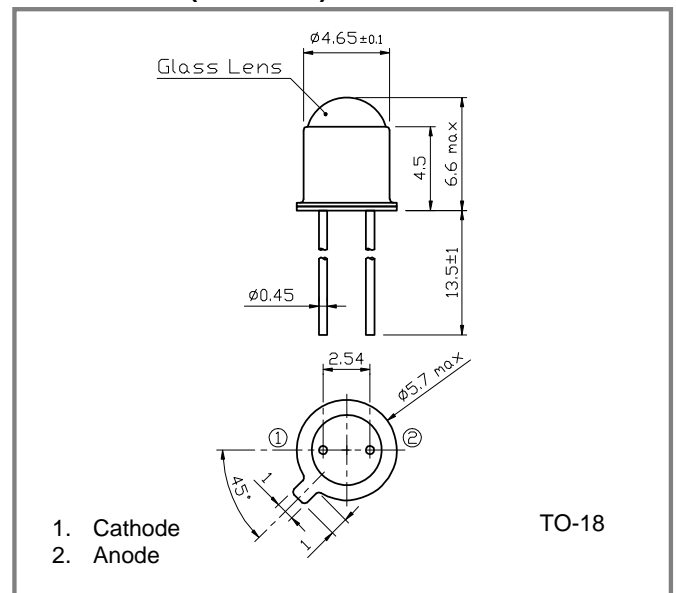


**Features**

- High output power
- Sharp directivity with a glass lens
- Highly reliable hermetic seal
- Direct modulation

**Applications**

- Optical switches
- Optical encoders
- Optical instruments
- Automatic control apparatus
- Smoke sensors
- Photo-isolators

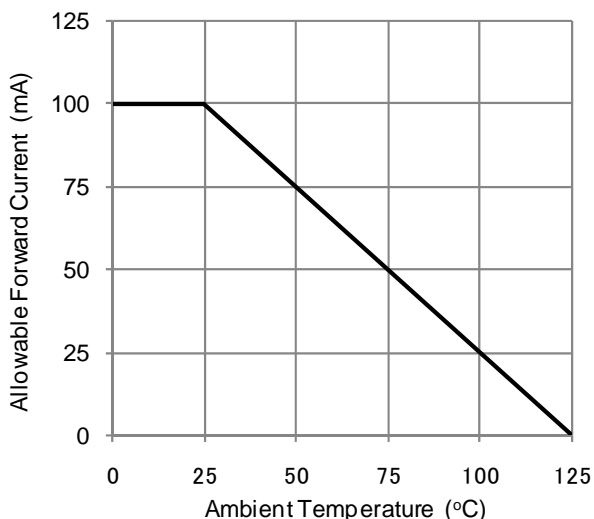
**Dimensions (unit: mm)****Absolute Maximum Ratings**

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	$V_R$	6	V	
Power dissipation	$P_D$	200	mW	
Operating temperature	$T_{opr}$	-40 to +125	$^\circ\text{C}$	Avoid dew condensation
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$	Avoid dew condensation

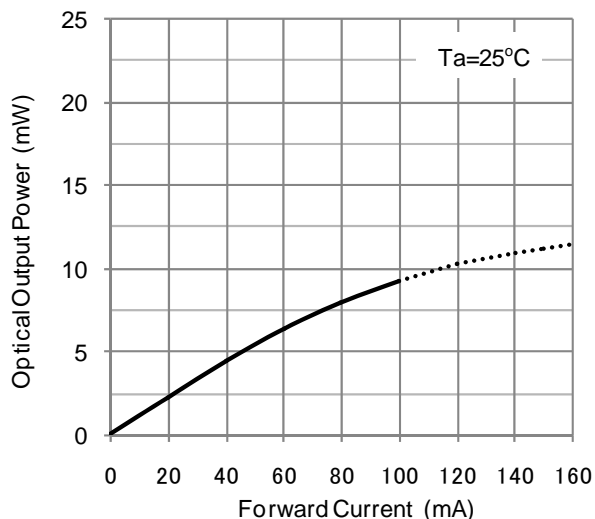
**Electrical and Optical Characteristics ( $T_a=25^\circ\text{C}$  unless otherwise noted)**

Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Forward voltage	$V_F$	-	1.5	1.7	V	$I_F=100\text{mA}$
Reverse current	$I_R$	-	-	10	$\mu\text{A}$	$V_R=6\text{V}$
Optical output power	$P_o$	-	9.0	-	mW	$I_F=100\text{mA}$
Peak emission wavelength	$\lambda_P$	-	890	-	nm	$I_F=100\text{mA}$
Spectral bandwidth at 50%	$\Delta\lambda$	-	50	-	nm	$I_F=100\text{mA}$

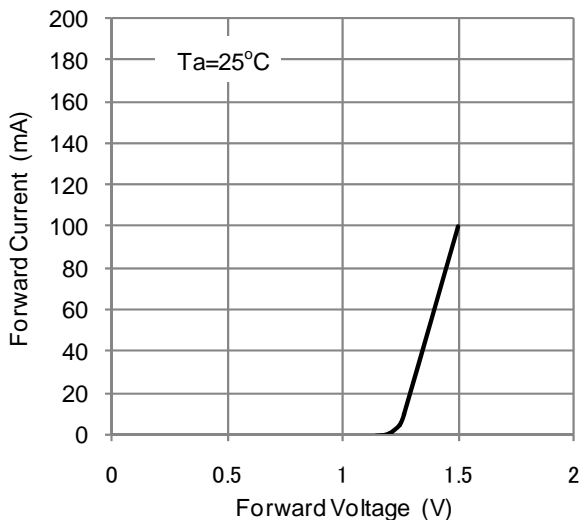
**Allowable Forward Current - Ambient Temperature**



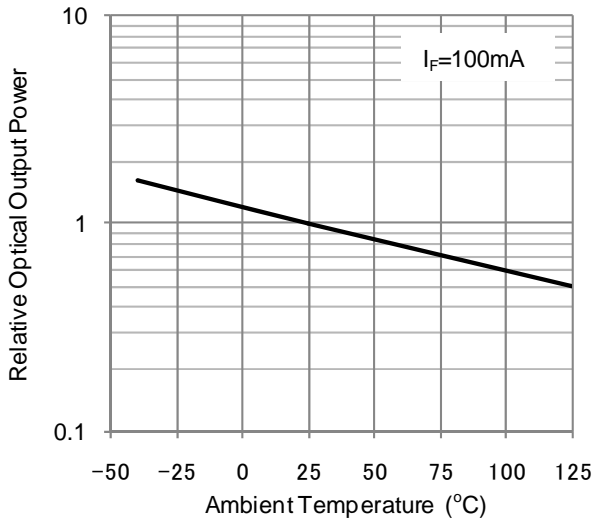
**Optical Output Power - Forward Current**



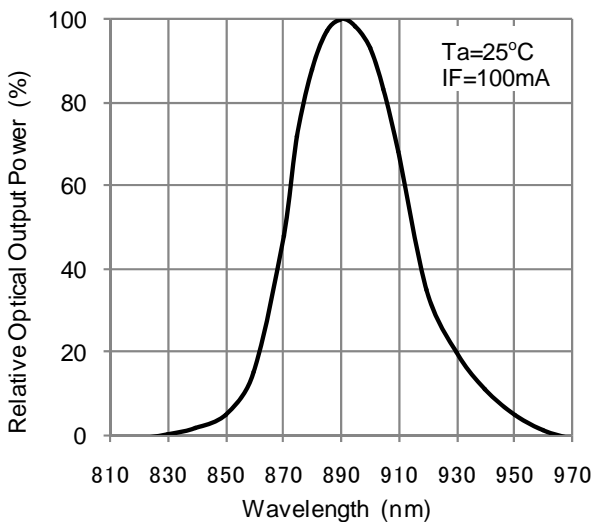
**Forward Current - Forward Voltage**



**Relative Optical Output Power - Ambient Temperature**



**Spectral Distribution**



**Directivity**

