

Features

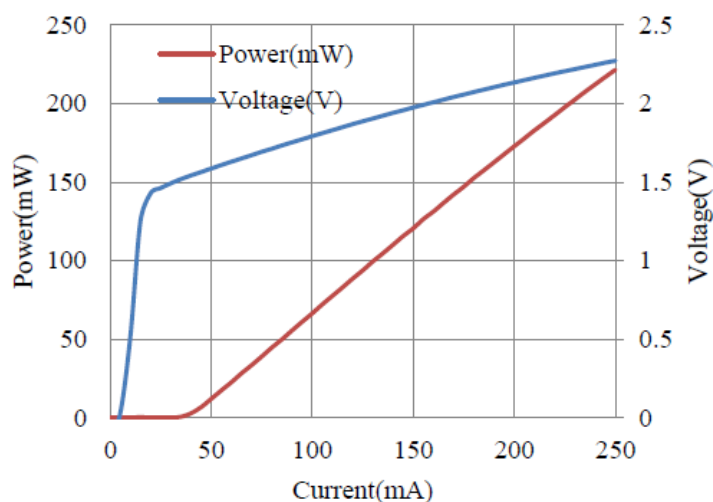
- 850nm multi-emitter VCSEL chip
- Typical 120mW output power at 150mA
- Number of emitters: 29
- Chip size: $290 \times 280 \pm 10 \mu\text{m}$
- Chip thickness: $150 \pm 15 \mu\text{m}$

Specifications

Absolute Maximum Ratings				
Parameters	Symbol	Rating	Unit	Conditions
Storage Temperature	T_{stg}	-40 to 125	$^{\circ}\text{C}$	
Operating Temperature	T_{op}	-20 to 85	$^{\circ}\text{C}$	
Continuous Forward Current	I_f	200	mA	
Solder reflow temperature	-	260	$^{\circ}\text{C}$	10 seconds

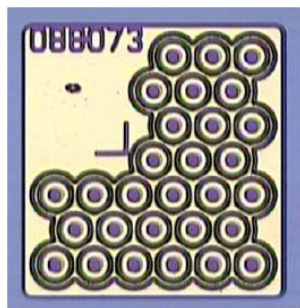
Electro-Optical Characteristics ($T_a=25^{\circ}\text{C}$, CW operation unless otherwise stated)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I_{th}		35		mA	
Optical Output Power	P_o		120		mW	$I_f=150\text{mA}$
Slope Efficiency	η		1.0		W/A	
Wavelength	λ_p	840	850	860	nm	$I_f=150\text{mA}$
Beam Divergence	Θ		25		$^{\circ}$	$I_f=150\text{mA}$ ($1/e^2$)
Forward Voltage	V_f		2.0	2.3	V	$I_f=150\text{mA}$
Power Conversion Efficiency	PCE		35		%	$I_f=150\text{mA}$
Wavelength Shift	$\Delta\lambda / \Delta T$		0.07		nm/ $^{\circ}\text{C}$	

Typical Characteristics



Typical electro / optical characteristics curves measured at 25°C , CW operation

Outline Dimensions



- Chip length: 290um +/- 10um
- Chip width: 280um +/- 10um
- Chip thickness: 150 +/- 15um
- Anode bond pad: 110 x 100 um
- Number of apertures: 29

Additional Notes

- The inherent design of this component causes it to be sensitive to electrostatic discharge (ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product.
- Specifications are subject to change without notice.