

850nm Implant Single Mode VCSEL TO-CAN

- Chips are made by proprietary implant process, which guarantee a high ESD value of > 400V and long lifetime operation > 10⁵ h @ 50°C
- > 2.0 mW 850nm wavelength single-mode VCSEL
- Cost effective TO-46 package with no glass window

ALVL-101



Absolute Maximum Ratings:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Optical Power	P _o	2.0			mW	CW
Storage Temperature		-40		85	°C	
Operating Temperature		-0		70	°C	
Reverse Voltage	V _R	5			V	

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

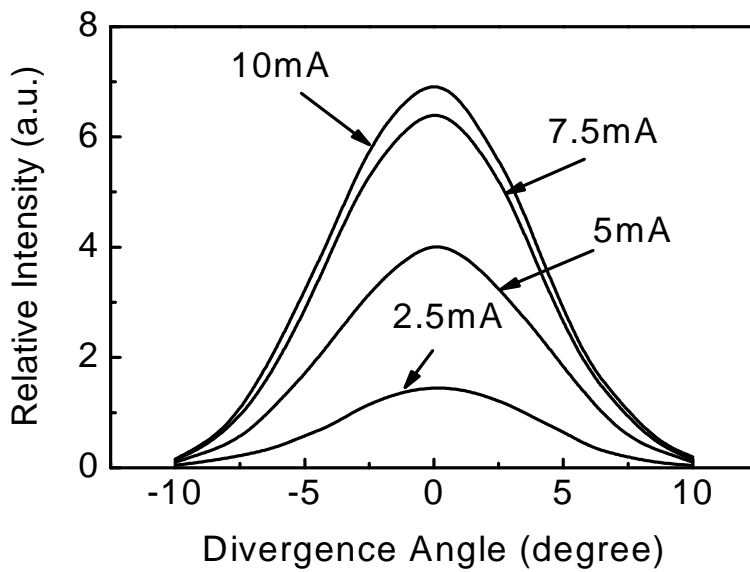
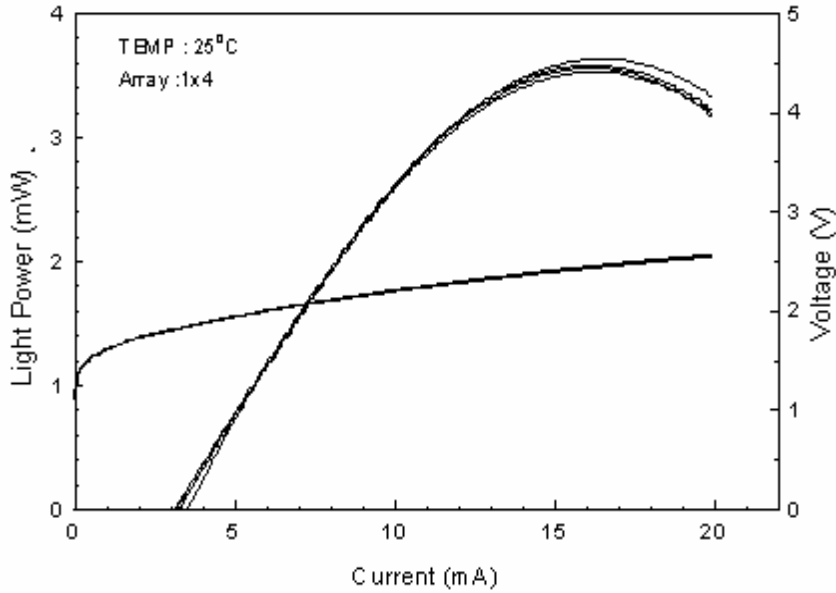
Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Optical Output Power	P _o	2.0			mW	I _F =10mA
Forward Voltage	V _F			3.0	V	I _F =10mA
Threshold Current	I _{th}		4	6	mA	
Operating Current	I _{op}	2		10	mA	P _o = 0.5 mW
Operating Voltage	V _{op}			2.5	V	P _o =0.5 mW
Center Wavelength	λ _c	840	850	860	nm	
Side Mode Suppression Ratio	SMSR	20			dB	
Beam Divergence	θ _{1/e²}		13		deg	I _F =10mA
Slope Efficiency	η	0.1			mW/mA	0.5~1.5mW
Series Resistance	R _s			150	Ω	
ESD Threshold	ESD	1 k			V	Human body mode

BIN:

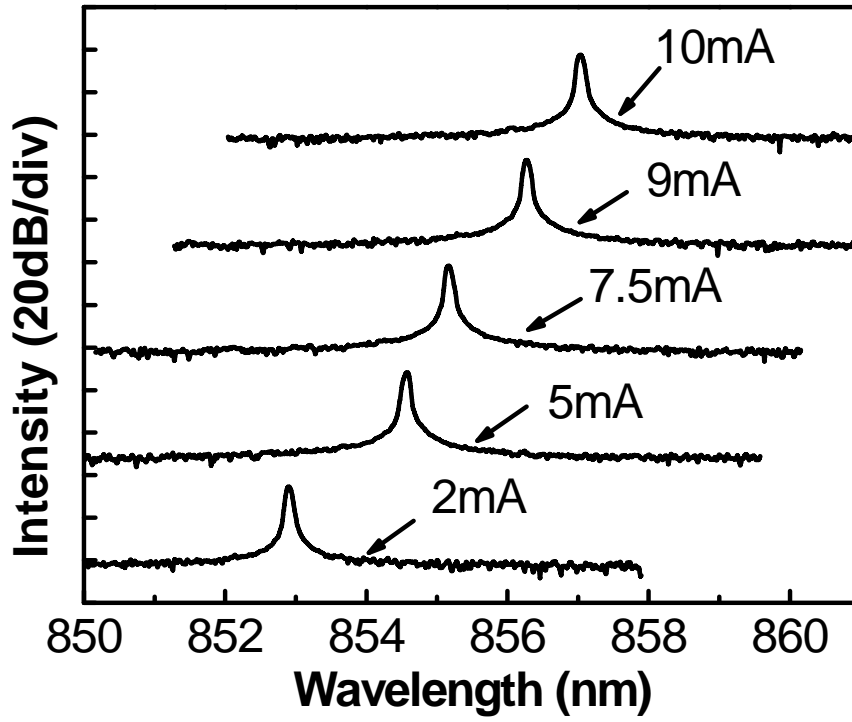
I_{op} @ 0.5 mW (mA)

- A. 2.0 ~ < 3.0
- B. 3.0 ~ < 4.0
- C. 4.0 ~ < 5.0
- D. 5.0 ~ < 6.0
- E. 6.0 ~ < 7.0
- F. 7.0 ~ < 8.0
- G. 8.0 ~ < 9.0
- H. 9.0 ~ < 10.0

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Outline dimensions & pin assignment:

