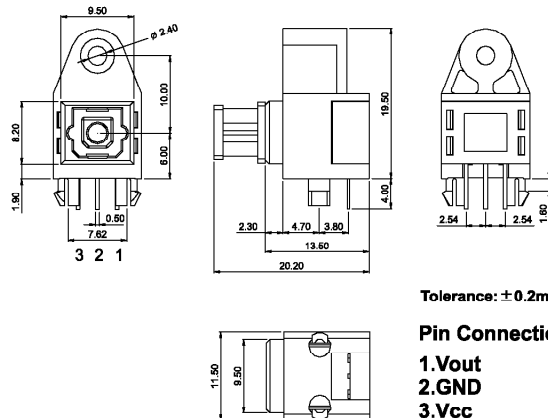


cosmo**Photo Link Connector****KPLR1320A****FIBER OPTIC Receiver Module****Features**

- TTL interface compatible.
- 13.2Mbps data rate(NRZ Signal).
- Directly connectable to demodulation IC.
- Supply voltage 3.3V/ 5V equipment.

Applications

- Audio equipment.
- DVD,CD,MD player.
- Automobile.
- Sound card.
- Set top box.
- PC,Notebook.

Outline Dimensions (Unit:mm)**1. Maximum Ratings (Ta=25°C,Vcc=3.3V/5V)**

Parameter	Symbol	Rating	Unit
Storage Temperature	T_{stg}	-40~80	°C
Operating Temperature	T_{opr}	-20~70	°C
Supply Voltage	V_{cc}	-0.5~7	V
Input Voltage	V_{IN}	-0.5~ $V_{\text{cc}}+0.5$	V
Soldering Temperature	T_{sol}	260 (Note 1)	°C

Note 1 :Soldering time ≤ 10 seconds (At a distance of 1 mm from the package.)

2. Recommended Operating Conditions (Ta=25°C,Vcc=3.3V/5V)

Parameter	Symbol	Min	Typ.	Max	Unit
Supply Voltage	V_{cc}	2.7	3.3	5.5	V
Operating transfer rate	T	0.1	-	13.2	Mbps
Input optical power level	PI	-24	-	-14.5	dBm

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Photo Link Connector

KPLR1320A**3. Electrical and Optical Characteristics : Receiver (Ta=25°C, Vcc=3.3V/5V)**

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Operating transfer rate	T	NRZ Signal (Note 2)	0.1	-	13.2	Mb/s
Operating voltage	V _{cc}		2.7	3.3	5.5	V
Optical Input Sensitivity	P _i		-24	-	-14.5	Bm
Peak Emission Wavelength	λ_p		-	700	-	nm
Dissipation Current	I _{cc}	Refer to Fig.(1)	-	8	15	mA
High Level Output Voltage	V _{OH}	Refer to Fig.(2)	2.4	-	-	V
Low Level Output Voltage	V _{OL}	Refer to Fig.(2)	-	-	0.4	V
Rise time	t _r	Refer to Fig.(2)	-	10	15	ns
Fall time	t _f	Refer to Fig.(2)	-	10	15	ns
Low->High Propagation delay time	t _{PLH}	Refer to Fig.(2)	-	-	180	ns
High -> Low Propagation delay time	t _{PHL}	Refer to Fig.(2)	-	-	180	ns
Pulse Width Distortion	Δtw	Refer to Fig.(2)	-20	-	20	ns
Jitter Time	Δtj	Refer to Fig.(3)	-	-	15	ns

Note 2 : LED is ON when input signal is high, and OFF when it is low.

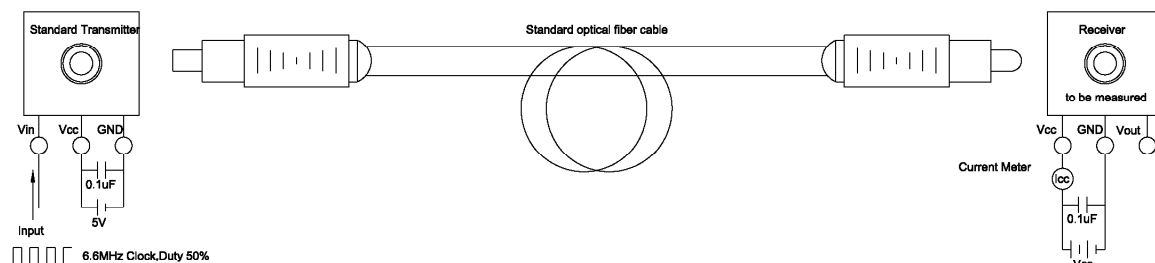
The duty factor must be maintained between 25 to 75%.

Note 3 : Measure with a standard optical fiber, peak value.

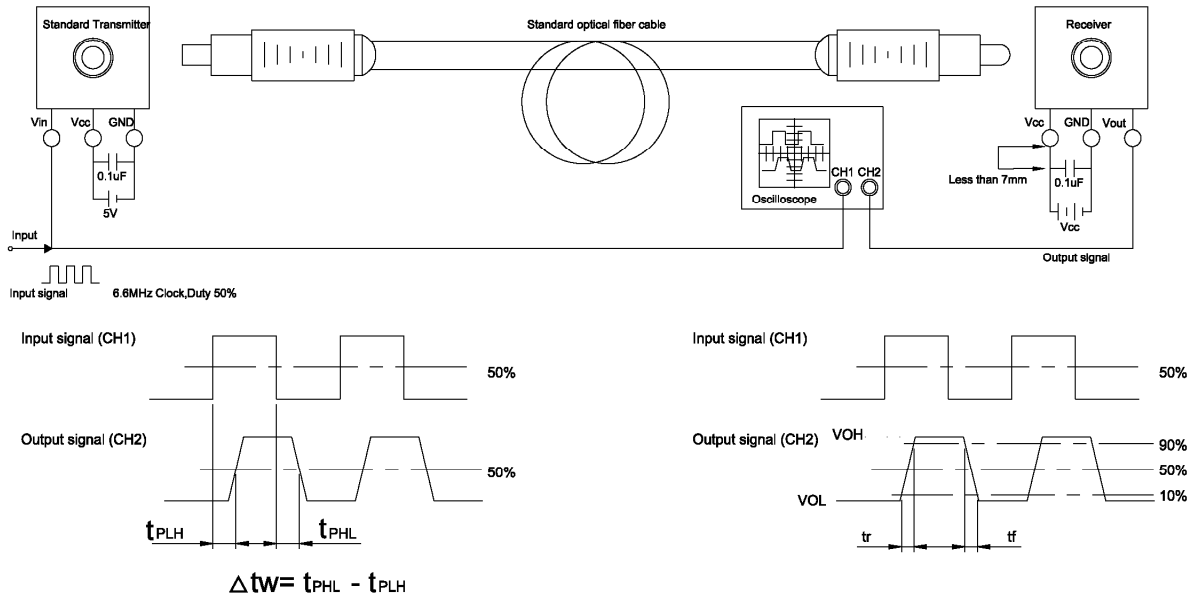
4. Measuring method**(1). Measuring Supply Current**

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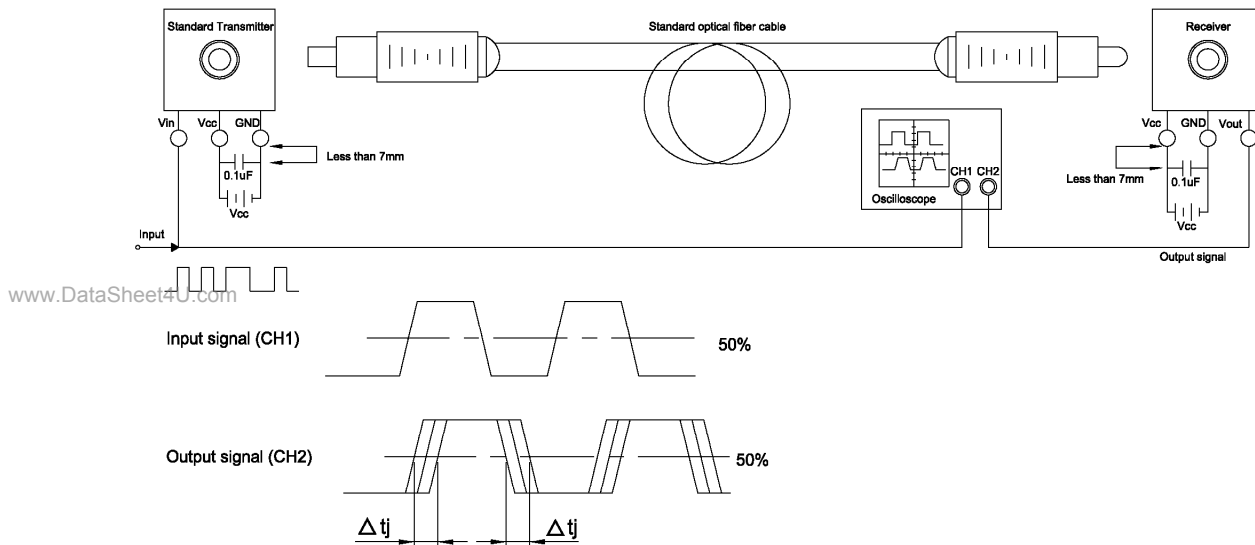
	Input test Conditions	Measuring method
Supply Voltage	V _{cc} =5.0V	DC Average current
Fiber coupling light output	P _c =-14.5dBm	
Standard transmitter input signal	13.2Mbps NRZ	



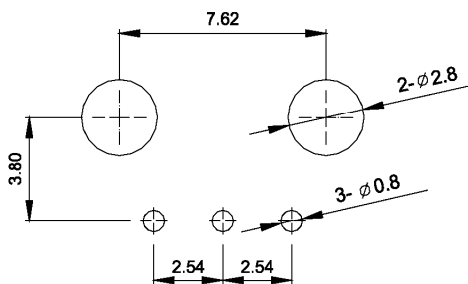
(2).Measuring method of Output Voltage and Pulse response



(3).Measuring method of Jitter



5.Recommended PCB Layout



Notes:
1.Unit:mm
2.Tolerance: 0.3mm