

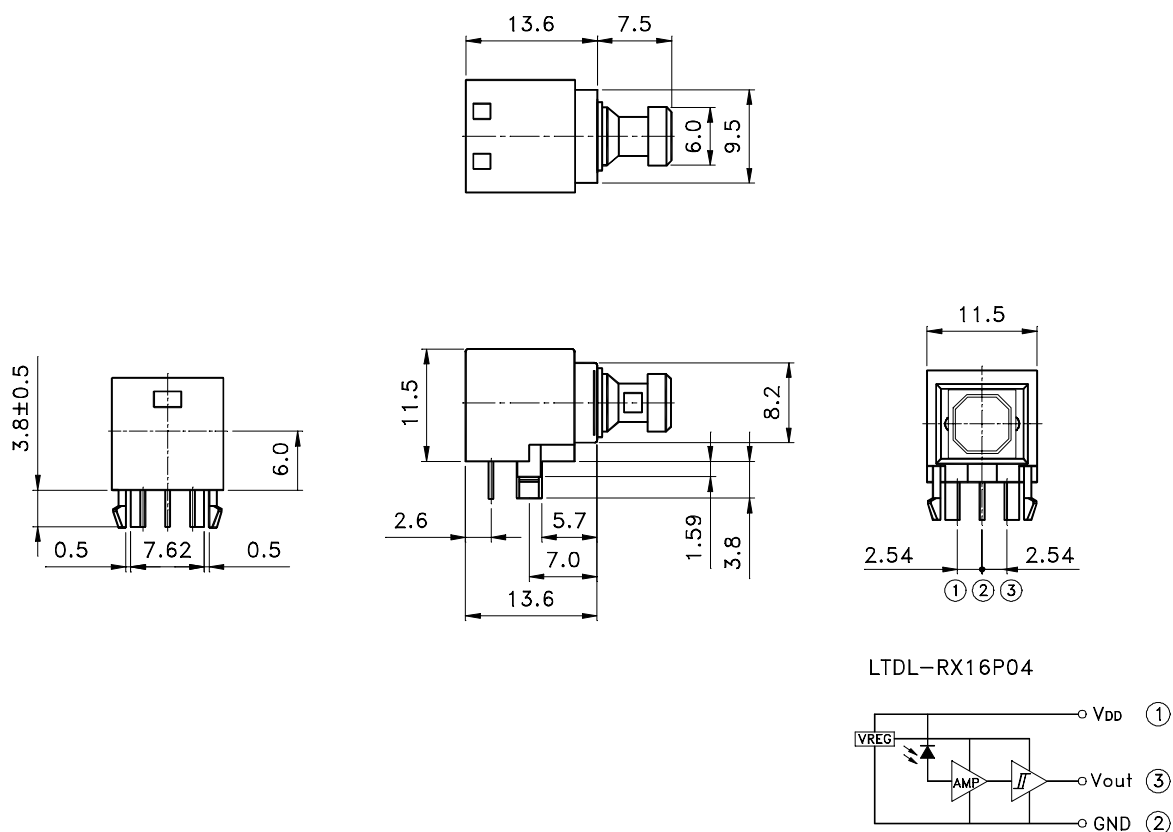
## FEATURES

- \* High speed transmission ( 16 Mbps , NRZ code )
- \* TTL compatible
- \* Same package as fiber optic transmitting module LTDL-TX12P04

## APPLICATIONS

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

## PACKAGE DIMENSIONS



## NOTES:

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.3$  mm unless otherwise noted.



# LITE-ON TECHNOLOGY CORPORATION

Property of LITE-ON Only

## ELECTRO - OPTICAL CHARACTERISTICS

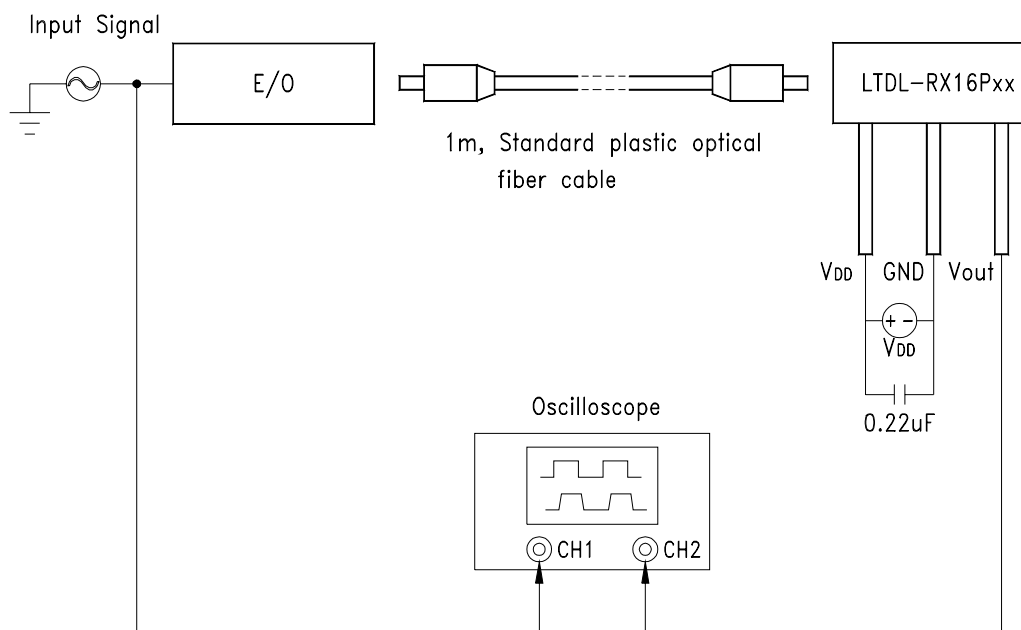
ABSOLUTE MAXIMUM RATINGS AT Ta=25

| PARAMETER                                              | MAXIMUM RATING        | UNIT |
|--------------------------------------------------------|-----------------------|------|
| Supply Voltage (V <sub>DD</sub> )                      | 6.0                   | V    |
| Output Voltage (V <sub>O</sub> )                       | V <sub>DD</sub> + 0.3 | 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     |      |

ELECTRICAL OPTICAL CHARACTERISTICS AT Ta=25

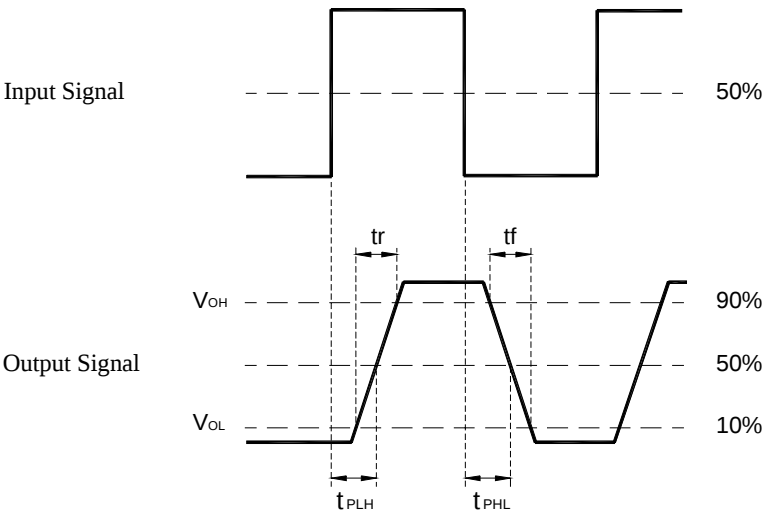
| PARAMETER                        | SYMBOL                  | MIN. | TYP. | MAX. | UNIT | TEST<br>CONDITION                           |
|----------------------------------|-------------------------|------|------|------|------|---------------------------------------------|
| Data Rate                        | T <sub>s</sub>          | 0.1  | -    | 16   | Mbps | NRZ signal                                  |
| Operating Voltage                | V <sub>DD</sub>         | 4.75 | -    | 5.25 | V    |                                             |
| Peak Sensitivity Wavelength      | $\lambda_{\text{Peak}}$ | -    | 650  | -    | nm   |                                             |
| Input Sensitivity                | P <sub>i</sub>          | -24  | -    | -14  | dBm  |                                             |
| Dissipation current              | I <sub>DD</sub>         | 2    | 7    | 10   | mA   | NRZ signal                                  |
| High level output voltage        | V <sub>OH</sub>         | 2.4  | 4.8  | -    | V    | Dc Light ,<br>I <sub>OH</sub> = -20 $\mu$ A |
| Low level output voltage         | V <sub>OL</sub>         | -    | 0.2  | 0.4  | V    | Dark , I <sub>OL</sub> = 0.6mA              |
| “Low→High”propagation delay time | t <sub>PLH</sub>        | -    | -    | 166  | ns   | *1                                          |
| “High→Low”propagation delay time | t <sub>PHL</sub>        | -    | -    | 166  | ns   |                                             |
| Pulse width distortion           | $\Delta t_w$            | -18  | -    | +18  | ns   |                                             |
| Jitter                           | $\Delta t_j$            | -    | 1    | 5    | ns   | *1                                          |
| Rise Time                        | t <sub>r</sub>          | -    | 8    | 20   | ns   | *1                                          |
| Fall Time                        | t <sub>f</sub>          | -    | 8    | 20   | ns   | *1                                          |

## \*1 Setup of Measuring System





Rise and Fall Times and Pulse Width Distortion



*Pulse Width Distortion= Δtw = t\_PHL-t\_PLH*

Jitter

