

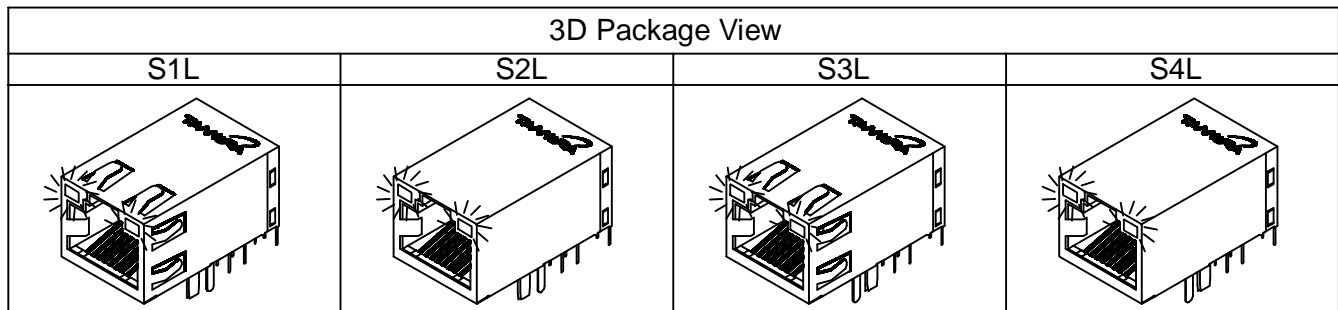
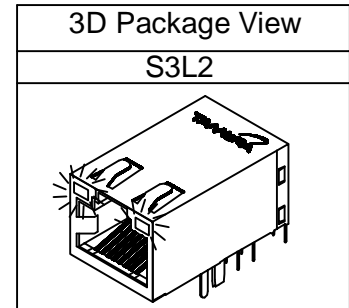


# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

**Features:**

1. Meets IEEE 802.3 and ANSI X3.263
2. Operating Temperature: 0°C to +85°C
3. 1500Vrms Isolation
4. Enhanced Common Mode Attenuation for maximum EMI Suppression
5. Full Product Qualification Tests



| Product Selection |             |            |               |                          |                |       |                 |         |          |                    |       |            |                         |
|-------------------|-------------|------------|---------------|--------------------------|----------------|-------|-----------------|---------|----------|--------------------|-------|------------|-------------------------|
| #                 | P/N         | Row X Port | Package Style | Schematic Identification |                |       |                 |         |          |                    |       |            |                         |
|                   |             |            |               | Auto Xfmr                | Input Pins-out |       | Output Pins-out |         | RTN      | Turn Ratio TX Only | SCH # | LED Yellow | LED Green and/or Orange |
| 1                 | TIC-L033-11 | 1x1        | S3L           | X                        | 2,1,3          | 4,6,5 | 1,4,5,2         | 3,7,8,6 | Shd      | 1ct:1ct            | 9L    | 7,8        | 9,10*                   |
| 2                 | TIC-L034-11 | 1x1        | S4L           | X                        | 2,1,3          | 4,6,5 | 1,4,5,2         | 3,7,8,6 | Shd      | 1ct:1ct            | 9L    | 7,8        | 9,10*                   |
| 3                 | TIC-L035-11 | 1x1        | S3L2          | X                        | 2,1,3          | 4,6,5 | 1,4,5,2         | 3,7,8,6 | Shd      | 1ct:1ct            | 9L    | 7,8        | 9,10*                   |
| 4                 | TIC-L036-11 | 1x1        | S2L           | X                        | 1,3,2          | 7,6,8 | 1,4,5,2         | 3,7,8,6 | 4,5      | 1ct:1ct            | 6L    | 10,9       | 11,12*                  |
| 5                 | TIC-L037-11 | 1x1        | S2L           | X                        | 1,3,2          | 7,6,8 | 1,4,5,2         | 3,7,8,6 | 4,5, Shd | 1ct:1ct            | 6L1   | 9,10       | 11,12*                  |
| 6                 | TIC-L040-11 | 1x1        | S2L           | X                        | 1,3,2          | 7,6,8 | 1,4,5,2         | 3,7,8,6 | 4,5,     | 1ct:1ct            | 6L3   | 11,12      | 10,9                    |
| 7                 | TIC-L038-11 | 1x1        | S1L           | X                        | 1,3,2          | 7,6,8 | 1,4,5,2         | 3,7,8,6 | 4,5      | 1ct:1ct            | 6L3   | 11,12      | 9,10                    |
| 8                 | TIC-L039-11 | 1x1        | S1L           | X                        | 1,3,2          | 7,6,8 | 1,4,5,2         | 3,7,8,6 | 4,5, Shd | 1ct:1ct            | 6L4   | 11,12      | 9,10                    |

RCV turn ratio is 1ct:1ct

\* Bi-directional LEDs, green and orange. Single LED is green.

| Package Identification |               |                       |                       |   |
|------------------------|---------------|-----------------------|-----------------------|---|
| Package #              | Package Style | Size LWH              |                       | Package Identification  |
|                        |               | inches                | mm                    |   |
| S1L                    | Single Port   | 1.005 x 0.661 x 0.531 | 25.53 x 16.80 x 13.50 | 6 Spring taps, 3 Pin -Rows<br>Plastic Mounting tap - Shield Mounting GND tap  |
| S2L                    | Single Port   | 1.005 x 0.661 x 0.531 | 25.53 x 16.80 x 13.50 | No Spring taps, 3 Pin -Rows<br>Plastic Mounting tap - Shield Mounting GND tap |
| S3L2                   | Single Port   | 1.005 x 0.661 x 0.531 | 25.53 x 16.80 x 13.50 | 2 Spring taps, 2 Pin -Rows<br>Shield Mounting GND tap - Plastic Mounting tap  |
| S3L                    | Single Port   | 1.005 x 0.661 x 0.531 | 25.53 x 16.80 x 13.50 | 6 Spring taps, 2 Pin -Rows<br>Shield Mounting GND tap - Plastic Mounting tap  |
| S4L                    | Single Port   | 1.005 x 0.661 x 0.531 | 25.53 x 16.80 x 13.50 | No Spring taps, 2 Pin -Rows<br>Shield Mounting GND tap - Plastic Mounting tap |



# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

| Package Information |                    |                       |                     |                      |                         |                    |                       |
|---------------------|--------------------|-----------------------|---------------------|----------------------|-------------------------|--------------------|-----------------------|
| Quantity            |                    |                       | Weight              |                      |                         | Size               |                       |
| qty/tray<br>( pcs ) | qty/box<br>( pcs ) | qty/carton<br>( pcs ) | weight/pcs<br>( g ) | weight/box<br>( kg ) | weight/carton<br>( kg ) | box size<br>( cm ) | carton size<br>( cm ) |
| 50                  | 250                | 1000                  | 7.2                 | 3.3                  | 14.2                    | 37.5x25.0x20.5     | 53.5x40.0x44.5        |

| Electrical Specification @ 25 °C |                         |           |           |                  |                       |                       |                 |                           |
|----------------------------------|-------------------------|-----------|-----------|------------------|-----------------------|-----------------------|-----------------|---------------------------|
| Insertion Loss<br>(dB Max)       | Return Loss<br>(dB Min) |           |           | CMRR<br>(dB Min) | Crosstalk<br>(dB Min) | OCL<br>( $\mu$ H Min) | Hipot<br>(Vrms) | Impedance<br>( $\Omega$ ) |
| 1-100<br>MHz                     | 1-30<br>MHz             | 60<br>MHz | 80<br>MHz | 1-100<br>MHz     | 1-100<br>MHz          | 8mA<br>Dc Bias        | 1<br>minute     |                           |
| 1                                | -18                     | -16       | -12       | -30              | -35                   | 350                   | 1500            | 100                       |

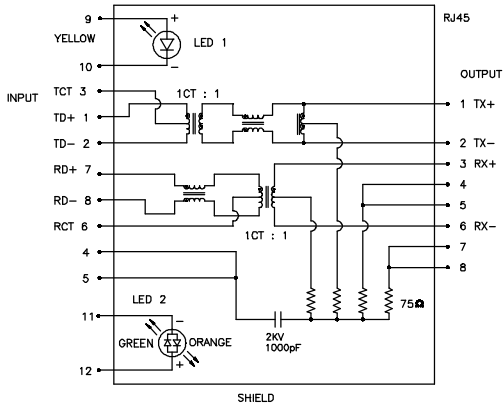
| Mechanical Material Specification |                    |                     |                    |                                  |                        |                    |   |   |                              |
|-----------------------------------|--------------------|---------------------|--------------------|----------------------------------|------------------------|--------------------|---|---|------------------------------|
| Contact                           |                    |                     |                    |                                  |                        |                    | Plastic Part  |   | Shell                        |
| RJ Contact                        |                    |                     |                    | RJ Joint Contact and LED Contact |                        |                    | RJ Housing  | Set Housing<br>& Insert                               | Stainless<br>SUS<br>304-1/2H |
| Contact<br>Material               | Contact<br>Area    | Solder Tail<br>Area | Under-<br>plating  | Contact<br>Material              | Solder<br>Tail<br>Area | Under-<br>plating  |   |   |                              |
| Phosphor<br>Bronze                | Gold               | Tin/Lead<br>(9:1)   | Nickel             | Brass                            | Tin/Lead<br>(9:1)      | Nickel             | Thermoplastic<br>PC<br>Transparent                    | Thermoplastic<br>PA6T, Black                          | Stainless<br>SUS<br>304-1/2H |
| 0.35<br>mm<br>thick               | 30 $\mu$ "<br>Min. | 100 $\mu$ "<br>Min. | 50 $\mu$ "<br>Min. | 0.35<br>mm<br>thick              | 100 $\mu$ "<br>Min.    | 50 $\mu$ "<br>Min. | UL 94V-0<br>E45587<br>General Electric<br>Grade: 940A | UL 94V-0<br>E52579(M)<br>Mitsui P.I.<br>Grade: CH230N | 0.20<br>mm<br>thick          |

| Product Qualification Tests |  |
|-----------------------------|--|
| Test #                      | Test Description   |
| 1                           | Product Performance: Complete Electrical Test, Mechanical Measurements and Visual Inspection |
| 2                           | Low Level Contact Resistance   |
| 3                           | Dielectric Strength  |
| 4                           | Insulation Resistance  |
| 5                           | Vibration  |
| 6                           | Mechanical Shock   |
| 7                           | Durability (Repeated mating / unmating)  |
| 8                           | Solderability  |
| 9                           | Thermal Shock  |
| 10                          | Humidity Temperature Cycling   |

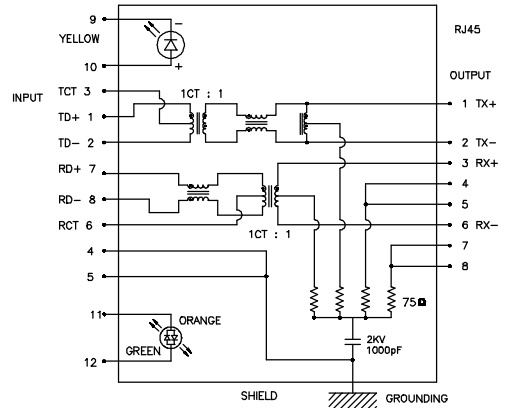
# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

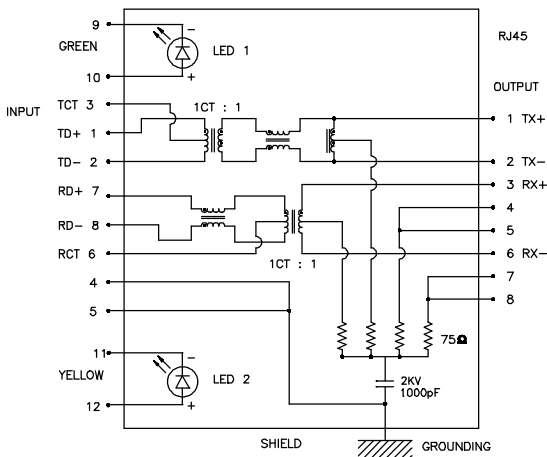
### Schematic 6L



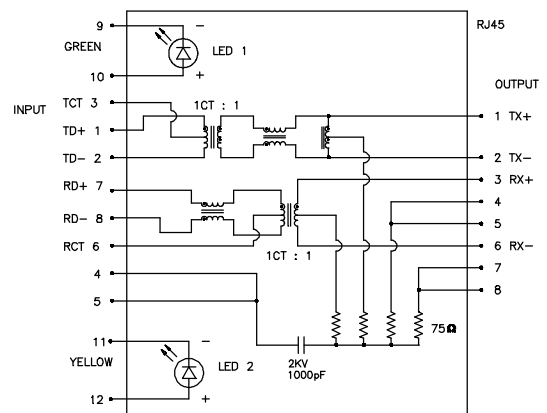
### Schematic 6L1



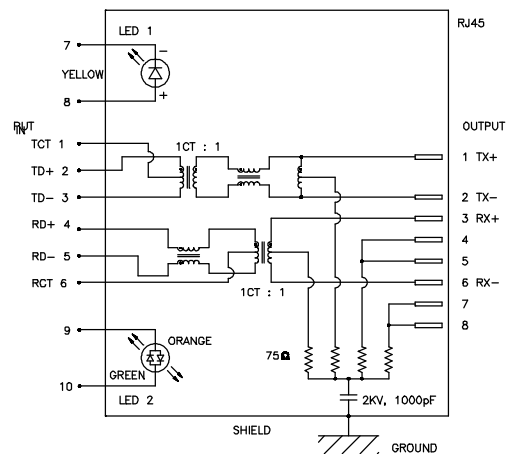
### Schematic 6L4



### Schematic 6L3



### Schematic 9L

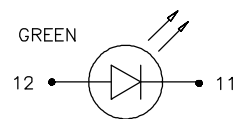
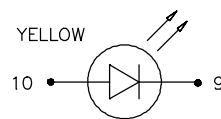
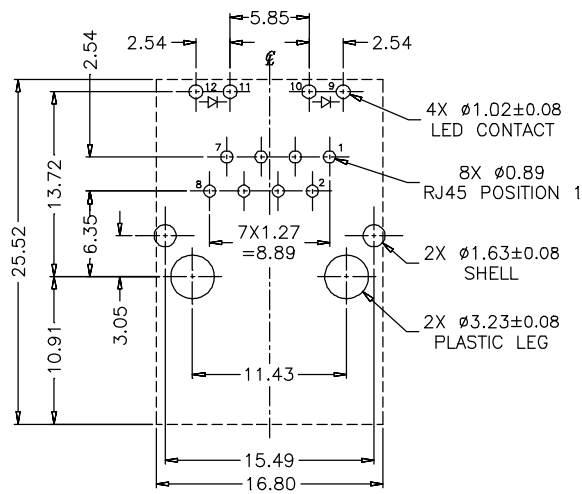
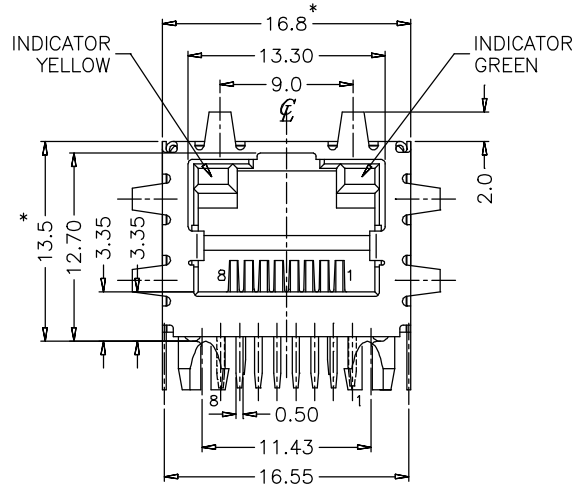
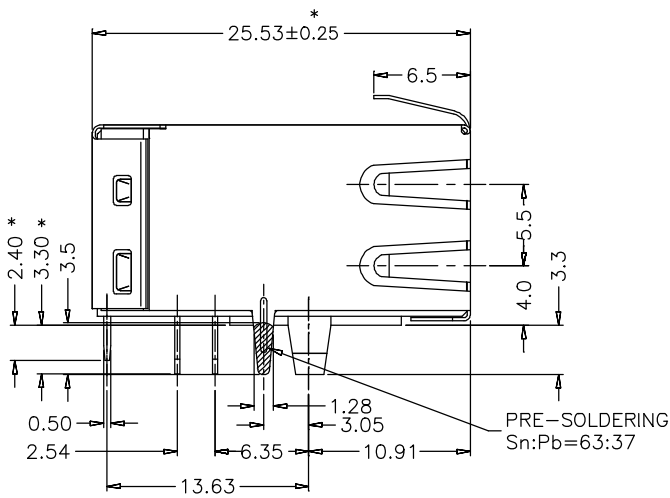
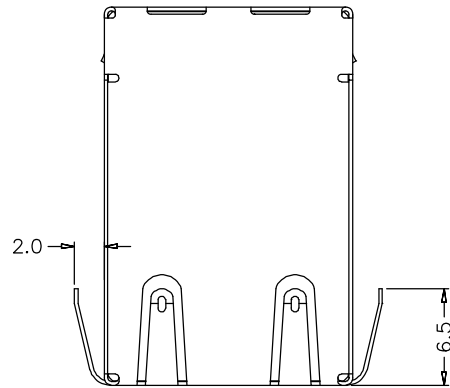


# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

### Package S1L

GENERAL TOLERANCE  
 .XX ±0.13  
 .X ±0.25



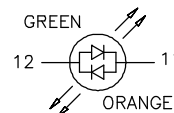
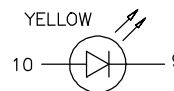
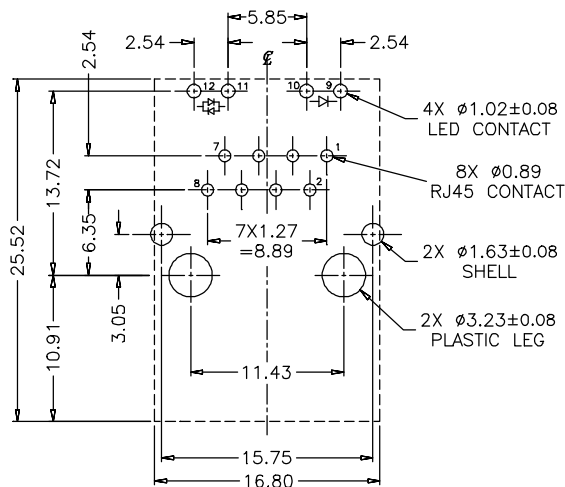
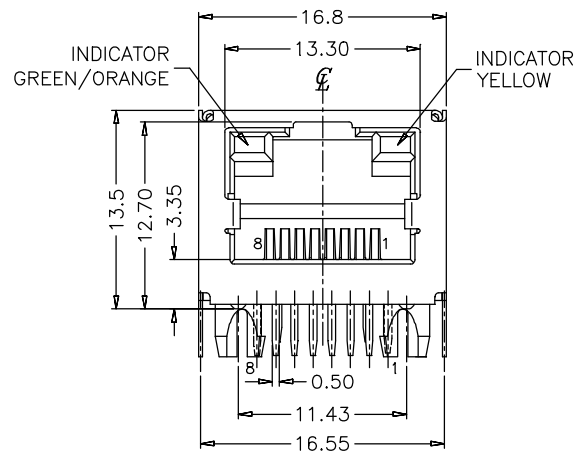
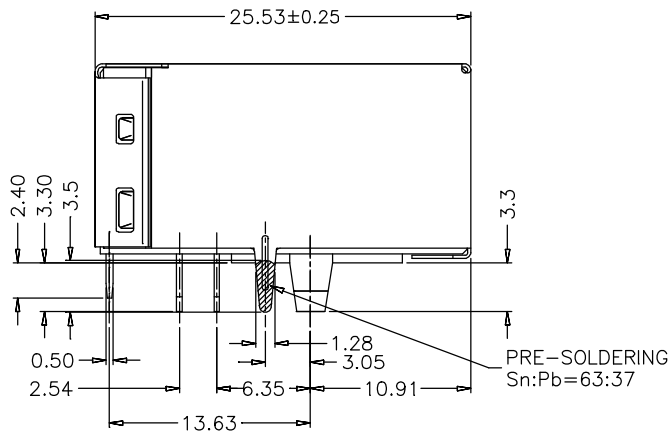
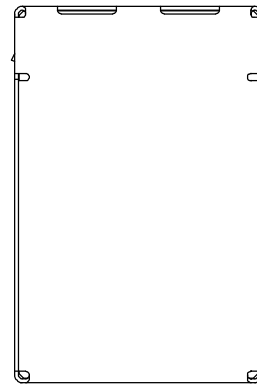
RECOMMENDED PCB LAYOUT  
 COMPONENT SIDE PCB THICKNESS : 1.60mm  
 ALL DIMENSION TOLERANCE ARE ±0.05 UNLESS OTHERWISE SPECIFIED

# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

### Package S2L

GENERAL TOLERANCE  
 .XX ±0.13  
 .X ±0.25



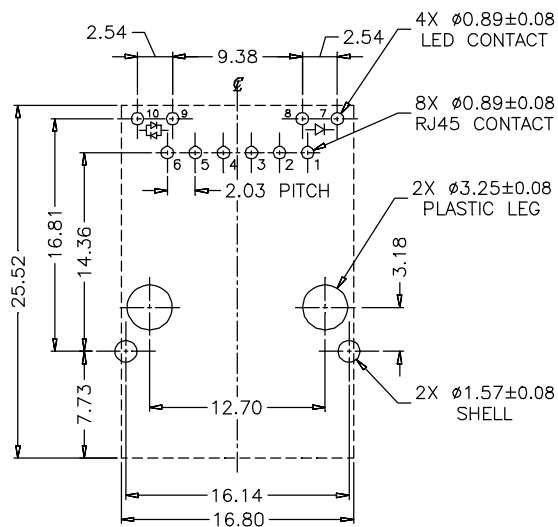
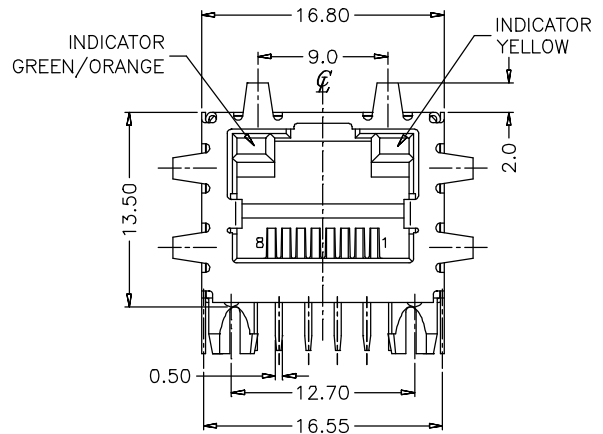
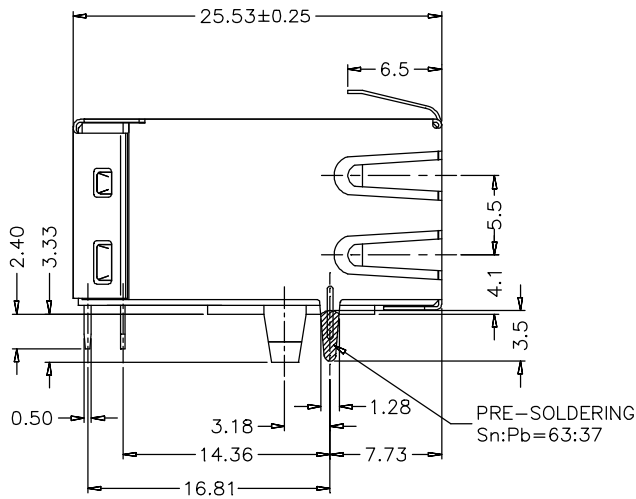
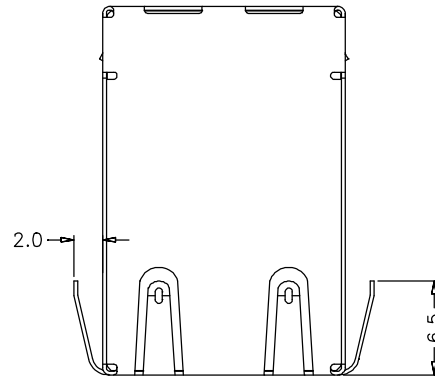
RECOMMENDED PCB LAYOUT  
 COMPONENT SIDE PCB THICKNESS : 1.60mm  
 ALL DIMENSION TOLERANCE ARE ±0.05 UNLESS OTHERWISE SPECIFIED

# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

### Package S3L

GENERAL TOLERANCE  
 .XX ±0.13  
 .X ±0.25



RECOMMENDED PCB LAYOUT  
 COMPONENT SIDE PCB THICKNESS : 1.60mm  
 ALL DIMENSION TOLERANCE ARE  $\pm 0.05$  UNLESS OTHERWISE SPECIFIED

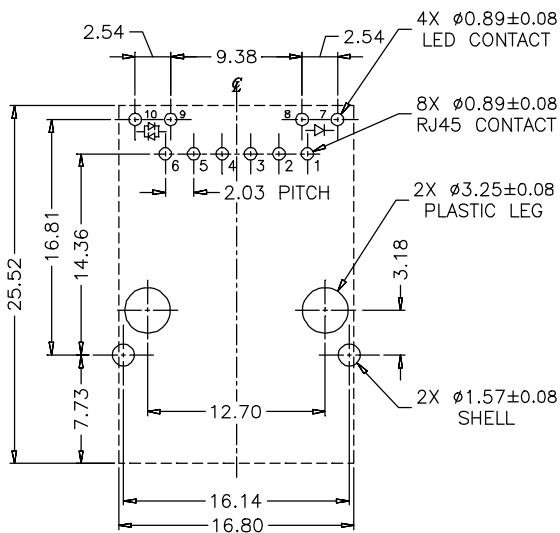
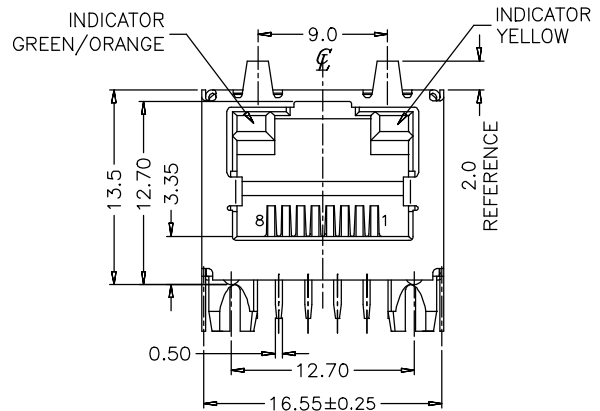
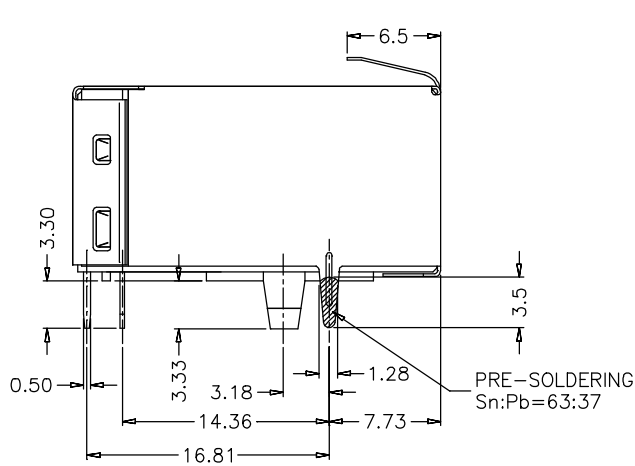
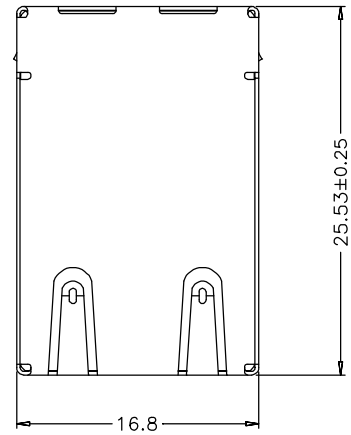
# RJ45 Integrated Connector

## 10/100 Base-TX, Single Port, Through Hole, with LED

### Package S3L2

GENERAL TOLERANCE

.XX ±0.13  
.X ±0.25



RECOMMENDED PCB LAYOUT

COMPONENT SIDE PCB THICKNESS : 1.60mm

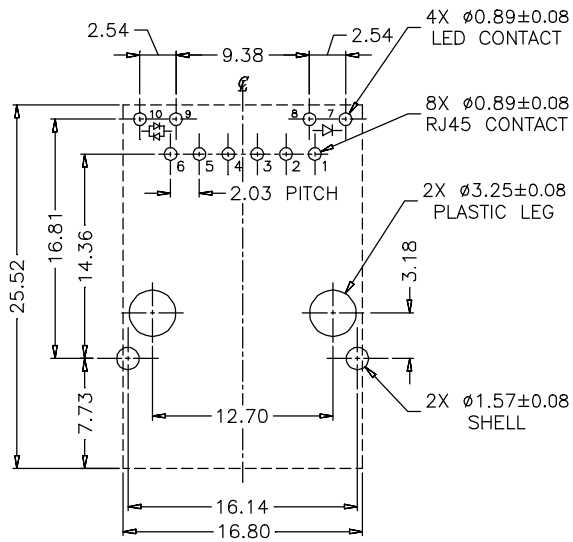
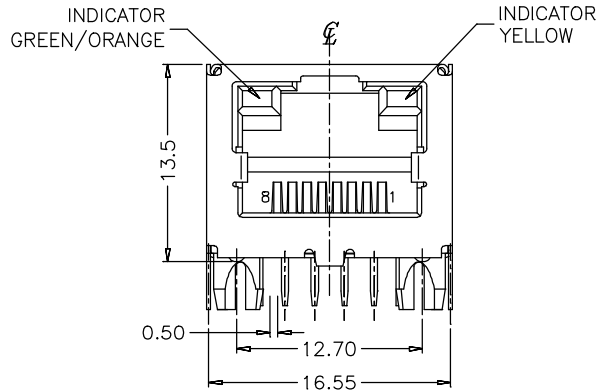
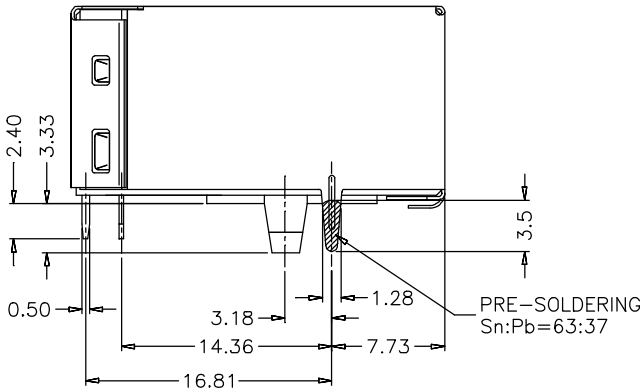
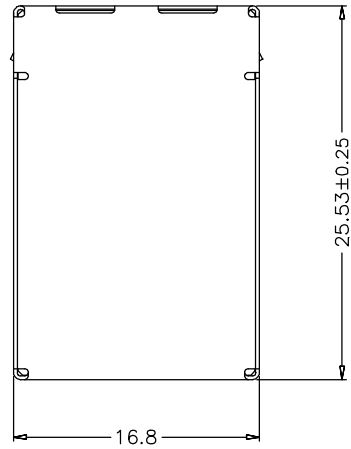
ALL DIMENSION TOLERANCE ARE ±0.05 UNLESS OTHERWISE SPECIFIED

# RJ45 Integrated Connector

10/100 Base-TX, Single Port, Through Hole, with LED

## Package S4L

GENERAL TOLERANCE  
 .XX ±0.13  
 .X ±0.25



RECOMMENDED PCB LAYOUT  
 COMPONENT SIDE PCB THICKNESS : 1.60mm  
 ALL DIMENSION TOLERANCE ARE ±0.05 UNLESS OTHERWISE SPECIFIED