

# LAN TRANSFORMERS - MTLAN SERIES

**Order Code: MTLAN84814ANL (1000 BASE-T Magnetic Module for POE+ Application)**

## Features

- Compact design
- Soldering profile: Reflow
- Perfect module for High Speed applications
- Higher Common mode Impedance
- Operating Temperature : -40 °C to +85 °C

## Electrical Characteristics (at 25°C)

### ● Turns Ratio:

Pri:Sec = 1CT:1CT

### ● Insertion Loss (dB max.)

0.1 ~ 100 MHZ: -1.4 dB

### ● Return Loss (dB min.)

|               |                |
|---------------|----------------|
| 1~30 MHZ: -16 | 40 MHZ: -14.4  |
| 50 MHZ: -13.1 | 60~80 MHZ: -12 |
| 100 MHZ: -10  |                |

### ● Cross Talk (dB min.)

|               |  |
|---------------|--|
| 30 MHZ: -43.5 |  |
| 60 MHZ: -37.5 |  |
| 100 MHZ: -33  |  |

### ● DCMR (dB min.)

|              |  |
|--------------|--|
| 30 MHz: -45  |  |
| 60 MHz: -40  |  |
| 100 MHz: -35 |  |

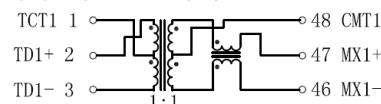
### ● OCL: 350 uH min. @100KHz , 0.1 Vrms, 20 mA DC bias

### ● Hi-Pot: 1500 Vrms

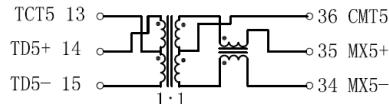
### ● Operating Temperature: -40 °C ~ +85 °C

## Schematic

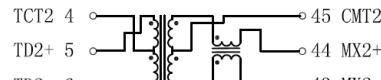
### Channel 1 - Port 1



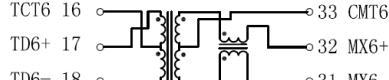
### Channel 1 - Port 2



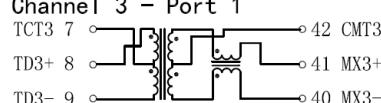
### Channel 2 - Port 1



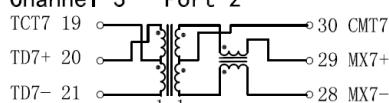
### Channel 2 - Port 2



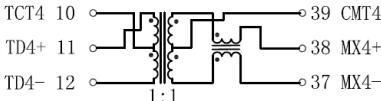
### Channel 3 - Port 1



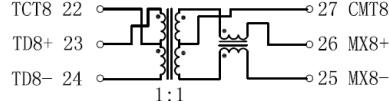
### Channel 3 - Port 2



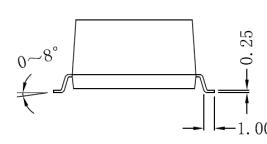
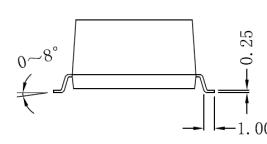
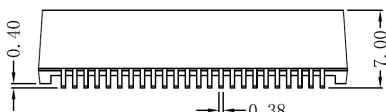
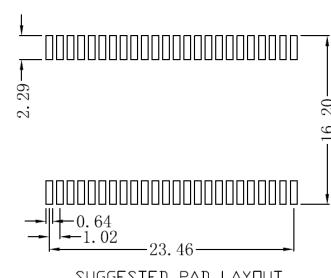
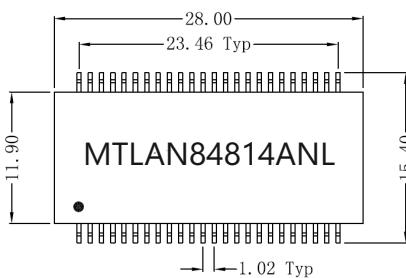
### Channel 4 - Port 1



### Channel 4 - Port 2



## Dimensions (mm)



## Applications

- SOHO (ADSL Modems)
- LAN-on-Motherboard (LOM)
- Hub
- Switches
- PoE applications with 720mA current capabilities

### NOTE:

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