Property of Lite-On Only

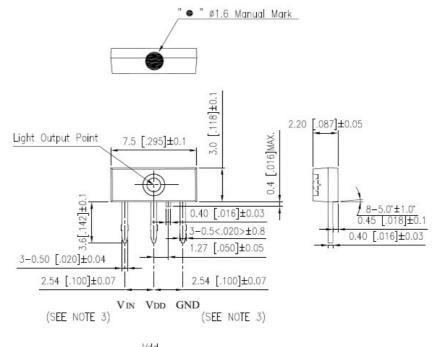
FEATURES

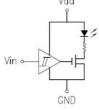
- * TTL INTERFACE COMPATIBLE
- * HIGH SPEED OPTIC SIGNAL TRANSMISSION
- * BUILT-IN LED DRIVER
- * LOW POWER CONSUMPTION

*	$ m V_{DD}$	Vin	LED	$V_{ m DD}$	Vin	LED
ĺ	2.7V ~ 5.25V	HIGH	ON	FLOATING	HIGH	OFF
ĺ	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 ± 0.1 mm(.004") unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.
- 4. Mark: Purple color.

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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		
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			

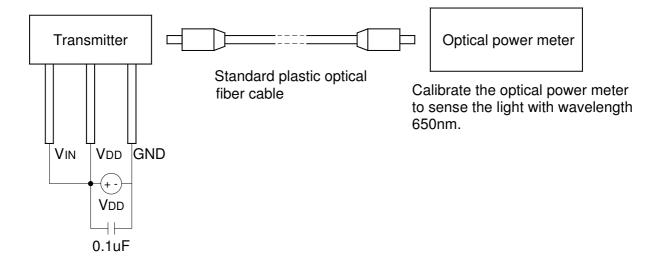
ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Transmission Speed	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	Рс	-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	VIL	_	_	0.8	V	
"Low→High" propagation delay time	$t_{\scriptscriptstyle PLH}$	_	_	100	ns	
"High→Low"propagation delay time	$t_{ m PHL}$	_		100	ns	*3
Pulse width distortion	$\Delta t_{\rm W}$	-15	_	15	ns	
Viewing Angle (See FIG.2)	2 θ 1/2	_	90	_	deg.	
Jitter	$\Delta t_{\rm j}$		_	15	ns	

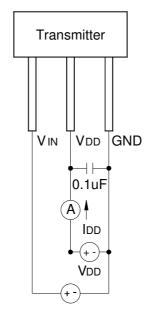
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*1 Measuring method of optical output coupling power



*2 Power dissipation measuring method



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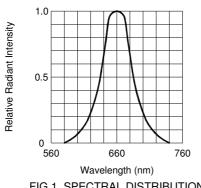
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*3 Measuring pulse response Transmitter Standard receiver Standard plastic optical **Output Signal** fiber cable VIN VDD GND (+-)- V_{DD} + \vdash Oscilloscope Trigger:CH1 0.1uF Input NRZ code "1010..." pattern OCH1 OCH2 Input signal **- 50%** (CH1) Standard receiver output - 50% (CH2) t_{PLH} t_{PHL} Pulse width distortion $\triangle tw = t_{PHL} - t_{PLH}$ Note (1) The impedance of the probe for the oscilloscope must be more than $1M\Omega$ and less than 10pf. Part No.: LTDL-TA25A/L4 DATA SHEET Page: 4 of 5

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



10° 20° n° 30 Relative Radiant Intensity 40° 50° 0.9 0.8 60° 70° 80 90 (0.5 0.3 0.1 0.2 0.4 0.6

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°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.

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