

# Fibre Optic Receiver Jack multicom<sup>PRO</sup>

RoHS  
Compliant



## Features

- High PD sensitivity for red light
- High speed up to 16 Mbps
- Low power consumption and current dissipation
- +3 to +5V power source

## Descriptions

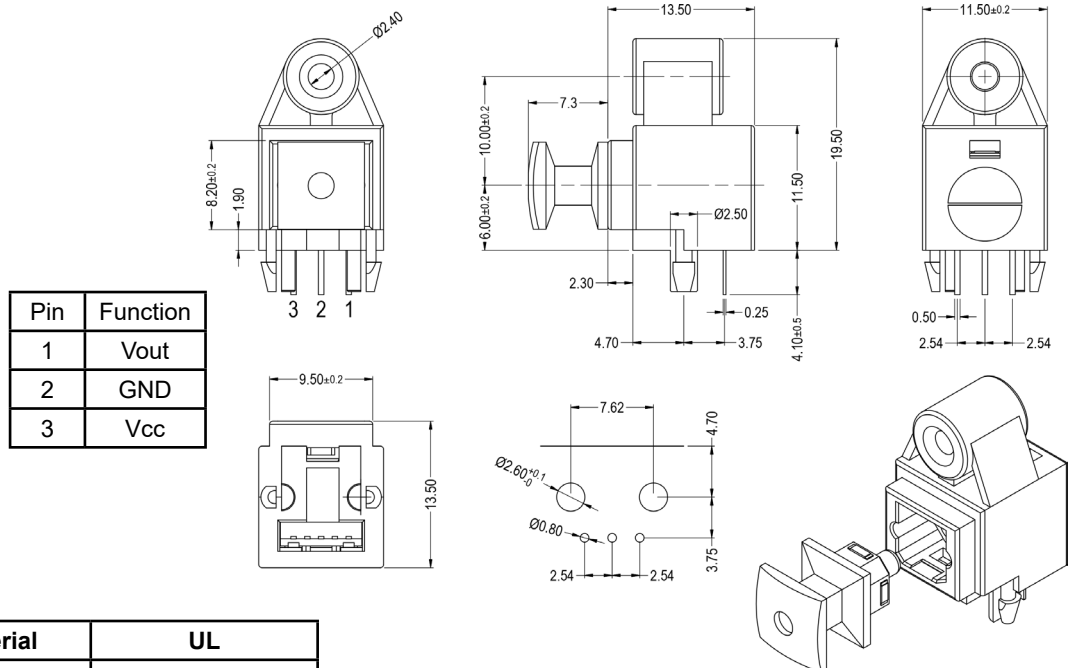
The light receiving unit is a standard-package product with connector and opto-electric component packaged with PD and I/V amplifier IC. The function of unit changes the light signal into electric signal.

The unit is operated at +3 to +5V and the input signal is TTL compatible. This has a maximum operating speed of 16 Mbps.

## Applications

- Audio equipment
- Digital optical data link
- MD
- Sound card

## Diagram



Description	Material	UL
Body	Black PBT	UL94 V-0 E323954
Rear Body	Black PBT	UL94 V-0 E323954
Cover	Black PBT	UL94 V-0 E323954
IC	Bright TIN Plate	n/a

Dimensions : Millimetres

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## Specification

Chip		Operating Voltage (Vcc)	Dissipation Current(mA)	Fiber Coupling Light Output (dBm)		
IC (dBm) Material	LED $\lambda$ (nm)		Typ	Min.	Typ.	Max.
Si	700	2.7 to 5.5	6.5	-24	-	-14.5

## Absolute Maximum Ratings( Ta = 25°C)

Parameter	Symbol	Rating	Unit
Supply Voltage	Vcc	5.5	V
Storage Temperature	Tstg	-30 to 80	°C
Operating Temperature	Topr	-20 to 70	°C
Soldering Temperature	Tsol	260*	°C

\* Soldering time  $\leq$  5s / 2times.

\*Don't touch flux soldering and white Gas

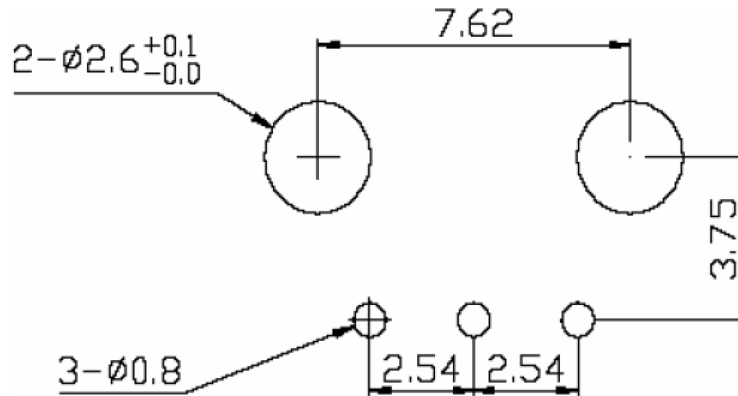
## Electro-Optical Characteristics

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Operating Voltage	Vcc	-	2.7	-	5.5	V
Peak Detective Wavelength	$\lambda$ p	-	-	700	-	nm
Transfer Speed		NRZ signal	0.1	-	16	Mbps
Receiving Distance		Using APF	0.2	-	20	m
Pulse Width Distortion	$\Delta$ tw	16Mbps NRZ Signal	-20	-	20	ns
Input Light power	Pi	*1	-24	-	-14.5	dBm
Dissipation Current	Icc	*2	-	6	10	mA
High Level Output Voltage	VOH		2.4	-	-	v
Low Level Output Voltage	VoL		-	-	0.4	v
Rise Time	tr	*3	-	-	25	ns
Fall Time	tf	*3	-	-	25	ns
Low $\rightarrow$ High propagation delay time	tPLH	*3	-	-	100	ns
High $\rightarrow$ Low propagation delay time	tPHL	*3	-	-	100	ns
Jitter time	$\Delta$ tj	*3	-	1.5	15	ns

Light receiving unit satisfies EIAJ CP-1201 digital audio interface standard.

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## PCB Layout For Electrical Circuit



### Notes:

1. Unit: mm
2. Unspecified tolerance:  $\pm 0.3$ mm
3. Substrate Thickness: 1.6mm

## Part Number Table

Description	Part Number
Fibre Optic Receiver Jack, 16 Mbps, -24dBm, 5.5V, 6.5mA	MP-FCR6842031R

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