FIBER OPTIC TRANSMITTING MODULE
FOR DIGITAL AUDIO EQUIPMENT

Features

TTL interface.

LED is driven by differential circuit.

A Self-tapping hole for easy attachment to audio Equipment panels.

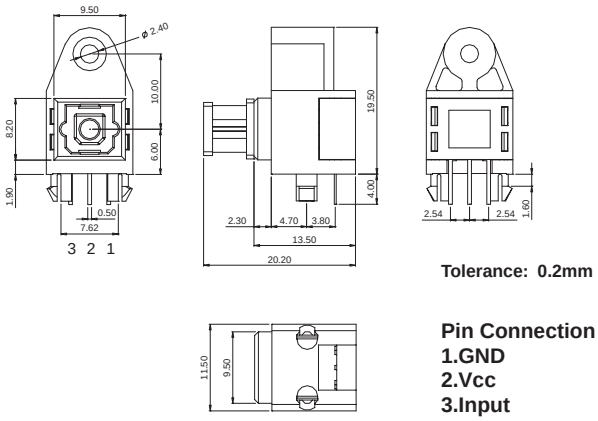
Applications

Audio equipment.

DVD player.

Automobile.

Outline Dimensions (Unit:mm)



Tolerance: 0.2mm

Pin Connection
1.GND
2.Vcc
3.Input

1. Maximum Ratings Ta=25

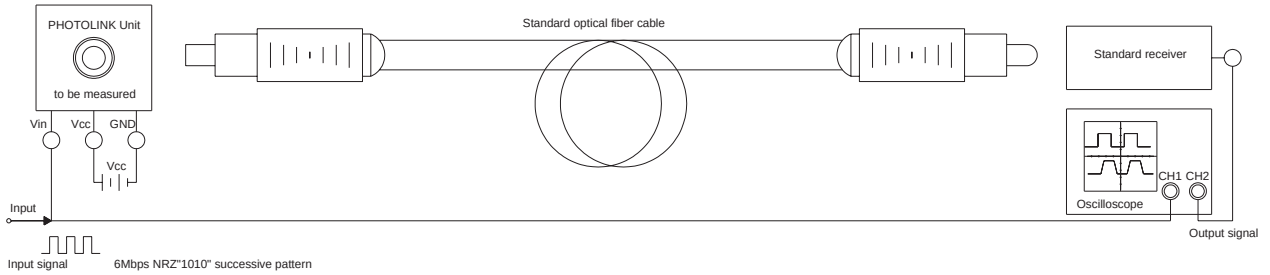
Parameter	Symbol	Rating	Unit
Storage Temperature	T_{stg}	-40~80	
Operating Temperature	T_{opr}	-20~70	
Power Dissipation	P_{max}	120	mW
Supply Voltage	Vcc	-0.5~7	V
Input Voltage	V_{IN}	-0.5~Vcc+0.5	V
Soldering Temperature	T_{sol}	260 Note 1	

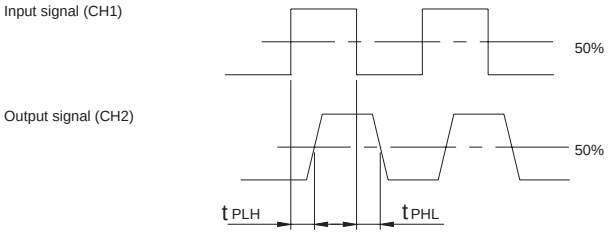
Note 1 Soldering time 10 seconds At a distance of 1 mm from the package .

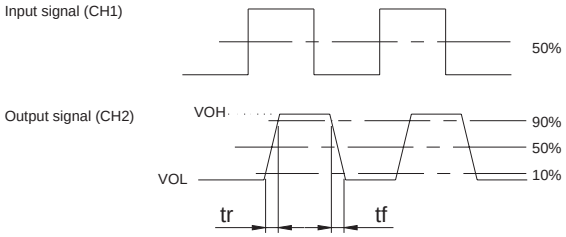
2. Recommended Operating Conditions

Parameter	Symbol	Min	Typ.	Max	Unit
Supply Voltage	V_{CC}	4.75	5.0	5.25	V
High-Level Input Voltage	V_{IH}	2.0	-	VCC	V
Low-Level Input Voltage	V_{IL}	0	-	0.8	V

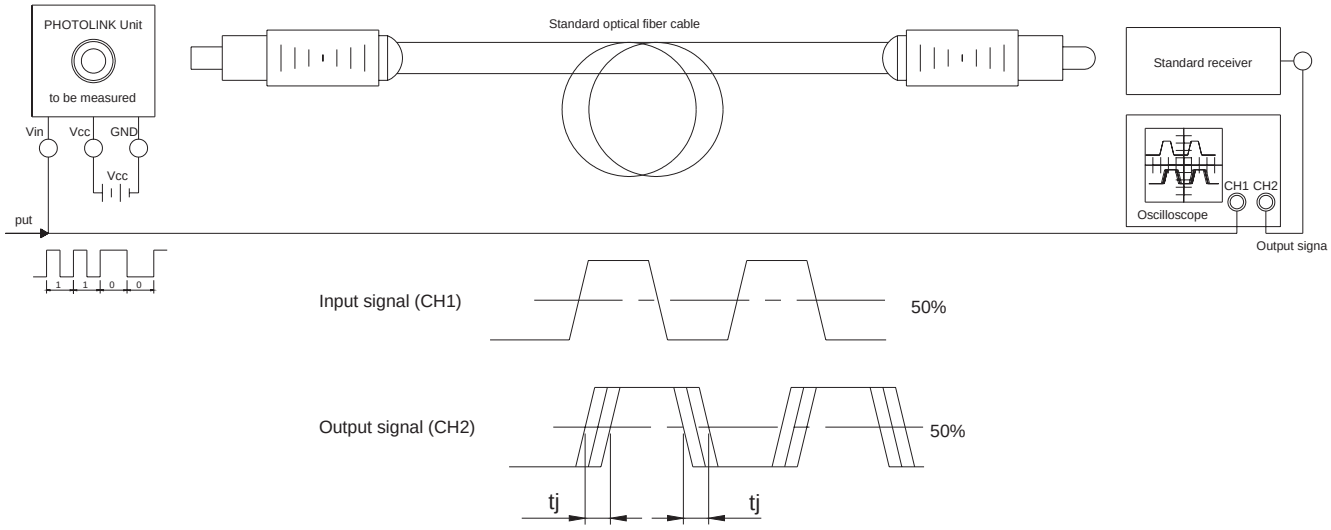
(3).Measuring method of Pulse response



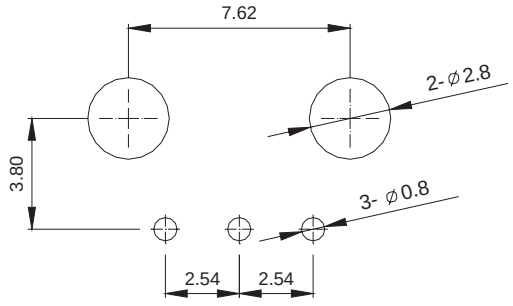




(4).Measuring method of Jitter



5.Recommended PCB Layout



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

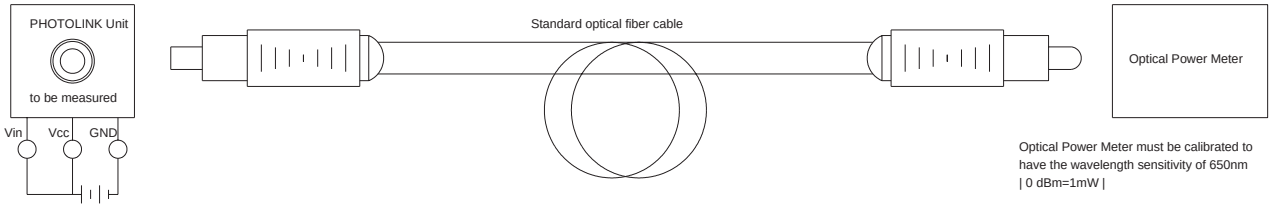
3. Electrical and Optical Characteristics Ta=25 V_{CC}=5V

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Data Rate		NRZ Signal Note 2	DC	-	12.8	Mb/s
Transmission Distance		Using APF Note 3	0.2	-	5	m
Fiber Output Power Note 4	Pf		-21	-	-15	dBm
Peak Emission Wavelength	p		630	650	690	nm
Current Consumption	Icc		-	-	13	mA
High Level Input Voltage	V_{IH}		2.0	-	-	V
Low Level Input Voltage	V_{IL}		-	-	0.8	V
Low->High Propagation delay time	t_{PLH}				150	ns
High -> Low Propagation delay time	t_{PHL}				150	ns
Pulse Width Distortion	tw	6Mbps NRZ Signal	-25	-	25	ns
Jitter Time	tj				25	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%.
ote 3 All Plastic Fiber 970 / 1000µm .
ote 4 Measure with a standard optical fiber, peak value.

4. Measuring method

(1).Measuring method of optical output coupling fiber



(2).Measuring method of power dissipation current and input voltage