Akaylight

>1.5 mW 850nm Implant Single Mode VCSEL Mini Lamp

ALVL-102

- Chips are made by proprietary implant process, which guarantee a high ESD value of > 400 V and long lifetime operation > 10^6 h @ 50℃
- > 1.5 mW 850nm wavelength single-mode VCSEL
- Cost effective 3 mm diameter epoxy lamp on a ceramic base

Absolute Maximum Ratings:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Optical Power	Po	1.0			mW	CW
Storage Temperature		-40		85	℃	
Operating Temperature		-0		70	℃	
Reverse Voltage	V_R	5			V	

Optical / Electrical Characteristics (T=25℃):

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Max. Optical Output Power	P_O	1.5			mW	I_F=6~15mA
Forward Voltage	V_F			3.0	V	I_F = 12 mA
Threshold Current	I_{th}		3	8	mA	
Operating Current	I_{op}		8	15	mA	Po=1.5 mW
Operating Voltage	V_{op}		2.5	3.0	V	Po=1.5 mW
Center Wavelength	λc	830	850	860	nm	
Side Mode Suppression Ratio	SMSR	20			dB	
Beam Divergence	θ_{FWHM}		8		deg	I_F=12mA
Slope Efficiency	η	0.1			mW/mA	0.5~1.0mW
Series Resistance	R_s			150	Ω	
ESD Threshold	ESD	400			V	Human body mode

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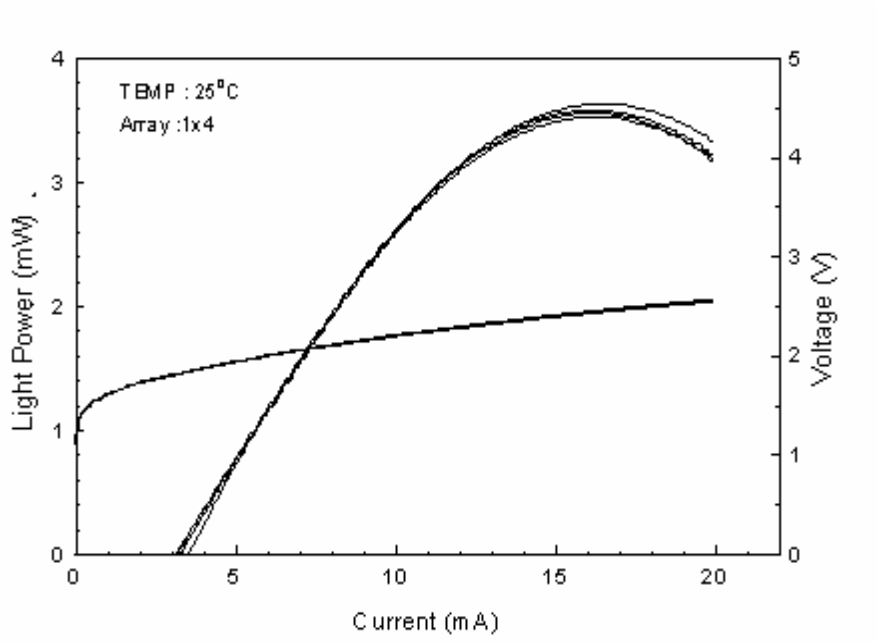

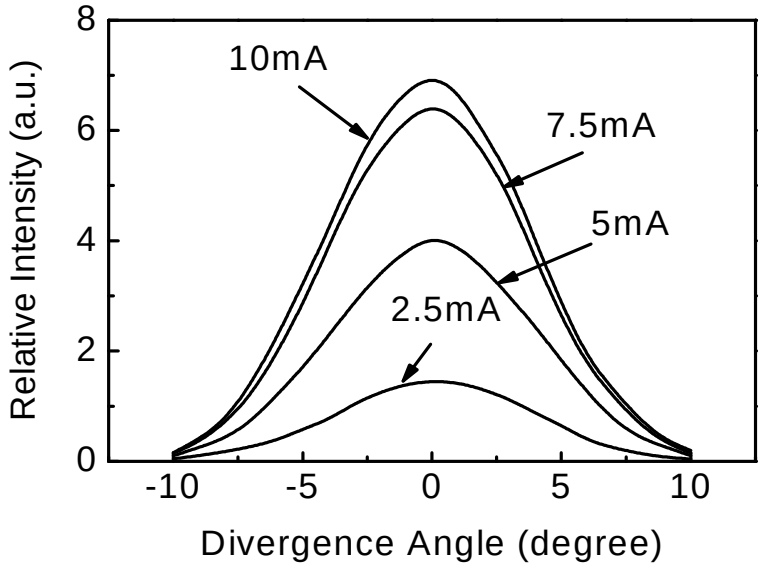

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1.CATHODE
2.ANODE