

**NEC****Fiber Optic Devices****OD-8325-□□ LD Module**

OD-8325 is designed to couple LD (Laser Diode) output light efficiently to optical fiber. PIN photodiode is installed in OD-8325 for APC (Automatic Power Control) and monitoring the modulated waveform.

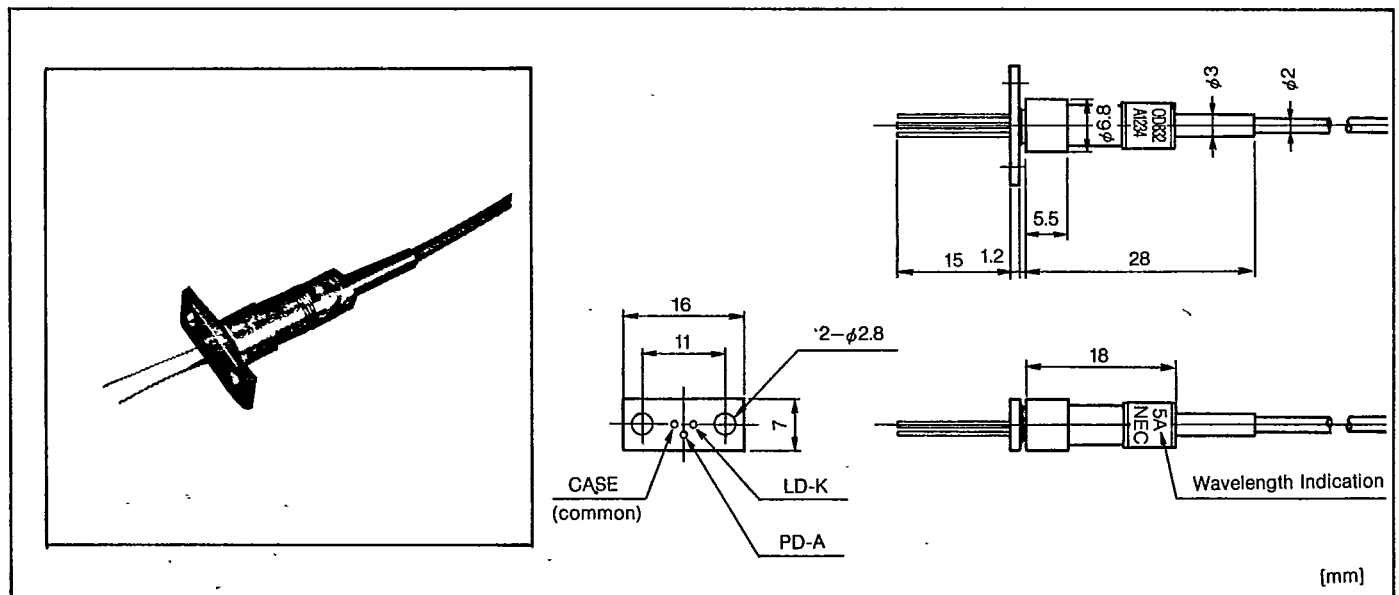
OD-8325 is especially suitable for installation in optical repeaters.

**FEATURES**

- LD package with internal PIN detector.
- High coupling efficiency from LD to optical fiber.
- High speed and high output power LD is mounted.
- Highly reliable construction.
- Compact and easily installed in various systems.
- Near end reflection rejected.
- Flexible for connector termination.

**APPLICATIONS**

- Light source for fiber optics communication systems.
- Light source for optical fiber and optical devices measuring sets.

**ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)**

PARAMETERS	SYMBOL	RATION	UNIT
Reverse Voltage	VR	2	V
Forward Current	IF	100	mA
Fiber Coupled Power	Pf	1.6	mW
Forward Current (Monitor diode)	IF	10	mA
Reverse Voltage (Monitor diode)	VR	15	V
Operating Case Temperature	Top	-10 ~ 60	°C
Storage Temperature	Tstg	-40 ~ 80	°C
Soldering Temperature (5 sec.)		230	°C

PERFORMANCE SPECIFICATIONS (Ta = 25°C)

SYMBOL	PARAMETERS	CONDITIONS	OD-8325			UNIT
			MIN	TYP	MAX	
Pf	Fiber Coupled Power				1.3*	mW
Ith	Threshold Current			20	40	mA
$\Delta I_{th}/\Delta T_a$	Temperature Dependence of Ith			0.5		mA/°C
$\lambda_0$	Center Wavelength	Pf = 1.3mW	**			nm
$\Delta\lambda$	Spectrum Width	(Pf = 1.3mW)		1	2	nm
$\Delta\lambda/\Delta T_a$	Temperature Dependence of $\lambda_0$			0.3		nm/°C
V <sub>F</sub>	Forward Voltage	Pf = 1.3mW		1.9	2.5	V
tr/tf	Rise/Fall Time	10 - 90%		0.5		n sec
I <sub>mon</sub>	Monitor Photo Current	Pf = 1.3mW	100	250		μA

\* Light output power over 1.3 mW is available (LD life time will be shortened).

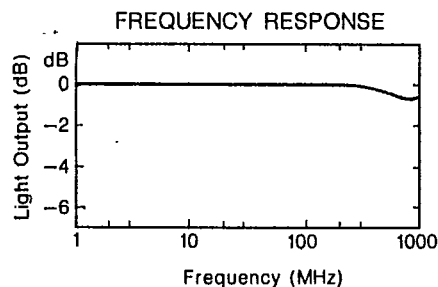
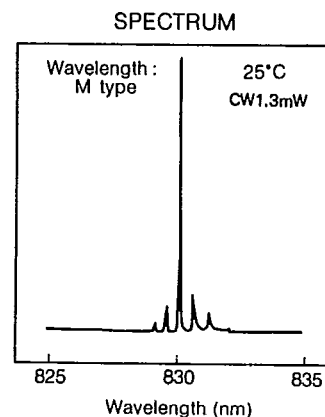
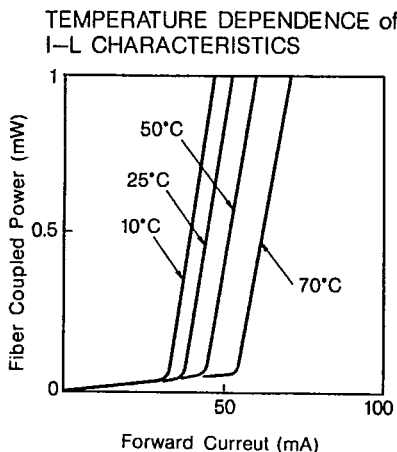
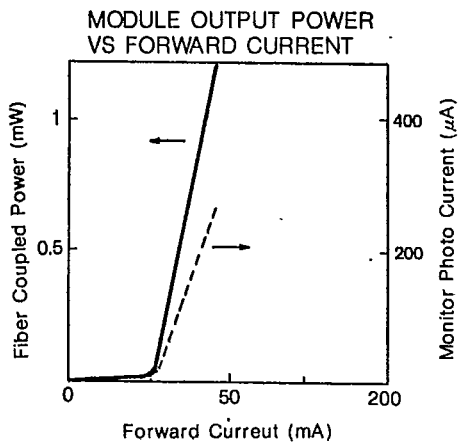
\*\* Wavelength and LD life time

Type	A	B	K	L	S	M	N	Q
Wavelength (nm)	800~890	760~800	773~787	793~806	803~816	823~836	853~866	883~895
Life time (MTTF)	400,000	40,000	40,000	400,000	400,000	400,000	400,000	400,000

MAJOR PARAMETERS

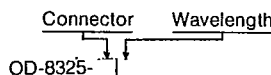
- Laser diode: AlGaAs laser diode
- Dimensions: 16W x 7H x 30D mm
- Weight : 13g
- Connector
  - B: Without connector (fiber length: 1m)
  - D: D type (fiber length: 0.5m)
- Pigtail Cord
  - fiber dimension: 47/125 GI
  - outer diameter : φ2 mm PVC

TYPICAL CHARACTERISTICS (Ta = 25°C)



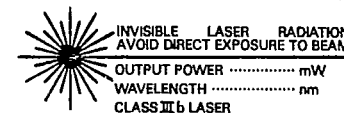
ORDERING FORM

When ordering please fill in connector type and wavelength information as follows.



NOTES

- 1) Connector: D type (OD-9470 Series)
- 2) Specifications are subject to change without previous notice.



NEC NEC Corporation

NEC Building  
33-1 Shiba Gochome, Minato-ku  
Tokyo 108 Japan  
Tel Tokyo 454 1111  
Cable Address "MICROPHONE TOKYO"  
Telex Address NECTOK J22686

NEC Electronics U.S.A., Inc.  
252 Humboldt Court Bldg B  
Sunnyvale, California 94086, U.S.A  
Tel (408) 745-6520  
Telex Address: 35-7475 NECTRN SUVL

NEC Electronics (Europe) GmbH  
NEC Electronics (Germany) GmbH  
Oberrather Str.4  
4000 Düsseldorf 30, West Germany  
Tel: 0211-650301  
Telex Address: 8587419 NEC D

FO-0008  
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