Two-Piece 4.0mm Pitch Battery
9155-400

This unique battery or removable module style connector is different from most others in that it allows for the pluggable device to be swiped or connected from either direction. The spring contact offers enhanced contact deflection range over existing connectors in the market with a full 1.4mm of travel after contact engagement. This contact design allows the connector to absorb more of the plastic or housing tolerances making it more functional and reliable in real life applications.

The fixed pad connector is unique in the industry as it replaces the plating of gold directly onto PCB pads. The main benefit of using this connector is to elevate the pad surface well above the PCB so that the gold contacts are close to flush with the outside packaging. This minimizes the distance that a spring contact would need to absorb in the mating tolerance band. Also unique to this connector is the angled contact lead-in on both sides which facilitates smooth engagement of the spring contact from either direction.

**APPLICATIONS**
- Portable electronics requiring a removable battery
- Interface for removable/pluggable modules or cartridges
- Docking cradle for charging and data transfer

**FEATURES AND BENEFITS**
- Proven contact reliability in harsh industrial or medical applications
- Increased contact deflection range above existing connectors on the market
- Gold plated Beryllium contact spring contact assures maximum contact reliability and functionality up to 5000 cycles
- Beveled lead in on pad connector facilitates smooth module engagement from either direction

**ELECTRICAL**
- Current Rating: 5A/contact
- Voltage Rating: 125 VAC

**ENVIRONMENTAL**
- Operating Temperature: -40°C to +125°C

**MECHANICAL**
- Contact Material: Spring contact is Be Cu, Fixed contact is Phosphor Bronze
- Contact Plating: Gold over nickel mating area, pure Tin SMT tails
- Durability 5000 Cycles

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Reel Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>401</td>
<td>Battery Connector - Sprung Half</td>
<td>550</td>
</tr>
<tr>
<td>402</td>
<td>Battery Connector - Fixed Half</td>
<td>1100</td>
</tr>
</tbody>
</table>

**Plating Option**
- 6 = 0.4μm Selective Gold, Pure Tin Tail
- 8 = 0.8μm Selective Gold, Pure Tin Tail
Two-Piece 4.0mm Pitch Battery

9155-400

2 WAY BATTERY CONNECTOR – SPRUNG HALF

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
2. FOR FURTHER DETAILS REFER TO AVX SPECIFICATION 201-01-207.
3. ADDITIONAL INFORMATION AND BASIC MATING DETAILS REFER TO PAGES 12-14.
4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.
6. RECOMMENDED PLATING ON MATING PADS, GOLD OVER NICKEL.
7. FOR OTHER TAN VERTICAL MATING WE RECOMMEND MATING WITH THE FIXED CONNECTOR, REFER TO PAGE 13.
3 WAY BATTERY CONNECTOR – SPRUNG HALF

NOTES:
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2. FOR FURTHER DETAILS REFER TO AVX SPECIFICATION 201-01-207.
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SUGGESTED MATING PCB LAYOUT

SECTION ON Z-Z

SUGGESTED SMT PCB LAYOUT
Two-Piece 4.0mm Pitch Battery
9155-400

4 WAY BATTERY CONNECTOR – SPRUNG HALF

NOTES:
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Two-Piece 4.0mm Pitch Battery
9155-400

5 WAY BATTERY CONNECTOR – SPRUNG HALF

NOTES:
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4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.
6. RECOMMENDED PLATING ON MATING PADS, GOLD OVER NICKEL.
7. FOR OTHER TAN VERTICAL MATING WE RECOMMEND MATING WITH THE FIXED CONNECTOR, REFER TO PAGE 13.
Two-Piece 4.0mm Pitch Battery
9155-400

6 WAY BATTERY CONNECTOR – SPRUNG HALF

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
2. FOR FURTHER DETAILS REFER TO AVX SPECIFICATION 201-01-207.
3. ADDITIONAL INFORMATION AND BASIC MATING DETAILS REFER TO PAGES 12-14.
4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.
6. RECOMMENDED PLATING ON MATING PADS. GOLD OVER NICKEL.
7. FOR OTHER TAN VERTICAL MATING WE RECOMMEND MATING WITH THE FIXED CONNECTOR, REFER TO PAGE 13.

SUGGESTED SMT PCB LAYOUT

SECTION ON Z-Z

SUGGESTED MATING PCB LAYOUT

DETAIL A

CONNECT
INTER

041519
2 WAY BATTERY CONNECTOR – FIXED HALF OPTIONAL

SECTION ON Z-Z

SUGGESTED SMT PCB LAYOUT

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
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Two-Piece 4.0mm Pitch Battery
9155-400

3 WAY BATTERY CONNECTOR – FIXED HALF OPTIONAL

NOTES:
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2. FOR FURTHER DETAILS REFER TO AVX SPECIFICATION 201-01-207.
3. ADDITIONAL INFORMATION AND BASIC MATING DETAILS REFER TO PAGES 12-13.
4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.

SECTION ON Z-Z

SUGGESTED SMT PCB LAYOUT
Two-Piece 4.0mm Pitch Battery
9155-400

4 WAY BATTERY CONNECTOR – FIXED HALF OPTIONAL

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
2. FOR FURTHER DETAILS REFER TO AVX SPECIFICATION 201-01-207.
3. ADDITIONAL INFORMATION AND BASIC MATING DETAILS REFER TO PAGES 12-13.
4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.
5 WAY BATTERY CONNECTOR – FIXED HALF OPTIONAL

SECTION ON Z-Z

SUGGESTED SMT PCB LAYOUT
Two-Piece 4.0mm Pitch Battery
9155-400

6 WAY BATTERY CONNECTOR – FIXED HALF OPTIONAL

SECTION ON Z-Z

SUGGESTED SMT PCB LAYOUT

NOTES:
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3. ADDITIONAL INFORMATION AND BASIC MATING DETAILS REFER TO PAGES 12-13.
4. PACKING DETAILS ON PAGE 15.
5. CONNECTOR OUTLINE.
BATTERY CONNECTOR - MATING DETAILS
SPRUNG HALF MATED WITH FIXED HALF

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
2. INSULATION MATERIAL: LCP, GLASS FILLED, UL94 V-0, COLOR BLACK.
3. CONTACT MATERIAL SPRUNG HALF: BERYLLIUM COPPER.
4. CONTACT MATERIAL FIXED HALF: PHOSPHOR BRONZE.
5. CONTACT PLATING: GOLD OVER NICKEL, PURE TIN TAILS.
6. DURABILITY 5000 OPERATIONS.
7. CURRENT RATING 5A.
8. CONTACT RESISTANCE 25mΩ MAX.

BATTERY CONNECTOR - MATING DETAILS
DIRECTION OF MATING

HORIZONTAL MATING - FROM EITHER END

VERTICAL MATING

BATTERY CONNECTOR - MATING DETAILS
SPRUNG HALF MATED WITH PCB

NOTES:
1. GENERAL TOLERANCE ±0.20 UNLESS OTHERWISE STATED.
2. SPRUNG HALF MATED WITH GOLD PLATED PAD ON PCB
3. VERTICAL MATING ONLY.
BI-DIRECTIONAL BATTERY CONNECTOR - PACKING DETAILS

PACKING DETAILS
SPRUNG CONNECTOR

PACKING DETAILS
FIXED CONNECTOR

<table>
<thead>
<tr>
<th>REEL QTY</th>
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<tbody>
<tr>
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<td>TRAILER</td>
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UNREELED
330mm DIAMETER REEL

041519

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