

OD-J8230

10Gbps PIN-AMP Module

FEATURES

- InGaAs PIN-PD Module with pre/limiting Amplifier.
- Designed for SONET/SDH Systems.
- Compact Size (37.3 x 17x 7.1 mm).
- Differential Output.
- Low Power Distortion.



APPLICATIONS

- Telecommunication equipment as e.g. OC-192 and STM-64:
 - SDH,
 - SONET.
- Datacom equipment

ABSOLUTE MAXIMUM RATINGS

(Ta=+25°C, unless noted)

Parameter	Symbol	Unit	Values		
			Min.	Typ.	Max.
Optical Input Power	P _{in}	dBm	–	–	3
PD Forward Current	I _F	mA	–	–	10
PD Reverse Voltage	V _R	V	–	–	20
Supply Voltage	V _{dd}	V	–	–	6
	V _{ss}	V	–	–	-2.5
Operating Temperature	T _{OP}	°C	0	–	+70-
Storage Temperature	T _{Stg}	°C	-40	–	+85
Lead Soldering Temperature	T _{Sol}	°C	–	+260(10sec)	–

OPTICAL / ELECTRICAL CHARACTERISTICS

(Ta=+25°C,unless noted)

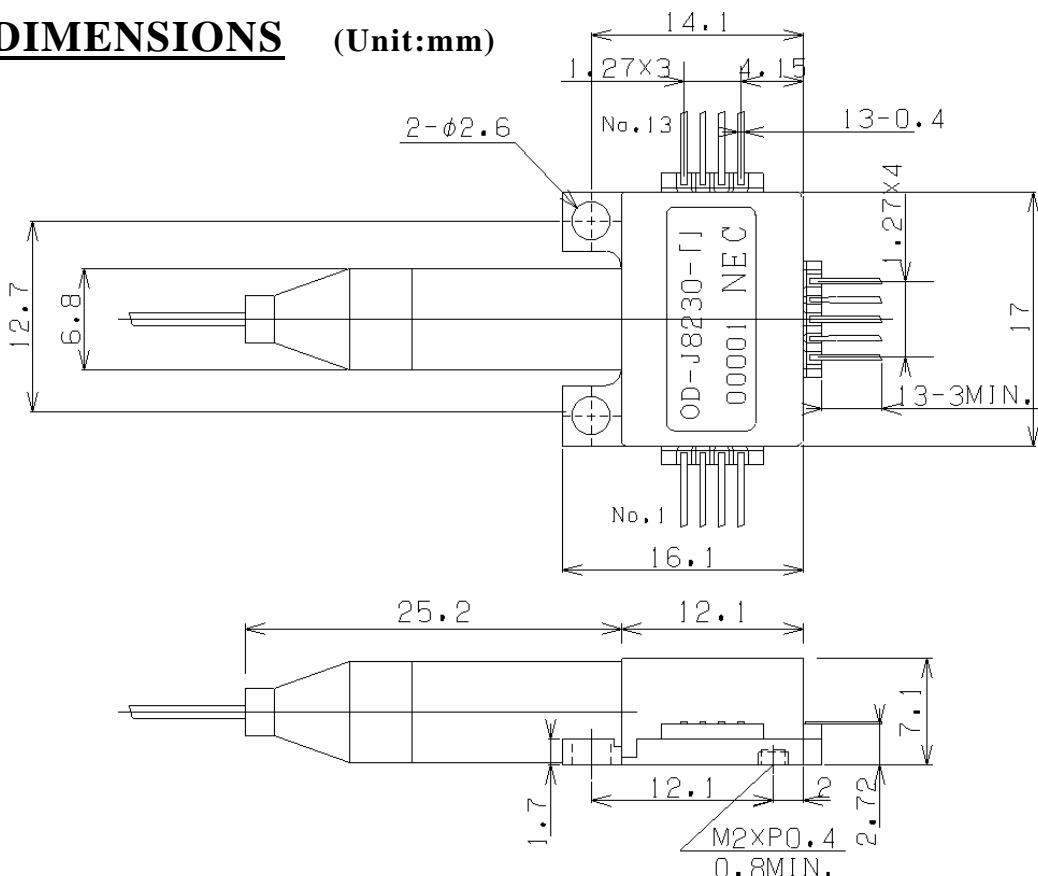
Parameter	Symbol	Conditions	Unit	Values		
				Min.	Typ	Max.
PD Reverse Voltage	VR		V	4.75	5.0	5.25
Supply Voltage	Vdd		V	4.75	5.0	5.25
	Vss		V	-2.1	-2.0	-1.9
Supply Current	Idd		mA	100	120	180
	Iss		mA	12	15	26
Responsively	S	$\lambda=1.55\mu m$	A/W	0.7	0.8	-
Dark Current	ID	$V_R=5V$	nA	-	-	10
Cut-off Frequency	fc	3dB down(2)	GHz	7	8	-
Input Sensitivity	PIN	(1)	dBm	-	-18	-16
Optical Overload	POVL	(1)	dBm	0	-	-
Small Signal Trans Impedance (including lim AMP)	ZT		dB Ω	60	65	70
Output Voltage Swing	V _{OUT,AC}	50Ω load(3)	mV _{pp}	400	600	-
Optical Return Loss	ORL	$\lambda=1.55\mu m$	dB	28	-	-

(1) Data rate: 9.95328 Gbps, BER = 10^{-11} , PRBS $2^{23}-1$, Mark = 1/2, NRZ

(2) Pin=-20dBm

(3) Pin=0dBm

DIMENSIONS (Unit:mm)



Pin Assign

No.	Function
1	Vpd(+5V)
2	Vss(-2V)
3	GND
4	NC
5	GND
6	<u>OUT</u>
7	GND
8	OUT
9	GND
10	GND
11	Vdd3(+5V)
12	Vdd1,2(+5V)
13	GND

DATA SUBJECT TO CHANGE WITHOUT NOTICE

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