



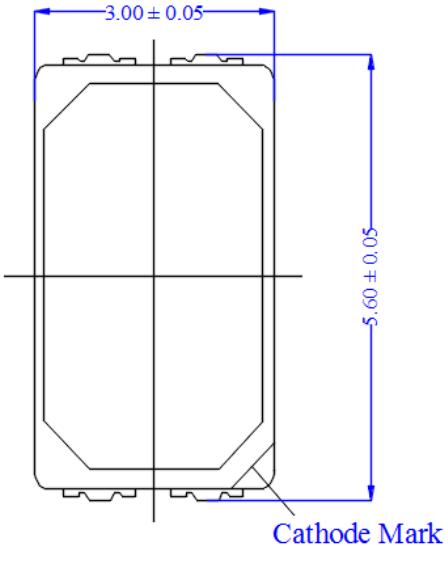
■ Features

1. Peak wavelength at 25°C : 650 nm (typical)
2. Standard optical power output : 5mW (CW)
3. 5630 Packaged
4. High temperature operation
5. single mode lasing

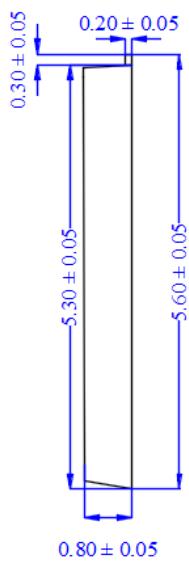
■ Applications

1. Laser Module
2. Laser Pointer
3. Medical application

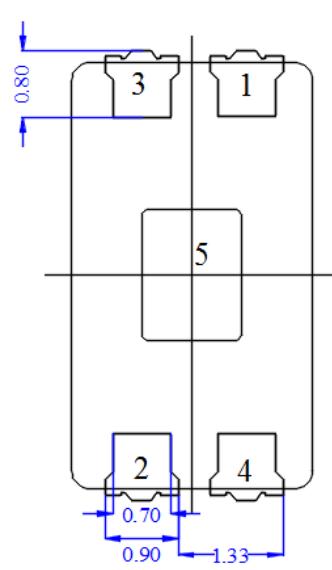
■ External dimensions(Unit : mm) **5.60×3.00×0.80**



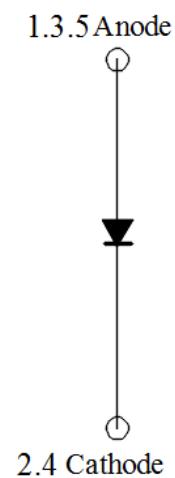
Top View



Front View



Bottom View



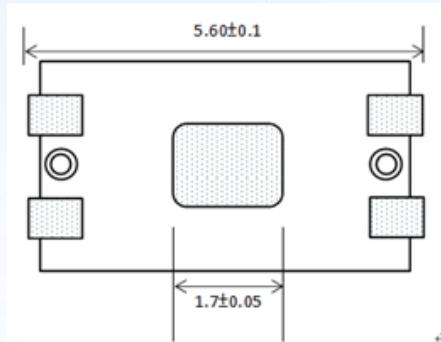
Notes:

1. Drawings are not to scale
2. All dimensions are all in millimeter
3. All dimensions without tolerance are for reference only

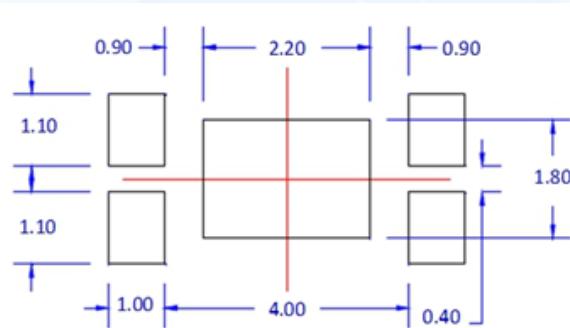


Soldering Conditions(Reference Outline)

Soldering pad pattern



Metal solder stencil aperture

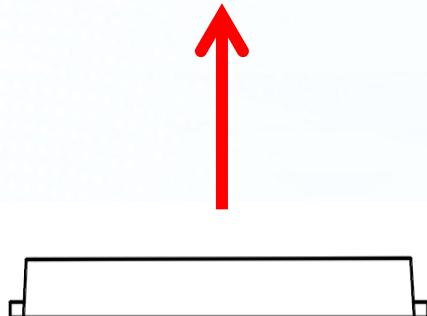


NOTE : All dimensions in mm tolerance is +/- 0.1mm unless otherwise noted.

The drawing above shows the recommended solder pad layout on Printed Circuit Board (PCB).

Emission direction

Laser beam



Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Rating	Unit
Optical Output	Po	5	mW
Reverse Voltage	Vr	2	V
Operating Temperature Casep.	Top	-10~+70	°C
Storage Temperature	Tstg	-40~+85	°C



■ Electrical and Optical Characteristics($T_c=25^\circ C$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I_{th}	$P_o=5\text{mW}$	-	12	25	mA	
Operating Current	I_{op}	$P_o=5\text{mW}$	-	17	25	mA	
Operating Voltage	V_{op}	$P_o=5\text{mW}$	-	2.2	2.5	Volts	
Slope Efficiency	η	$P_o=1.5-5\text{mW}$	0.7	1	-	mW/mA	
Beam Divergence (FWHM)	Parallel	$\theta_{//}$	$P_o=5\text{mW}$	5	7.5	12	deg.
	Perpendicular	θ_{\perp}	$P_o=5\text{mW}$	30	36	42	deg.
Lasing Wavelength	λ	$P_o=5\text{mW}$	640	650	660	nm	

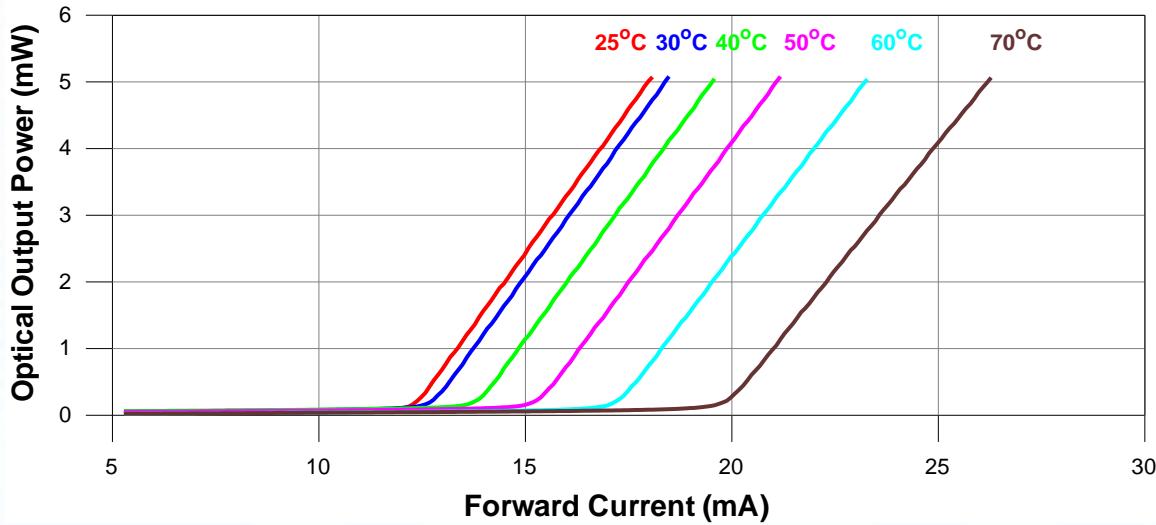
◎ $\theta_{//}$ and θ_{\perp} are defined as the angle within which the intensity is 50% of the peak value.

■ Quality Notice

This device is still under product development.

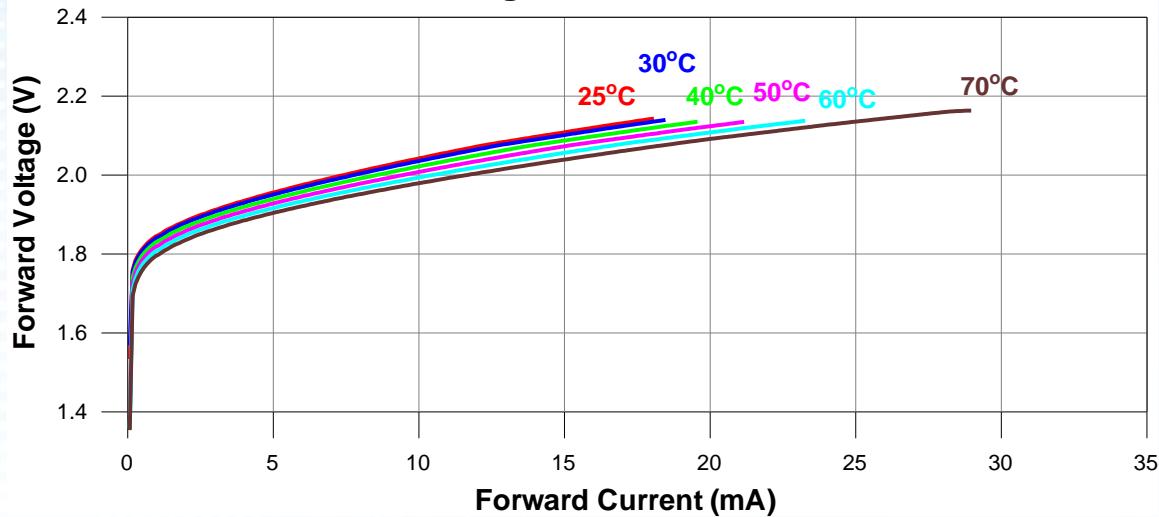
■ Typical characteristic curves

Optical Output Power v.s. Forward Current

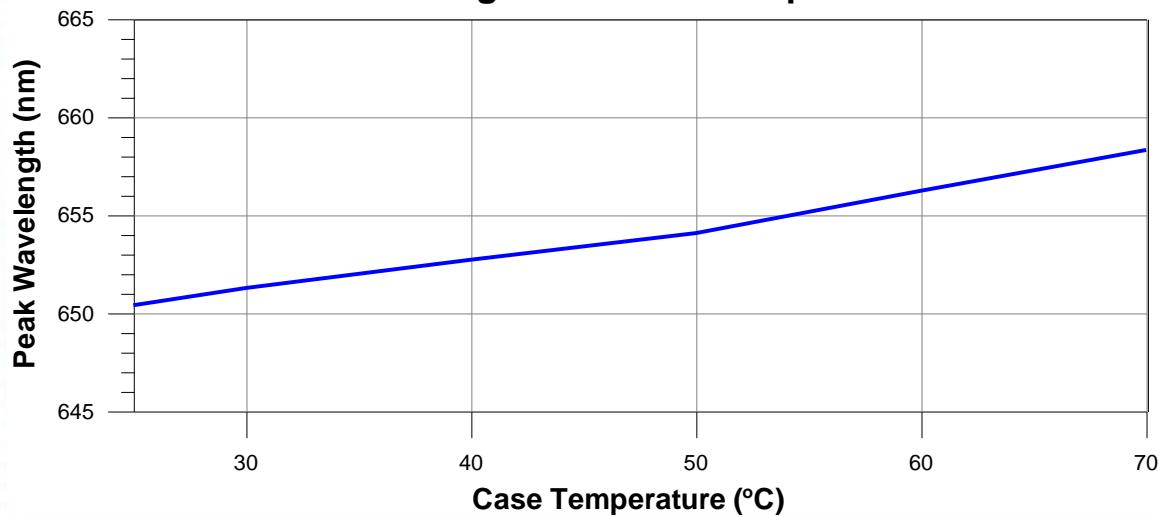




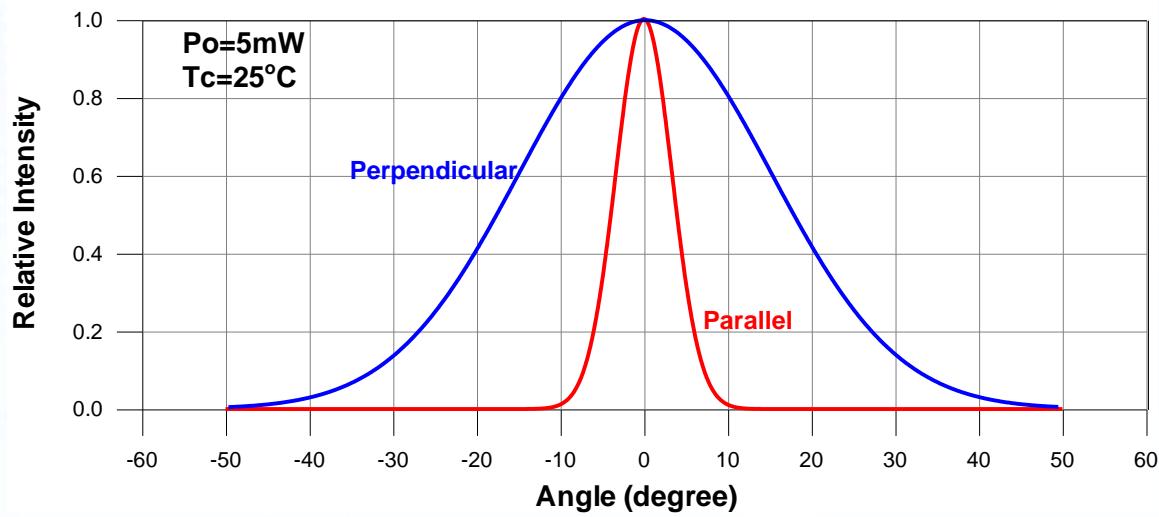
Forward Voltage v.s. Forward Current



Peak Wavelength v.s. Case Temperature

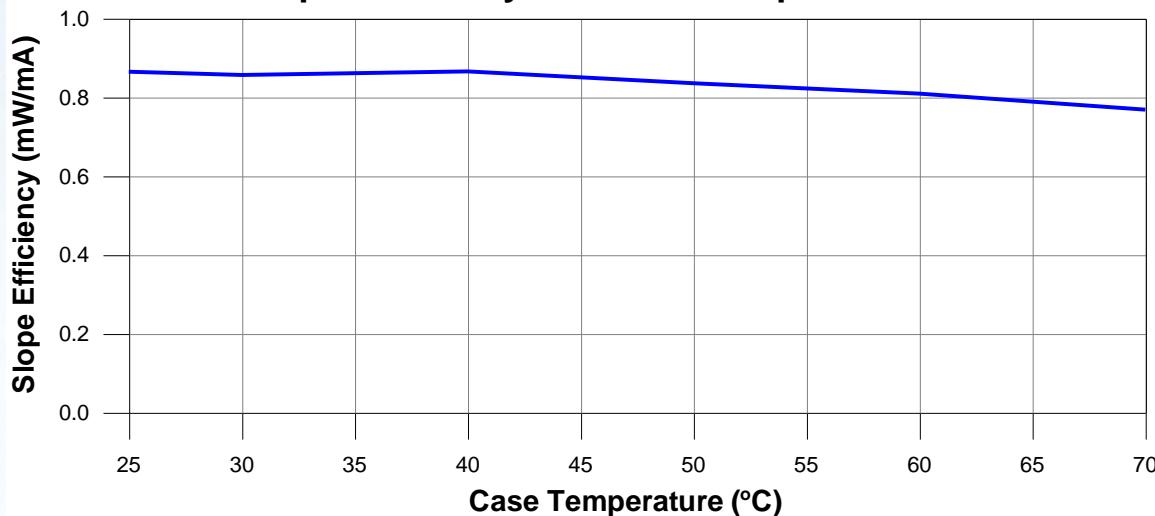


Far-Field Pattern

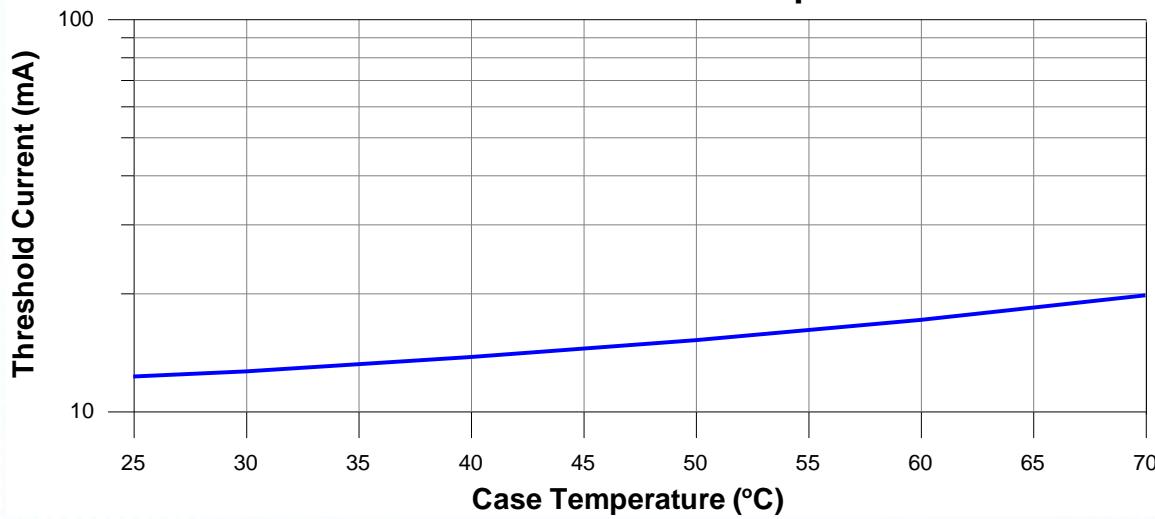




Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



Power v.s. Case Temperature

