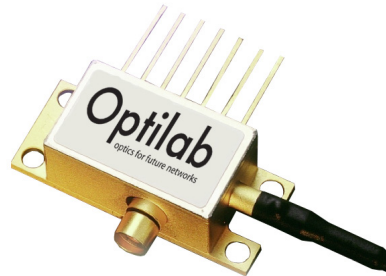


DFB-1550-EAM-12



EAM DFB Laser Diode, 12 GHz, 5 mW

The Optilab DFB-1550-EAM-12 laser diode is a cost effective and compact laser solution for OC-192/STM-64 DWDM applications. Consisting of a DFB laser with an integrated electro-absorption modulator (EAM), this allows for modulation speeds of over 12 GHz / 10 Gb/s applications on one 7-pin butterfly package device. Including a thermoelectric cooler (TEC), temperature thermistor, optical isolator and a GPO RF connector, the DFB-EAM is available in ITU grid wavelengths upon request, contact Optilab for more information.

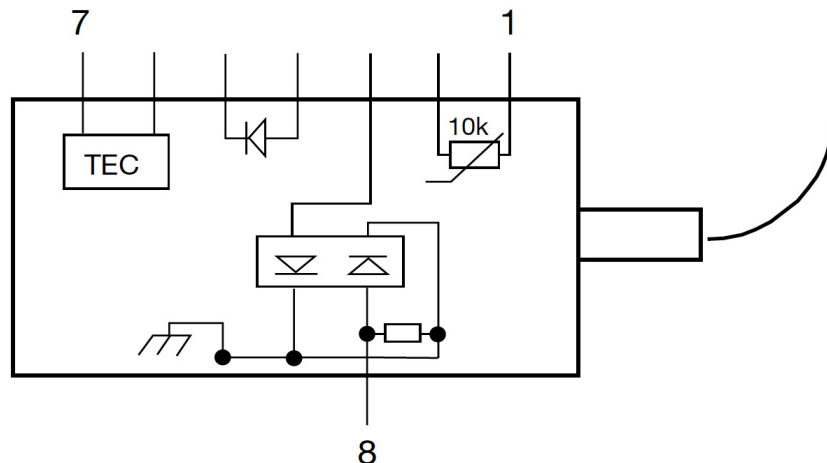
Features

- 1550 nm DFB + EAM Modulator
- Hermetic, 7 pin butterfly package
- Single-mode fiber pigtail
- 12 GHz typical bandwidth
- 5mW output power
- TEC Cooler + Thermistor

Applications

- DWDM SDH STM-64 LH
- DWDM SONET OC-192 LR

Functional Diagram



TOP VIEW

EAM DFB Laser Diode, 12 GHz, 5 mW

OPTIONS

DFB-1550-EAM-12

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please click below.



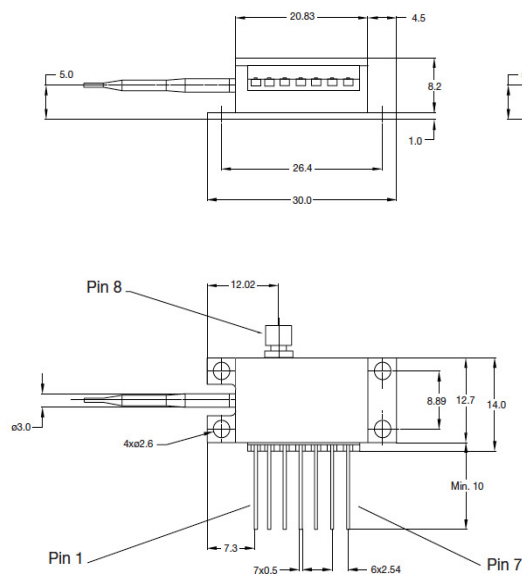
Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications	
Operating Wavelength Range	1530 nm to 1564 nm, ITU selectable
Output power	2mW min., 5mW typ.
Extinction ratio	10 dB min.
Dispersion penalty	1.5 dB max. @ 800 ps/nm disp.
Side mode suppr.ratio	35 dB min.
Optical isolation	30 dB min.
Operating current	50 mA min., 100 mA max.
Threshold current	25 mA max.
Forward voltage	2 V max.
Small signal modulation bandwidth	12 GHz min.
Rise/Fall time	40 ps max.
Monitor current	0.1 mA min., 1 mA max.
Monitor dark current	5 nA typ., 100 nA max.
Thermistor resistance	9.5 kΩ min., 10.5 kΩ max.
TEC Voltage	-2.5 V min., 2.5 V max.
TEC Current	-1.2 V min., 1.2 V max.
TEC Power	3 W max.
Mechanical Specifications	
Operating case temperature	0°C to +70°C
Storage temperature	-40 °C to +85°C
Optical Connector	LC/UPC Standard, FC/APC Optional
Fiber Type	SMF-28, 900 micron buffer
RF Connector	GPO

EAM DFB Laser Diode, 12 GHz, 5 mW

Mechanical Drawing



Pin Description

- | Pin Number | Description |
|------------|-------------------|
| 1. | Thermistor |
| 2. | Thermistor |
| 3. | Laser DC bias (+) |
| 4. | Monitor (-) |
| 5. | Monitor (+) |
| 6. | TEC (+) |
| 7. | TEC (-) |
| 8. | EA modulation (-) |

Typical S21 Bandwidth

