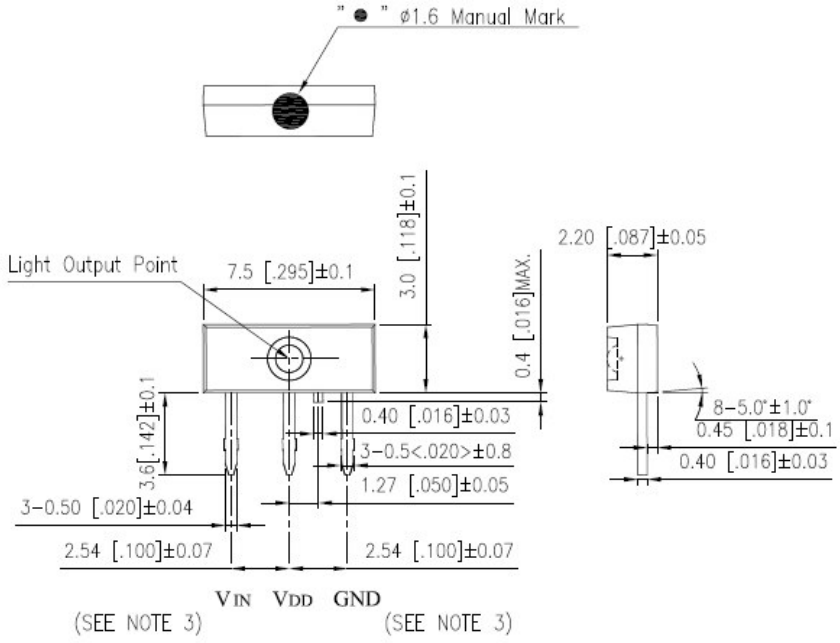
FEATURES

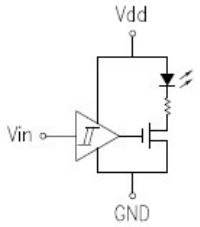
* TTL INTERFACE COMPATIBLE
* HIGH SPEED OPTIC SIGNAL TRANSMISSION
* BUILT-IN LED DRIVER
* LOW POWER CONSUMPTION
*

V_{DD}	Vin	LED	V_{DD}	Vin	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





NOTES:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1mm(.004") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Mark: Purple color.

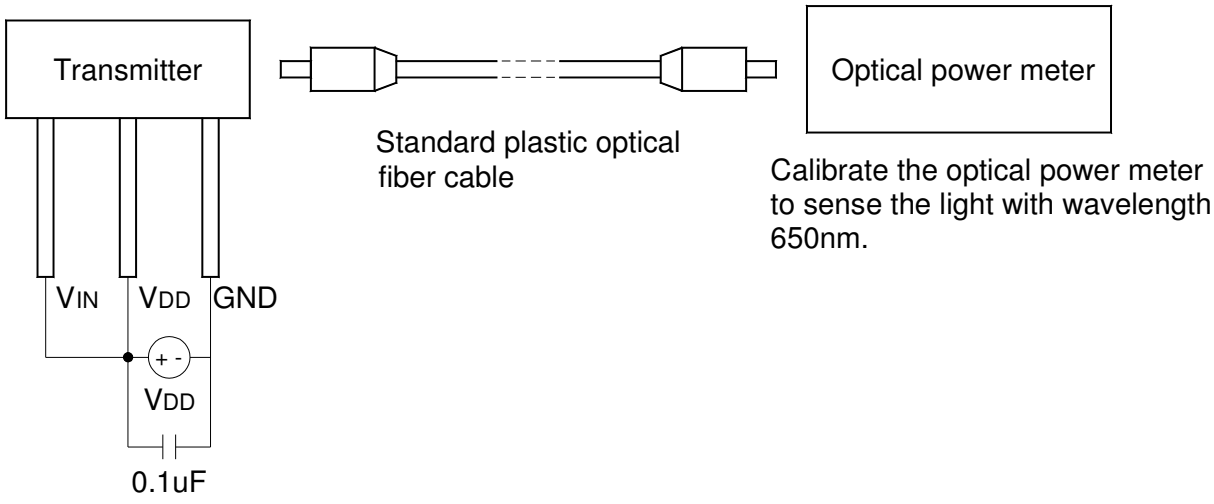
ABSOLUTE MAXIMUM RATINGS AT T_A=25℃

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 ℃ to + 70 ℃	
Storage Temperature Range	-40 ℃ to + 70 ℃	
Lead Soldering Temperature [1.6mm(.063") From Body]	260℃ for 5 Seconds	

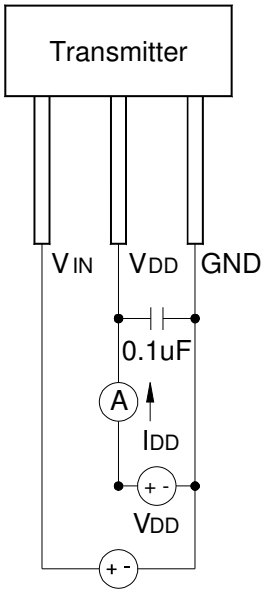
ELECTRICAL OPTICAL CHARACTERISTICS AT T_A=25℃

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Transmission Speed	Ts	—	—	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	Pc	-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	
Viewing Angle (See FIG.2)	$2\theta_{1/2}$	—	90	—	deg.	
Jitter	Δt_j	—	—	15	ns	

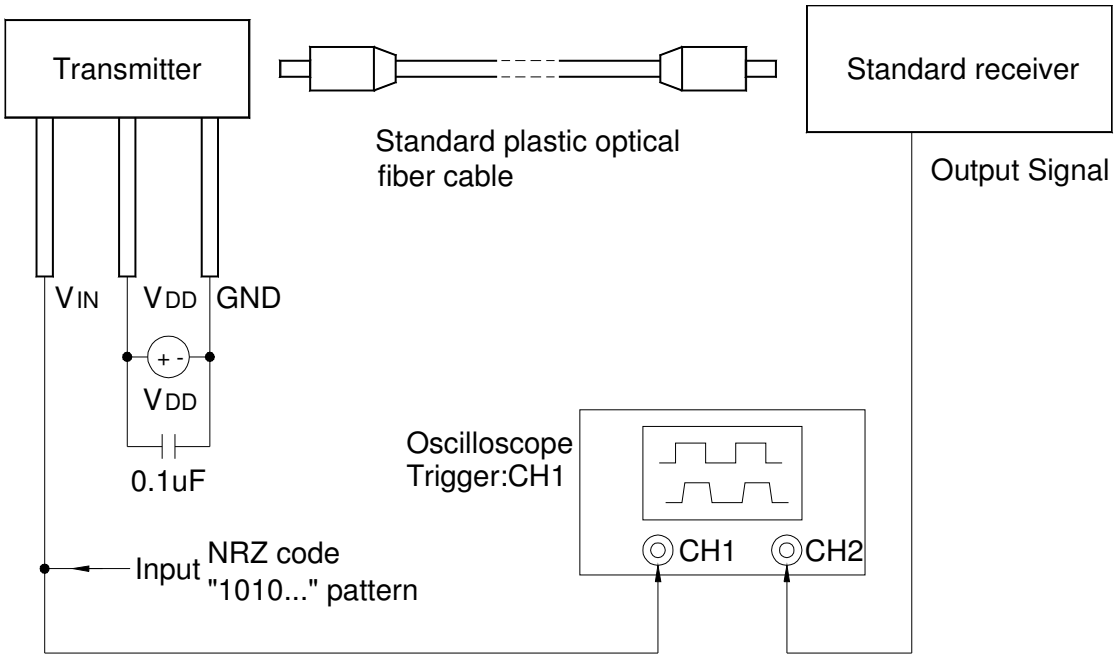
***1 Measuring method of optical output coupling power**

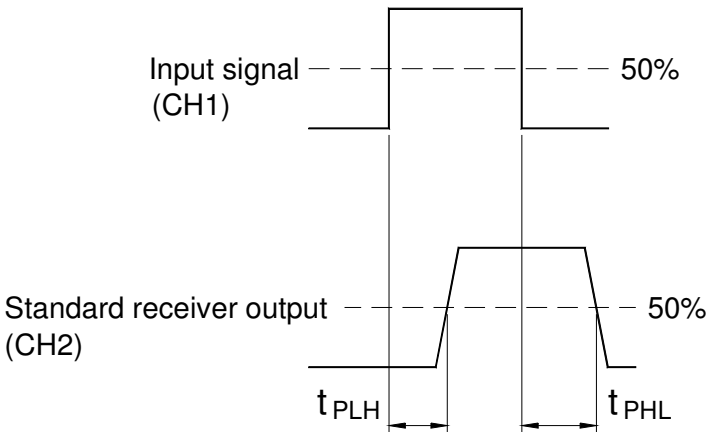


***2 Power dissipation measuring method**



***3 Measuring pulse response**





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

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25℃ Ambient Temperature Unless Otherwise Noted)

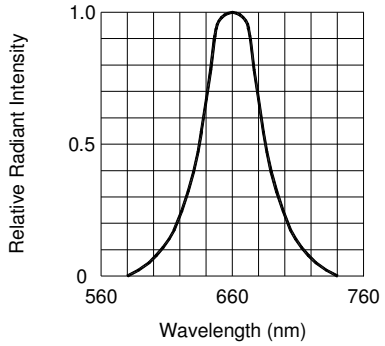


FIG.1 SPECTRAL DISTRIBUTION

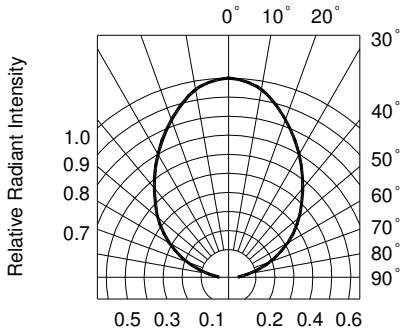


FIG.2 RADIATION DIAGRAM

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±5℃ 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.

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