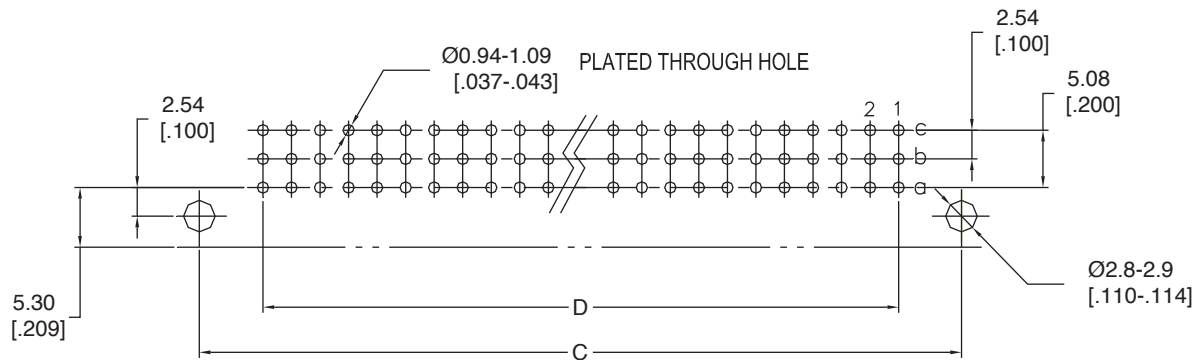
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RECOMMENDED PCB LAYOUT

## Ordering Information

**DIN - XXXRS 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)

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

Termination Options:

SR1 = 3.00 [.118]

RR1L = 3.00 [.118] with 'B' retention clips

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.

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