Mini D Ribbon (MDR) Connectors

.050” Boardmount Thru-Hole Right Angle Receptacle — Shielded

102 Series

- Wiper-on-wiper contact for reliable repetitive plugging
- SMT compatible PCT insulator material
- Ground lock PCB retention
- Interface latch design for connection stability
- MDR digital LCD interface as a 20 or 26 contact connector
- Contacts: 14, 20, 26, 36, 40, 50 and 68

Physical

**Insulation**
- Material: Glass Reinforced Polyester (PCT)
- Flammability: UL 94V-0
- Color: See ordering information

**Contact**
- Material: Copper Alloy (C521)

**Plating**
- Underplating: See ordering information
- Wiping Area: See ordering information

**Shroud & Latch Hook**
- Material: Steel
- Plating: Nickel

**Ground Lock**
- Material: Copper Alloy
- Plating: Tin Lead

**Marking:** 3M Logo and Part Number

Electrical

**Current Rating:** 1 A
**Insulation Resistance:** $>5 \times 10^8 \Omega$ at 500 V dc
**Withstanding Voltage:** 500 Vrms for 1 minute

Environmental

**Temperature Rating:** -55°C to +105°C
**Process Rating:** Surface mount compatible up to 240°C peak for short durations.

UL File No.: E68080
# 3M™ Mini D Ribbon (MDR) Connectors

## .050” Boardmount Thru-Hole Right Angle Receptacle — Shielded

## 102 Series

### Contact Quantity Dimensions

<table>
<thead>
<tr>
<th>Contact Quantity</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1.200 [30.48]</td>
<td>1.831 [46.50]</td>
<td>2.06 [52.5]</td>
<td>1.40 [35.5]</td>
<td>1.67 [42.5]</td>
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<tr>
<td>68</td>
<td>1.650 [41.91]</td>
<td>2.281 [57.93]</td>
<td>2.51 [63.9]</td>
<td>1.85 [46.9]</td>
<td>2.12 [53.9]</td>
</tr>
</tbody>
</table>

### Ordering Information

**X102XX-55X3XX**

- **Connector Material:**
  - Blank = Beige
  - D = Black (20 pos. only)

- **Contact Quantity**

- **Plating Options for Wiping Area:**
  - J = 8 µ" [0.2 µm] Min. Gold over 50 µ" [1.27 µm] Min. Ni.
  - VC = 30 µ" [0.76 µm] Min. Gold over 100 µ" [2.54 µm] Min. Ni.

- **Panelmount thread size**
  - G = M2.5 (14, 20, 26, 36, 40 position)
  - H = #4-40 (20, 36, 50 & 68 position)

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**Note:** Must order panelmount screws: 3344-38 for M2.5, 3344-44 for #4-40.
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<table>
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<tr>
<th>Quantity</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>.450 [11.43]</td>
<td>1.081 [27.45]</td>
<td>.94 [23.8]</td>
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<tr>
<td>50</td>
<td>1.200 [30.48]</td>
<td>1.831 [46.50]</td>
<td>1.69 [42.8]</td>
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<tr>
<td>68</td>
<td>1.650 [41.91]</td>
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<td>2.13 [54.2]</td>
</tr>
</tbody>
</table>

### Recommended Board Layout

(Viewed from Connector Side)

For 20, 36, 40, & 68 Positions

For 14, 26, & 50 Positions

*Note: Plated through holes for .063 board thickness

### Recommended Panel Cut-Out

Note: Panel thickness .079 [2.00] Max.
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