

# BATTERY CONNECTORS

## Vertical Mate 2.0mm Pitch 9155-800



Traditional battery connectors have been used for years in a number of applications: battery packs, removable or pluggable modules and conventional board-to-board to connect both signal level and power circuits. These ultra reliable and robust gold plated beryllium copper contacts provide high integrity connections in harsh environments.

The vertical mate 9155-800 series eliminates end user damage when pluggable modules or packs are pressed down vertically into a base unit. Traditional right angle connectors have contact geometries that rely on the pack being inserted at an angle and then rotated down into position. The unique contact design of this connector deflects cleanly and easily when a module or mating connector is pushed vertically into position, eliminating any end user damage.

### APPLICATIONS

- Handheld/portable devices requiring docking or cradle charging
- Patient monitoring or portable medical electronics
- Industrial devices requiring pluggable or programming modules
- Internet appliances requiring battery back-up
- Application notes; refer to 201-01-205

### FEATURES AND BENEFITS

- Gold plated BeCu contacts provide high electrical and mechanical performance over 5000 mating cycles
- Unique contact geometry allows for full vertical engagement in pluggable module applications
- Plastic locating bosses and SMT anchor tabs maximizes the mechanical stability of the connector in harsh conditions
- Contact nose incorporates an anti-snag feature to protect during deflection

### ELECTRICAL

- Current Rating: 2p-4p: 2.0 Amps, 5p-6p: 1.5 Amps
- Voltage Rating; 125 VAC

### ENVIRONMENTAL

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

### MECHANICAL

- Insulator Material; Glass-Filled Nylon 46; UL94V0
- Contact Material: Beryllium Copper
- Plating: Gold over Nickel, Tin leads
- Durability: 5000 Cycles

### HOW TO ORDER

**00**  
Prefix

**9155**  
Series

**00X**  
No. of Ways

| Code | No of Ways | Packing QTY |
|------|------------|-------------|
| 002  | 2          | 1000        |
| 003  | 3          | 1000        |
| 004  | 4          | 1000        |
| 005  | 5          | 1000        |
| 006  | 6          | 1000        |

**8XX**  
Standard Battery Connector

852 = Battery Connector Right Angle  
Connector Height: 5.00mm  
Boss: Yes

**00**

**X**  
Plating Option

6 = 0.4µm Selective Gold, Pure Tin Tail  
8 = 0.8µm Selective Gold, Pure Tin Tail

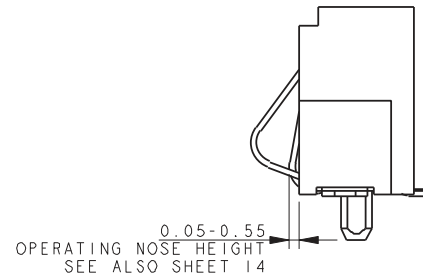
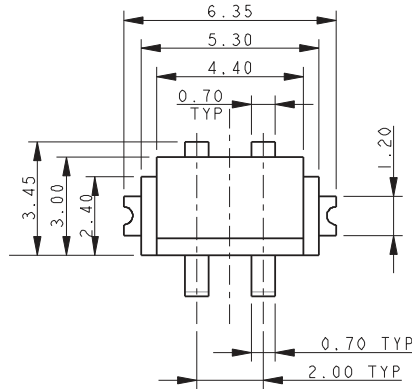


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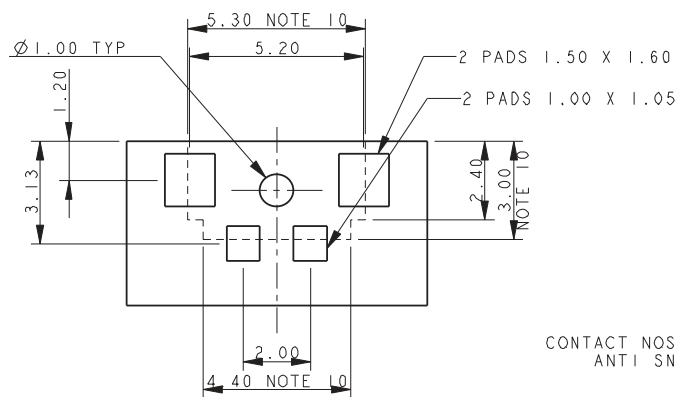
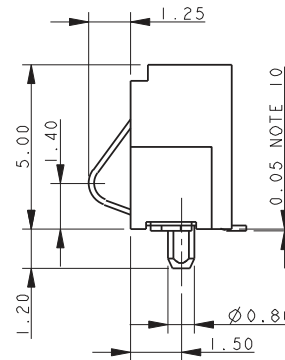
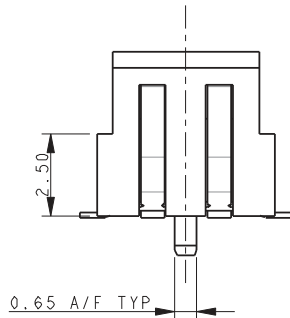
## Vertical Mate 2.0mm Pitch 9155-800



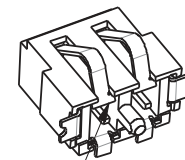
### 2 WAY BATTERY CONNECTOR – RIGHT ANGLE 2MM PITCH - WITH BOSS



#### DEFLECTED CONTACT



#### SUGGESTED PCB LAYOUT



CONTACT NOSE RETAINED  
ANTI SNAG FEATURE

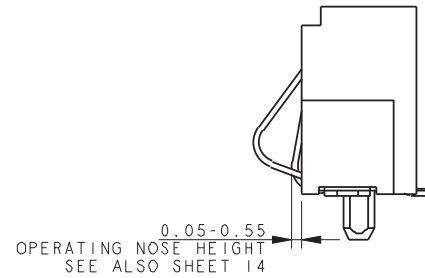
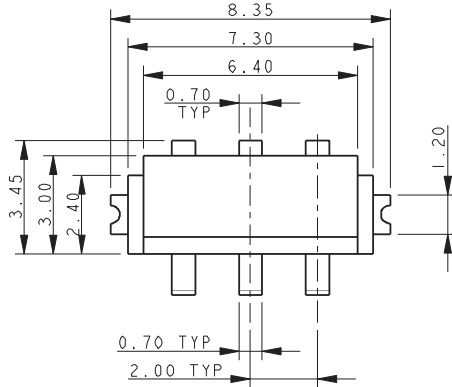
#### NOTES:

1. GENERAL TOLERANCE  $\pm 0.20$  UNLESS STATED.
2. FOR FULL PRODUCT DETAILS REFER TO SPECIFICATION 201-01-2014.  
FOR APPLICATION DATA REFER TO SPECIFICATION 201-01-205.
3. FOR MATING PAD DETAILS REFER TO PAGE 44.
4. FOR PACKING DETAILS REFER TO PAGE 43
5. INSULATION MATERIAL: GLASS FILLED NYLON 46, UL94 V-O, COLOR BLACK.
6. CONTACT MATERIAL: BERYLLIUM COPPER.
7. CONTACT PLATING: SELECTIVE GOLD OVER NICKEL, PURE TIN ON TAILS.
8. BRACKET MATERIAL: TIN PLATED PHOSPHOR BRONZE.
9. CONNECTOR OUTLINE.
10. COPLANARITY ON ALL CONTACT TAILS AND PADS 0.12MM MAXIMUM.

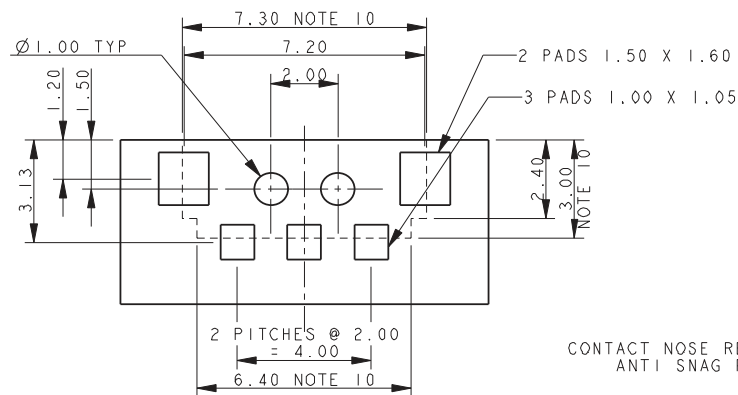
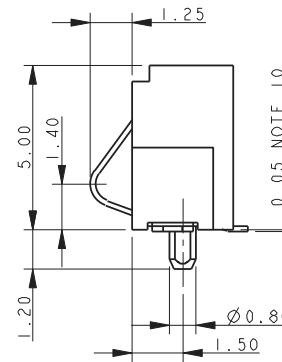
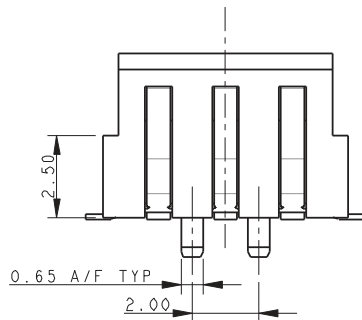
# BATTERY CONNECTORS

## Vertical Mate 2.0mm Pitch 9155-800

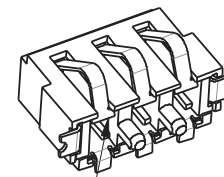
### 3 WAY BATTERY CONNECTOR – RIGHT ANGLE 2MM PITCH - WITH BOSS



#### DEFLECTED CONTACT



#### SUGGESTED PCB LAYOUT



CONTACT NOSE RETAINED  
ANTI SNAG FEATURE

#### NOTES:

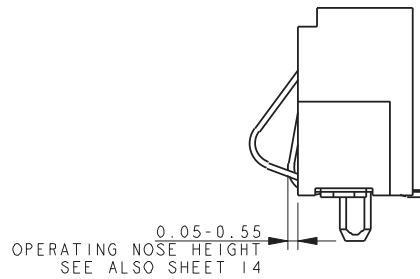
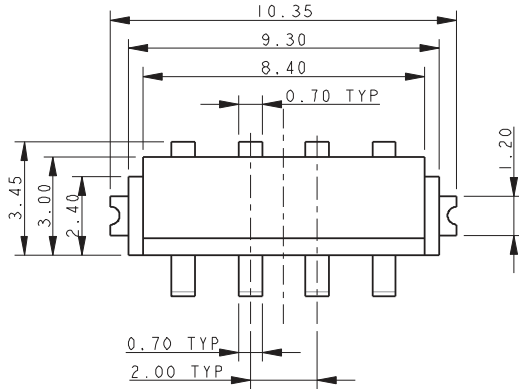
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# BATTERY CONNECTORS

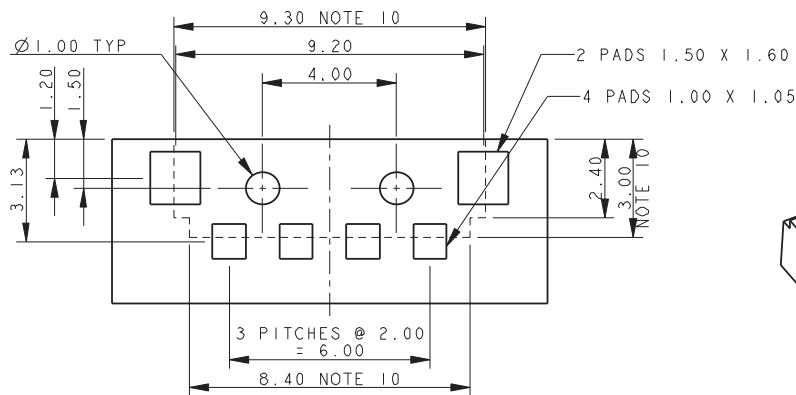
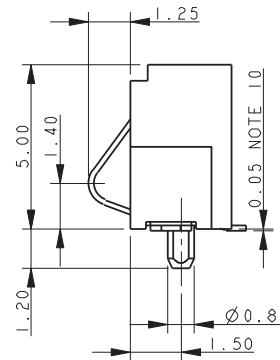
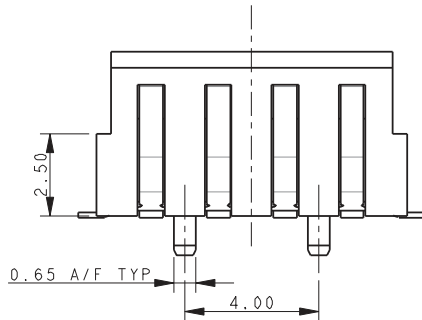
## Vertical Mate 2.0mm Pitch 9155-800



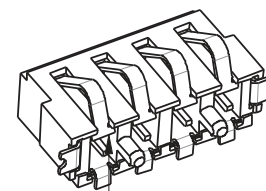
### 4 WAY BATTERY CONNECTOR – RIGHT ANGLE 2MM PITCH - WITH BOSS



#### DEFLECTED CONTACT



#### SUGGESTED PCB LAYOUT



CONTACT NOSE RETAINED  
ANTI SNAG FEATURE

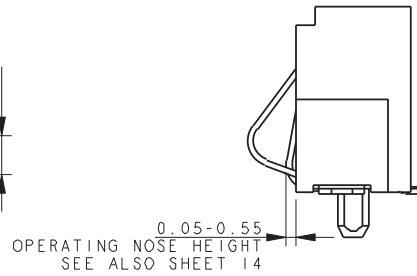
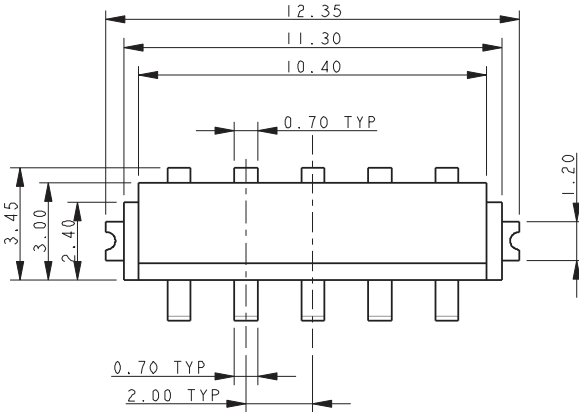
#### NOTES:

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10. COPLANARITY ON ALL CONTACT TAILS AND PADS 0.12MM MAXIMUM.

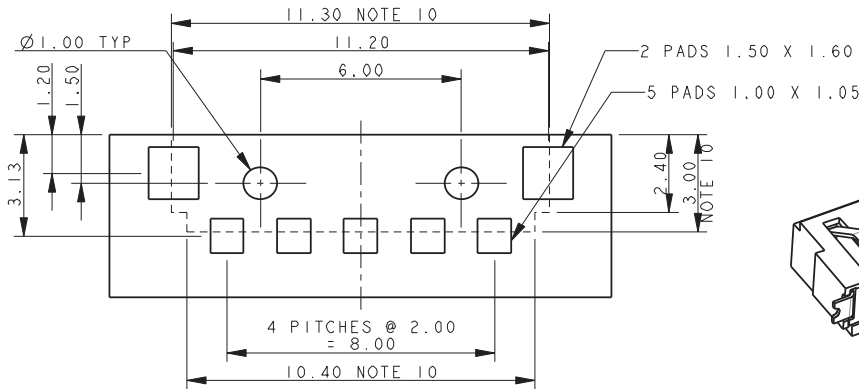
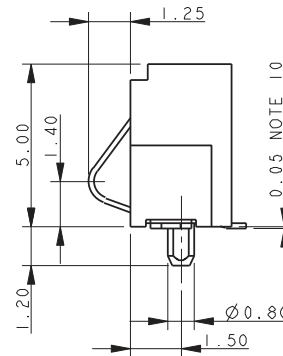
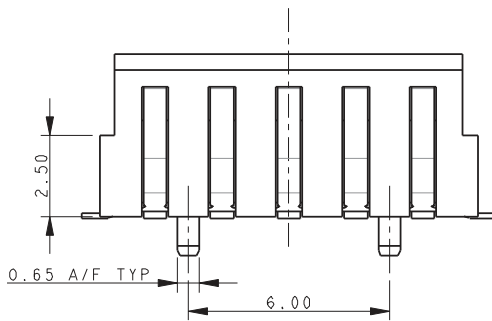
# BATTERY CONNECTORS

## Vertical Mate 2.0mm Pitch 9155-800

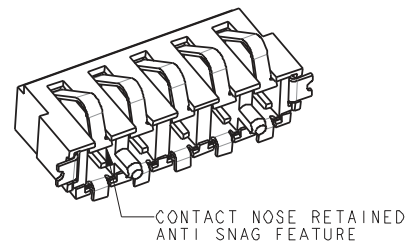
### 5 WAY BATTERY CONNECTOR – RIGHT ANGLE 2MM PITCH - WITH BOSS



#### DEFLECTED CONTACT



#### SUGGESTED PCB LAYOUT



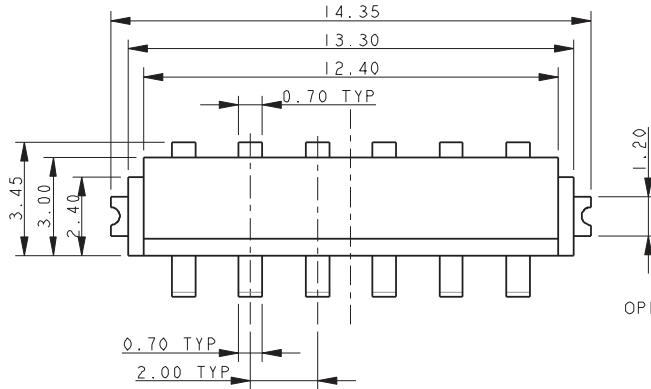
#### NOTES:

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# BATTERY CONNECTORS

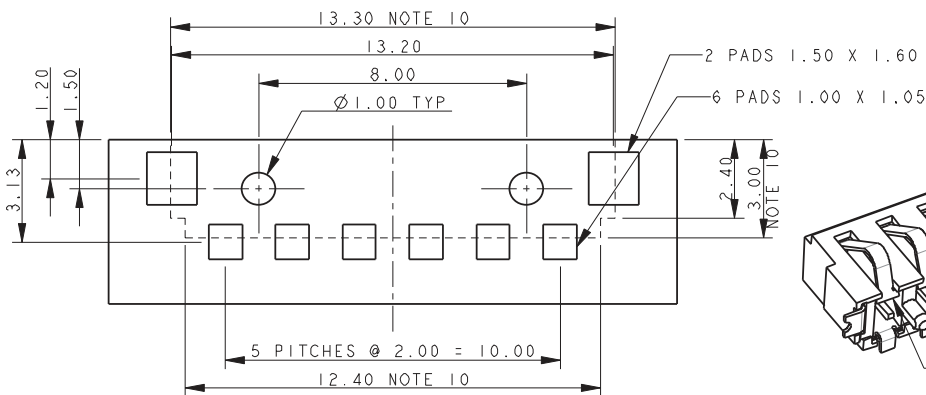
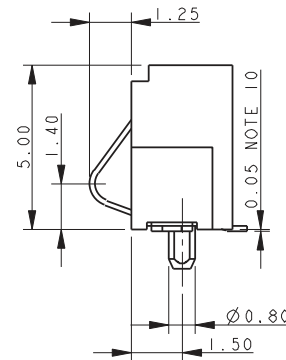
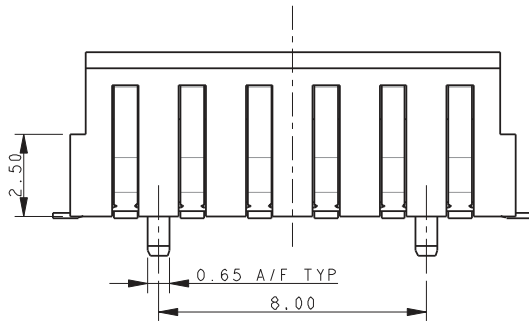
## Vertical Mate 2.0mm Pitch 9155-800

### 6 WAY BATTERY CONNECTOR – RIGHT ANGLE 2MM PITCH - WITH BOSS

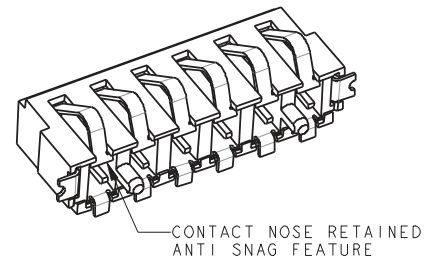


0.05-0.55  
OPERATING NOSE HEIGHT  
SEE ALSO SHEET 14

#### DEFLECTED CONTACT



#### SUGGESTED PCB LAYOUT



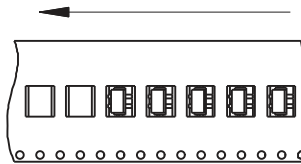
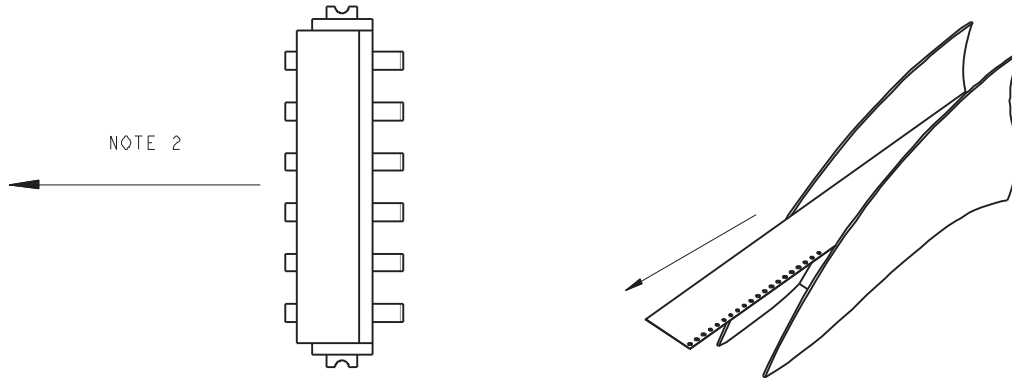
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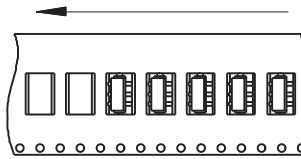
# BATTERY CONNECTORS

## Vertical Mate 2.0mm Pitch 9155-800

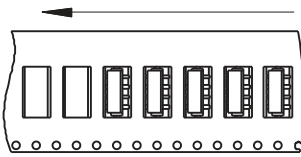
### PACKING DETAILS



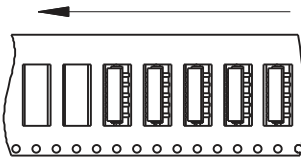
|                   |                  |
|-------------------|------------------|
| <b>No of Ways</b> | <b>2</b>         |
| REEL QTY          | 100 without Boss |
| TAPE WIDTH        | 24mm             |
| POCKET PITCH      | 8mm              |



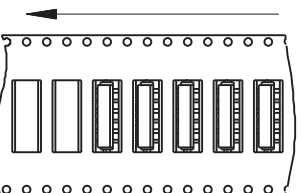
|                   |                  |
|-------------------|------------------|
| <b>No of Ways</b> | <b>3</b>         |
| REEL QTY          | 100 without Boss |
| TAPE WIDTH        | 24mm             |
| POCKET PITCH      | 8mm              |



|                   |                  |
|-------------------|------------------|
| <b>No of Ways</b> | <b>4</b>         |
| REEL QTY          | 100 without Boss |
| TAPE WIDTH        | 24mm             |
| POCKET PITCH      | 8mm              |



|                   |                  |
|-------------------|------------------|
| <b>No of Ways</b> | <b>5</b>         |
| REEL QTY          | 100 without Boss |
| TAPE WIDTH        | 24mm             |
| POCKET PITCH      | 8mm              |



|                   |                  |
|-------------------|------------------|
| <b>No of Ways</b> | <b>6</b>         |
| REEL QTY          | 100 without Boss |
| TAPE WIDTH        | 24mm             |
| POCKET PITCH      | 8mm              |

**NOTES:**

1. PARTS TO BE PACKED ON 330MM DIAMETER REELS.
2. COMPONENT ORIENTATION SHOWN.

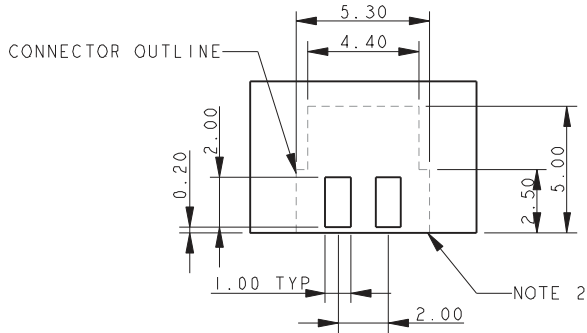
# BATTERY CONNECTORS

## Vertical Mate 2.0mm Pitch 9155-800

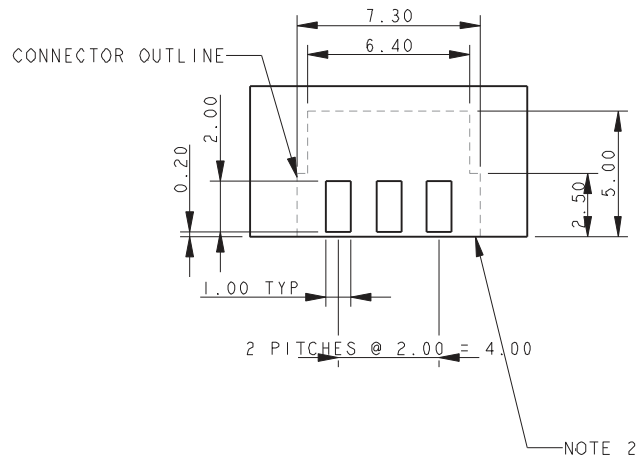


### 2MM PITCH RIGHT ANGLE – MATING PADS

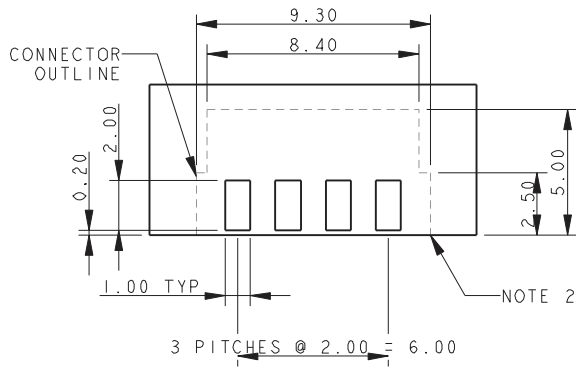
#### 2 WAY – MATING PADS



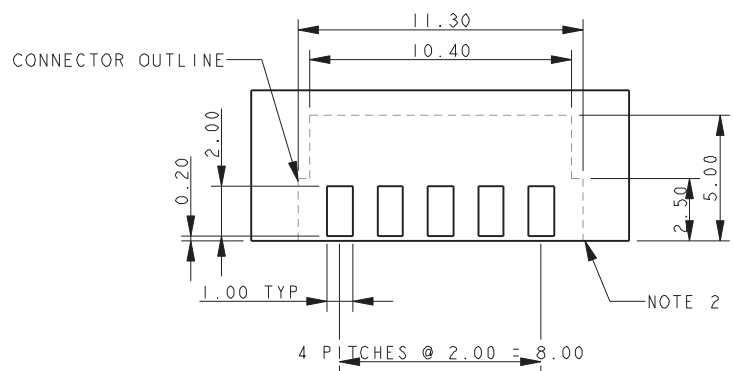
#### 3 WAY – MATING PADS



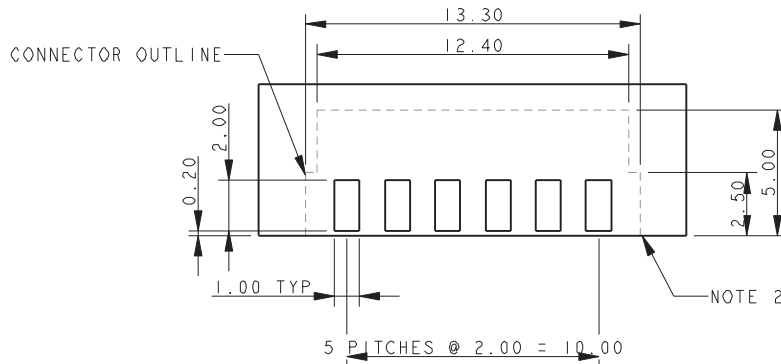
#### 4 WAY – MATING PADS



#### 5 WAY – MATING PADS



#### 6 WAY – MATING PADS



#### NOTES:

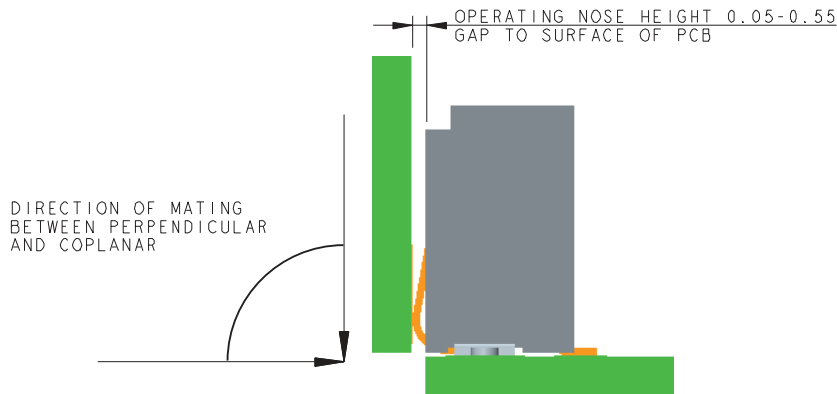
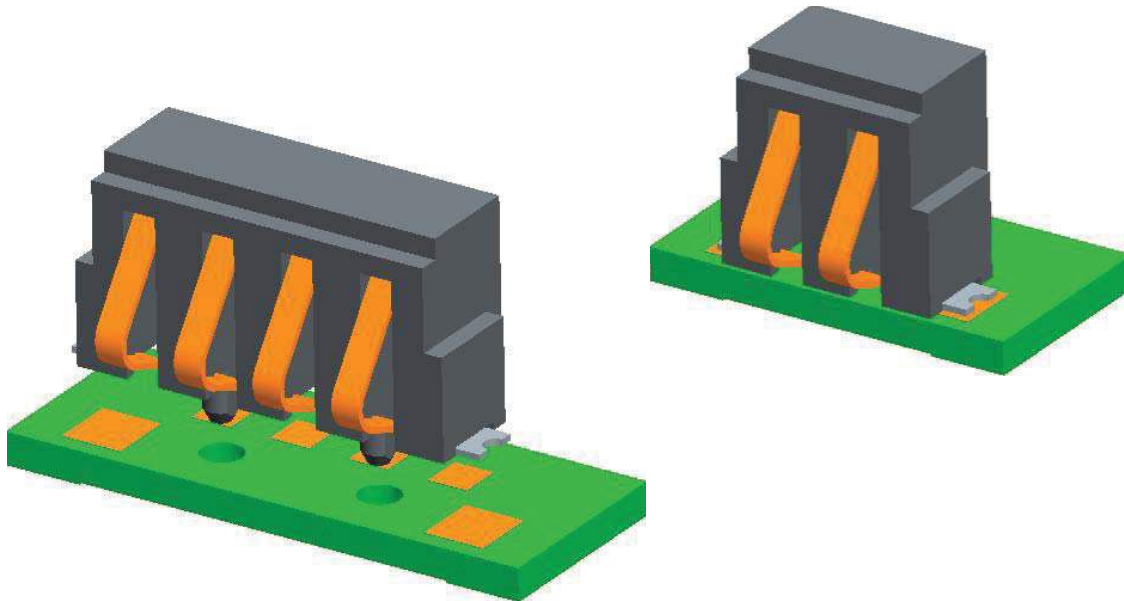
1. SUGGESTED MATING PADS FOR RIGHT ANGLE BATTERY CONNECTOR.
2. TOP SURFACE OF SMT PCB/BASE OF CONNECTOR.
3. PREFERRED PLATING ON PADS, GOLD OVER NICKEL.



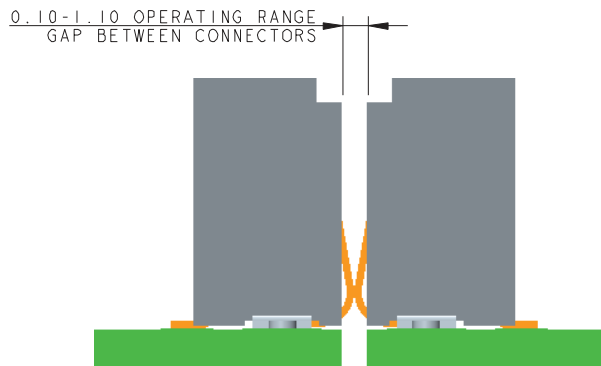
# BATTERY CONNECTORS

Vertical Mate 2.0mm Pitch 9155-800

## 2MM PITCH RIGHT ANGLE CONNECTOR



### BOARD TO BOARD/COMPONENT (REFER TO APPLICATION NOTES 201-01-205)



### CONNECTOR TO CONNECTOR (REFER TO APPLICATION NOTES 201-01-205)