Property of Lite-On Only

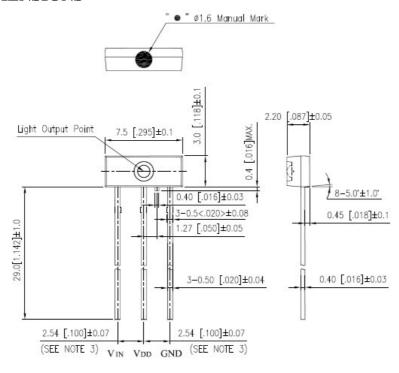
FEATURES

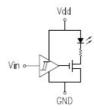
- * TTL INTERFACE COMPATIBLE
- * HIGH SPEED OPTIC SIGNAL TRANSMISSION
- * BUILT-IN LED DRIVER
- * BUILT-IN CURRENT LIMIT RESISTOR
- * LOW POWER CONSUMPTION

*	$V_{ m DD}$	Vin	LED	$V_{ m DD}$	Vin	LED
	2.75V ~ 3.3V	HIGH	ON	FLOATING	HIGH	OFF
	2.75V ~ 3.3V	LOW	OFF	FLOATING	LOW	OFF
	2.75V ~ 3.3V	FLOATING	OFF			

* WATER CLEAR EPOXY COMPOUND PACKAGED.

PACKAGE DIMENSIONS





NOTES:

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

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ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT		
Supply Voltage (VDD)	-0.5 ~ +7	V		
Input Voltage (V _{IN})	-0.5 ~ V _{DD} +0.5	V		
Power Dissipation (P)	120	mW		
Operating Temperature Range	-25 °C to + 70 °C			
Storage Temperature Range	-40 °C to + 85 °C			
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds			

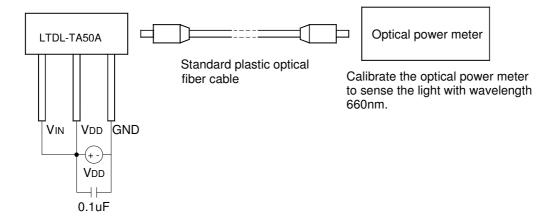
ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Transmission Speed	Ts	_	_	50	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	Рс	-21	-17	-15	dBm	*1
Dissipation current	Idd	0.5	_	10	mA	*2
High level input voltage	V _{IH}	2	_	_	V	
Low level input voltage	VIL	_	_	0.8	V	
"Low→High" propagation delay time	$t_{ ext{PLH}}$	_	_	50	ns	
"High-Low" propagation delay time	$t_{ m PHL}$	_	_	50	ns	*3
Pulse width distortion	$\Delta t_{\rm W}$	-8	_	8	ns	
Jitter	$\Delta t_{\rm j}$	_	_	8	ns	

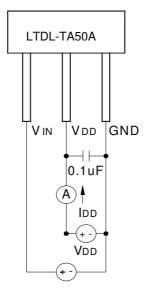
2 of 5 Part No.: LTDL-TA50A DATA SHEET Page:

Property of Lite-On Only

*1 Measuring method of optical output coupling power



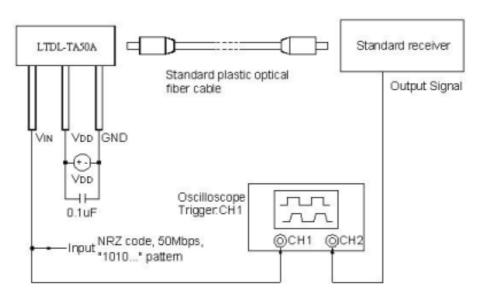
*2 Power dissipation measuring method

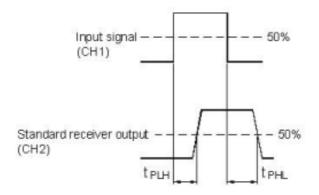


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Property of Lite-On Only

*3 Measuring pulse response





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

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Property of Lite-On Only

CAUTIONS

1. Storage

For the devices which are stored out of their original packaging and storage ambient should not exceed 30°C temperature 60% relative humidity for more than 168 hrs, it is better to bake them at about 100±5°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 devices during storage and handling.

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