# LCT Series

UL Recognized
CSA Certified

*Shield 2 RJ11* *Shield 1 RJ11* *Shield 2 RJ45* *Shield 1 RJ45*

## LCT Series

- Low capacitance model for improved performance.
- Particularly suited for ethernet applications
- Available with block or sleeve inductance
- Available with board grounded shield or spring fingered panel ground interface

## Performance Data

### Typical Insertion Loss

Line to ground (stop band) in 50 Ohm circuit

| | Frequency – MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Model** | **40** | **100** | **200** | **250** | **300** | **500** | **1000** |
| **S** – Ferrite Sleeves | 8 | 12 | 27 | 50 | 38 | 25 | 20 |
| **B** – Ferrite Blocks | 10 | 18 | 22 | 55 | 40 | 28 | 24 |

Line to line (pass band) in 50 Ohm circuit

| | Frequency – MHz | | | | | | |
|---|---|---|---|---|---|---|---|
| **Model** | **2** | **5** | **10** | **30** | **50** | **70** | **100** |
| **S** – Ferrite Sleeves | - | 1.2 | 1.9 | 4 | 5 | 7 | 10 |
| **B** – Ferrite Blocks | 1 | 2 | 3 | 5 | 8 | 10 | 13 |

Model dimensions and PC board layout on pages 255-259

## Specifications

**Contacts:**
Material: Phosphor Bronze
Plating: 50 microinches gold
Barrier underplating: 100 microinches nickel
Resistance:
Initial: 20 mΩ max.
After 500 mating cycles: 30 mΩ max.

**Capacitors:**
Type: Monolithic ceramic chip
Standard Value: 82 pF
Standard Tolerance: ± 20%

**Ferrites:**
Type: High resistivity, nickel zinc ceramic
Sleeves: Single-aperture cylinders
Block: Multi-aperture rectangular prism

**Shield Material:** Tin-plated copper alloy

**Housing Material:** Glass-filled polyester (UL94V-0)

**Dielectric Withstanding Voltage:**
Line to Line and Line to Ground: 1000 VAC for 60 seconds

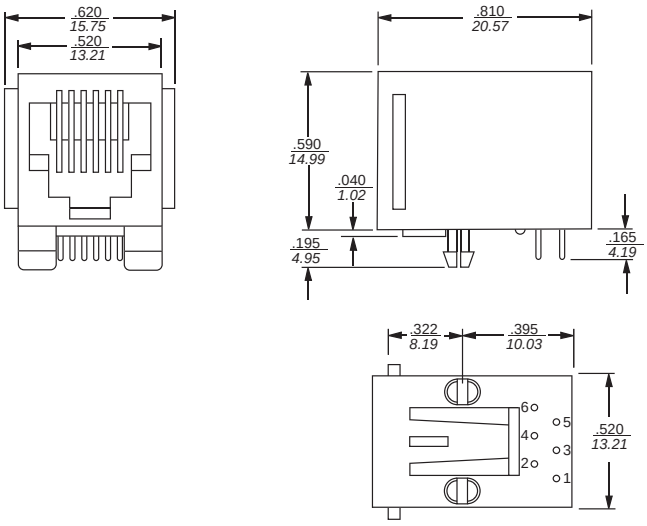
**Printed Circuit Board Retention:**
Before soldering: 1 lb. minimum
After soldering: 20 lb. minimum

## Available Part Numbers

| | |
|---|---|
| RJ11-6LCT1-S | RJ45-8LCT1-S |
| RJ11-6LCT1-B | RJ45-8LCT1-B |
| RJ11-6LCT2-S | RJ45-8LCT2-S |
| RJ11-6LCT2-B | RJ45-8LCT2-B |

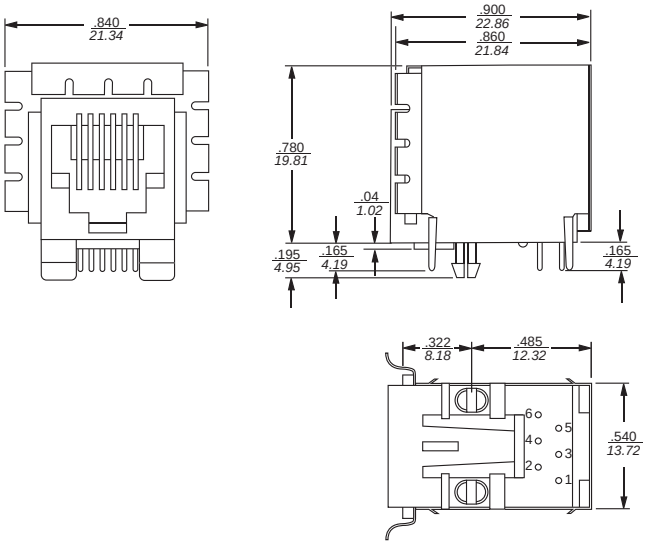
# L, LC, LCT and X Series RJ Jack Dimensions

## RJ11 – No Shield



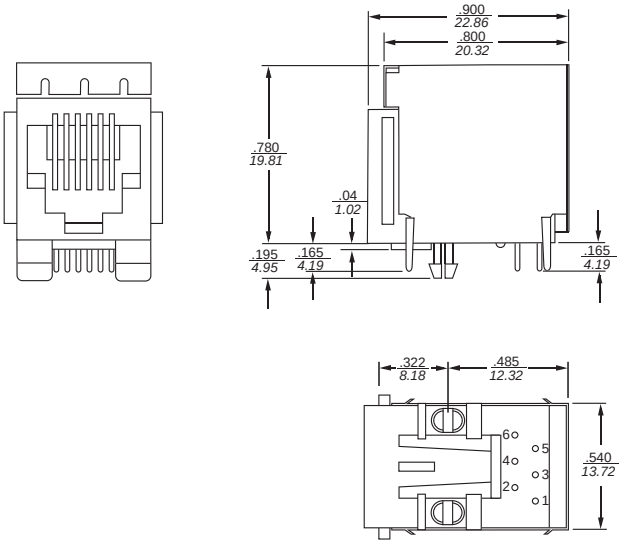

| Part No. | | |
|---|---|---|
| RJ11-2L-S | RJ11-2L-B | RJ11-2X |
| RJ11-4L-S | RJ11-4L-B | RJ11-4X |
| RJ11-6L-S | RJ11-6L-B | RJ11-6X |

## RJ11 – Style 1 Shield



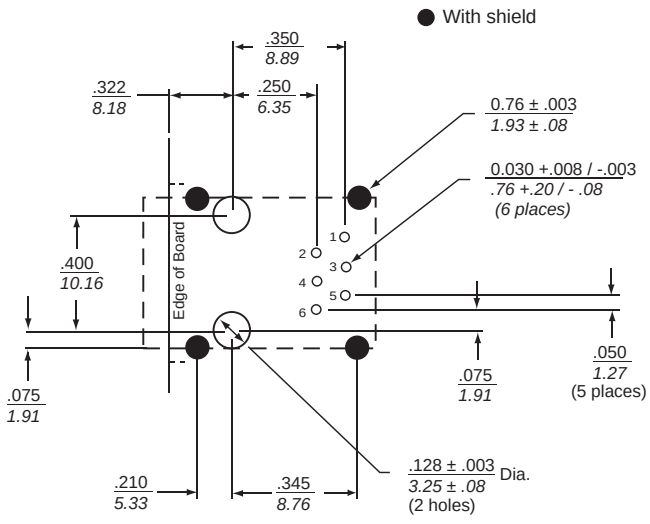

| Part No. | | | |
|---|---|---|---|
| RJ11-2LC1-S | RJ11-2LC1-B | RJ11-4L1-S | RJ11-6L1-B |
| RJ11-4LC1-S | RJ11-4LC1-B | RJ11-6L1-S | RJ11-6LCT1-S |
| RJ11-6LC1-S | RJ11-6LC1-B | RJ11-4L1-B | RJ11-6LCT1-B |

## RJ11 – Style 2 Shield




| Part No. | | | |
|---|---|---|---|
| RJ11-2LC2-S | RJ11-2LC2-B | RJ11-4L2-S | RJ11-6L2-B |
| RJ11-4LC2-S | RJ11-4LC2-B | RJ11-6L2-S | RJ11-6LCT2-S |
| RJ11-6LC2-S | RJ11-6LC2-B | RJ11-4L2-B | RJ11-6LCT2-B |

## RJ11 – PC Board Layout




For all RJ11 L, LC, LCT and X Series Models Shown from Component Side

All tolerances ± 0.010 [0.25] unless otherwise noted

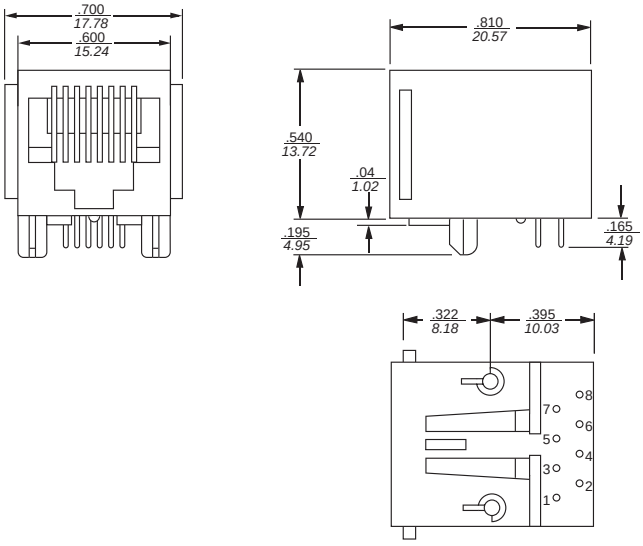




Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

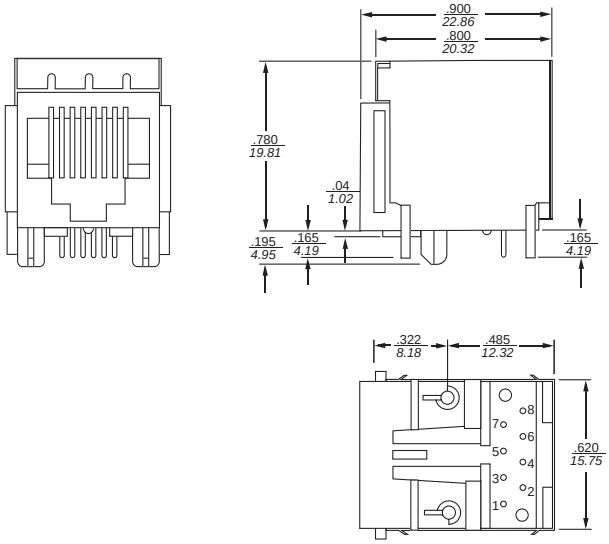
# L, LC, LCT and X Series RJ Jack Dimensions *(continued)*

## RJ45 – No Shield



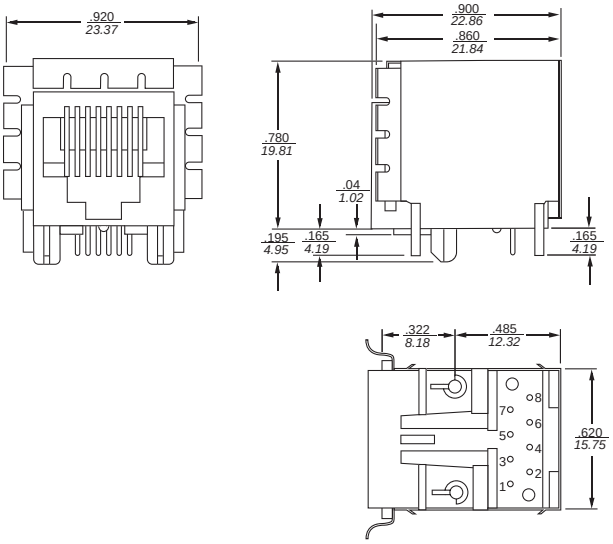

| Part No. | |
|---|---|
| RJ45-6L-S | RJ45-8L-B |
| RJ45-8L-S | RJ45-6X |
| RJ45-6L-B | RJ45-8X |

## RJ45 – Style 2 Shield



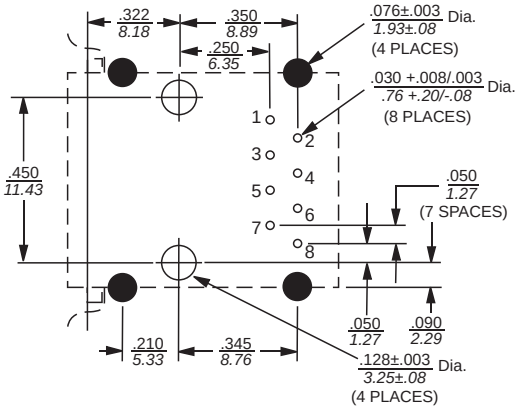

| Part No. | | | |
|---|---|---|---|
| RJ45-6LC2-S | RJ45-8LC2-S | RJ45-6LC2-B | RJ45-8LC2-B |
| RJ45-6L2-S | RJ45-8L2-S | RJ45-6L2-B | RJ45-8L2-B |
| RJ45-8LCT2-S | RJ45-8LCT2-B | | |

## RJ45 – Style 1 Shield




| Part No. | | |
|---|---|---|
| RJ45-6LC1-S | RJ45-8LC1-S | RJ45-6LC1-B |
| RJ45-6L1-S | RJ45-8L1-S | RJ45-6L1-B |
| RJ45-8LCT1-S | RJ45-8LCT1-B | RJ45-8LC1-B |
| | | RJ45-8L1-B |

## RJ45 – PC Board Layout



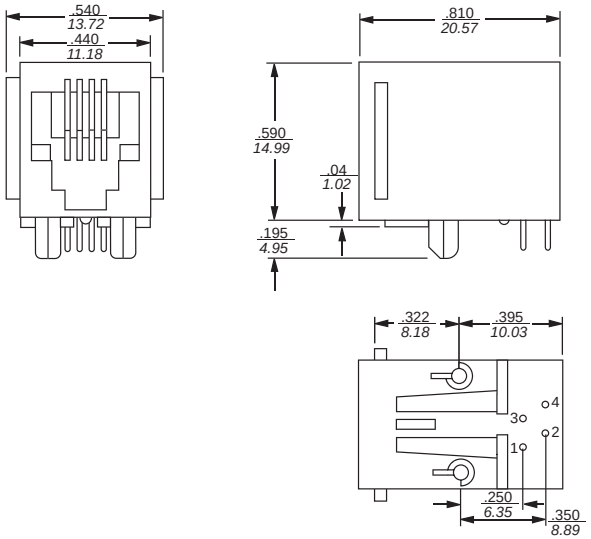

For all RJ45 L, LC, LCT and X Series Models Shown from Component Side

All tolerances ± 0.010 [*0.25*] unless otherwise noted

Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

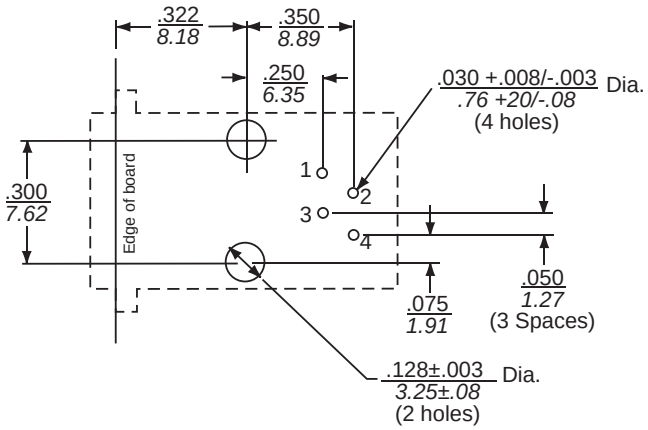
## L, LC, LCT and X Series RJ Jack Dimensions *(continued)*

### RJH – No Shield



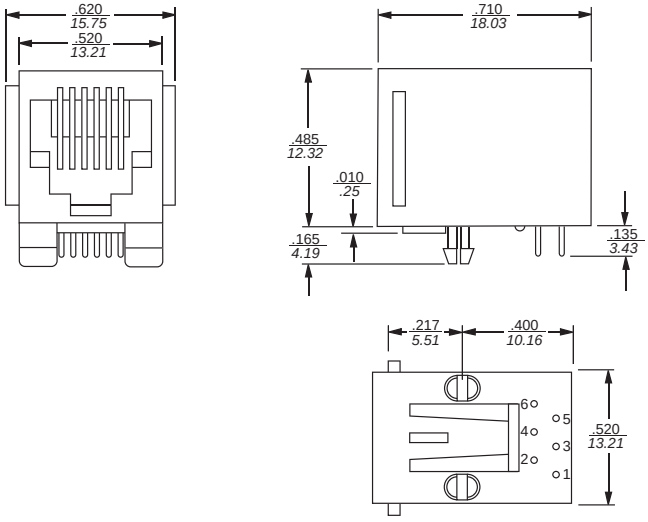

| Part No. |
|---|
| RJH-4-L-B |

### RJH – PC Board Layout



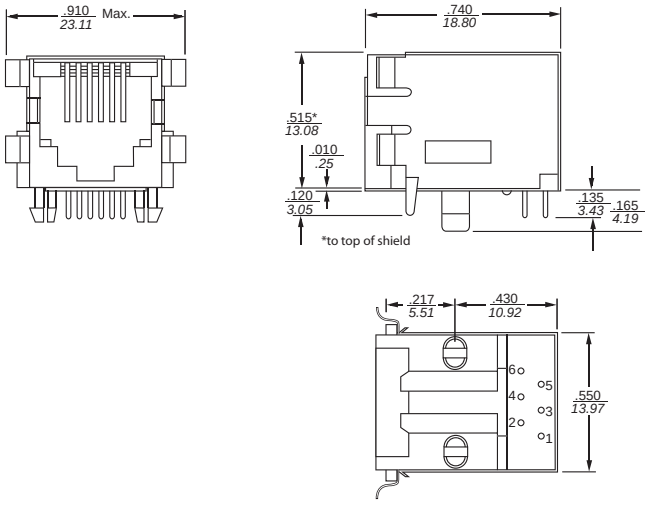

## N and Z Series RJ Jack Dimensions

### RJ11 – Low Profile, No Shield




| Part No. | |
|---|---|
| RJ11-6N-B | RJ11-6Z |

### RJ11 Low Profile, Style 3 Shield




| Part No. | |
|---|---|
| RJ11-6N3-B | RJ11-6Z3 |

All tolerances ± 0.010 [*0.25*] unless otherwise noted





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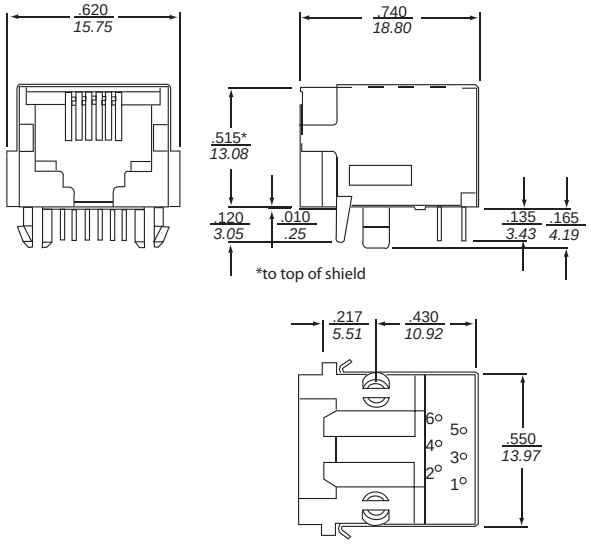
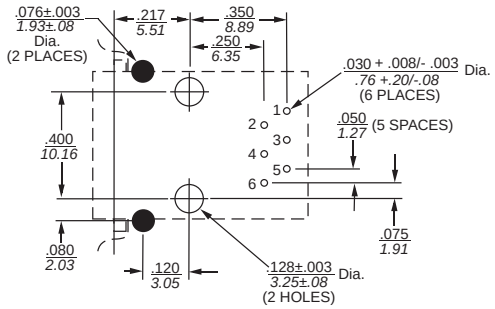
# N and Z Series RJ Jack Dimensions *(continued)*

## RJ11 Low Profile, Style 4 Shield



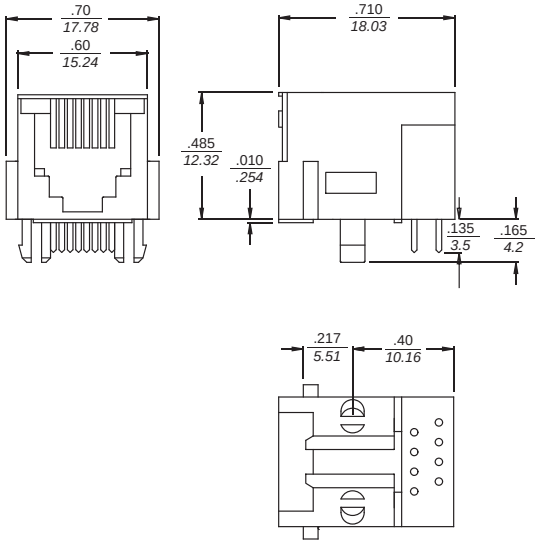

| Part No. | |
|---|---|
| RJ11-6N4-B | RJ11-6Z4 |

## RJ11 Low Profile, PC Board Layout



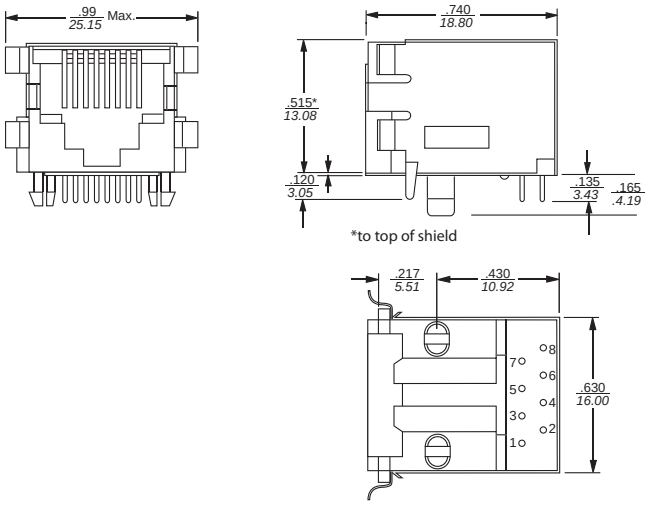

For all RJ11 N and Z Series Models
Shown from Component Side

## RJ45 – Low Profile, No Shield




| Part No. | | |
|---|---|---|
| RJ45-8N-B | RJ45-8N-S | RJ45-8Z |

## RJ45 – Low Profile, Style 3 Shield



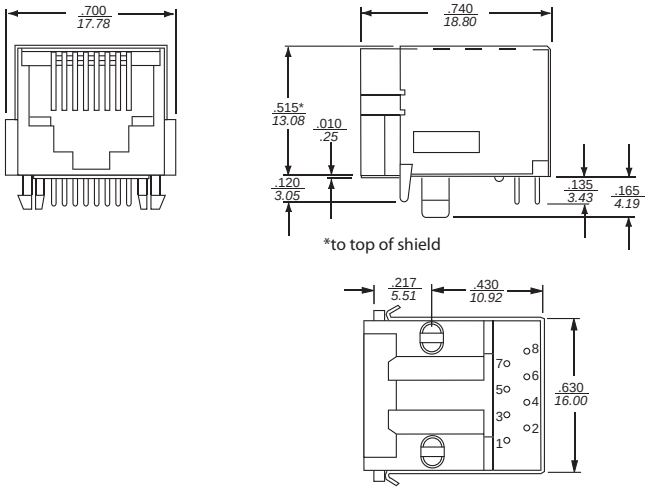

| Part No. | | |
|---|---|---|
| RJ45-8N3-B | RJ45-8N3-S | RJ45-8Z3 |

All tolerances ± 0.010 [*0.25*] unless otherwise noted

## Model Dimensions *(continued)*

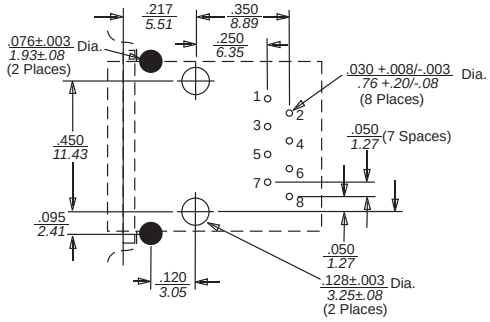
# N and Z Series RJ Jack Dimensions *(continued)*

## RJ45 Low Profile, Style 4 Shield




| Part No. | | |
|---|---|---|
| RJ45-8N4-B | RJ45-8N4-S | RJ45-8Z4 |

## RJ45 Low Profile PC Board Layout




For all RJ45 N and Z Series Models
Shown from Component Side

All tolerances ± 0.010 [*0.25*] unless otherwise noted