



LITE-ON TECHNOLOGY CORPORATION

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ELECTRO - OPTICAL CHARACTERISTICS

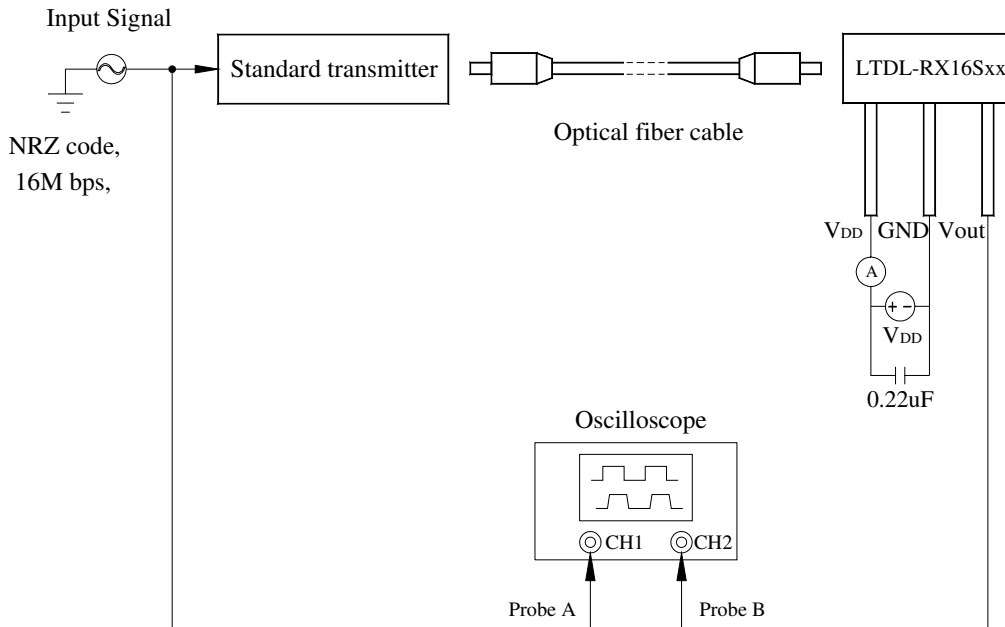
ABSOLUTE MAXIMUM RATINGS AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Supply Voltage (V _{DD})	-0.5 ~ +6.0	V
Output Voltage (V _o)	-0.5 ~ V _{DD} + 0.3	V
Operating Temperature Range	-20°C to + 70°C	
Storage Temperature Range	-30°C to + 80°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
Data Rate	T _s	0.1	-	16	Mbps	NRZ signal
Operating Voltage	V _{DD}	4.75	-	5.25	V	
Peak Sensitivity Wavelength	λ_{Peak}	-	650	-	nm	
Input Sensitivity	P _i	-24	-	-14	dBm	
Dissipation current	I _{DD}	-	4	6	mA	*1
High level output voltage	V _{OH}	2.4	4.8	-	V	*1
Low level output voltage	V _{OL}	-	0.2	0.4	V	*1
“Low→High”propagation delay time	t _{PLH}	-	-	166	ns	*1
“High→Low”propagation delay time	t _{PHL}	-	-	155	ns	
Pulse width distortion	Δt_w	-18	-	+18	ns	
Jitter	Δt_j	-	1	5	ns	*1
Rise Time	t _r	-	8	20	ns	*1
Fall Time	t _f	-	8	20	ns	*1

***1 Setup of Measuring System**

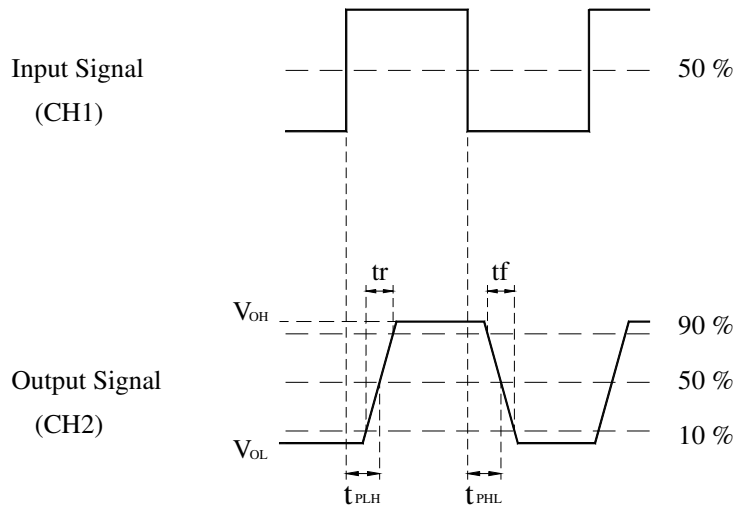


Note :

- (1) $V_{DD} = + 5.0 V \pm 0.05V$
- (2) Input signal : 16M bps, NRZ code, $t_r, t_f \leq 5ns$
- (3) Characteristics of standard transmitter are according to another sheet.
- (4) The SONY POC-10 (POF, 1m) or its equivalent fiber optic cable should be used.
- (5) The Tektronix TDS380P or its equivalent oscilloscope should be used.
- (6) The probe B for the oscilloscope must be more than $1M\Omega$ and less than $10pF$.
- (7) When measuring delay time, use same type and length of probe A and B.
- (8) It measures in the condition where did fiber optic cable straight, but the curve of the range within contented.

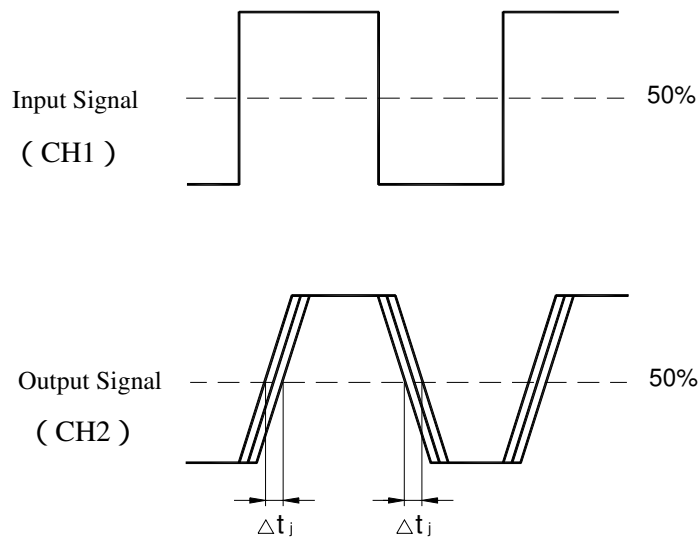
Item	Measuring Method
I_{DD}	Measured on the ammeter
V_{OH}	Measured on the oscilloscope
V_{OL}	Measured on the oscilloscope
t_{PLH}	Measured on the oscilloscope
t_{PHL}	Measured on the oscilloscope
Δt_w	Measured on the oscilloscope
t_r	Measured on the oscilloscope
t_f	Measured on the oscilloscope
Δt_j	Measured on the oscilloscope

Rise and Fall Times and Pulse Width Distortion



Pulse Width Distortion = $\Delta tw = t_{PHL} - t_{PLH}$

Jitter





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