

760nm SM VCSEL TO-CAN(39) datasheet

P/N: WV76-001-B

Description

The laser diode module is a cost effective, highly coherent laser source. The Discrete Mode laser diode chip is packaged in an industry standard.

Features

Narrow Linewidth < 2MHz
Excellent wavelength control and stability
Mode-Hop free tuning
Excellent reliability

Applications

Tunable diode laser absorption spectroscopy

Electrical/Optical Characteristics(Tsub=25°C, CW bias unless stated otherwise)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Center Wavelength	λ	1mA@25°C	758	760	762	nm
Side Mode Suppression Ratio	SMSR	CW	15	20	30	dB
Threshold Current	Ith	CW	0.4	0.6	0.8	mA
Operating Current	Iop		-	2	3	mA
Operating Voltage	Vop		-	1.7	-	V
SlopeEfficiency	--		-	0.5	-	-
OutputPower(mW)	Pf	1mA@25°C	-	0.3	-	mW
current tuning coefficient	T λ		-	0.05	0.06	nm / °C
temperature tuning coefficient	I λ		0.5	0.7	0.9	nm / mA
BeamDivergence	°		-	10	-	-
Thermistor						
Resistance (Standard 10kΩ @ 25 °C Thermistor)	Rth	Tc=Tld=25°C	9.5	10	10.5	KΩ
B constant of Rth	B		3800	3930	4000	K
Thermistor current			10	-	200	uA

Thermoelectric(TEC)						
TEC Current	ITEC	T _c =T _{ld} =25℃	-	-	0.49	A
TEC Voltage	VTEC		-	-	1.88	V
TEC Power	PTEC		-	-	0.55	W
TEC Capacity	ΔT		-20	-	55	℃

Environment Specification

Item	Unit	Min	Typ	Max
OperatingTemperature	℃	-20		55
Storage Temperature	℃	-40		85

Pin Connection Type & Outline Drawings

