

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

3M has been among the world's leaders in connectors utilizing Insulation Displacement Contacts (IDCs).

- 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 3M cable socket 451 and 3M header 452 series are used together as a high density wire-to-board solution with a 1.27mm (0.050") pitch and a 0.635mm (0.025") pitch ribbon cable. This system uses insulation displacement contact (IDC) technology and cantilever U-contacts, proven reliable termination and space saving without sacrificing connection density.

The 3M cable socket 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 μ" 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 3M header 452 series is designed to maximize design flexibility while minimizing PCB footprint. They mate to 3M cable socket 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 μ" 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



3M cable socket 451 and 3M header 452 series

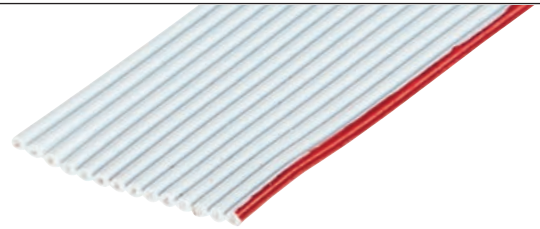
Configuration	Part Number	Customer Drawing
3M cable socket 451 series	451XX-0XXXXX	78-5100-2436-3
3M header 452 series	452XXX-XX0XXX	78-5100-2437-1

Product Specifications

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

Current Rating	1.0 A, all lines energized, per UL
Voltage Rating	125 VAC
Insulation Resistance	> 1 × 10 ⁹ Ohms at 500 VDC
Withstanding Voltage	1250 VDC at sea level
Operating Temperature	-65°C to +125°C
Processing Temperature	260°C
Lead-Free Solderable	Yes
Moisture Sensitivity Level	MSL1 per J-STD-020

Related Products



3M™ Round Conductor Flat Cable, 3604 Series
 3M™ Round Conductor Flat Cable, 3609 Series
 3M™ Round Conductor Flat Cable, 3447 Series
 3M™ Round Conductor Flat Cable, 3749 Series
 3M™ Round Conductor Flat Cable, 3754 Series
 3M™ Round Conductor Flat Cable, 3756 Series
 3M™ Round Conductor Flat IDC Cable, 7700 Series
 3M™ Round Conductor Flat, LSHF Cable, HF447 Series

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