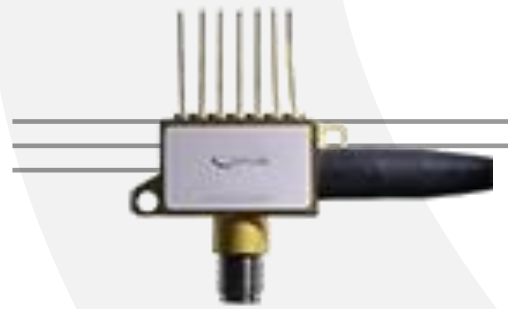




DFB-1550-EAM-12-K



EAM DFB Laser Diode, 12 GHz, 5 mW, 2.92mm Connector

OVERVIEW

The Optilab DFB-1550-EAM-12-K laser diode is a cost effective and compact laser solution for optical transmission applications. Consisting of a DFB laser with an integrated Electro-Absorption Modulator (EAM), this allows for modulation speeds of over 12 GHz on one 7-pin butterfly package device. Including a thermoelectric cooler (TEC), temperature thermistor, optical isolator and a 2.92mm RF connector. Contact Optilab for more information.

FEATURES

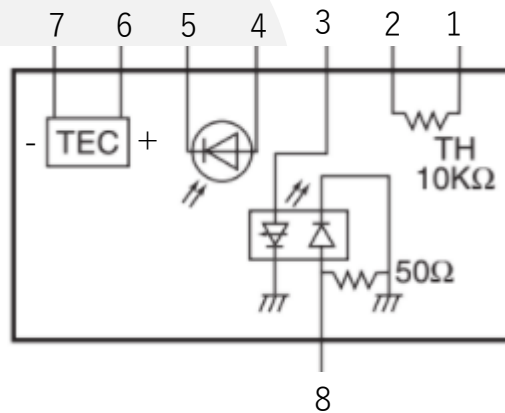
- 1550 nm DFB + EAM Modulator
- Hermetic, 7 pin butterfly package
- Single-mode fiber pigtail
- 12 GHz bandwidth
- 2.5 mW output power
- TEC Cooler

APPLICATION

- Optical Communication
- RFoF
- Microwave Link
- Pulse Source

FUNCTION DIAGRAM

Pin#	Desc	Pin#	Desc
1	Thermistor	5	Power Monitor Cathode
2	Thermistor	6	TEC +
3	LD Anode	7	TEC -
4	Power Monitor Anode	8	Modulator Anode





DFB-1550-EAM-12-K

SPECIFICATIONS

GENERAL

Wavelength Range	1550nm +/-10nm
Output Power	2.5 mW typ.
Extinction Ratio	10 dB min.
Side Mode Suppression. Ratio	40 dB min.
Optical Isolation	30 dB min.
Operating Current	100 mA max.
Threshold Current	15 mA typ.
Forward Voltage	2 V max.
Modulation Bandwidth	12 GHz min.
Rise/Fall Time	40 ps max.
Monitor Current	0.1 mA min.
Thermistor Resistance	10 kΩ typ.
TEC Voltage	2.5 V max.
TEC Current	1.2 V max.
TEC Power	3 W max.

MECHANICAL

Operating Case Temperature	-10 °C to +70 °C
Storage Temperature	-50 °C to +85 °C
Optical Connector	FC/APC
Fiber Type	SMF-28, 900 um buffer
RF Connector	2.92mm Connector

TYPICAL S21 BANDWIDTH

