



LD-980-600-BT-SM



DEVICE

980 nm Pump Laser Module, 600 mW, SM Fiber

OVERVIEW

The Optilab LD-980-600-BT-SM is a 980 nm pump module, available with up to 600 mW of continuous output power, with single mode fiber. It utilizes a planar construction with chip on subcarrier. The high power chip is hermetically sealed in a epoxy-free and flux-free 14-pin butterfly package and fitted with a thermistor, thermoelectric cooler, and monitor diode. The 980 nm pump module uses FBG stabilization to "lock" the emission wavelength. It provides a noise-free narrowband spectrum, even under changes in temperature, drive current, and optical feedback. Wavelength selection is available for applications that require the highest performance in spectrum control with the highest available powers. This module complies described in Telcordia GR-468-CORE requirement.

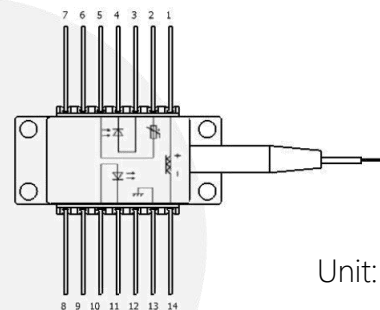
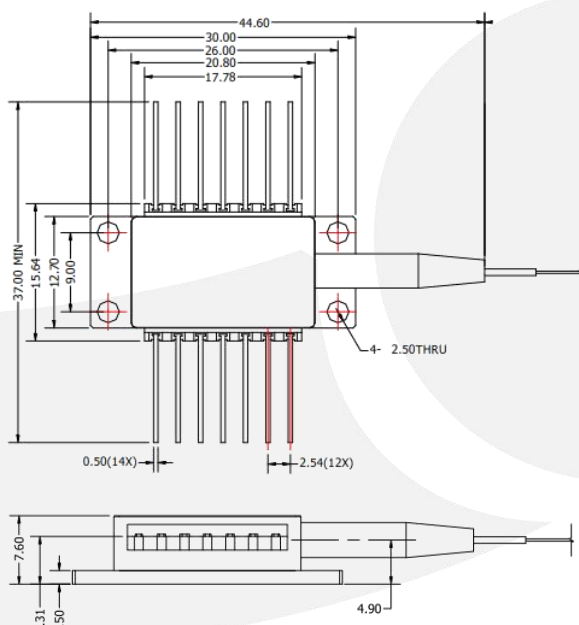
FEATURES

- Kink-free operating power up to 600 mW
- Epoxy-free, and flux-free 14-PIN butterfly package with SM Hi1060 fiber
- Fiber Bragg grating stabilization
- Integrated thermoelectric cooler, thermistor, and monitor diode

USE IN

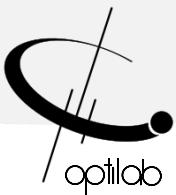
- DWDM EDFA
- Fiber amplifier
- Reduced pump-count EDFA architectures
- Optical pumping
- Very long distance CATV trunks and very high node count distribution

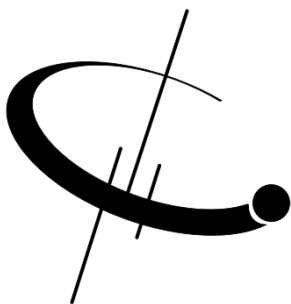
MECHANICAL DRAWING



Unit: mm

PIN	Description	PIN	Description
1	TEC (+)	14	TEC (-)
2	Thermistor	13	Case Ground
3	PD Anode	12	NC
4	PD Cathode	11	LD Cathode
5	Thermistor	10	LD Anode
6	NC	9	NC
7	NC	8	NC





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SPECIFICATIONS

Optical Data

Laser Type	Fabry-Perot
Output Power	600 mW max.
Center Wavelength	980±5 nm
Spectral Width	2.0 nm max.
Wavelength Shift with Temperature	0.02 nm/°C max.
Spectrum Stability	-0.5 nm min.; 0.5 nm max.

Electrical Data

LD Threshold Current	45 mA typ.; 80 mA max.
LD Forward Current	1200 mA max.
LD Forward Voltage	2.5 V max.
LD Reverse Current	10 uA max.
LD Reverse Voltage	2.0 V max.
PD Forward Current	-10 mA max.
PD Reverse Voltage	20 V max.
Kink Free Power	450 mW min.
Kink Free Current	1.2 mA
TEC Current	2 A max.
TEC Voltage	3.5 V max.
Monitor Responsivity	1 uA/mW typ.; 20 uA/mW max.
Monitor Dark Current	50 nA max.

Fiber Data

Total Fiber Length	1 m (Standard)
Fiber Type	Single Mode
Connector	FC/APC (Standard) or None
Fiber Bend Radius	30 mm min.

Others

Operating Case Temperature	-5 °C to +75 °C
Storage Temperature	-40 °C to +80 °C
Operating Humidity	0% to 95%
Material	GaAs

