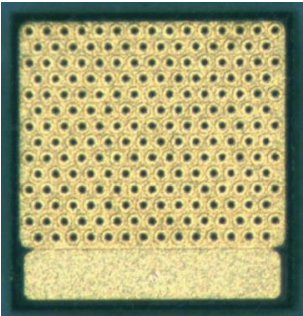
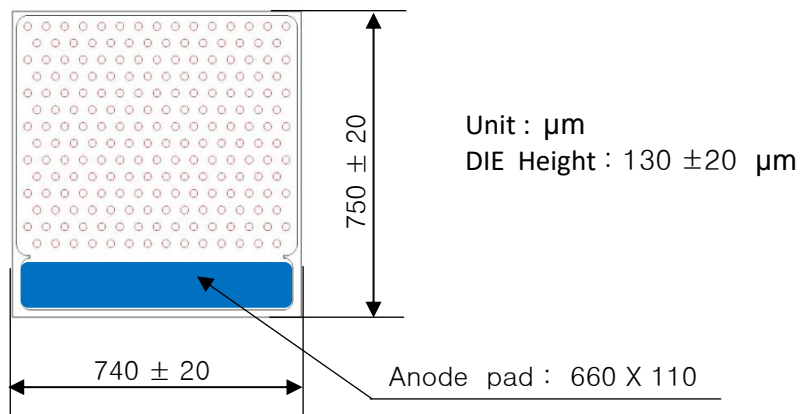




| Features | Description |
|---|--|
| <ul style="list-style-type: none"> : 940nm wavelength range : > 1 W peak VCSEL by pulse mode operation : Multi mode beam profile : High reliability : Other configurations available on request |  |

| 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) |
| 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



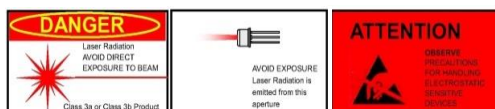


► Electro-Optics Characteristics (10% duty cycle, pulse length =0.1ms, T_a=60 °C unless otherwise stated

| Parameters | Symbol | Specified | | | Unit | Test Conditions |
|-----------------------------|------------------|-----------|------|------|------|---|
| | | Min. | Typ. | Max. | | |
| Threshold Current | I _{th} | | 0.3 | | A | CW |
| Peak Optical Output Power | P _o | | 1.0 | | W | I _f = 1.5 A |
| Operating Voltage | V _f | | 2.0 | | V | I _f = 1.5 A |
| Power Conversion Efficiency | PCE | | 30 | | % | I _f = 1.5 A |
| Peak Wavelength | λ _p | 930 | 940 | 950 | 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.

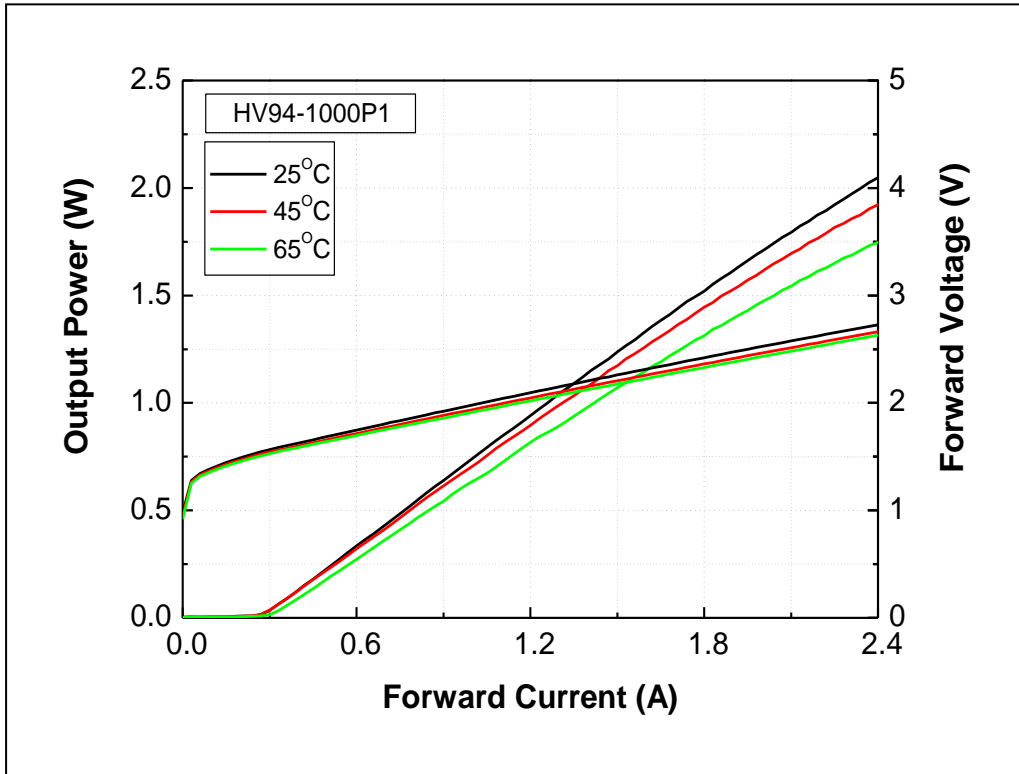


| | |
|---------------|--|
| NOTICE | The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product |
| DANGER | The VCSEL is a class IIIb laser and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

