

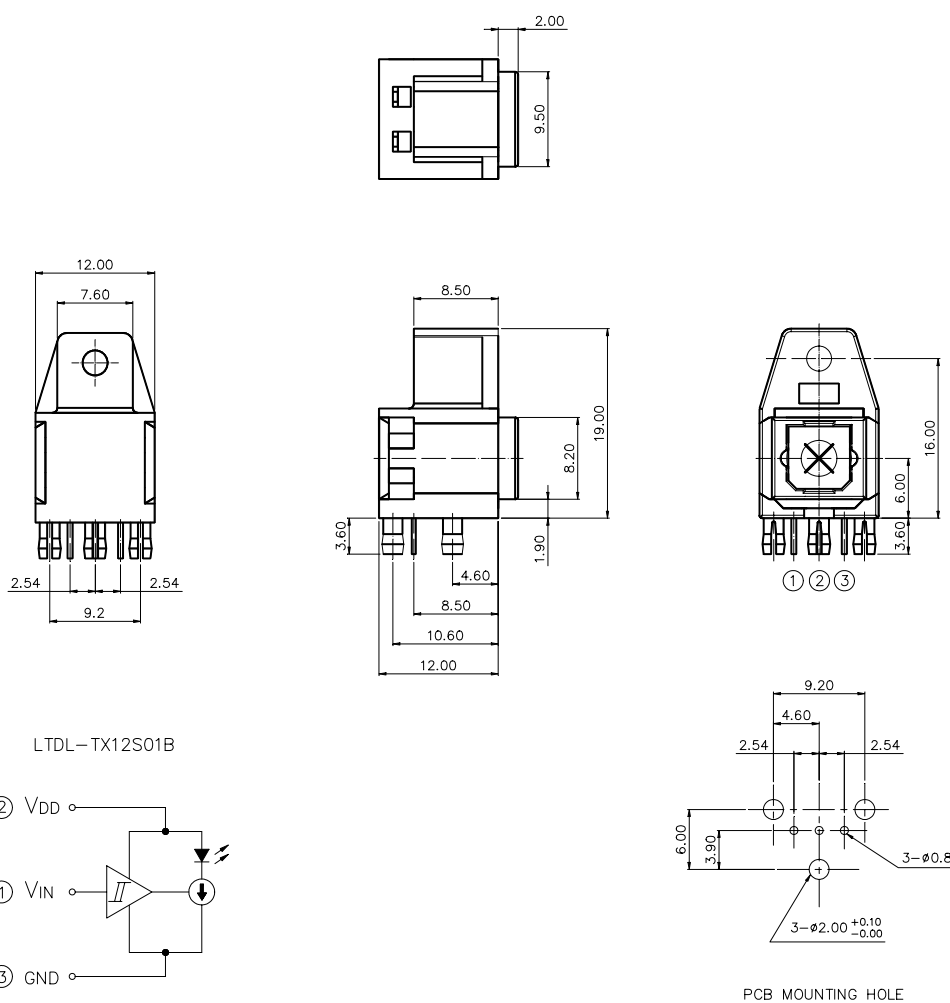
## FEATURES

- \* High speed transmission ( 13.2 Mbps , NRZ code )
- \* Build-in LED driving circuit allows connecting directly to modulation IC for digital audio equipment.
- \* Wide range of operating voltage from 3V to 5V
- \* Same package as fiber optic receiving module LTDL-RX16S01B

## APPLICATIONS

- \* Digital audio system
- \* CD, MD & DVD players

## PACKAGE DIMENSIONS



### NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.3$  mm (.012") unless otherwise noted.
3. In the absence of confirmation by device data sheets, LITE-ON takes no responsibility for any defects that may occur in equipment using any devices shown in catalogs, data book, etc. Contact LITE-ON in order to obtain the latest device data sheets before using any LITE-ON device.



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## ELECTRO - OPTICAL CHARACTERISTICS

### ABSOLUTE MAXIMUM RATINGS AT TA=25

| PARAMETER                                              | MAXIMUM RATING              | UNIT |
|--------------------------------------------------------|-----------------------------|------|
| Supply Voltage (V <sub>DD</sub> )                      | -0.5 ~ +7                   | V    |
| Input Voltage (V <sub>IN</sub> )                       | -0.5 ~ V <sub>DD</sub> +0.5 | V    |
| Operating Temperature Range                            | -20 to +70                  |      |
| Storage Temperature Range                              | -30 to +80                  |      |
| Lead Soldering Temperature<br>[1.6mm(.063") From Body] | 260 for 5 Seconds           |      |

The shutter may not recover completely after duration or when it was used in high temperature enviroment.

### ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25

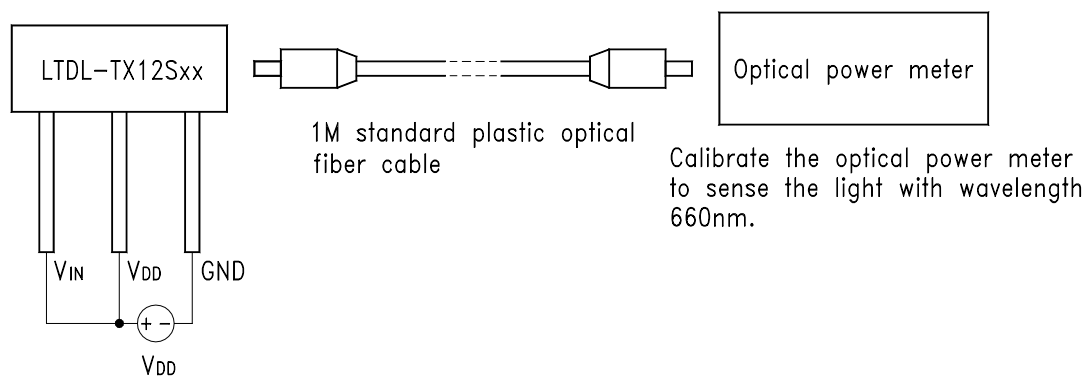
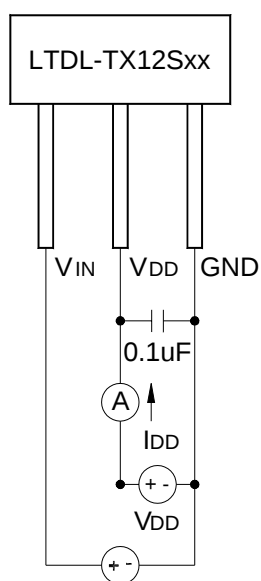
| PARAMETER                        | SYMBOL                  | MIN. | TYP. | MAX. | UNIT | TEST<br>CONDITION |
|----------------------------------|-------------------------|------|------|------|------|-------------------|
| Data Rate                        | T <sub>s</sub>          | -    | -    | 13.2 | Mbps | NRZ code          |
| Operating Voltage                | V <sub>DD</sub>         | 2.75 | -    | 5.25 | V    |                   |
| Peak Emission Wavelength         | $\lambda_{\text{Peak}}$ | 630  | 650  | 690  | nm   |                   |
| Fiber Coupling Light Output      | P <sub>C</sub>          | -21  | -17  | -15  | dBm  | *1                |
| Current Consumption              | I <sub>DD</sub>         | -    | 6    | 8    | mA   |                   |
| High Level Input Voltage         | V <sub>IH</sub>         | 2    | -    | -    | V    |                   |
| Low Level Input Voltage          | V <sub>IL</sub>         | -    | -    | 0.8  | V    |                   |
| “Low→High”propagation delay time | t <sub>PLH</sub>        | -    | -    | 166  | ns   | *2                |
| “High→Low”propagation delay time | t <sub>PHL</sub>        | -    | -    | 155  | ns   |                   |
| Pulse Width Distortion           | $\Delta t_w$            | -18  | -    | +18  | ns   |                   |
| Jitter                           | $\Delta t_j$            | -    | 1    | 18   | ns   | *2                |

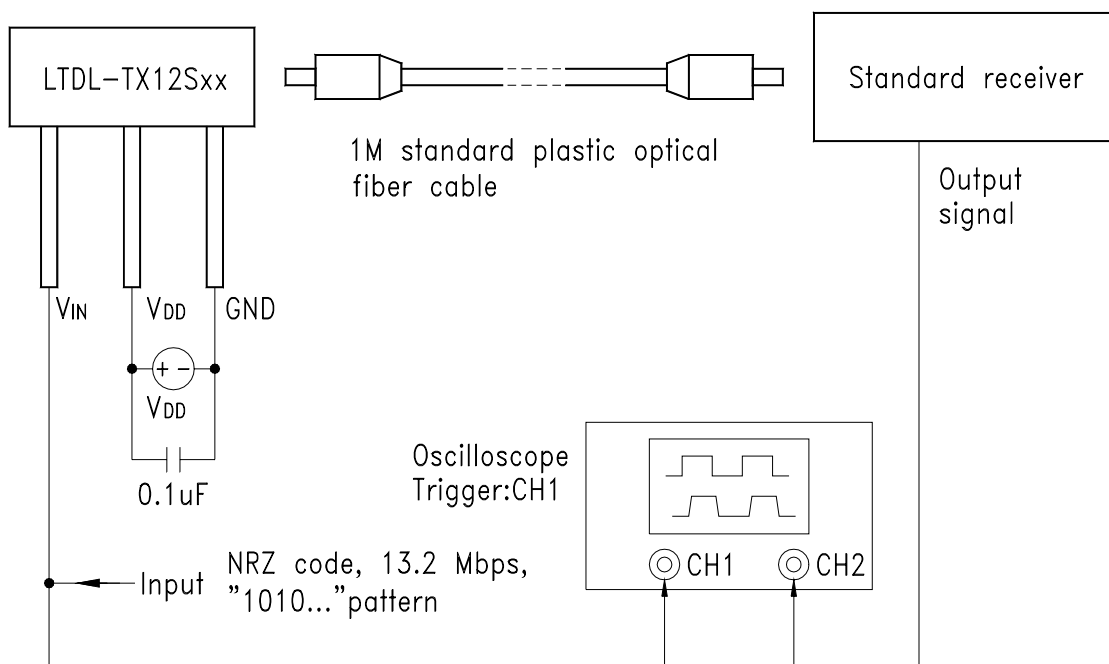


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BNS-OD-C131/A4

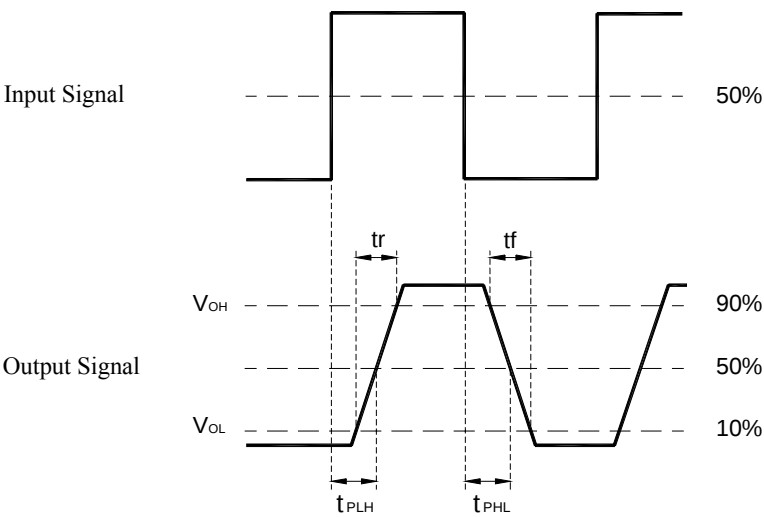
**\*1 Measuring method of optical output coupling power**

**\*2 Power dissipation measuring method**


**\*3 Measuring pulse response**


Note :

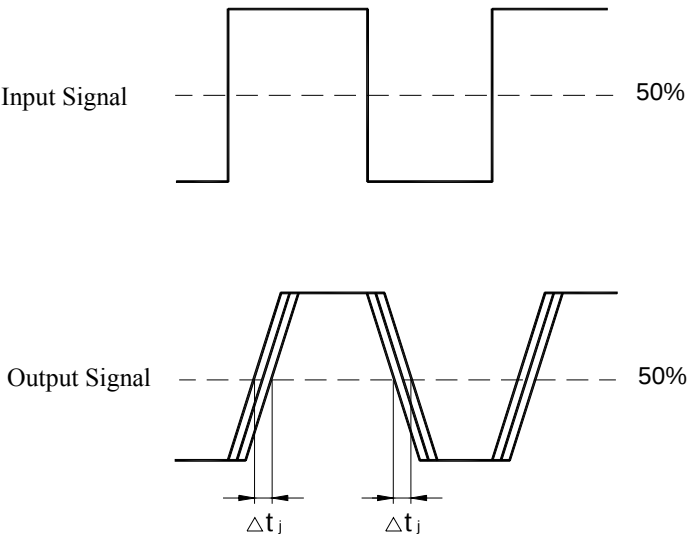
(1)The impedance of the probe for the oscilloscope must be more than 1MΩ and less than 10pf.

Rise and Fall Times and Pulse Width Distortion



*Pulse Width Distortion=  $\Delta tw = t_{PHL}-t_{PLH}$*

Jitter



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    - Office automation equipment
    - Telecommunication equipment 【 terminal 】
    - Test and measurement equipment
    - Industrial control
    - Audio visual equipment
    - Consumer electronics
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    - Traffic signals
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    - Alarm equipment
    - Various safety devices, etc.
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