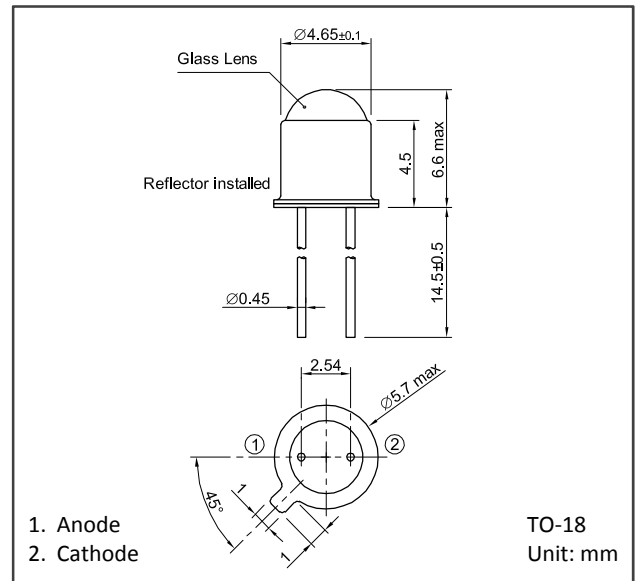


**Features**

- $\lambda_p=1450\text{nm}$
- High output power
- Sharp directivity with a glass lens
- Highly reliable hermetic seal
- Direct modulation

**Applications**

- Optical switches
- Optical instruments
- Water sensors
- Humidity analysis

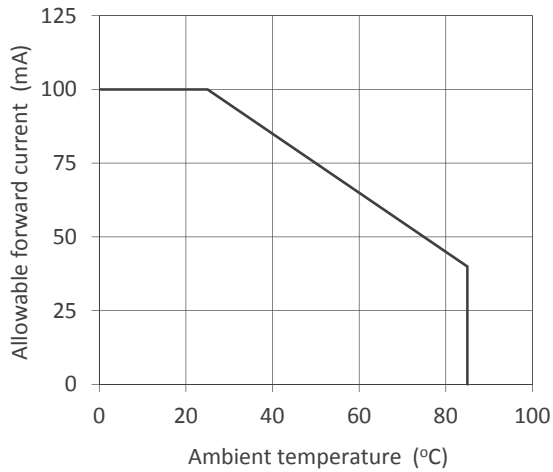
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Forward current	$I_F$	100	mA	$T_a=25^\circ\text{C}$
Peak forward current	$I_{FP}$	1.0	A	Pulse width=100 $\mu\text{s}$ Duty ratio=0.1%
Reverse voltage	$V_R$	5	V	
Power dissipation	$P_D$	130	mW	$T_a=25^\circ\text{C}$
Operating temperature	$T_{opr}$	-30 to +85	$^\circ\text{C}$	Avoid dew condensation
Storage temperature	$T_{stg}$	-40 to +100	$^\circ\text{C}$	Avoid dew condensation

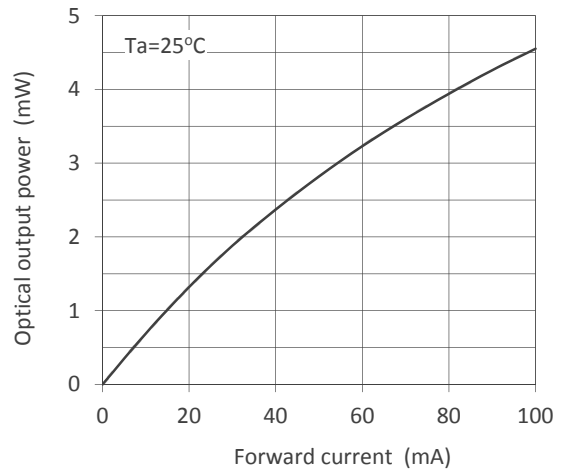
**Electrical and Optical Characteristics** ( $T_a=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward voltage	$V_F$	-	0.8	1.3	V	$I_F=50\text{mA}$
Reverse current	$I_R$	-	-	10	$\mu\text{A}$	$V_R=1\text{V}$
Optical output power	$P_O$	-	2.8	-	mW	$I_F=50\text{mA}$
Peak emission wavelength	$\lambda_p$	1400	1450	1500	nm	$I_F=50\text{mA}$
Spectral bandwidth at 50%	$\Delta\lambda$	-	100	-	nm	$I_F=50\text{mA}$

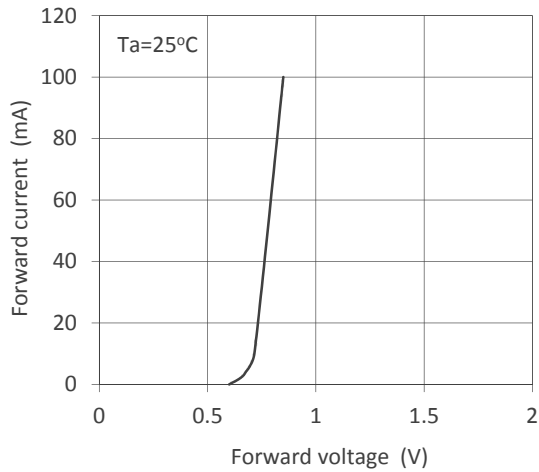
Allowable Forward Current-Ambient Temperature



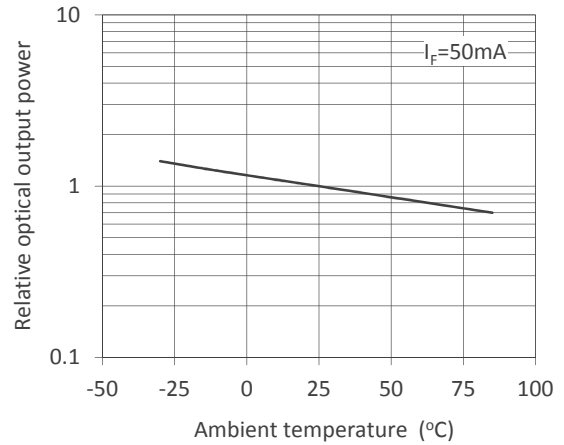
Optical Output Power - Forward Current



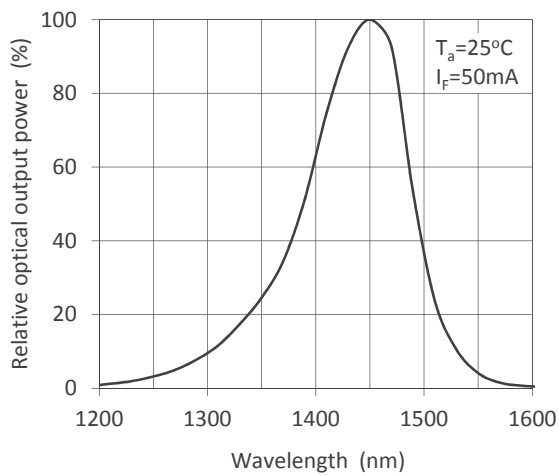
Forward Current - Forward Voltage



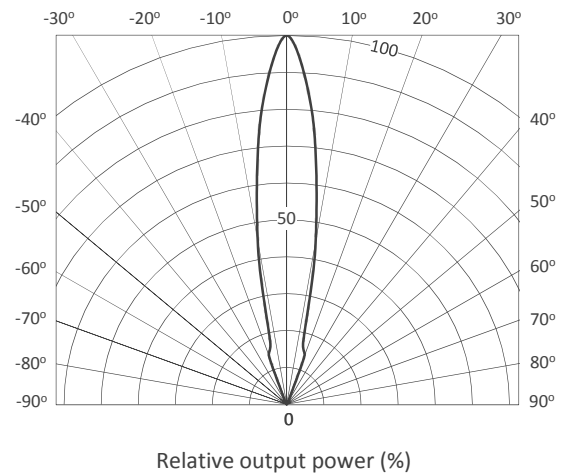
Relative Optical Output Power - Ambient Temperature



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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