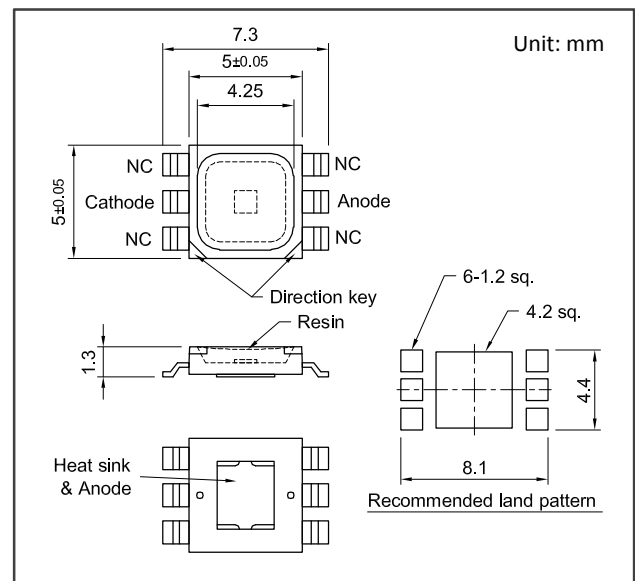


Features

- High output power: 580mW (IF=1A with heat sink)
- SMD type package
- Broad directivity

Applications

- Infrared illuminations for IR imaging
- Optical switches
- Optical instruments

**Absolute Maximum Ratings**

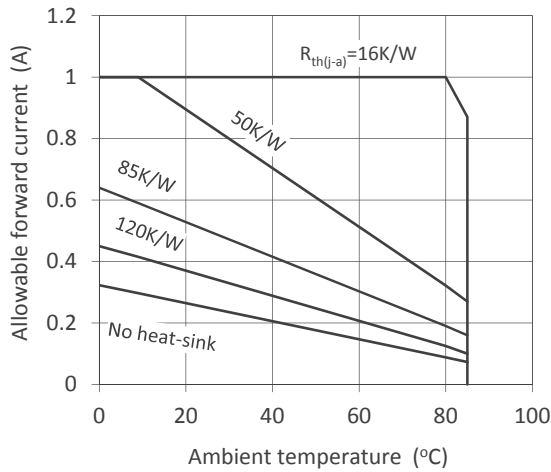
Parameter	Symbol	Value	Unit	Note
Forward current	I_F	1000	mA	$T_a=25^\circ\text{C}$, $R_{th(j-a)}=16\text{K/W}$ *
		250		$T_a=25^\circ\text{C}$, No heat-sink
Reverse voltage	V_R	10	V	
Dice temperature	T_j	115	$^\circ\text{C}$	
Operating temperature	T_{opr}	-20 to +85	$^\circ\text{C}$	Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100	$^\circ\text{C}$	Avoid dew condensation

Electrical and Optical Characteristics ($T_a=25^\circ\text{C}$, $R_{th(j-a)}=16\text{K/W}$ * unless otherwise noted)

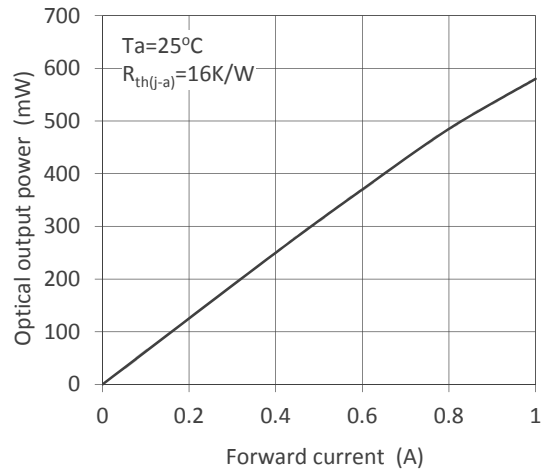
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward voltage	V_F	-	2.1	-	V	$I_F=1\text{A}$
		-	1.4	1.7		$I_F=100\text{mA}$, No heat-sink
Reverse current	I_R	-	-	10	μA	$V_R=10\text{V}$
Optical output power	P_O	-	580	-	mW	$I_F=1\text{A}$
		-	60	-		$I_F=100\text{mA}$, No heat-sink
Peak emission wavelength	λ_p	-	855	-	nm	$I_F=1\text{A}$
Spectral bandwidth at 50%	$\Delta\lambda$	-	25	-	nm	$I_F=1\text{A}$
Half angle	2θ	-	130	-	deg.	

* $R_{th(j-a)}$: Thermal resistance from dice to ambient

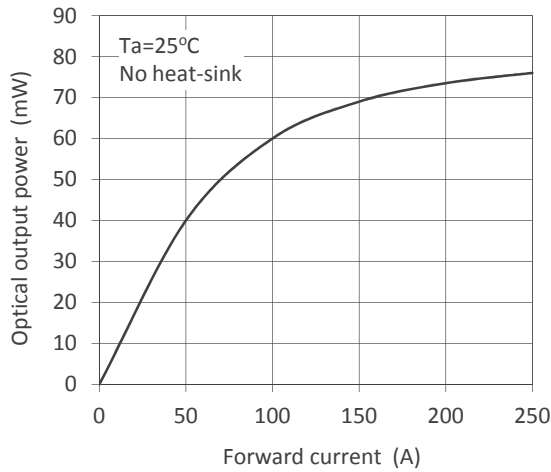
Allowable Forward Current-Ambient Temperature



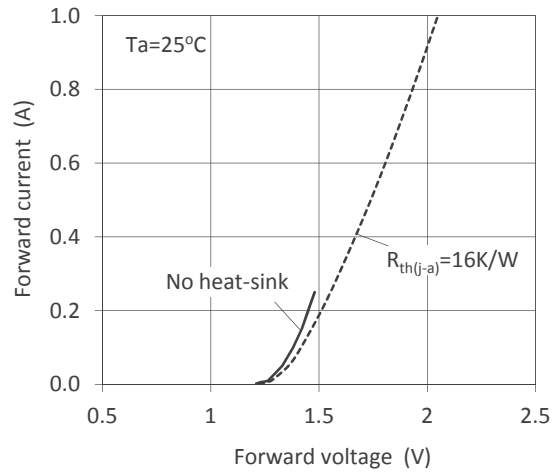
Optical Output Power - Forward Current



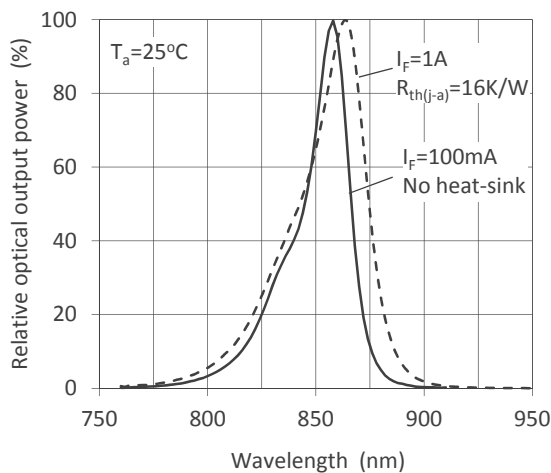
Optical Output Power - Forward Current



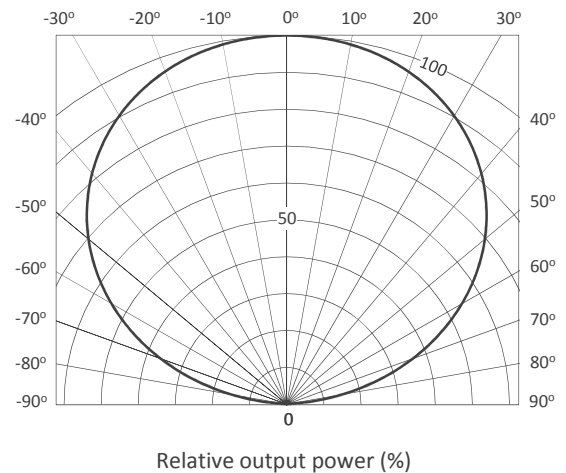
Forward Current - Forward Voltage



Spectral Distribution



Directivity



- Specifications , characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

Opto-technologies for the Future



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