

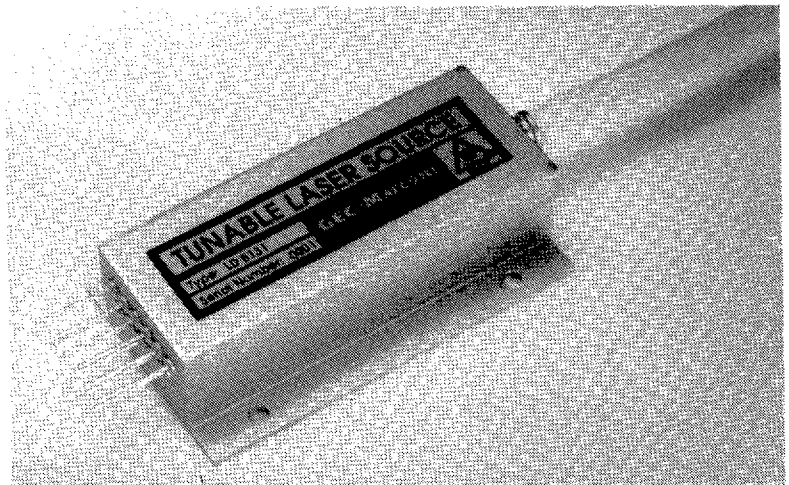
LD5000 DFB Series

TUNABLE LASER DIODES (DFB)

These lasers offer direct modulation capability, narrow linewidth, and simple electronic wavelength tuning in a single reliable device operating at 1550nm

Features

- High speed, direct modulation of laser output
- Electronic wavelength tuning
- 1nm tuning range
- Narrow linewidth and high sidemode suppression (give improved system performance)
- No moving parts
- Insensitive to reflection
- Compatible with EDFA



Specifications:

All data measured at 25°C

	Min	Typ	Max	Units
Output power (from fibre)	0.5	1.0		mW
Threshold current		30	40	mA
Nominal centre wavelength		1550		nm
Continuous tuning range	1.0	1.2		nm
Sidemode suppression ratio	30			dB
Spectral linewidth		10	30	MHz
Optical isolation	60			dB
Modulation bandwidth	0.5	1		GHz

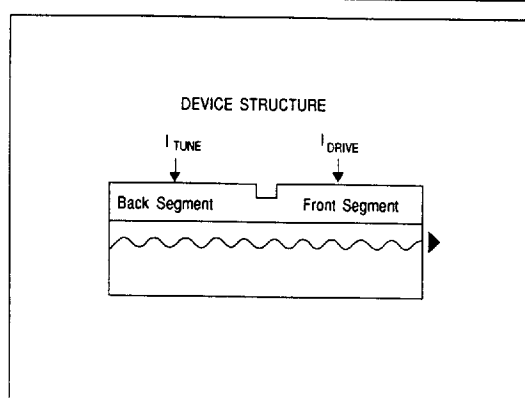
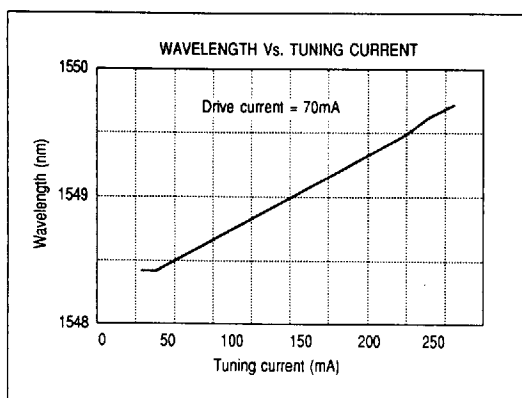
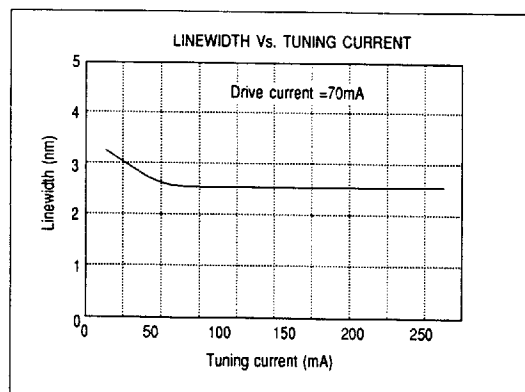
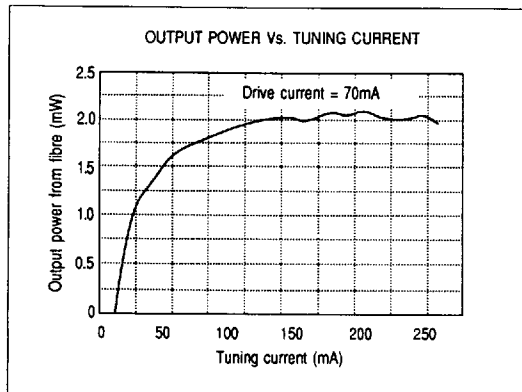
Applications

- Dense WDM
- Coherent transmission
- Test and measurement
- LIDAR
- Spectroscopy
- Interferometric sensors
- Direct detection sensors

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Measured Data:

All data measured at 25°C



Absolute maximum ratings:

Drive current (DRIVE)	180mA
Tuning current (ITUNE)	250mA
Total current (DRIVE + ITUNE)	350mA
Reverse voltage	2V
Thermocooler current	±500mA
Operating temperature	5 to 40°C

These devices are for use as highly coherent light sources for a wide variety of fibre optic applications. Capable of being wavelength tuned, they are suitable as sources for WDM and coherent systems operating in the 1550nm window and provide the user with the advantage of extended transmission range or data transmission capacity. They can also be used as part of a sensor system such as LIDAR, gas sensing or interferometric sensing systems.

Ordering Information

Package	Fibre
LD 5131DFB	Corning SMF 9 -125
LD 5171DFB	Fujikura SM15-P

Connectors

The standard products are supplied without fibre connectors. FC/PC, polarisation maintaining and other connector types can be fitted if required, please contact GMMT for further details.

For outline drawing information please refer to the end of this section.

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