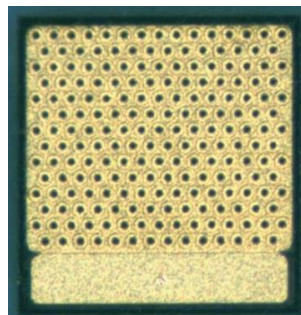


Features

- : 850nm wavelength range
- : Peak 1 W VCSEL by pulse mode operation
- : Multi mode beam profile
- : High reliability
- : Other configurations available on request

Description



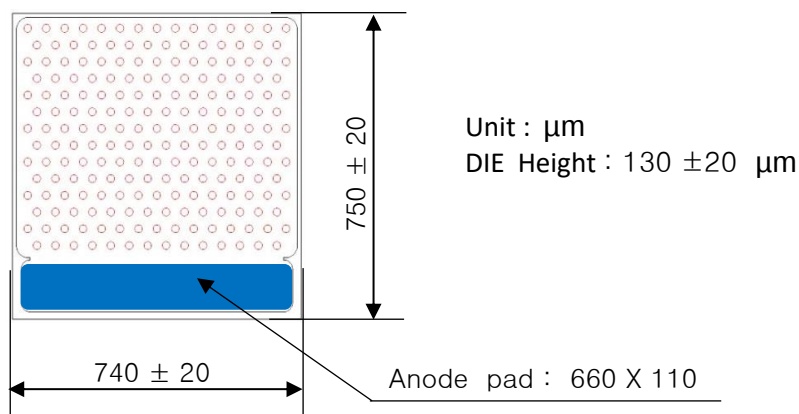
Applications

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

Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 85 °C
Operating Temperature	-20 to 85 °C
Continuous Forward Current	2.5 A(max 10 sec)
Continuous Reverse Voltage	5 V(max 10 sec)

Dimensions



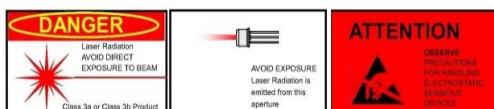


► Electro-Optics Characteristics (10% duty cycle, pulse length =0.1ms, $T_a=60^{\circ}\text{C}$ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	I_{th}		0.3		A	CW
Peak Optical Output Power	P_o		1.1		W	$I_f = 1.5\text{ A}$
Operating Voltage	V_f		2		V	$I_f = 1.5\text{ A}$
Power Conversion Efficiency	PCE		35		%	$I_f = 1.5\text{ A}$
Peak Wavelength	λ_p	840	850	860	nm	$I_f = 1.5\text{ A}$
Spectral Bandwidth (RMS)	$\Delta \lambda$		2		nm	$I_f = 1.5\text{ A}$
Beam Divergence	Θ		22		°	$I_f = 1.5\text{ A}$ (Full Width, $1/e^2$), Room temp.
ESD Voltage	V_{ESD}	3000			V	HBM mode, Room Temp.

► Notes

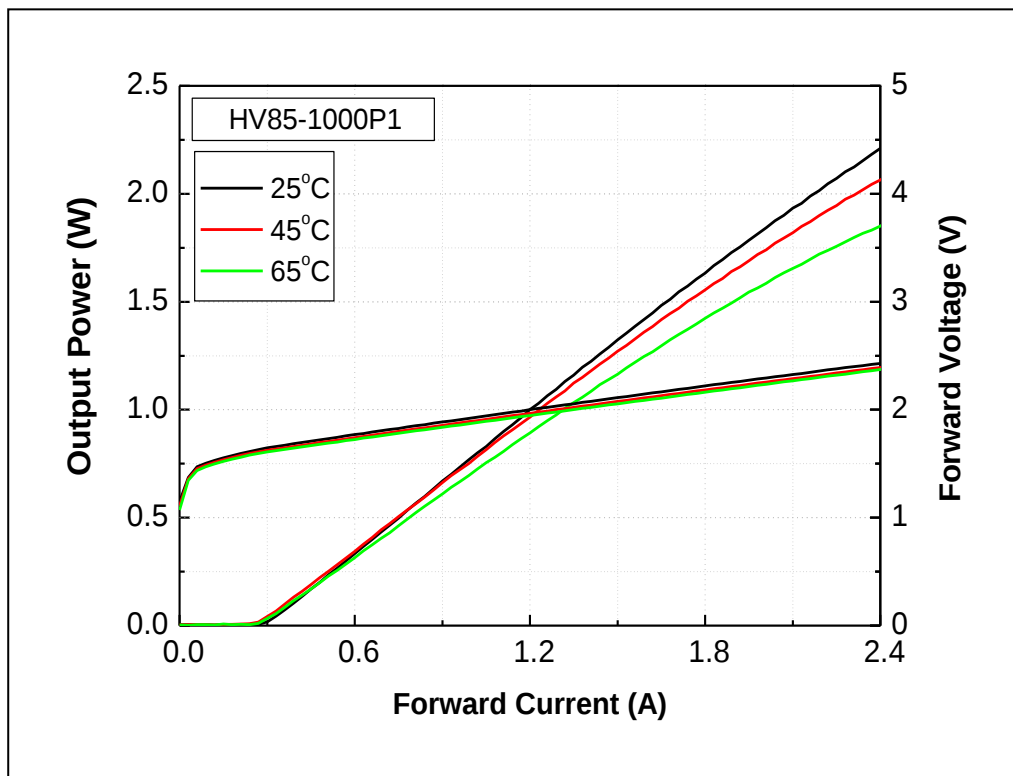
* These specifications are subject to change without notice.



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

L-I-V-Temperature



Power Conversion Efficiency

