

# APPROVAL SHEET

To :

Customer P/N :

UDE P/N : L12N003-0

Description : 1000 Base -T  
Single Port LAN Filter



**RoHS HF** Halogen Free

Spec No.  
LZ0025-00

Update Date  
2020/7/14

Revision  
C

Approved	Checked	Prepared



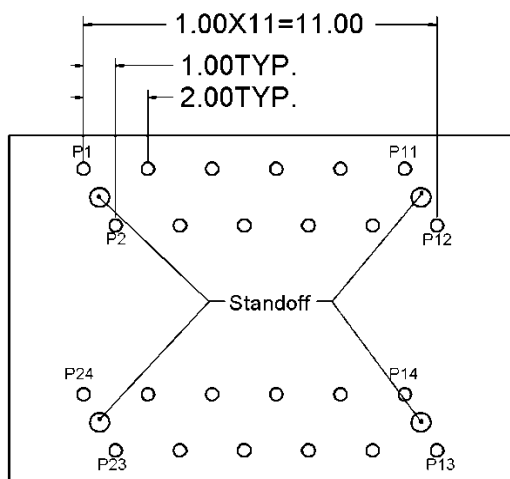
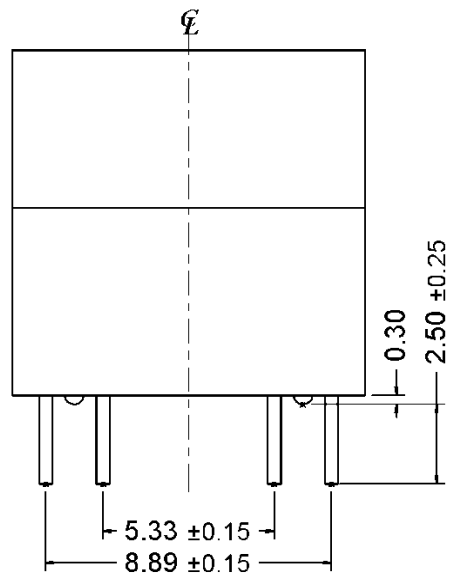
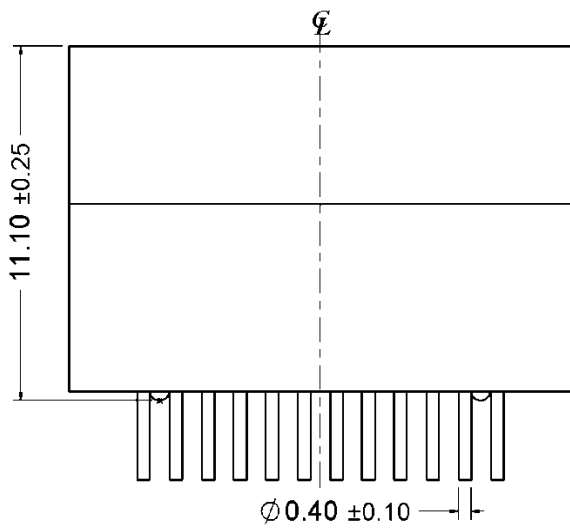
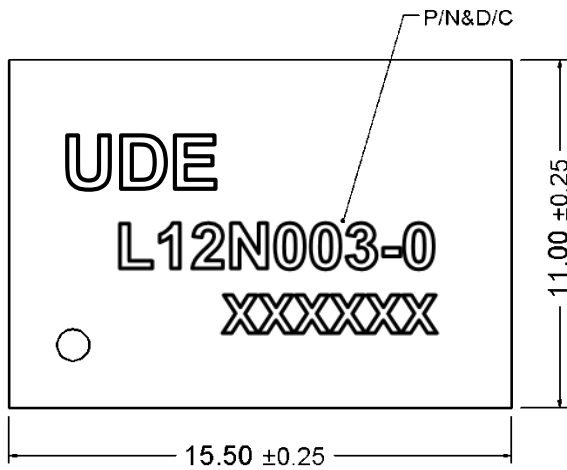
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# 1. MECHANICAL DIMENSION

## 1.1 Product Dimension

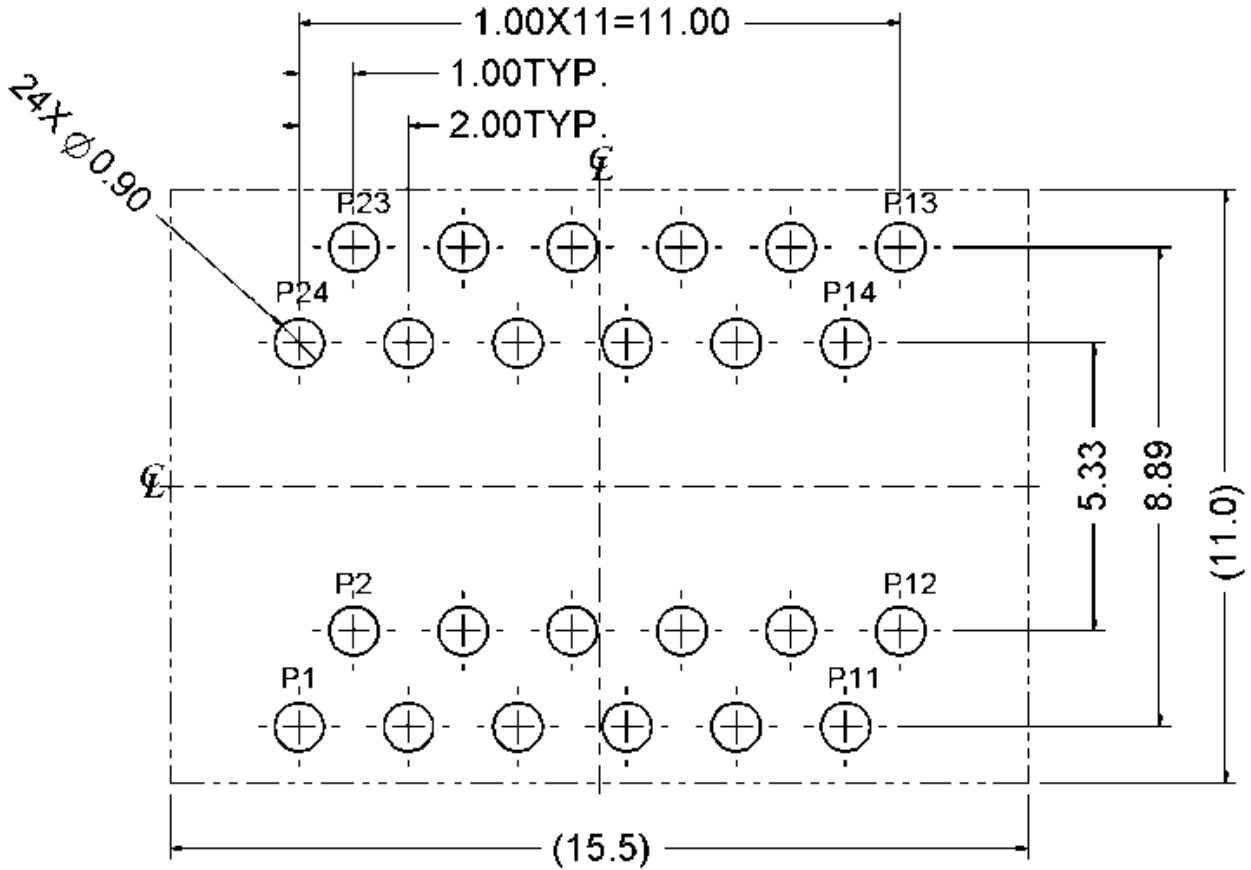
General Tolerance : X.X : ± 0.25  
 X.XX : ± 0.13



### 1.2 Recommended PCB Layout

Component Side of Board

All dimension tolerance are  $\pm 0.08\text{mm}$  unless otherwise specified



### 1.3 Order Information

L 1 2 N 003 - 0  
 A B C D E F

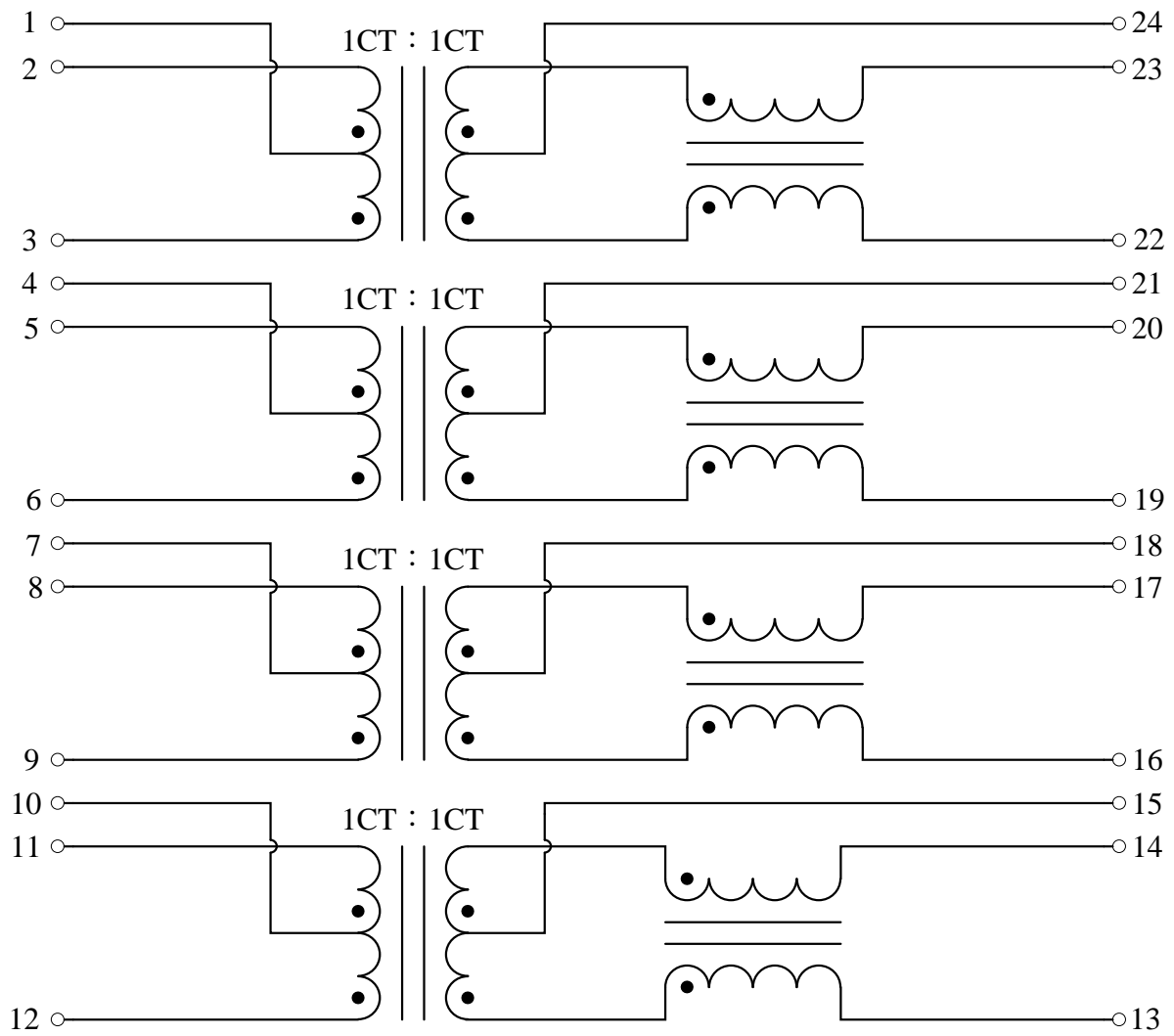
- A、 Filter
- B、 DIP
- C、 24PIN
- D、 Normal
- E、 Product Numbering
- F、 Normal

## 2. FEATURES

- 2.1 Designed for Ethernet 1000 BASE-T, Single port applications.
- 2.2 Supports 4 pairs of category 5 UTP cable.
- 2.3 Cable interface for isolation and low common mode emissions.
- 2.4 Compliant with IEEE 802.3ab standard for 1000 BASE-T.
- 2.5 Compliance with ROHS requirements.
- 2.6 Operating and Storage Temperature
  - Operating Temperature : 0°C to +70°C
  - Storage Temperature : -25°C to +105°C
- 2.7 Packing Information
  - 32 pcs finished goods per tube.
  - 160 tubes(5120 pcs finished goods) per master carton.

### 3. ELECTRICAL CHARACTERISTICS

#### 3.1 Schematic



### 3.2 Electrical Specifications @25°C

Type : Balance low pass 100Ω impedance

Insertion loss : 1~100 MHz -1.0dB max.

Return loss : 1~30 MHz -18dB min. load 100Ω

30~60MHz -14dB min. load 100Ω

60~80MHz -12dB min. load 100Ω

80~100MHz -10dB min. load 100Ω

### 3.3 DCMR

@ 30 MHz -40dB min.

@ 60 MHz -35dB min.

@ 100 MHz -30dB min.

### 3.4 Cross Talk

@ 30 MHz -40dB min.

@60 MHz -35dB min.

@ 100 MHz -30dB min.

### 3.5 Inductance

@ 100KHz, 0.1V, 8mA DC BIAS 350uHMin

### 3.6 HiPot Test

@ 1500 Vrms

### 3.7 Turns Ratio

@ 1:1±5%

#### 4. DIPPING TEMPERATURE PROFILE

Recommend Wave Soldering Curve:

