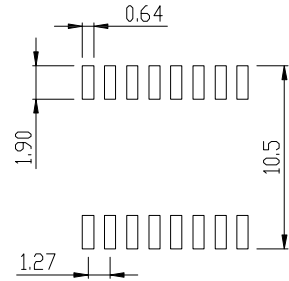
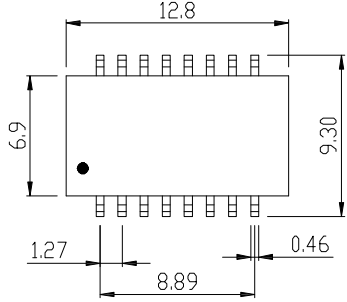


| REV. | DESCRIPTION | ECN NO. | APPD. |
|------|-------------|---------|-------|
| R1   | NEW RELEASE |         |       |

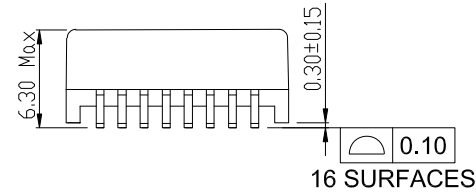
### MECHANICAL



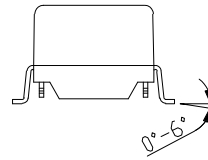
SUGGESTED PAD LAYOUT

### 10/100 BASE-T SINGLE PORT SURFACE MOUNT LAN TRANSFORMER

- Meet IEEE 802.3 & ANSI X3.263 Standards.
- This is a RoHS compliant component, All engineering changes must have prior approval by the design center
- Plastic: Thermoset plastic material with flammability rating UL 94V-0 or better
- Solderability: Conforms to ANSI/J-STD-002,245°C reflow peak temperature per IPC/EIA J-STD-003A
- J-STD-020 Moisture sensitive level 1.
- Operation temperature: -40°C~+85°C
- Storage condition: -20°C ~ 125°C, 20~80%RH.



16 SURFACES

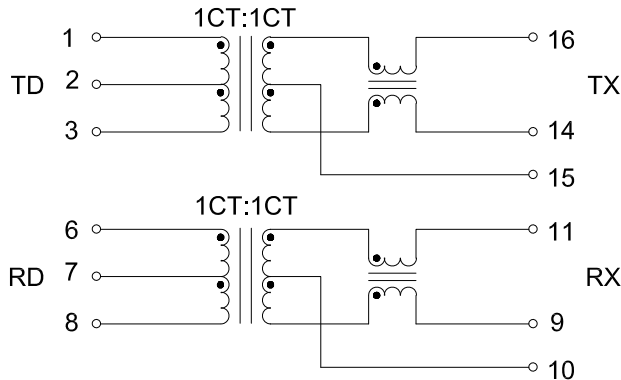


Dimensions: mm unless otherwise specified, tolerances as following.  
 .X = ±0.25  
 .XX = ±0.13

### ELECTRICAL SPECIFICATIONS @ +25°C UNLESS OTHER SPECIFIED

|                  |  |                     |                 |
|------------------|--|---------------------|-----------------|
| Inductance (OCL) | 350 uH Min @ 100KHz/0.1V with 8mA DC Bias          |                     |                 |
| Hi-Pot           | 1500 Vrms  |                     |                 |
| Turns Ratio      | 1CT:1CT ± 5%                                       |                     |                 |
| DCR (Diff. pair) | PHY side = 0.90 OHM MAX, Cable side = 1.20 OHM MAX |                     |                 |
| Cw/w             | PHY side : Cable side = 28pF Typ @ 100KHz/0.1V     |                     |                 |
| OCL Balance      | 1uH MAX @ 100KHz/0.1V                              |                     |                 |
| Insertion Loss   | 1~100 MHz: -1.1 dB Max                             |                     |                 |
| Return Loss      | 1~30 MHz   | 30~60 MHz           | 60~80 MHz       |
|                  | -18 dB Min   | -18+20*log(f/30) dB | -12 dB Min      |
| Cross Talk       | 1~30 MHz   | 30~60 MHz           | 60~100 MHz      |
|                  | -35 dB Min Ref.                                    | -33+20*log(f/50) dB | -30 dB Min Ref. |
| CMRR             | 1~100 MHz  |                     |                 |
|                  | -30 dB Min Ref.                                    |                     |                 |

### SCHEMATIC



LT 16 S 1 0 0 1 E - X

|                           |           |
|---------------------------|-----------|
| Pin Number                | 16: 16PIN |
| Termination Method to PCB | S: SMT    |

|         |                |
|---------|----------------|
| Packing | T: Tube        |
|         | R: Tape & Reel |

|                               |                      |
|-------------------------------|----------------------|
| QUALITY SYMBOLS               |                      |
| ■: CRITICAL<br>▽: ZERO DEFECT | ☒: MAJOR<br>▽: S.P.C |
| UNIT: mm                      | Size: A3             |
| SCALE: NTS                    |                      |

|                                       |          |
|---------------------------------------|----------|
| TOLERANCE UNLESS OTHERWISE SPECIFIED: |          |
| DECIMALS:                             | ANGLES:  |
| X: ±0.5                               | X: ±2°   |
| X.X: ±0.3                             | X.X: ±1° |
| X.XX: ±0.2                            |          |

**Yee YEESHINE TECHNOLOGY** DONGGUAN CHINA

|               |           |           |             |   |
|---------------|-----------|-----------|-------------|---|
| APPROVED      | CHECKED   | DRAWN     | PART NO.    | LT16S1001E-X  |
| 23MAR2016     | 23MAR2016 | 22MAR2016 |             |   |
| K.L.          | Jack Liu  | Jack Liu  | DESCRIPTION | 10/100 Base-T Single Port SMT Isolation Transformer |
| CUSTOMER COPY |           |           | SHEET       | 1 OF 1  |
|               |           |           | DRAWING NO. | YEE160116   |
|               |           |           | REV         | R1  |