

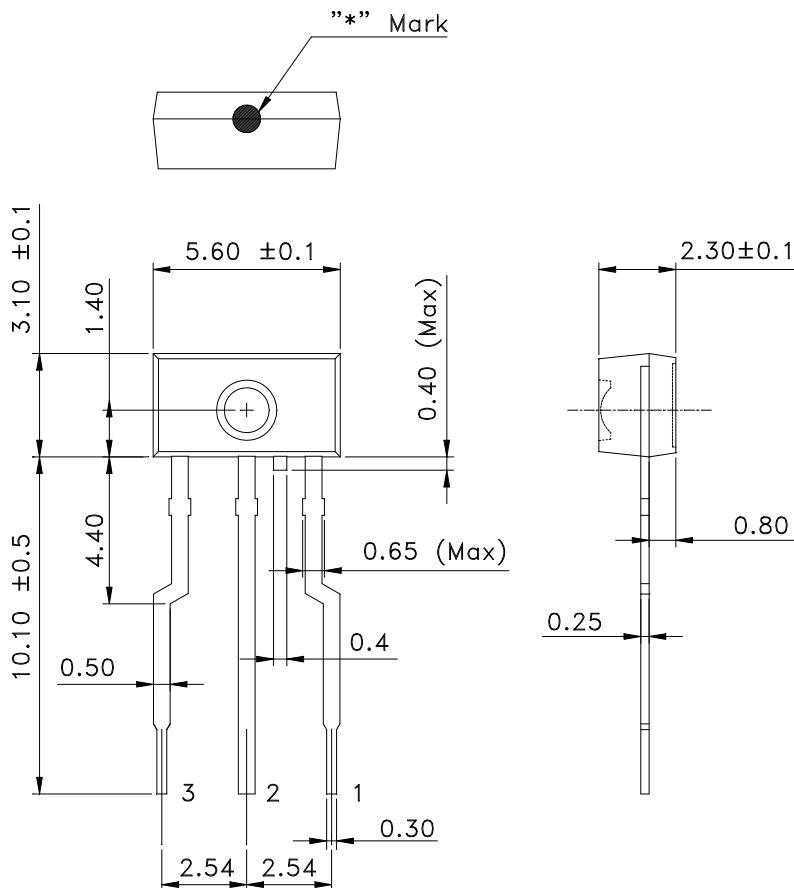
## FEATURES

- \* TTL INTERFACE COMPATIBLE
- \* HIGH SPEED OPTIC SIGNAL TRANSMISSION
- \* BUILT-IN LED DRIVER
- \* LOW POWER CONSUMPTION

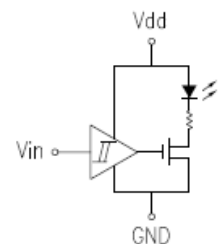
$V_{DD}$	$V_{in}$	LED	$V_{DD}$	$V_{in}$	LED
2.7V ~ 5.25V	HIGH	ON	FLOATING	HIGH	OFF
2.7V ~ 5.25V	LOW	OFF	FLOATING	LOW	OFF
2.7V ~ 5.25V	FLOATING	OFF			

- \* WATER CLEAR COMPOUND PACKAGED.

## PACKAGE DIMENSIONS



- 1.GND
- 2.Vcc
- 3.Vin



### NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15\text{mm}$  (.004") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Mark: Black color.



# LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

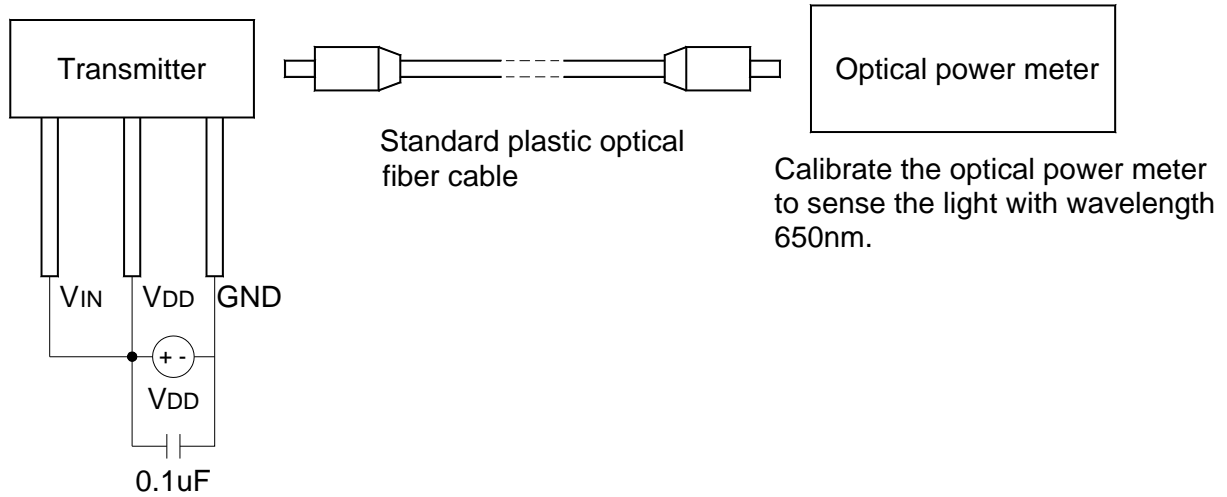
## ABSOLUTE MAXIMUM RATINGS AT TA=25°C

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
Power Dissipation (P)	120	mW
Human Body Model ESD (HBM)	3K	V
Machine Model ESD (MM)	300	V
Operating Temperature Range	-25 °C to + 70 °C	
Storage Temperature Range	-40 °C to + 70 °C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds	

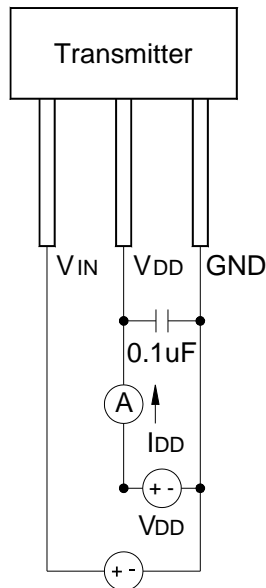
## ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Transmission Speed	T <sub>s</sub>	—	—	25	Mbps	NRZ signal
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
Dissipation current	I <sub>DD</sub>	—	5	12	mA	*2
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>	—	—	100	ns	*3
“High→Low”propagation delay time	t <sub>PHL</sub>	—	—	100	ns	
Pulse width distortion	Δt <sub>w</sub>	-15	—	15	ns	
Jitter	Δt <sub>j</sub>	—	—	15	ns	

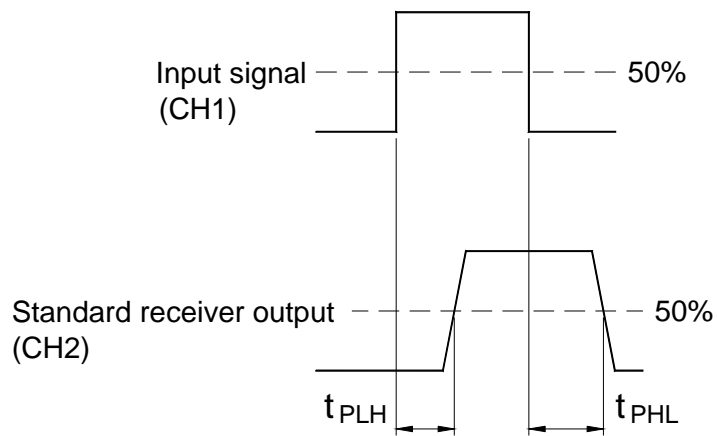
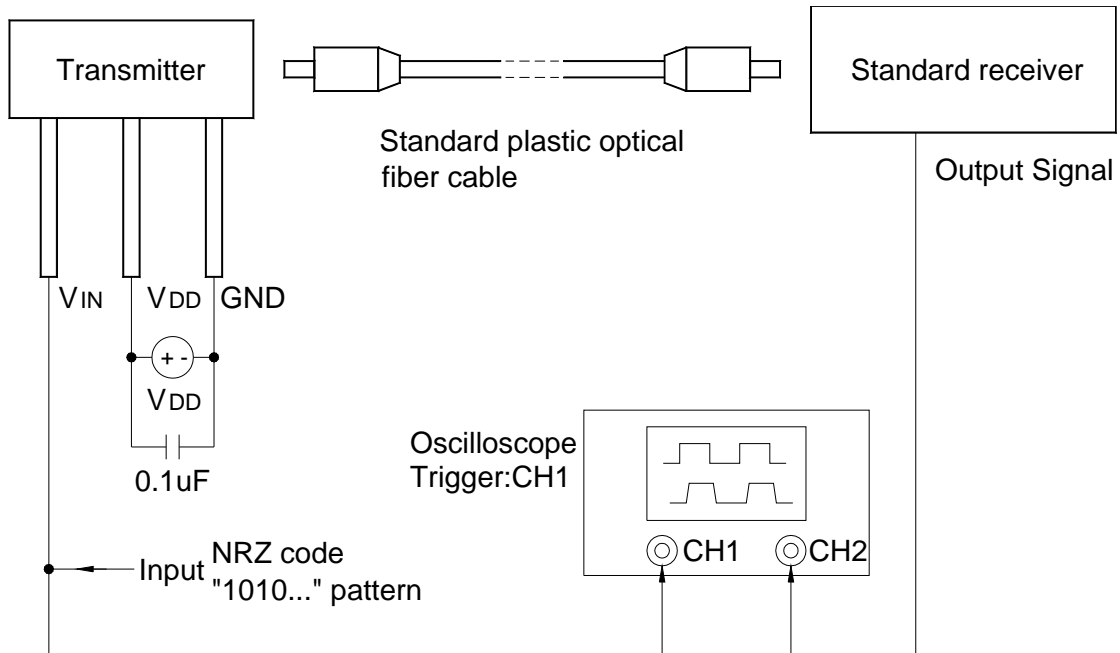
**\*1 Measuring method of optical output coupling power**



**\*2 Power dissipation measuring method**



**\*3 Measuring pulse response**



Pulse width distortion  $\Delta tw = t_{PHL} - t_{PLH}$

**Note**

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



## CAUTIONS

### 1. Storage

- For the devices which are stored out of their original packag for more than eight hours, it is better to bake them at about  $100 \pm 5^{\circ}\text{C}$  for at least 4 hours before assembling.

### 2. ESD (Electrostatic Discharge)

Static Electricity or power surge will damage the devices.

Suggestions to prevent ESD damage:

- Use of a conductive wrist band or anti-electrostatic glove when handling these devices.
- All devices, equipment, and machinery must be properly grounded.
- Work tables, storage racks, etc. should be properly grounded.
- Use ion blower to neutralize the static charge which might have built up on surface of the device's plastic lens as a result of friction between LEDs during storage and handling.