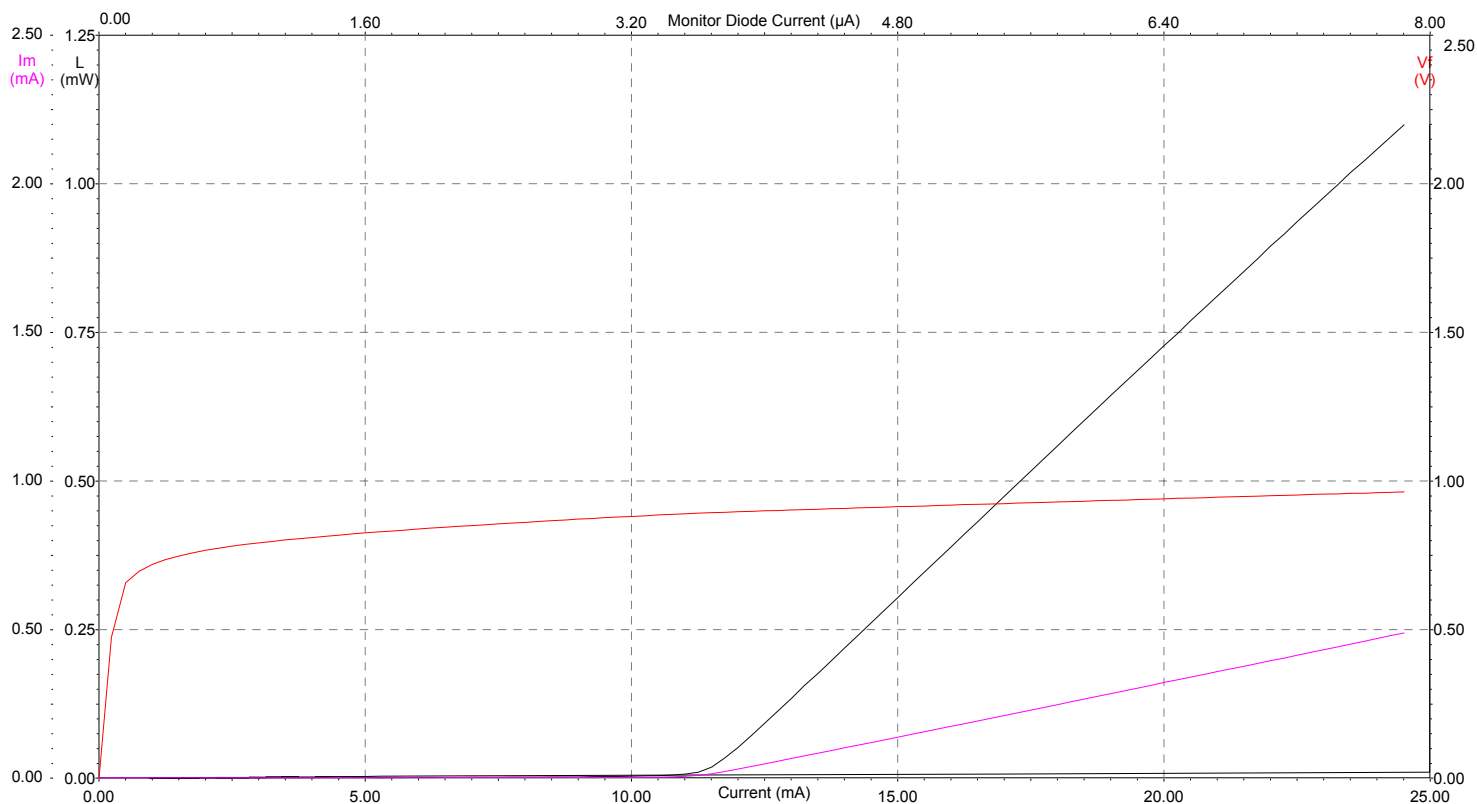


# MRV MRLD14C

Serial No:R1112

Tested By:Ryan Cyr  
Test Date:3/24/2006 12:11:59 PM



## Summary Characteristics

Temperature (C):	24.869° C
Wavelength (nm):	1553.730
SMSR:(dB)	-----
Threshold Current (mA):	11.750
Diff. Eff. (mW/mA):	0.084
Pop (mW):	1.000
Iop @ Pop (mA):	23.510
Vf @ Pop (V):	0.958
Im @ Pop (µA):	450.400

Connector Type: FC/PC

Cable Length: 1m

Comments:

- DIL laser diode. Pins slightly bent/used.

\*Note: Fermionics Lasertech pin settings and maximum values were used for this test.

## InGaAs/InP Strained MQW Laser Diode

### DESCRIPTION

LD-1550s are thermoelectrically cooled, single-mode fiber pigtailed 1550nm lasers with advanced strained multiple quantum wells. A lensed fiber is laser welded to insure low tracking error and long-term stability. An InGaAs backfacet monitor is provided for power monitoring.

### ABSOLUTE MAXIMUM RATINGS (T = 25°C)

PARAMETER	RATING	UNITS
Storage Temperature	-30 to +70	°C
Operating Temperature	-10 to +60	°C
Forward Current	150	mA
Reverse Voltage	2	V

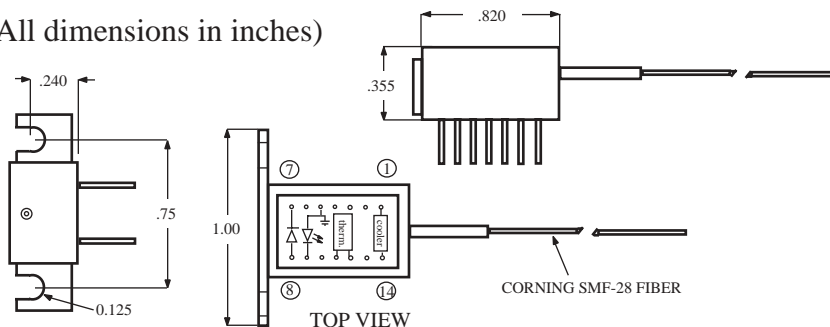


### OPTICAL AND ELECTRICAL CHARACTERISTICS (T = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Threshold Current	$I_{th}$	CW	-	10	30	mA
Forward Voltage	$V_f$	CW, $I_f = 60\text{mA}$	-	1.2	1.6	V
Optical Power	$P_o$	CW, $I_f = I_{th} + 30\text{mA}$	0.5	1	-	mW
Peak Wavelength	$\zeta_p$	CW, $P_o = 1\text{mW}$	1530	1550	1570	nm
Spectral Width (FWHM)	$\div \zeta$	CW, $P_o = 1\text{mW}$	-	4	6	nm
Rise Time	$t_r$	$P_o = 1\text{mW}$ , $I_{bias} = I_{th}$	-	0.2	0.5	nsec
Fall Time	$t_f$	$P_o = 1\text{mW}$ , $I_{bias} = I_{th}$	-	0.4	0.5	nsec
Thermistor R	R	$T_{laser} = 25^\circ\text{C}$	9	-	11	KT
TEC Current	$I_{TEC}$	-	-	-	0.8	A

### DIMENSIONAL OUTLINE

(All dimensions in inches)



Pin #	Function
1	Cooler (+)
2-4	N/C
5	LD Anode (+), GND
6	N/C
7	Monitor (+V)
8	Monitor (-V)
9	LD Cathode (-)
10	LD Anode (+), GND
11	Thermistor
12	Thermistor
13	N/C
14	Cooler (-)

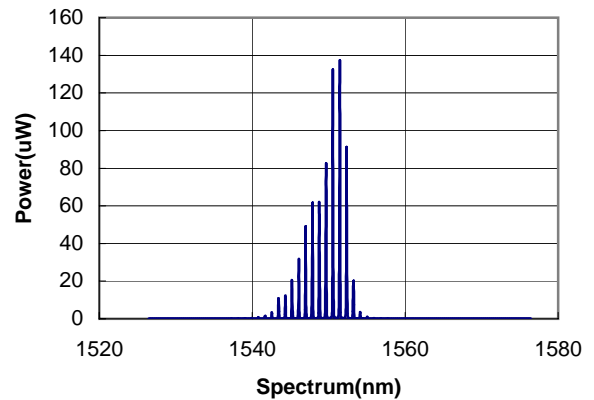


PART NUMBER  
**LD - 1550**

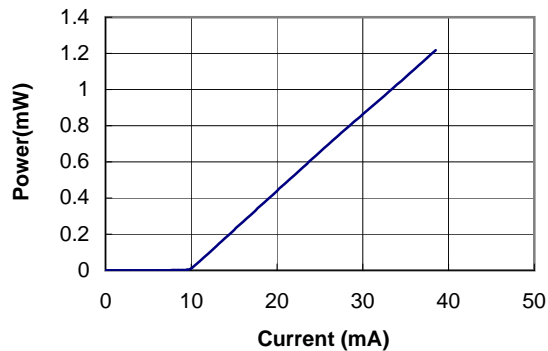
## InGaAs/InP Strained MQW Laser Diode

Serial Number  
Po(mW) 1.00  
Ith(mA) 9.55  
If(mA) 33.29  
Imo(uA) 795.66  
Es(uW/mA) 42.11  
Spectral Width(nm) 2.73  
Center Wavelength(nm) 1551

**Output Spectrum**



**Output Power vs Input Current**



**Monitor Current vs Output Power**

