

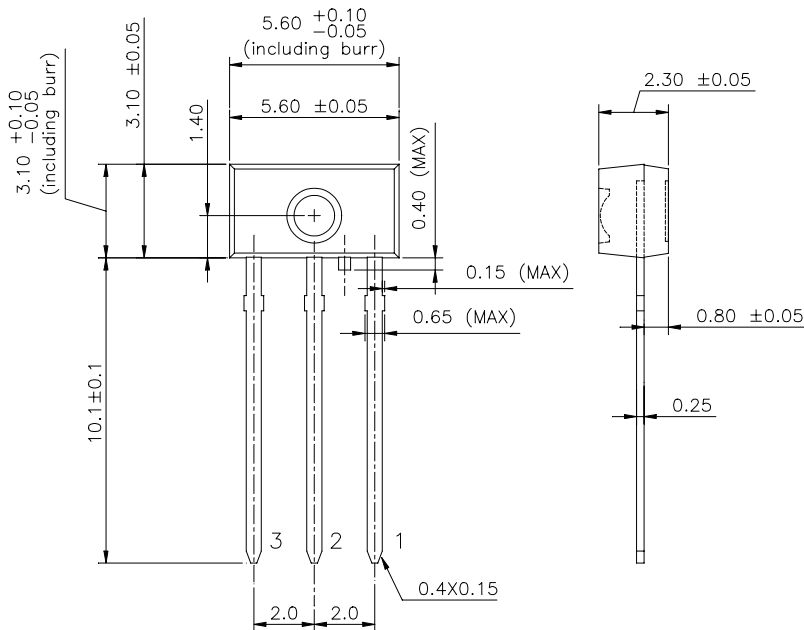
FEATURES

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

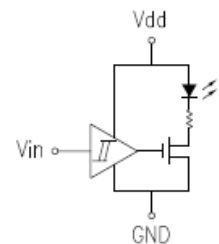
| * V_{DD} | V_{in} | LED | V_{DD} | V_{in} | LED |
|--------------|----------|-----|----------|----------|-----|
| 2.7V ~ 5.25V | HIGH | ON | FLOATING | HIGH | OFF |
| 2.7V ~ 5.25V | LOW | OFF | FLOATING | LOW | OFF |
| 2.7V ~ 5.25V | FLOATING | OFF | | | |

- * WATER CLEAR COMPOUND PACKAGED.

PACKAGE DIMENSIONS



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



NOTES:

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



LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

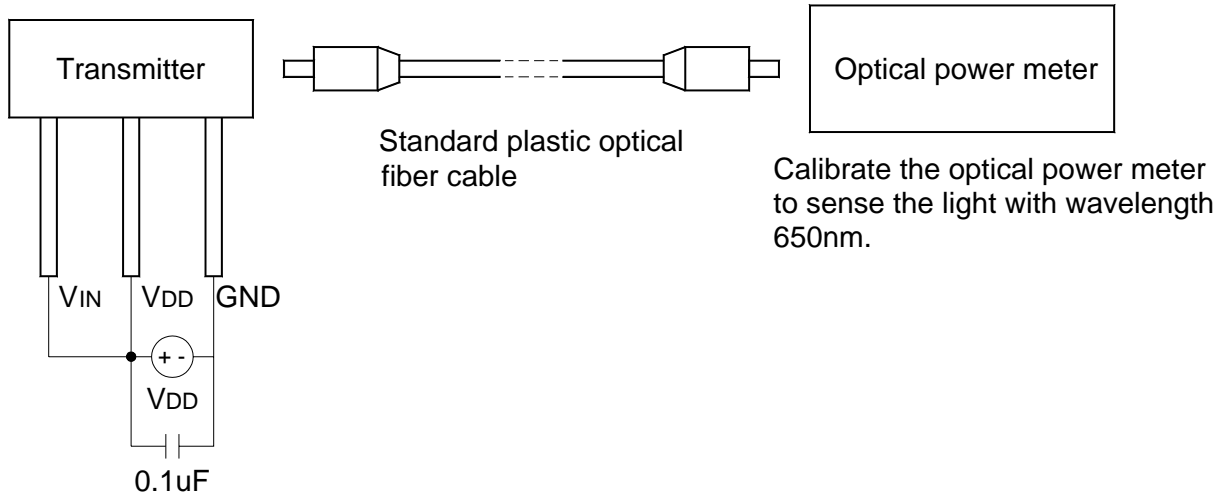
ABSOLUTE MAXIMUM RATINGS AT TA=25°C

| PARAMETER | MAXIMUM RATING | UNIT |
|--|-----------------------------|------|
| Supply Voltage (V _{DD}) | -0.5 ~ +7 | V |
| Input Voltage (V _{IN}) | -0.5 ~ V _{DD} +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 | |

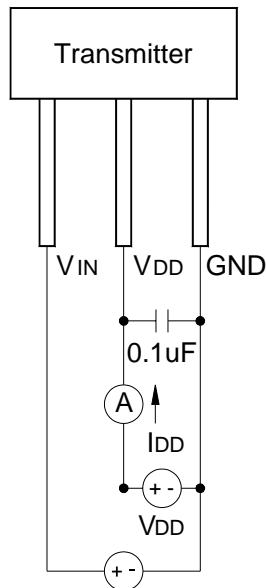
ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|----------------------------------|-------------------|------|------|------|------|----------------|
| Transmission Speed | T _s | — | — | 25 | Mbps | NRZ signal |
| Operating Voltage | V _{DD} | 2.75 | — | 5.25 | V | |
| Peak Emission Wavelength | λ _{Peak} | 630 | 650 | 690 | nm | |
| Fiber coupling light output | P _c | -21 | -17 | -15 | dBm | *1 |
| Dissipation current | I _{DD} | — | 5 | 12 | mA | *2 |
| High level input voltage | V _{IH} | 2 | — | — | V | |
| Low level input voltage | V _{IL} | — | — | 0.8 | V | |
| “Low→High”propagation delay time | t _{PLH} | — | — | 100 | ns | *3 |
| “High→Low”propagation delay time | t _{PHL} | — | — | 100 | ns | |
| Pulse width distortion | Δt _w | -15 | — | 15 | ns | |
| Jitter | Δt _j | — | — | 15 | ns | |

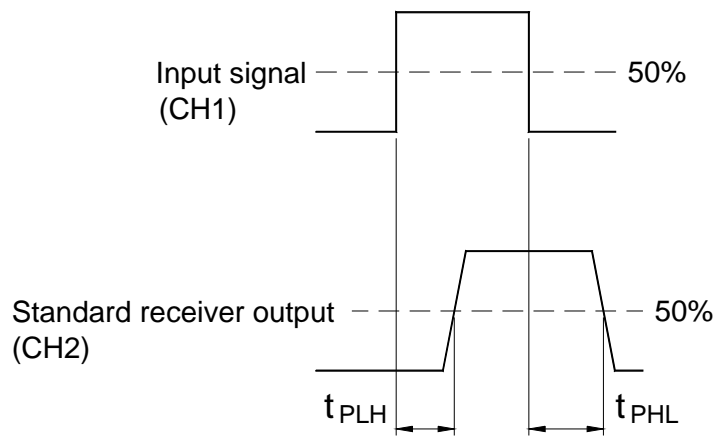
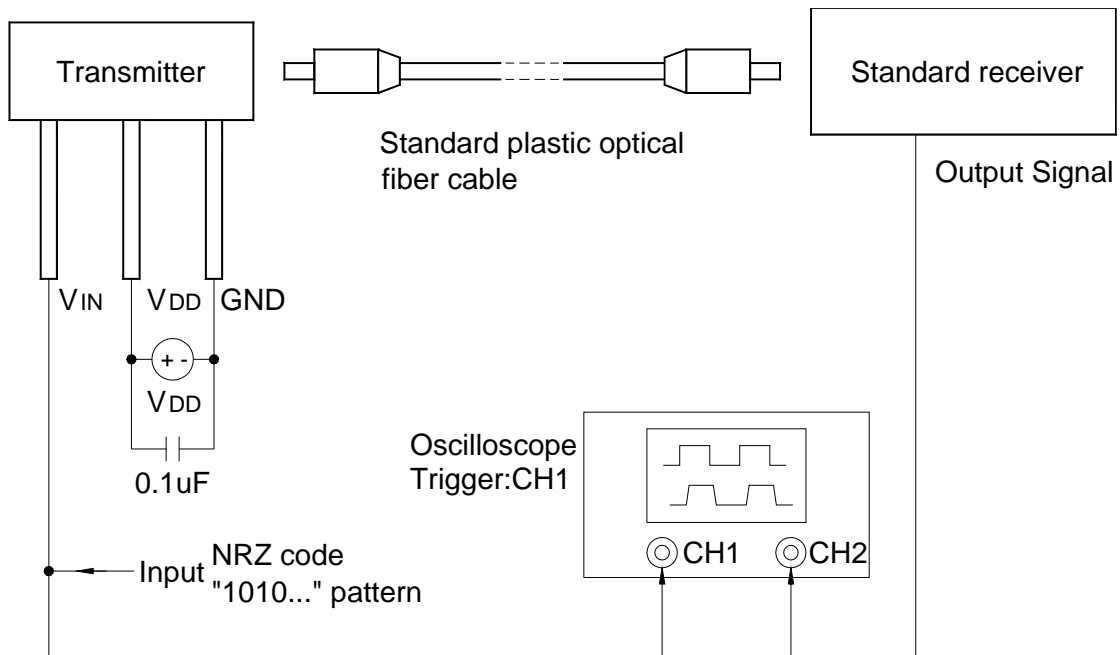
***1 Measuring method of optical output coupling power**



***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.