



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

DESCRIPTION

The LTDL-RA16A is a optical data link interface. The LTDL-RA16A consists of an optical sensor with an I/V amplifier, a Schmitt trigger, and a TTL output interface operating at data rates between 100K baud and 16 M baud.

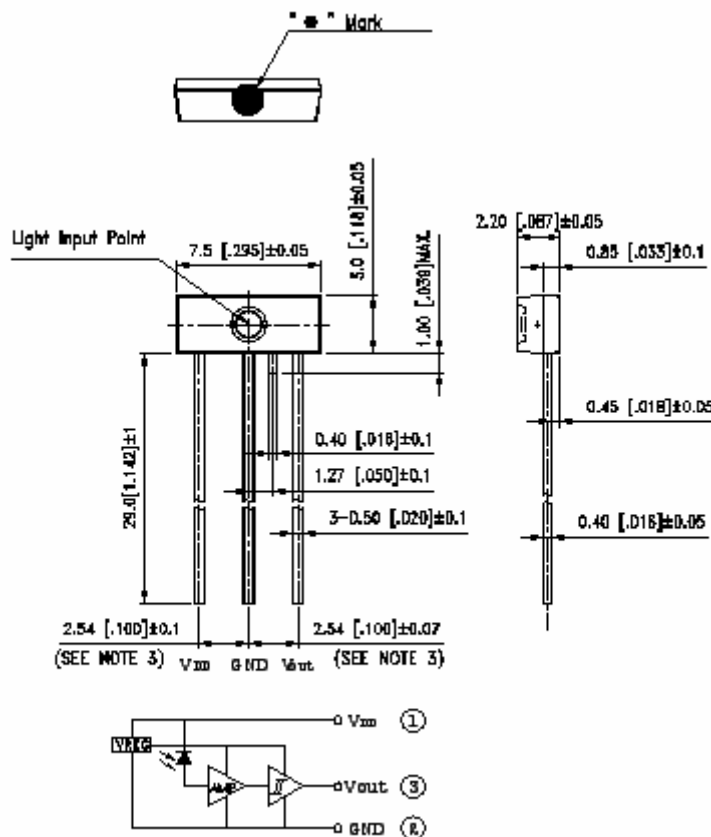
FEATURES

- * High PD sensitivity optimized for red light ($\lambda=650\text{nm}$)
- * Data Rates between 100Kbps and 16 Mbps
- * Low power consumption for extended battery life.
- * Built-in threshold control for improved noise margin

APPLICATIONS

- * Digital Optical Data-Link
- * Dolby AC-3 Digital Audio Interface

PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15\text{mm}$ (.006") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Mark color: Orange



LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

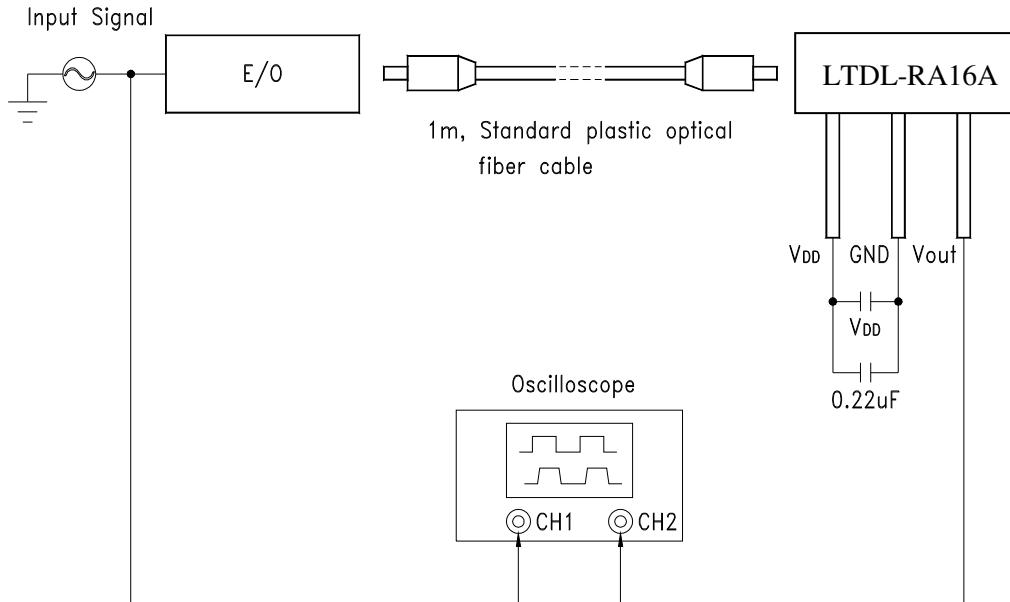
ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Supply Voltage (V _{DD})	5.25	V
Output Voltage (V _O)	V _{DD} +0.3	V
Operating Temperature Range	-20°C to + 70°C	
Storage Temperature Range	-30°C to + 70°C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C ≤ 5 Seconds	

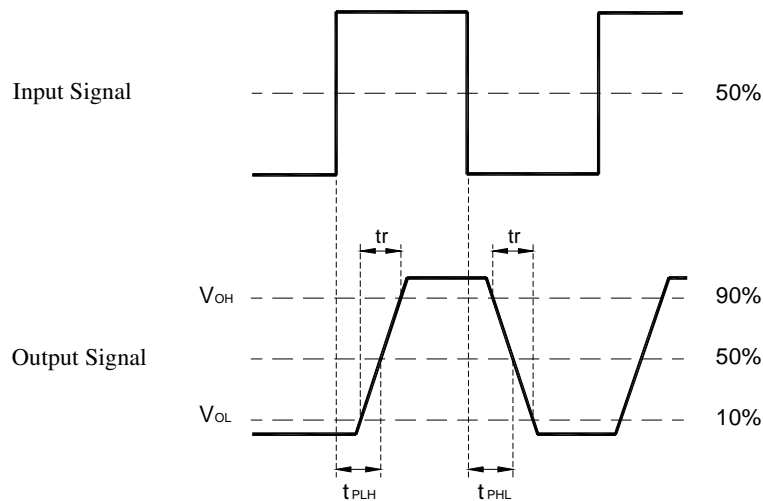
ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Data Rate	T _s	100 K	-	16	Mbps	NRZ signal
Operating Voltage	V _{DD}	2.75	-	5.25	V	
Peak Emission Wavelength	λ _{Peak}	630	650	670	nm	
Input Sensitivity	P _i	-27	-	-14	dBm	
Dissipation current	I _{DD}	-	-	10	mA	
High level output voltage	V _{OH}	2.1	2.5	-	V	Dc Light , I _{OH} = -20 μA
Low level output voltage	V _{OL}	-	0.2	0.4	V	Dark , V _{OL} = 0.6mA
“Low→High”propagation delay time	t _{PLH}	-	-	120	ns	*1
“High→Low”propagation delay time	t _{PHL}	-	-	120	ns	
Pulse width distortion	Δt _w	-25		+25	ns	
Jitter	Δt _j	-	-	10	ns	*2
Rise Time	t _r	-	10	20	ns	*1
Fall Time	t _f	-	10	20	ns	*1

Setup of Measuring System



***1 Rise and Fall Time and Propagation Delays**



$$\text{Pulse width Distortion} = \Delta tw = \frac{t_{PHL} - t_{PLH}}{2}$$

***2 Jitter**