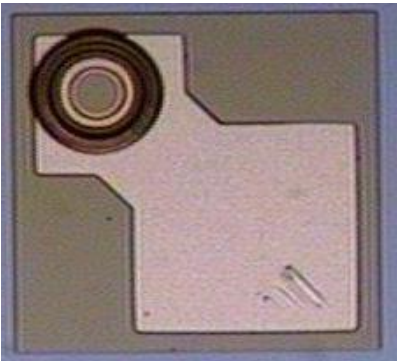




Features

- : 940nm wavelength range
- : 8mW VCSEL
- : Multi_mode beam profile
- : High reliability
- : Other configurations available on request

Description



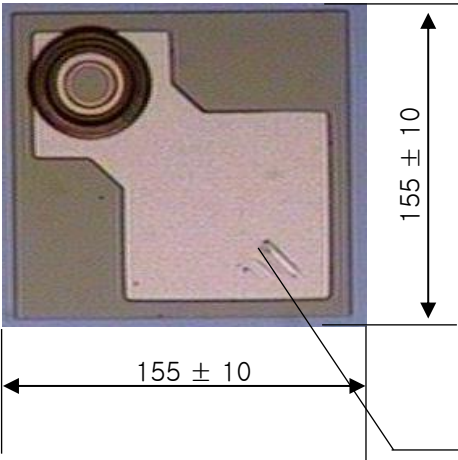
Applications

- : Consumer electronics
- : Safety sensor
- : Illumination light source
- : Proximity sensor light source

Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 85 °C
Operating Temperature	-10 to 70 °C
Continuous Forward Current	15mA

Dimensions



Unit : μm
DIE Height : 150±15 μm

Anode pad , 85 X 85 μm²

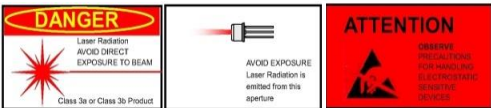


Electro-Optics Characteristics (T_a=25℃ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	I _{th}		1.5		mA	CW
I _{th} Temperature Variation	ΔI _{th}		2.0		mA	T _a = -10 to 70 ℃
Slope Efficiency	η		1.0		W/A	I _f = 10 mA
η Temperature Variation	Δη / ΔT		-0.5		% / ℃	T _a = -10 to 70 ℃ at 10mA
Optical Output Power	P _o		8		mW	I _f = 10 mA
Peak Wavelength	λ _p	930	940	950	nm	I _f = 10 mA
λ Temperature Variation	Δ λ / ΔT		0.06		nm/ ℃	T _a = -10 to 70 ℃ at 10mA
Spectral Bandwidth (RMS)	Δ λ			2	nm	I _f = 10 mA
Beam Divergence	Θ		20		°	Po = 10 mW (FWHM)
Operating Voltage	V _f		2.1	2.3	V	I _f = 10 mA
Breakdown Voltage	V _b	-7			V	
Dynamic Resistance	R _d		60		Ohm	I _f = 10 mA

Notes

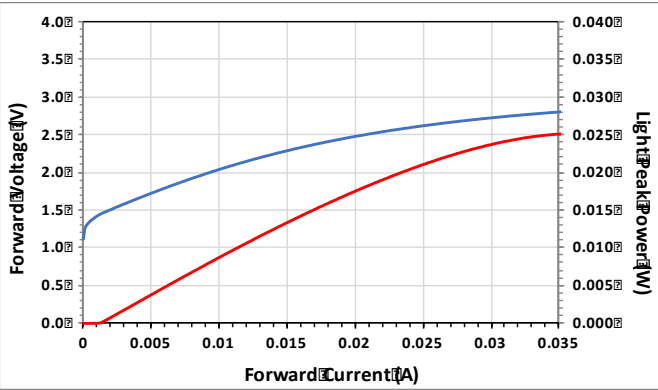
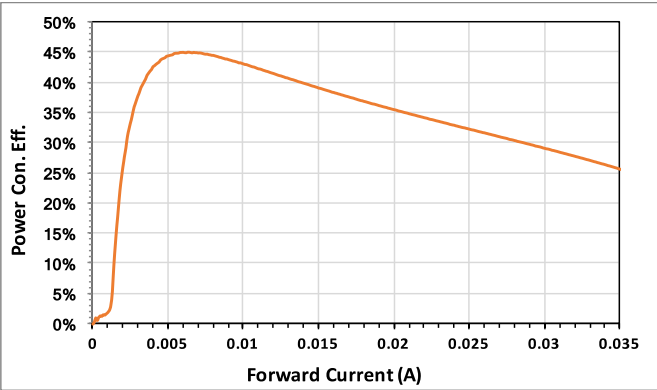
* These specifications are subject to change without notice.



NOTICE	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
DANGER	The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.



Characteristics Curves

LIV Curve	Power conversion efficiency
 Test PKG sample : To-Can type, To-46 Test condition : CW Mode : IF step interval 0.45mA, Delay time 2msec	 Test PKG sample : To-Can type, To-46 Test condition : CW Mode : IF step interval 0.45mA, Delay time 2msec