

PART NUMBER CREATOR

RJ45 T J S 1 1 A C O N O X

Product Line

PCB-Termination

- T = Solder pin, straight
- S = SMT

Contact finish

- J = Min. 50 micro inch, 1.27μ gold plated over nickel
- Other plating options are available.

Shielding

- S = Fully shielded

Number of ports

- 1 = 1 Port
- 2 = 2 Ports
- 4 = 4 Ports
- 6 = 6 Ports
- 8 = 8 Ports

Number of rows

- 1 = 1 row

Turns ratio of transformer

- A = 1:1/1:1 (Tx/Rx)
 - B = 1:1.414/1:1 (Tx/Rx)
- Other turns ratio of transformer are available, please contact factory.

Shunt choke option

- C = With shunt choke in transmit channel
- N = Without shunt choke in transmit channel

Impedance matching resistors

- O = Without impedance matching resistors

LED Color options

- N = Without LED
 - 1 = Green LED (left), yellow LED (right)
- Other LED combinations are available, please contact factory.

Standard

- OX = Standard

TECHNICAL DATA

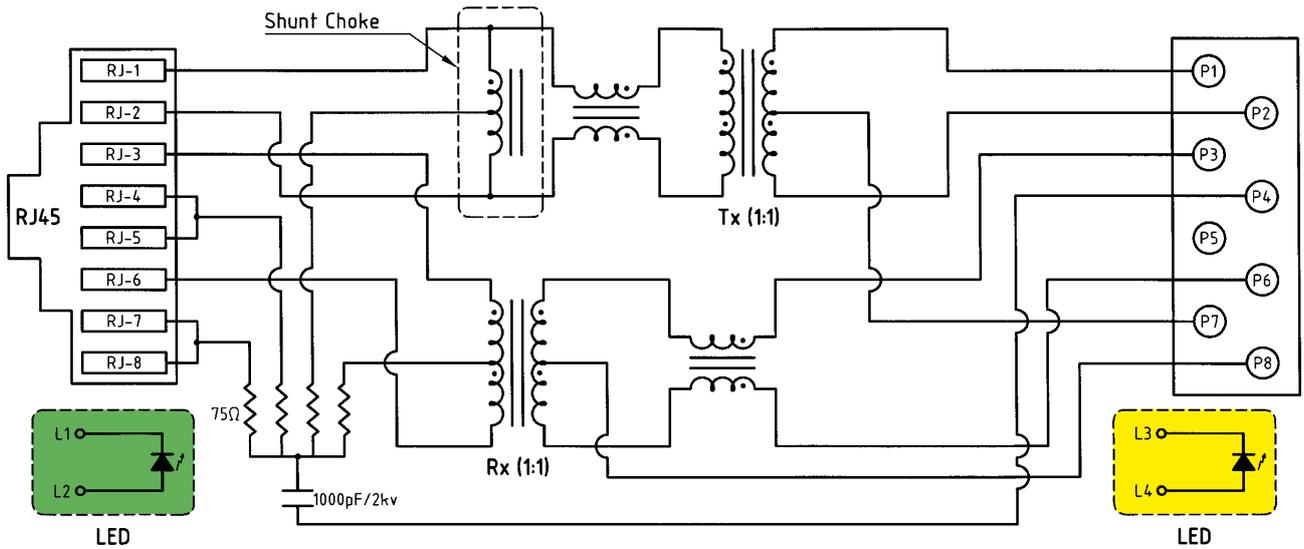
| Specifications | |
|----------------------------------|--|
| Housing, solder pin, straight | Polyester glass filled, black, UL94 V-0 |
| Housing, SMT-Termination | Nylon 46 glass filled, black, UL94 V-0 |
| Shielding | .008" / 0.20 mm thick copper alloy |
| Contact material | .014" / 0.35 mm thick copper alloy |
| Mating area plating | 50 μ m / 1.27 μ m gold min. over 30 μ m / 0.76 μ m min. nickel |
| Solder tails plating | Tin plated |
| OCL (Open Circuit Inductance) | Min. 350 μ H at 8mA DC bias |
| Leakage inductance | Max. 0.35 μ H |
| Inter-winding capacitance | Max. 25 pF |
| DC-Resistance | Max. 1.0 Ω |
| Turns ratio | 1:1/1:1 \pm 3% or Tx/Rx = 1:1.414/1:1 \pm 3% |
| Rise time and fall time | 3.0 ns (typical) |
| Mating force | Max. 22 N |
| Retention force | Min. 89 N |
| Mating cycles | Min. 1 000 |
| Contact resistance | Max. 20 m Ω |
| Insulation resistance | Min. 1000 m Ω |
| Dielectric with standing voltage | 1 500V ms (Signal to Shield) |
| Current rating | Max. 0,05A |

| Spezifikation at 25°C (Operating temperature -40°C to +85°C) | | |
|---|-------------|--------------|
| Insertion loss | 0.1-100 MHZ | 1.0 dB max |
| Return loss | 0.1-30 MHZ | 20.0 dB Type |
| | 60 MHZ | 15.0 dB Type |
| | 80 MHZ | 12.0 dB Type |
| Next near and cross talk | 0.1-30 MHZ | 50.0 dB Type |
| | 60 MHZ | 45.0 dB Type |
| | 100 MHZ | 40.0 dB Type |
| Differential to common mode rejection | 60 MHZ | 40.0 dB Type |
| | 100 MHZ | 35.0 dB Type |
| Common mode rejection ration | 60 MHZ | 35.0 dB Type |
| | 100 MHZ | 30.0 dB Type |
| Hi-Pot | 1500 Vrms | 60 sec. |

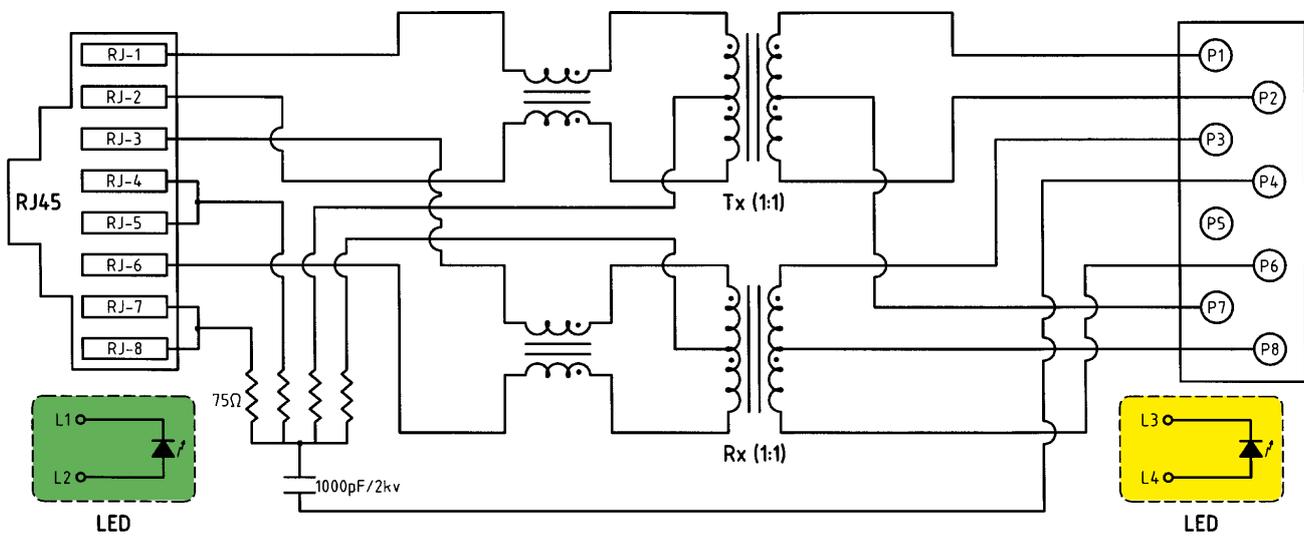
| Standard-LED | | |
|---|---------------|---------------|
| Color | Green | Yellow |
| Wave length | 565 nm | 585 nm |
| Forward voltage with I _F =20 mA | 2.6 V (max) | 2.6 V (max) |
| | 2.1 V (Type) | 2.0 V (Type) |
| Reserve voltage with I _R =10 μ A | 5.0 V (Type) | 5.0 V (Type) |
| Luminous intensity with I _F =20 mA | 15 mcd (min) | 20 mcd (min) |
| | 25 mcd (Type) | 30 mcd (Type) |

SCHEMATICS

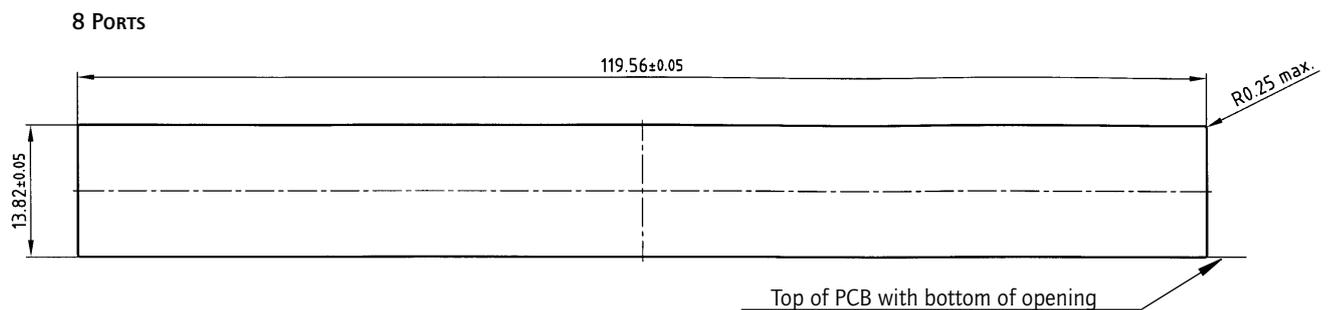
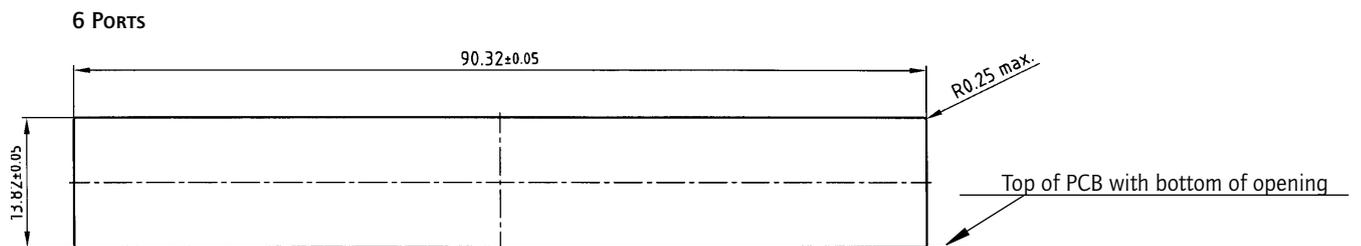
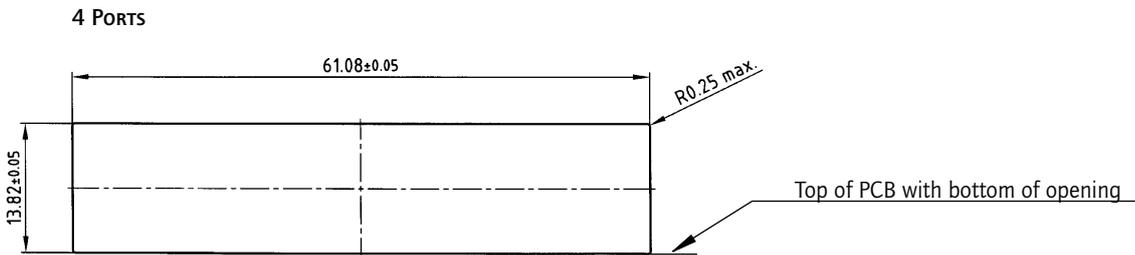
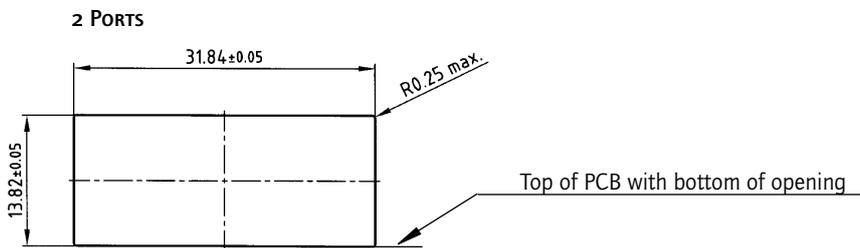
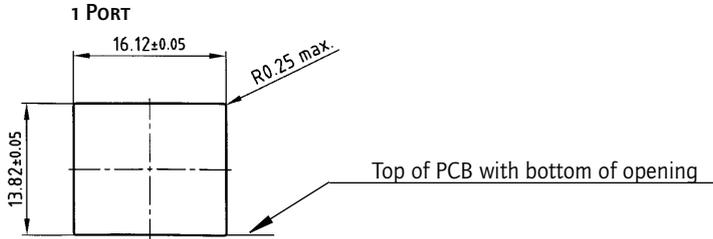
Schematic of magnetic Circuit with Tx/Rx = 1:1/1:1 or Tx/Rx = 1:1.414/1:1 - Turns Ratio, additional shunt Chok, 4x0,75Ω Terminal Resistors - 1000pF/2kv Capacitor and LEDs (Optional)



Schematic of magnetic Circuit with Tx/Rx = 1:1/1:1 or Tx/Rx = 1:1.414/1:1 - Turns Ratio, additional 4x0,75Ω Terminal Resistors - 1000pF/2kv Capacitor and LEDs (Optional).

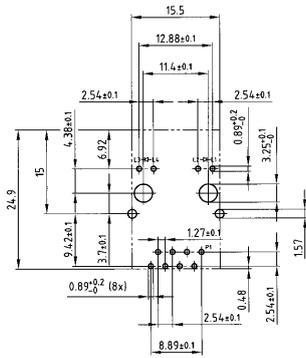


RECOMMENDED PANEL CUT-OUT

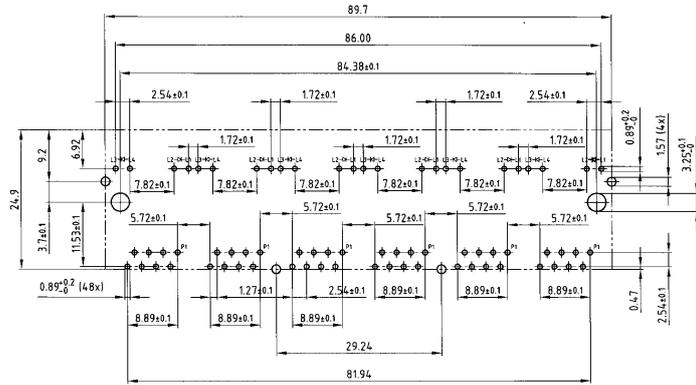


PCB LAYOUT FOR SOLDER PIN STRAIGHT

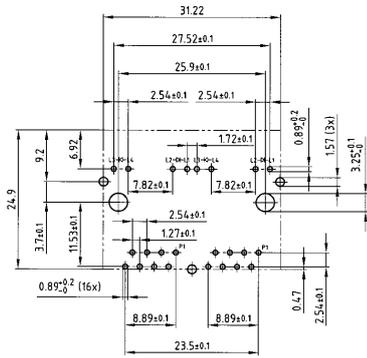
1 PORT



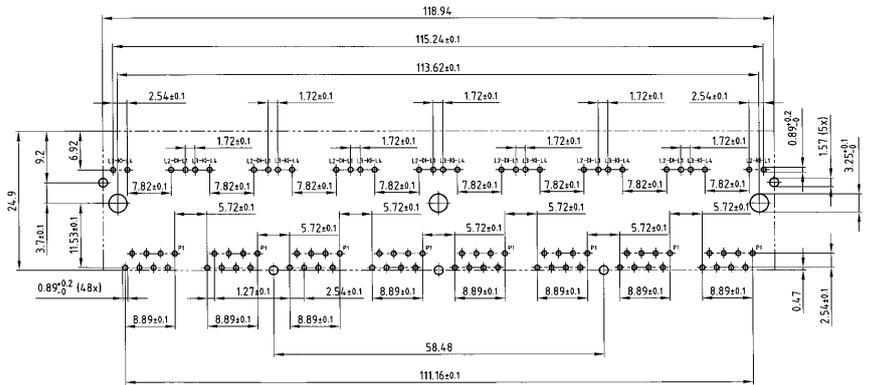
6 PORTS



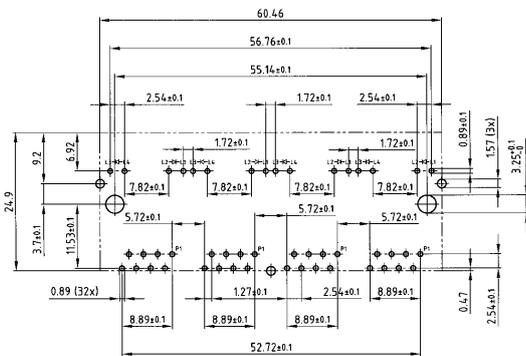
2 PORTS



8 PORTS

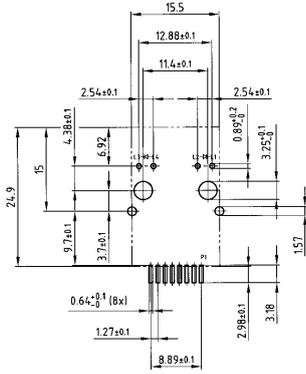


4 PORTS

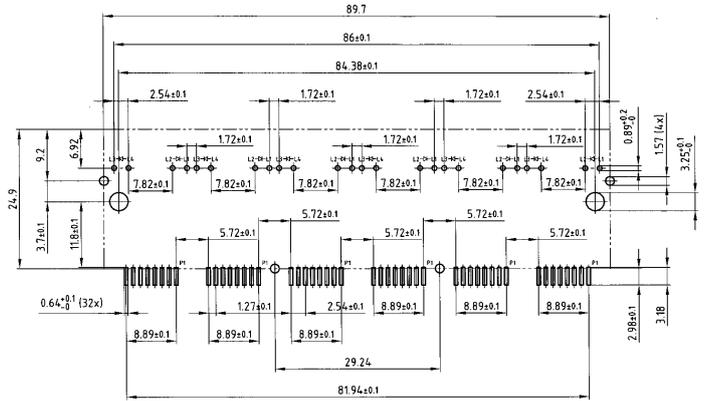


PCB LAYOUT FOR SMT-TERMINATION

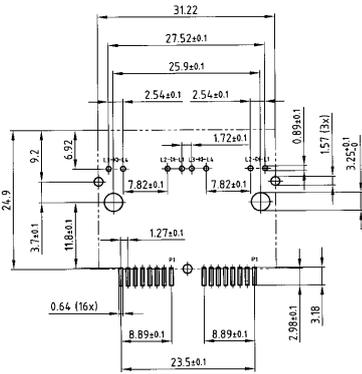
1 PORT



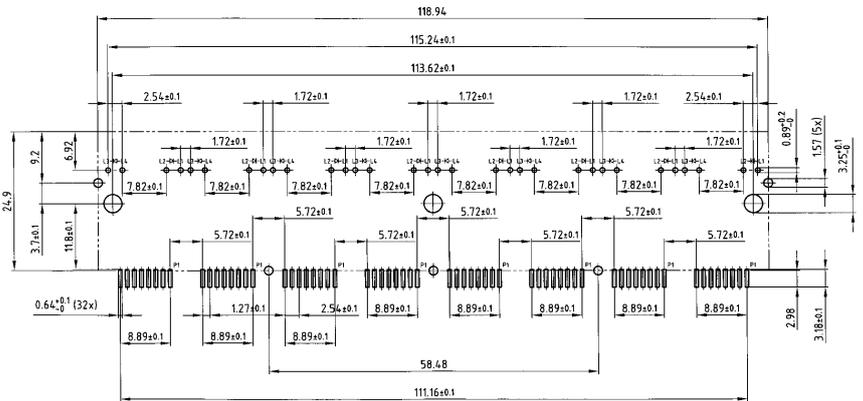
6 PORTS



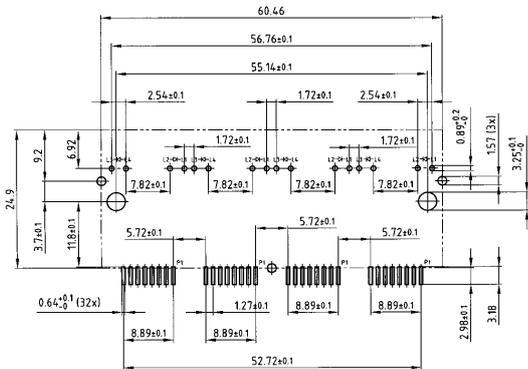
2 PORTS



8 PORTS



4 PORTS



SOLDER PROFILE

| Connector Type | Preheating | | Solder terminal dipping parameters | |
|---------------------------------------|------------------|----------|------------------------------------|------------------------------|
| | max. Temperature | Duration | max. Solder bath Temperature | max. Terminal Immersion Time |
| Filter D-SUB | 100°C | 30s | 260°C | 5s |
| Combo D-SUB Filter | 120°C | 120s | 260°C | 5s |
| Filter D-SUB Water Resistant | 100°C | 30s | 240°C | 5s |
| Combo D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Water Resistant | 120°C | 120s | 240°C | 5s |
| D-SUB Solid Body Type Water Resistant | 150°C | 180s | 265°C | 8s |
| RJ45 Modular Jack Filtered | 150°C | 180s | 265°C | 8s |
| Filter Plates | 150°C | 180s | 265°C | 8s |

Recommended wave-solder parameters for CONEC connectors.