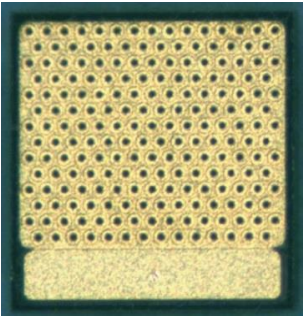
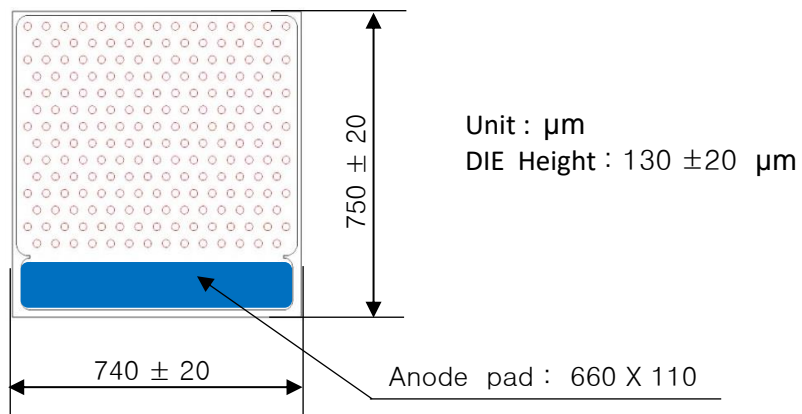




Features	Description
<ul style="list-style-type: none"> : 850nm wavelength range : Peak 1 W VCSEL by pulse mode operation : Multi mode beam profile : High reliability : Other configurations available on request 	

Applications	Absolute Maximum Ratings										
<ul style="list-style-type: none"> : Consumer electronics : Safety sensor : Illumination light source : Gesture sensor light source 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Parameter</th> <th>Rating</th> </tr> </thead> <tbody> <tr> <td>Storage Temperature</td> <td>-40 to 85 °C</td> </tr> <tr> <td>Operating Temperature</td> <td>-20 to 85 °C</td> </tr> <tr> <td>Continuous Forward Current</td> <td>2.5 A(max 10 sec)</td> </tr> <tr> <td>Continuous Reverse Voltage</td> <td>5 V(max 10 sec)</td> </tr> </tbody> </table>	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)
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Dimensions



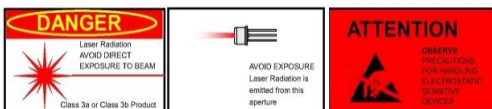


► Electro-Optics Characteristics (10% duty cycle, pulse length =0.1ms, T_a=60 °C unless otherwise stated

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 A
Operating Voltage	V _f		2		V	I _f = 1.5 A
Power Conversion Efficiency	PCE		35		%	I _f = 1.5 A
Peak Wavelength	λ _p	840	850	860	nm	I _f = 1.5 A
Spectral Bandwidth (RMS)	Δ λ		2		nm	I _f = 1.5 A
Beam Divergence	Θ		22		°	I _f = 1.5 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.

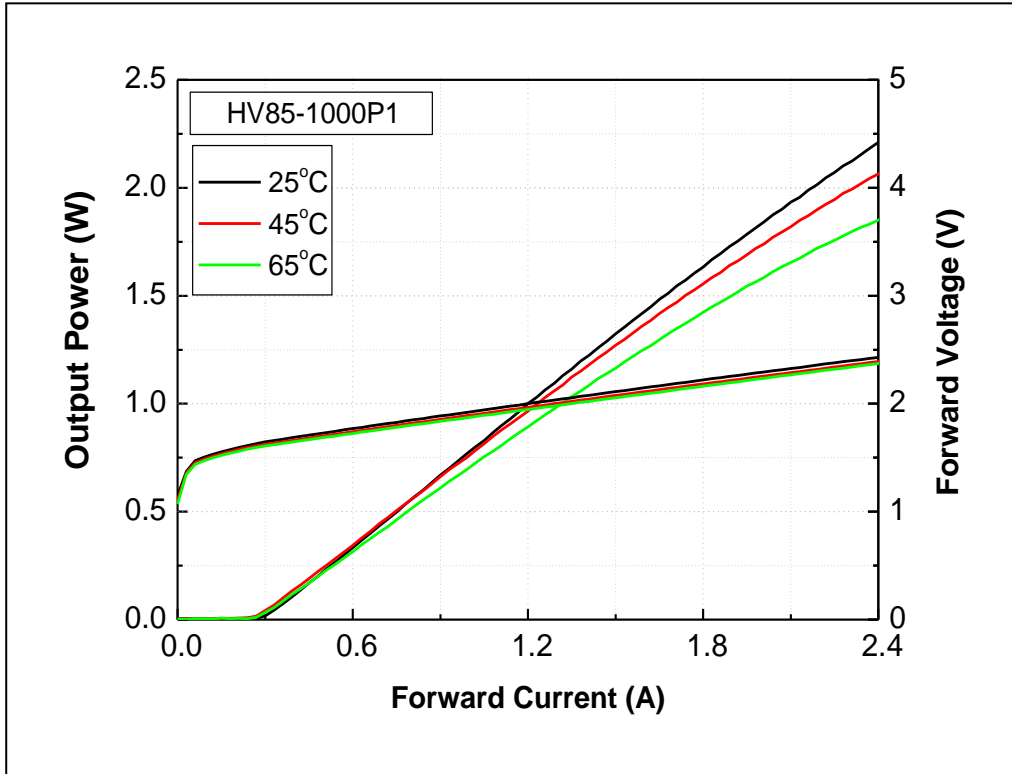


NOTICE	The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product
DANGER	The VCSEL is a class IIIb laser and should be treated as a potential eye 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

