IR LASER SMT LED

P/N: RHI-1285-S000

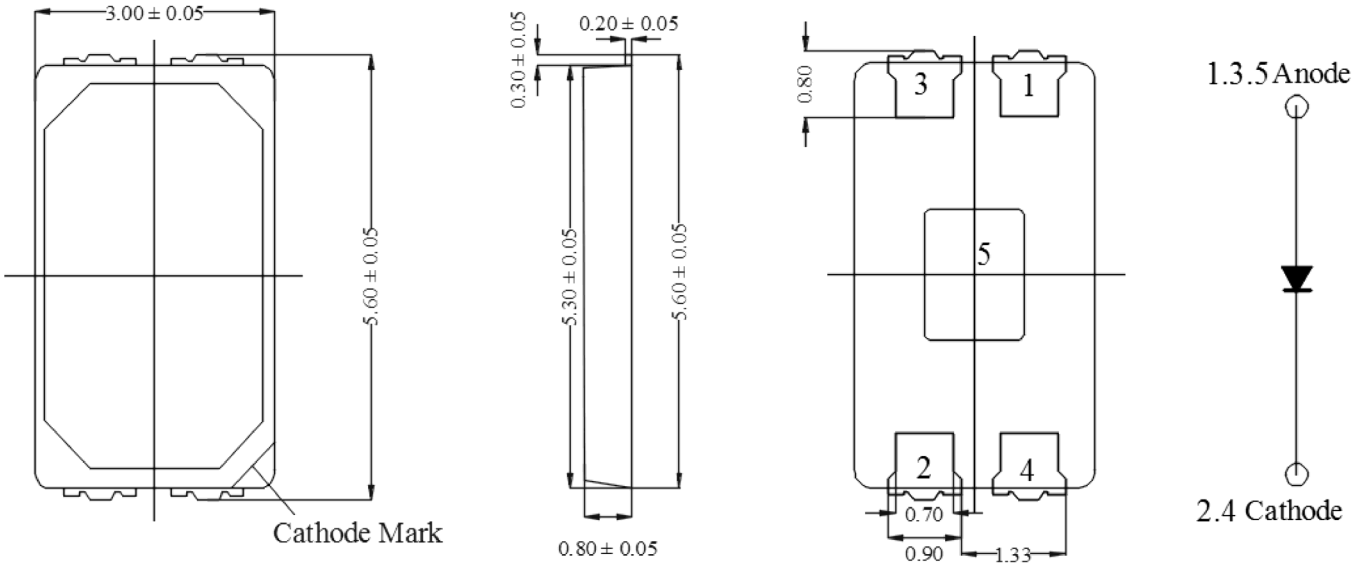
■ Features

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



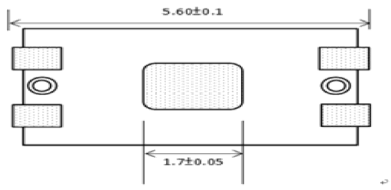
Top View　　Front View　　Bottom View

Notes:

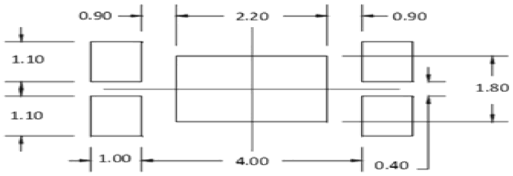
1. Drawings are not to scale
2. All dimensions are all in millimeter
3. All dimensions without tolerance are for reference only

Soldering Conditions(Reference Outline)

Soldering pad pattem

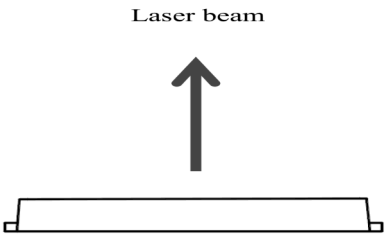


Metal solder stencil aperture



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



■ Absolute Maximum Ratings(Tc=25℃)

Parameter	Symbol	Rating	Unit
Optical Output	Po	5	mW
Reverse Voltage	Vr	2	V
Operating Temperature·Case	Top	-10～+70	℃
Storage Temperature	Tstg	-40～+85	℃

■ Electrical and Optical Characteristics(Tc=25℃)

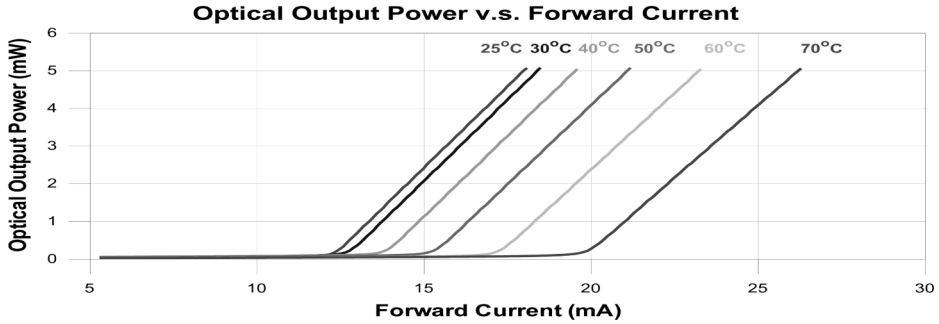
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	Po=5mW	-	12	25	mA
Operating Current		Iop	Po=5mW	-	17	25	mA
Operating Voltage		Vop	Po=5mW	-	2.2	2.5	Volts
Slope Efficiency		η	Po=1.5-5mW	0.7	1	-	mW/mA
Beam Divergence	Parallel	$\theta_{//}$	Po=5mW	5	7.5	12	deg.
(FWHM)	Perpendicular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

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

■ Quality Notice

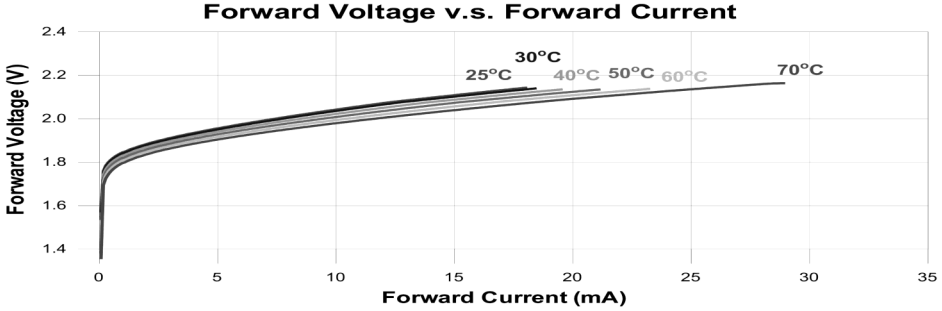
This device is still under product development.

■ Typical characteristic curves

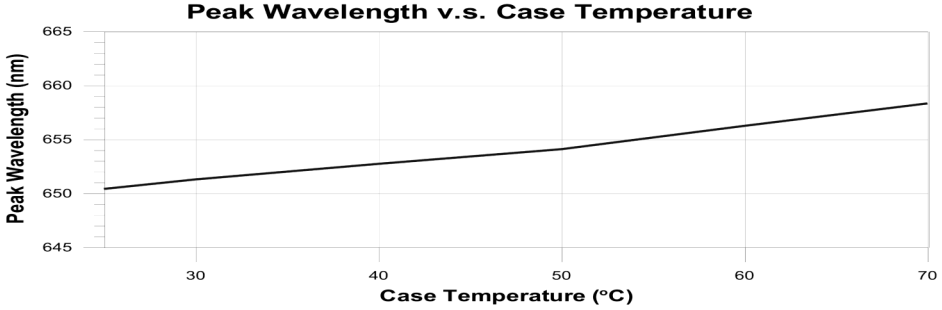


RoHS COMPLIANT

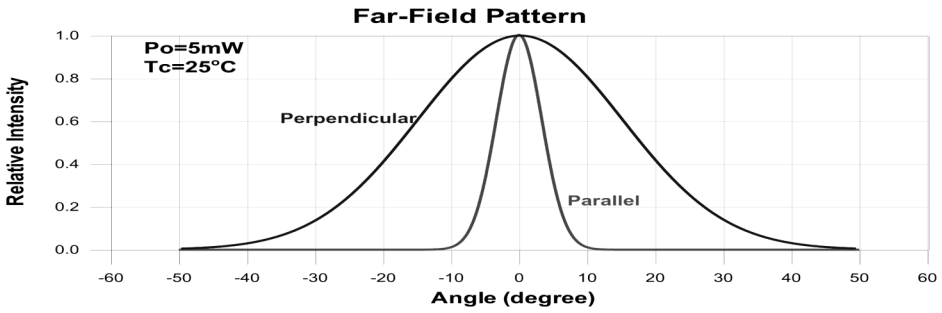
Forward Voltage v.s. Forward Current



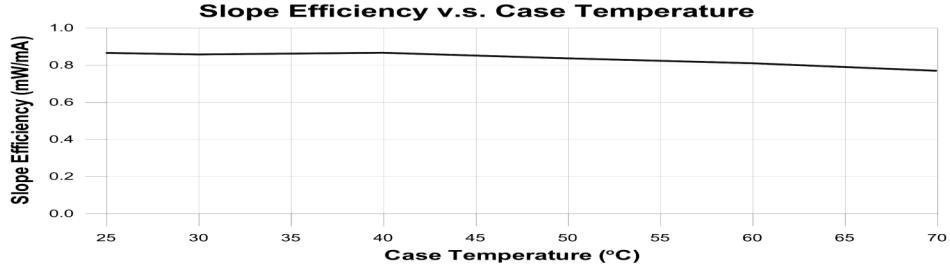
Peak Wavelength v.s. Case Temperature



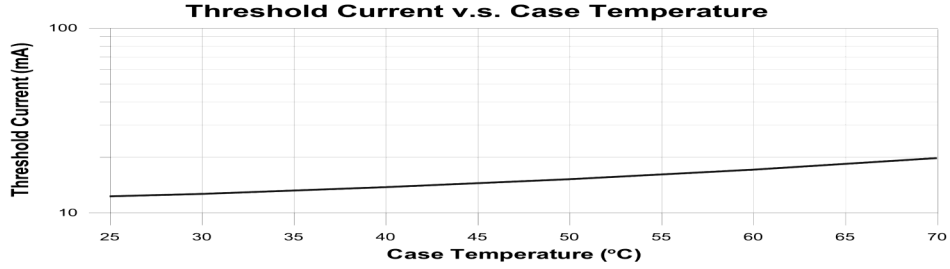
Far-Field Pattern



Slope Efficiency v.s. Case Temperature



Threshold Current v.s. Case Temperature



Power v.s. Case Temperature