

## 3M™ Wire-to-Board System, 1.27 mm, 450 Series

For more than fifty years, 3M has been among the world's leaders in connectors utilizing Insulation Displacement Contacts (IDCs). We now offer a new family of products to expand this rich history of leadership and innovation:

- 3M™ Ribbon Cable Wiremount Socket Assembly, 451 Series, 1.27 mm (0.050") Pitch
- 3M™ Shrouded Boardmount Header, 452 Series, 1.27 mm (0.050") Pitch

The Ribbon Cable Wiremount Socket Assembly, 451 Series, offers a robust connector in a very small package and with the following options:

- Fine pitch delivers high connection density in a very small space
- 30  $\mu$ " Au and Au flash available plating versions offer multiple mate/unmate cycle option levels at different price points
- Available friction latch configurations enable increased protection against accidental disconnect when using a box header
- Optional strain relief accessory provides additional security to help guard against damage when users pull on a terminated cable

The Shrouded Boardmount Header, 452 Series, is designed to maximize design flexibility while minimizing PCB footprint. They mate to Ribbon Cable Wiremount Socket Assembly, 451 Series and are available in the following configurations:

- The standard shrouded header is available with or without ejector latches. This innovative assembly method allows the addition of positive latch and ejection functionality with minimal size addition.
- 30  $\mu$ " Au and Au flash available plating versions offer multiple mate/unmate cycle option levels at different price points
- Vertical mount, right angle mount, thru-hole and SMT configurations available
- Tape and reel packaging for SMT version enables use in automated placement applications
- Lead-free process capable
- PCB standoffs enable pin-in-paste processing capability



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Configuration	Part Number	Customer Drawing
Ribbon Cable Wiremount Socket Assembly, 451 Series	451XX-0X00XX	78-5100-2436-3
Shrouded Boardmount Header, 452 Series	452XX-XX02XX	78-5100-2437-1



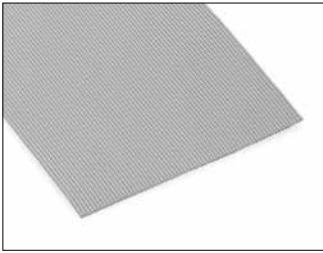
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## Product Specifications

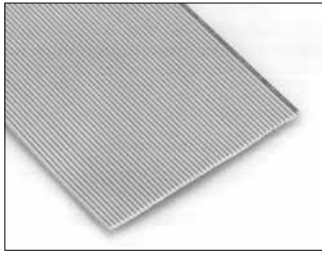
### 451 & 452 Series

Current Rating	1.0 A, all lines energized, 30°C temp rise per EIA 364-70 1.5 A, 6 lines energized, 30°C temp rise per EIA 364-70 2.5 A, 1 line energized, 30°C temp rise per EIA 364-70
Voltage Rating	125V min
Insulation Resistance	> 1 x 10 <sup>9</sup> Ohms at 500 VDC
Withstanding Voltage	1250 VACrms at sea level
Operating Temperature	-65°C to +105°C
Processing Temperature	260°C
Lead-Free Solderable	Yes
Moisture Sensitivity Level	MSL1 per J-STD-020

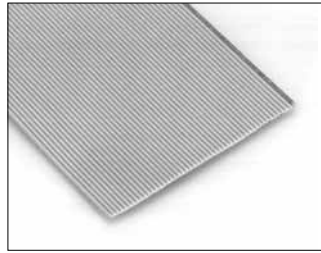
## Related Products



3M™ Round Conductor Flat Cable, 3447 Series, PVC Jacketed, 30 AWG, Tinned Copper, 20 to 100 Solid Conductor Cable



3M™ Round Conductor Flat Cable, 3754 Series, PVC Jacketed, 30 AWG, Tin Plated, 20 to 100 Stranded Conductor Cable



3M™ Round Conductor Flat Cable, 3609 Series, FEP Jacketed, 30 AWG, Silver Plated, 20 to 100 Solid Conductor Cable. For extreme temperature requirements.



3M™ Standard Assembly Press, Model 3640 and 3M™ Locator Plate 3443-82-XX

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