PINFET Optical Receiver Module



Description

LP-0800-SN-MD06 is a PIN-FET (P-Intrinsic-N Field-Effect Transistor) optical receiver module. The optical receiver module is part of the optical signal receiving section, which functions to convert optical signals into electrical signals and amplify them.

Features

- Wide operating wavelength range, low noise and high linearity
- Loose tube length and color can be customized
- Good performance consistency and quality reliability
- Corresponding bandwidth can be adjusted according to different responsivity

Application

- Fiber optic gyroscope system
- Fiber optic sensing system
- Photoelectric detection system
- Telecommunication lines

E/O Characteristics

Optoelectronic performance parameters

(Temperature: 25±3℃, humidity: 40%~70%)

Parameters	Sign	Unit	Performance indicators (Typical value)
No-light voltage	Vd	V	-1.7±0.3 V
Root mean square noise voltage	Vn	mV	≤0.5 mV
Linear responsivity	Re	V/μW	≥0.16 V/μW
Linear minimum optical power	Pmin	μW	≤0.1 μW
Linear saturation optical power	Pmax	μW	≥16 μW
Full-temperature responsivity change rate	△Re	%	≤5 %
3dB bandwidth	BW	MHz	≥8 MHz
Transimpedance	Rf	KΩ	200±10% KΩ
Operating temperature	TW	℃	-45~70℃
Storage temperature	TS	℃	-55~85℃

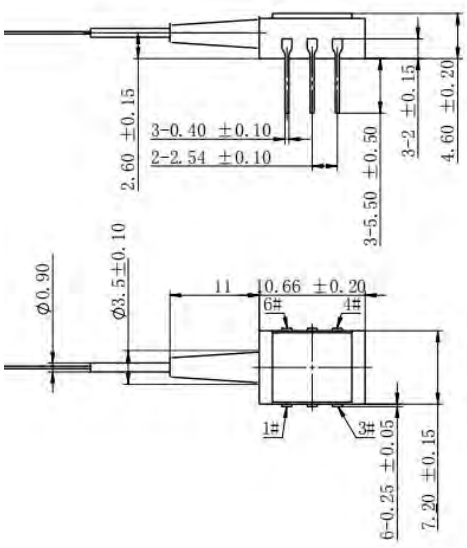
Maximum Parameter Range

(T=25℃, If=150mA)

Parameters	Sign	Unit	Performance indicators (Typical value)
Fiber bending radius		mm	≥30
Solder temperature	-	℃	≤260(10s)

Dimensions and Pin definitions

Tube shell dimension (unit: mm)



PIN Definition

PIN	Definition	PIN	Definition
1	-5V	4	-5V
2	GND	5	OUT
1	+5V	6	NC

Fiber specification

Fiber parameter	Min.	Typical	Max.	Unit
Fiber type	SM 6/80/165			
Loose tube length	customized			mm
Fiber length	1.0	-	-	m
Connector	Customized			

Safety Markings



Note: Electrostatic protection