



ZGY133/T8(PLT)

Technical Data Sheet

Photolink- Fiber Optic Transmitter

Descriptions

The opto-electrical component is assembled with a 660nm AlGaInP LED and a driver IC. It transforms the electrical signal to optical signal and be transmitted by 1mm diameter plastic optical fiber.

The component is operated at +3~+5V and has good performance at low dissipation current, steady light output and efficient light coupling.

Features

- High speed signal transmission (16Mbps NRZ Signal)
- TTL interface compatible
- +3~+5V single power source
- The product itself will remain within RoHS compliant version.

Applications

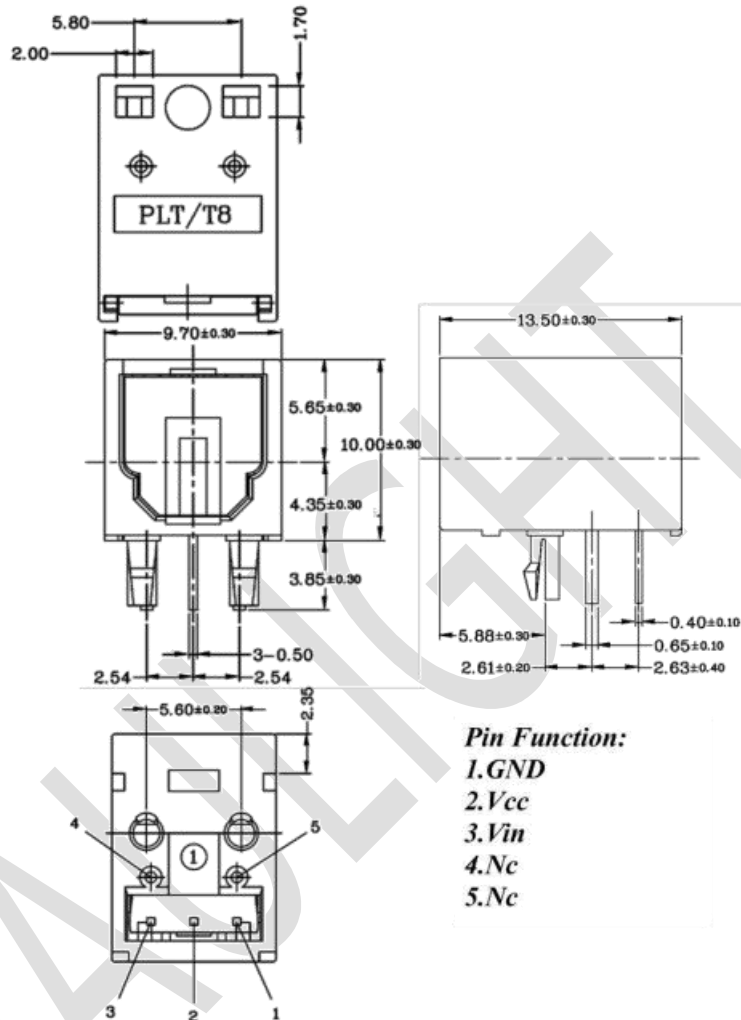
- Digital audio equipment
- CD player
- DVD player

Device Selection Guide

Chip		Operating Voltage (Vcc)	Dissipation Current (mA)		Fiber Coupling Light Output (dBm)		
Material	λ p(nm)		Typ.	Max.	Min.	Typ.	Max.
AlGaInP	660	+3.0~5.0	5.5	10	-21	--	-15



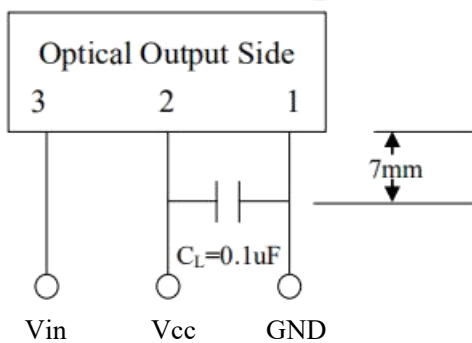
Package Dimensions



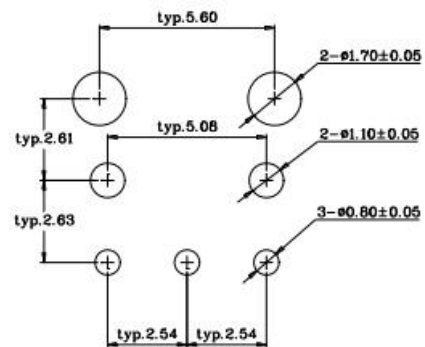
Notes:

1. unit:mm
- 2.Dimension Tolerance:±0.25mm
- 3.Substrate Thickness:1.6mm

Using Method



PCB Layout for Electrical Circuit





Absolute Maximum Ratings(Ta = 25°C)

Parameter	Symbol	Rating	Unit
Supply Voltage	Vcc	-0.5 to 7	V
DC Input Voltage	Vin	-0.5 to Vcc+0.5	V
Storage Temperature	Tstg	-40 to 85	°C
Operating Temperature	Topr	-20 to 70	°C
Soldering Temperature	Tsol	260*	°C

* Soldering time ≤ 10s.

Recommended Operating Conditions

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Power supply voltage	Vcc	-	2.75	-	5.25	V

Electro-Optical Characteristics (Ta=25°C, Vcc=3V/5V, 16Mbps)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Peak Emission Wavelength	λ_p		640	660	680	nm
Transmission Rate		NRZ Code	DC	-	16	Mbps
Transmission Distance	d	*1	0.2	--	5	m
Fiber Coupling Output Power	Pf	*2	-21	-18	-15	dBm
Dissipation Current	Icc	*2	3	-	10	mA
High Level Input Voltage	V _{IH}		2	-	-	V
Low Level Input Voltage	V _{IL}		-	-	0.8	V
Low to High Delay Time	t _{pLH}	*3	-	-	120	ns
High to Low Delay Time	t _{pHL}	*3	-	-	120	ns
Pulse Width Distortion	Δtw	*3	-25	-	25	ns
Jitter	Δtj	*3	-	-	20	ns

*All Plastic Optical Fiber (980/1000um)



CHAU LIGHT Technical Data Sheet

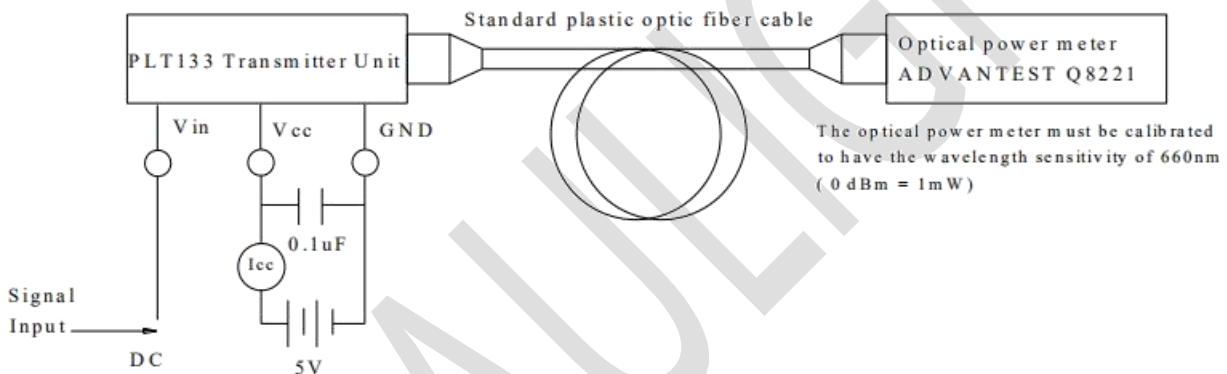
*Circuit Layout Notice:

When power is off, it must be cut off together in Vin and Vcc pin.
If it only has Vcc power-off, LED will sure to be no output power.

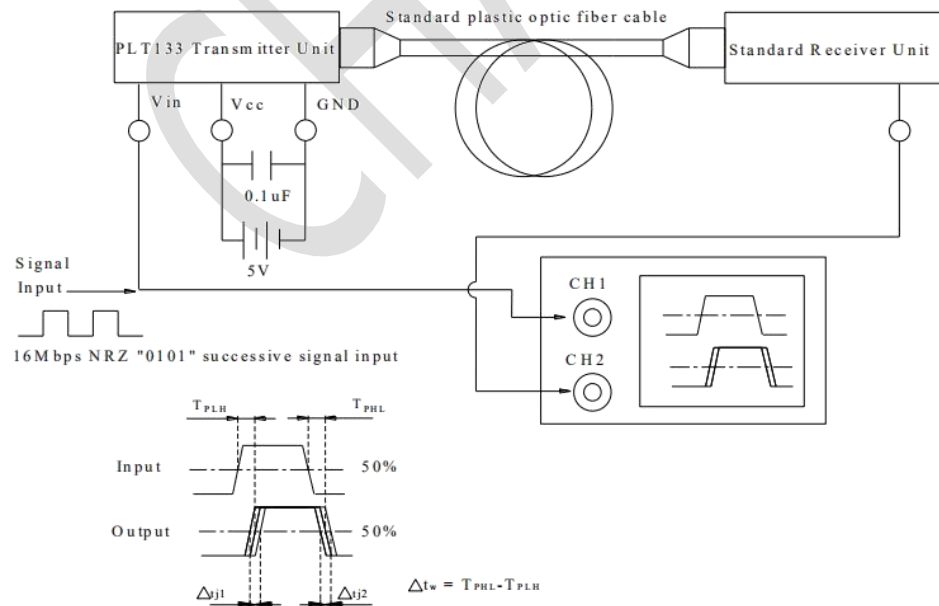
Vcc	Vin	LED Condition
2.7~5.5V	High	ON
2.7~5.5V	Low	OFF
2.7~5.5V	FLOATING	ON
FLOATING	0~Vcc	ON

Measuring Method

*1 Measuring method of optical output coupling fiber and dissipation current



*2 Pulse response measuring method





Packing Quantity Specification

1. 60 pcs/tube
2. 36 tube/box
3. 4 box/outside box

CHAU LIGHT