

>1.0 mW 850nm Implant Single Mode VCSEL TO-CAN

- Chips are made by proprietary implant process, which guarantee a high ESD value of > 1 kV and long lifetime operation > 10⁵ h @ 50°C
- > 1.0 mW 850nm wavelength single-mode VCSEL
- Cost effective TO-46 package with flat glass window

ALVL-100



Absolute Maximum Ratings:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Optical Power	P _o	1.0			mW	CW
Storage Temperature		-40		85	°C	
Operating Temperature		-0		70	°C	
Reverse Voltage	V _R	5			V	

Optical / Electrical Characteristics (T=25°C):

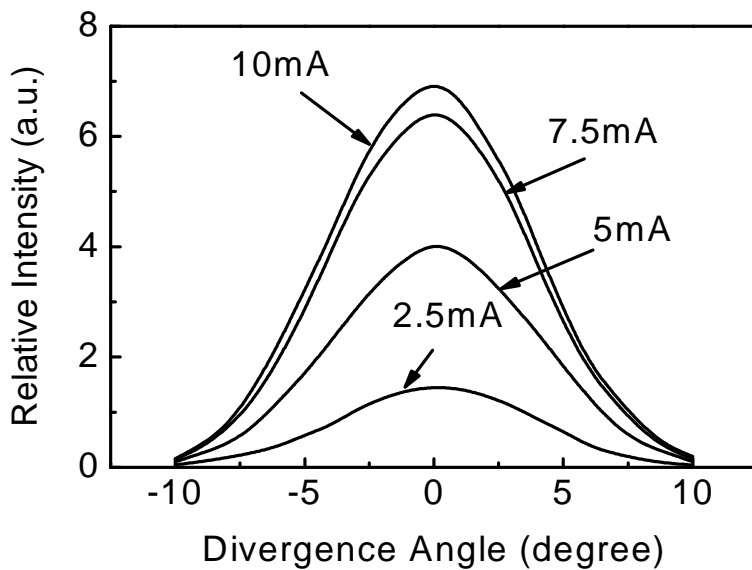
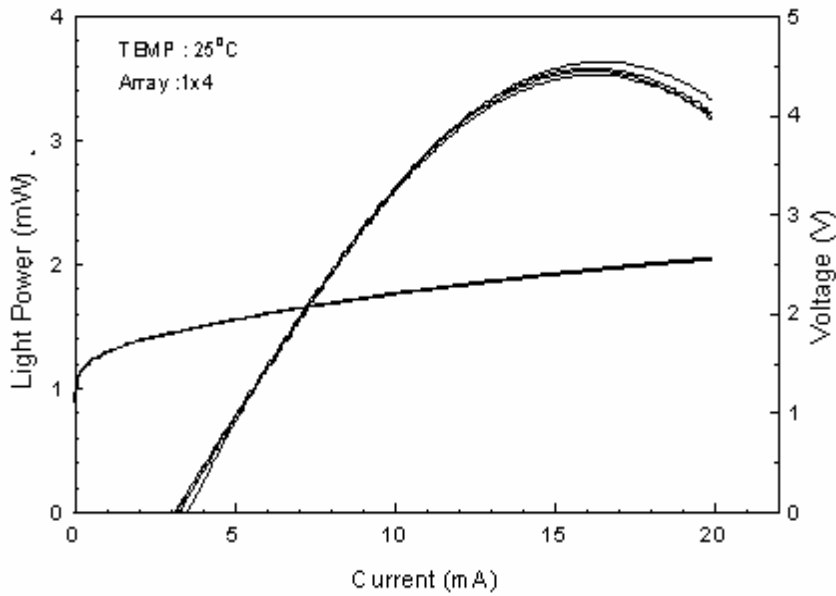
Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Max. Optical Output Power	P _o	1.0			mW	I _F =8~15mA
Forward Voltage	V _F			3.0	V	I _F = 10 mA
Threshold Current	I _{th}		4	8	mA	
Operating Current	I _{op}		10	15	mA	P _o =1.0 mW
Operating Voltage	V _{op}		2.5	3.0	V	P _o =1.0 mW
Center Wavelength	λ _c	840	850	870	nm	
Side Mode Suppression Ratio	SMSR	20			dB	
Beam Divergence	θ _{FWHM}		8		deg	I _F =10mA
Slope Efficiency	η	0.1			mW/mA	0.5~1.0mW
Series Resistance	R _s			120	Ω	
ESD Threshold	ESD	1 k			V	Human body mode

BIN:

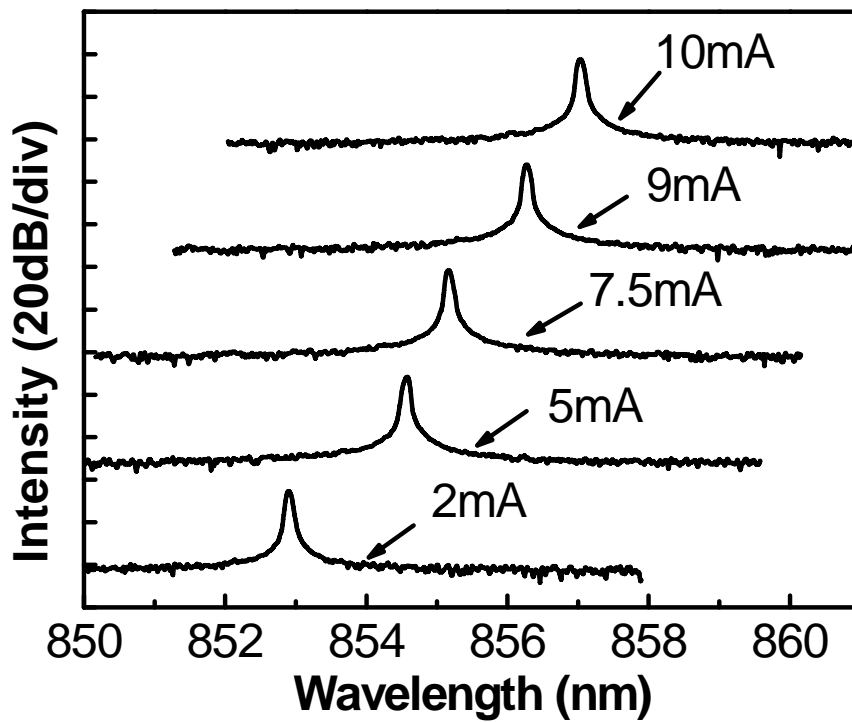
I_{op} @ 1.0 mW (mA)

- A. < 8.0
- B. 8.0 ~ < 9.0
- C. 9.0 ~ < 10.0
- D. 10.0 ~ < 11.0
- E. 11.0 ~ < 12.0
- F. 12.0 ~ < 13.0
- G. 13.0 ~ < 14.0
- H. 14.0 ~ < 15.0

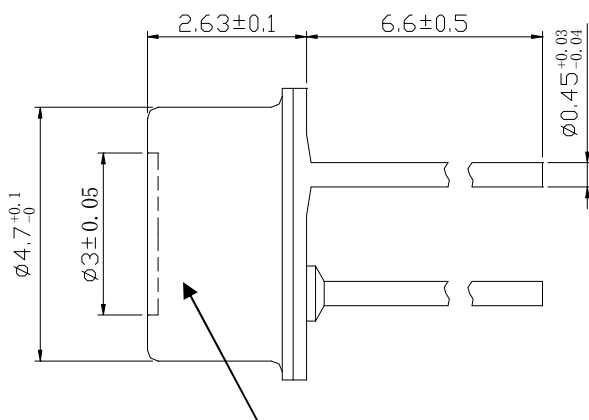
>1.0 mW 850nm Implant Single Mode VCSEL TO-CAN



>1.0 mW 850nm Implant Single Mode VCSEL TO-CAN



Outline dimensions & pin assignment:



glass window

PIN OUT:

- 1. LD+
- 2. LD-

