

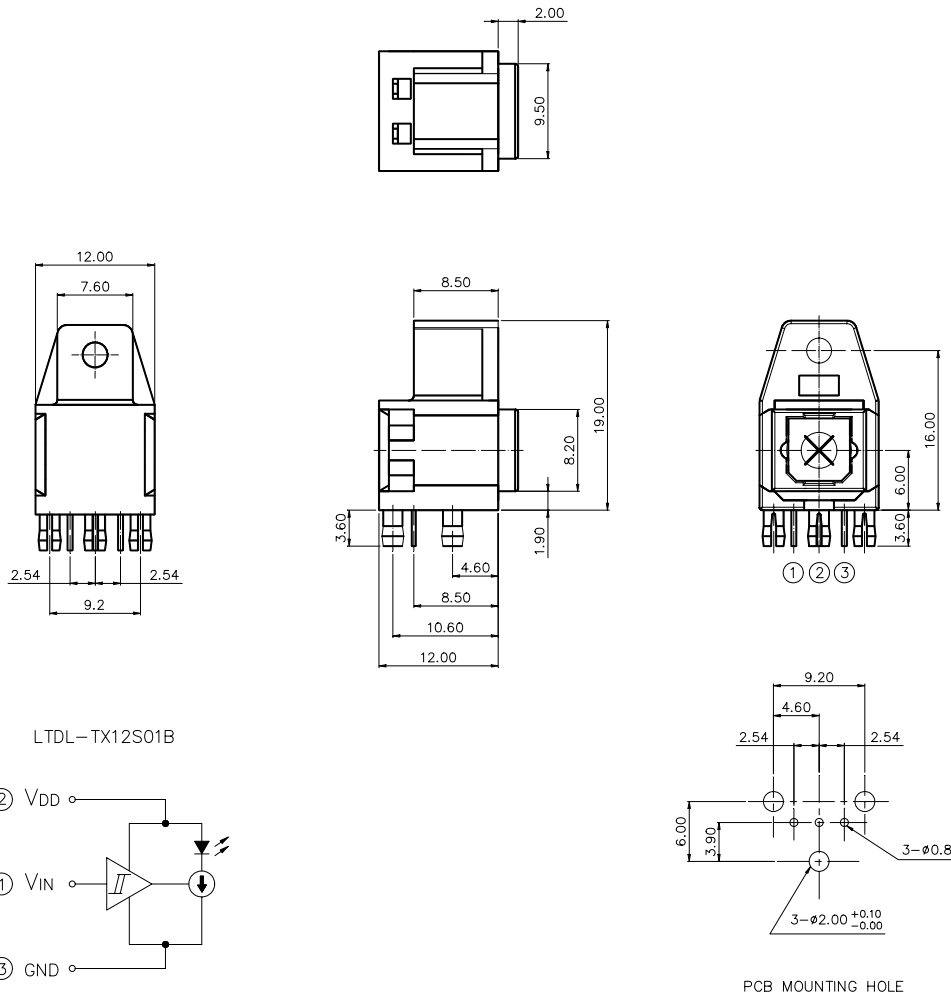
**FEATURES**

- \* 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°C

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 °C to +70 °C	
Storage Temperature Range	-30 °C to +80 °C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds	

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

### ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST 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	λ <sub>Peak</sub>	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	Δ t <sub>w</sub>	-18	-	+18	ns	
Jitter	Δ t <sub>j</sub>	-	1	18	ns	*2

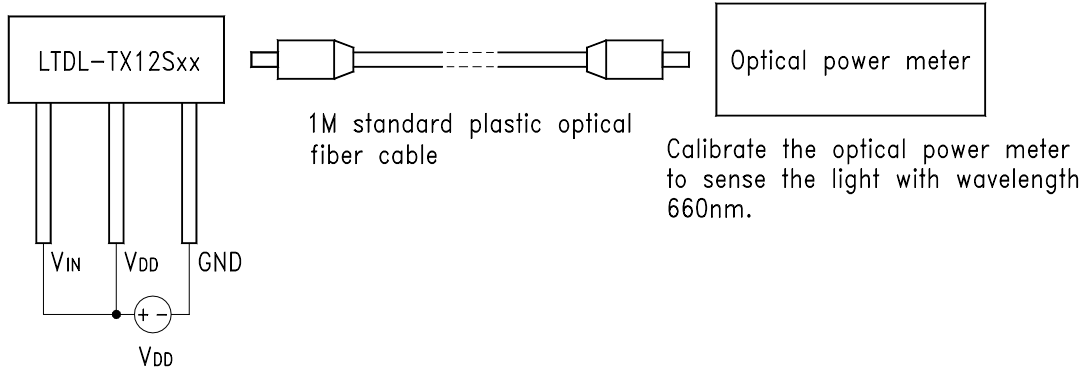


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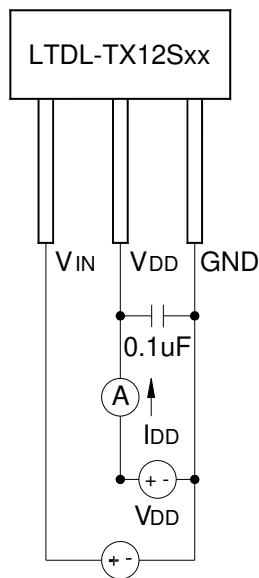
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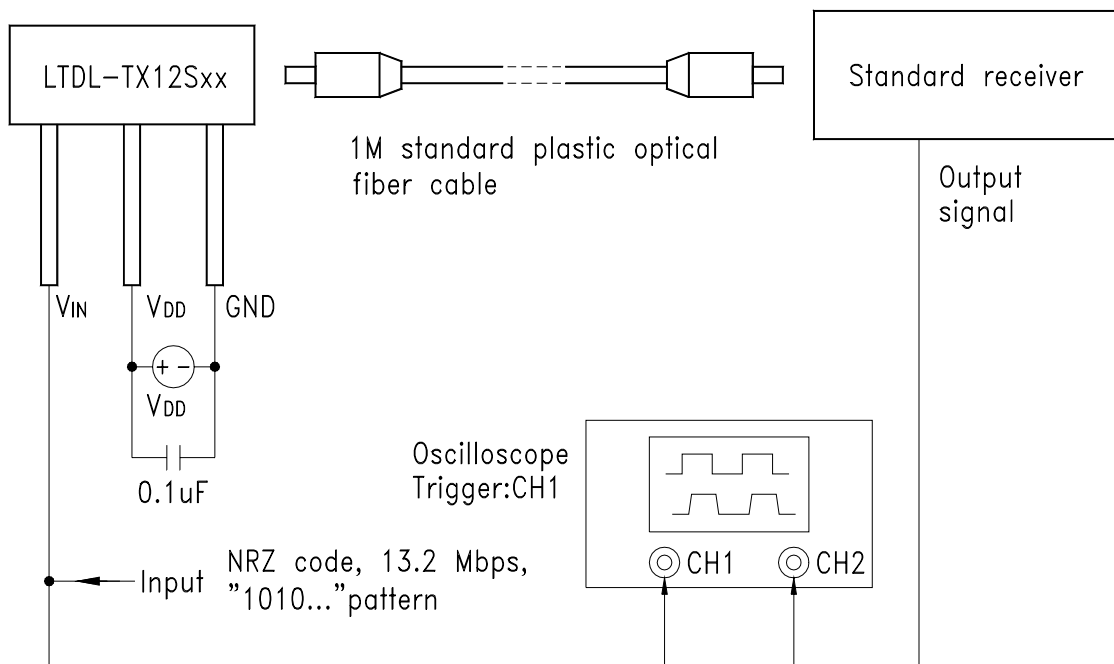
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**\*1 Measuring method of optical output coupling power**



**\*2 Power dissipation measuring method**

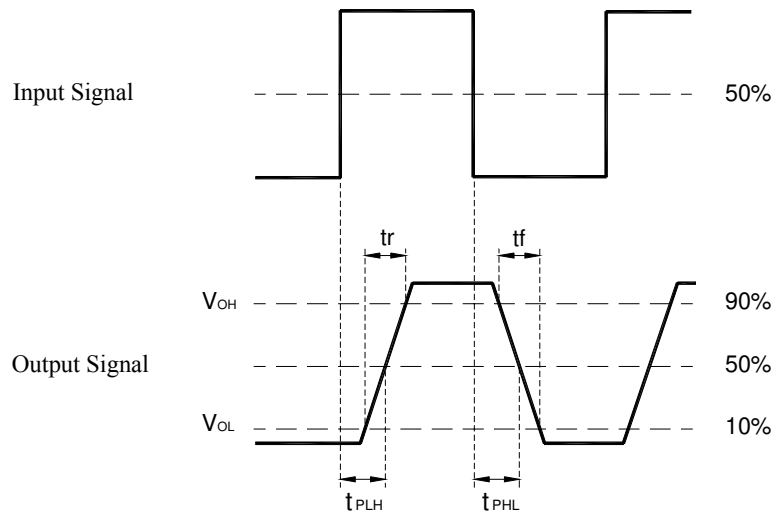


**\*3 Measuring pulse response**

Note :

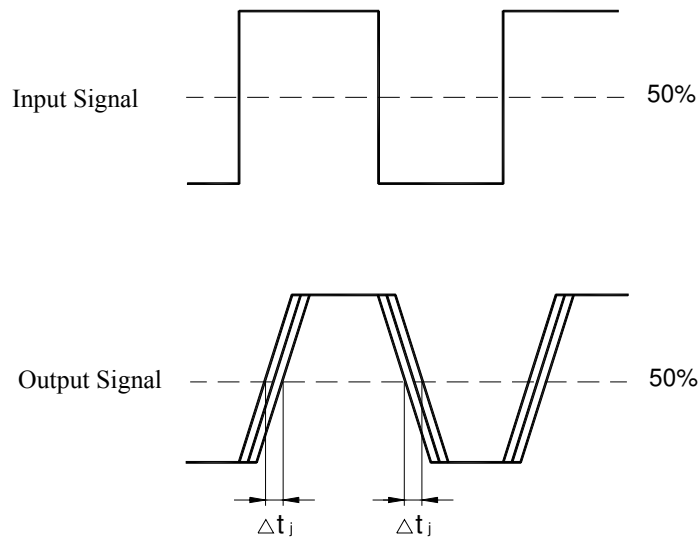
(1)The impedance of the probe for the oscilloscope must be more than  $1M\Omega$  and less than 10pf.

**Rise and Fall Times and Pulse Width Distortion**



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

**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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