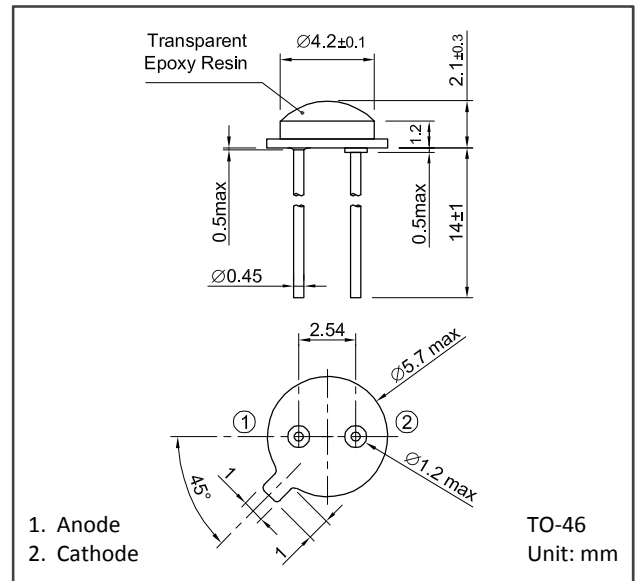


**Features**

- 50 $\mu$ m emitting area
- Transparent epoxy potting

**Applications**

- High speed optical sensors
- Optical encoders

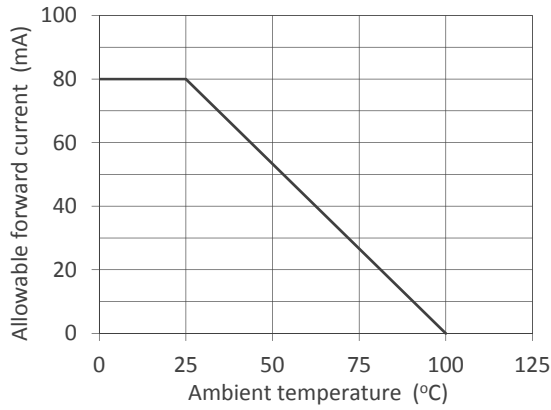
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Forward current	$I_F$	80	mA	$T_a=25^\circ\text{C}$
Reverse voltage	$V_R$	3	V	
Operating temperature	$T_{opr}$	-20 to +100	$^\circ\text{C}$	Avoid dew condensation
Storage temperature	$T_{stg}$	-30 to +100	$^\circ\text{C}$	Avoid dew condensation

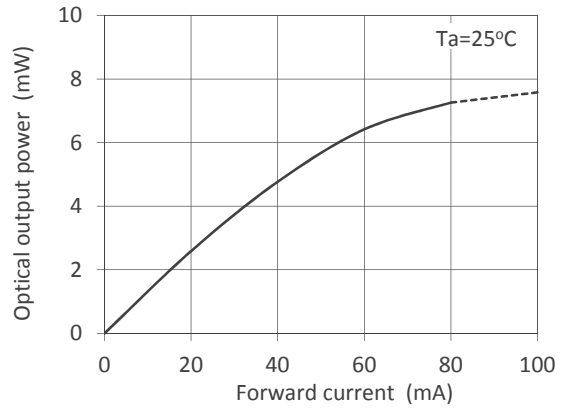
**Electrical and Optical Characteristics** ( $T_a=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward voltage	$V_F$	-	1.9	2.4	V	$I_F=50\text{mA}$
Reverse current	$I_R$	-	-	10	$\mu\text{A}$	$V_R=3\text{V}$
Optical output power	$P_O$	-	5	-	mW	$I_F=50\text{mA}$
Peak emission wavelength	$\lambda_p$	-	850	-	nm	$I_F=50\text{mA}$
Cutoff frequency	$f_C$	-	32	-	MHz	$I_F=50\text{mA}$

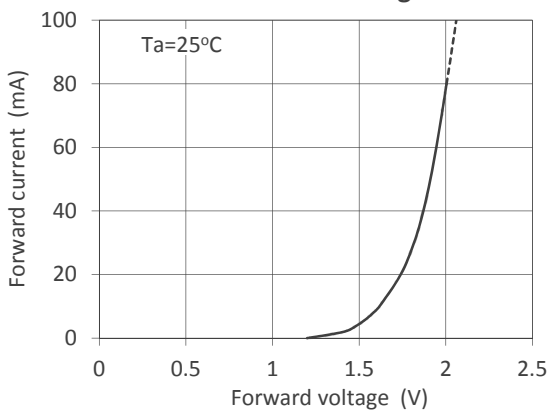
Allowable Forward Current-Ambient Temperature



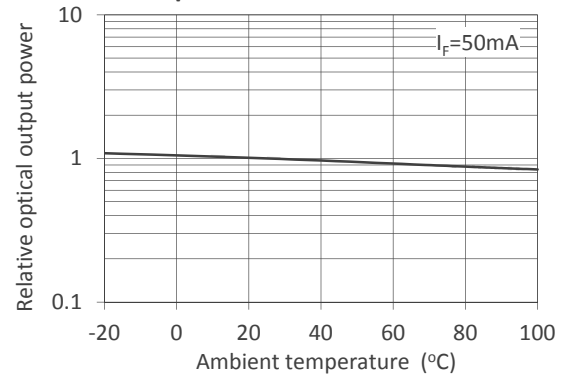
Optical Output Power - Forward Current



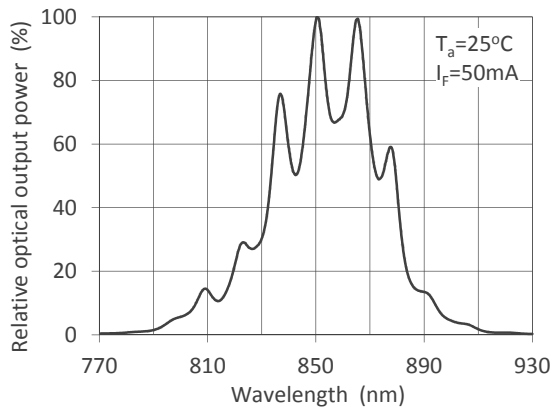
Forward Current - Forward Voltage



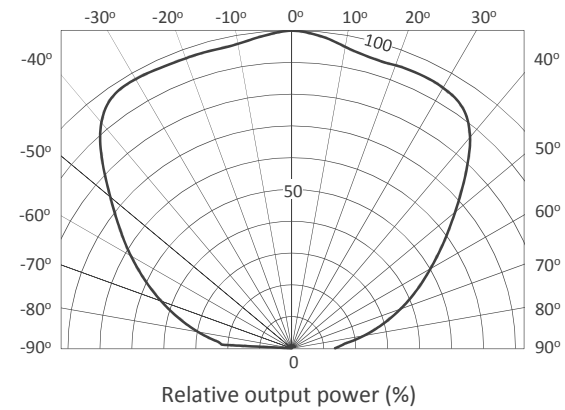
Relative Optical Output Power - Ambient Temperature



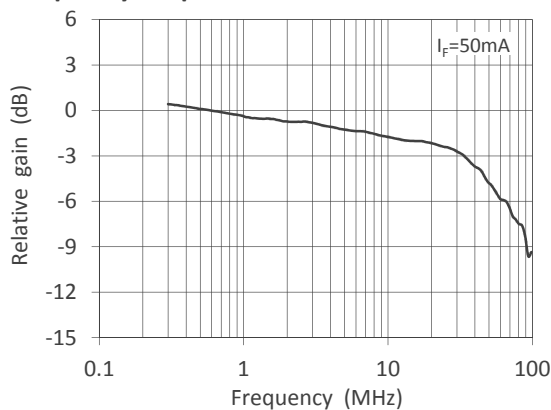
Spectral Distribution



Directivity



Frequency Response



- 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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