

Infrared LEDs

KED601H

Characteristics

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

Applications

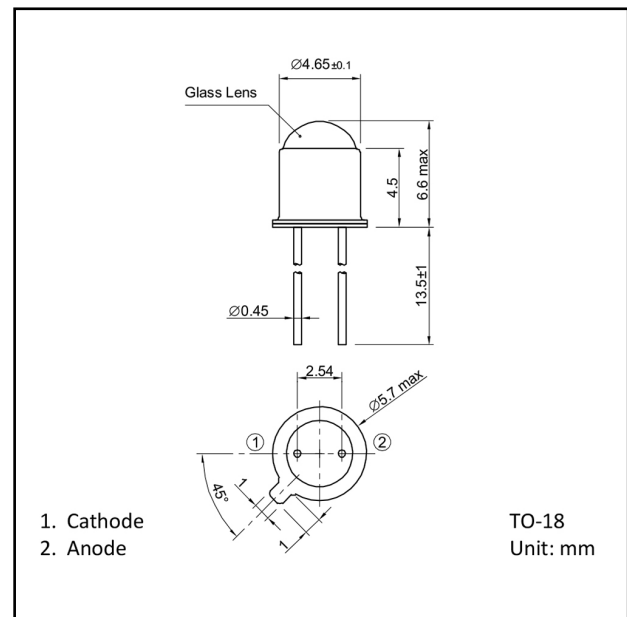
- Optical switches
- Optical encoders
- Optical instruments
- Automating control apparatus
- Smoke sensors
- Photo-isolators

Chip Material

- GaAlAs

Package

- TO-CAN



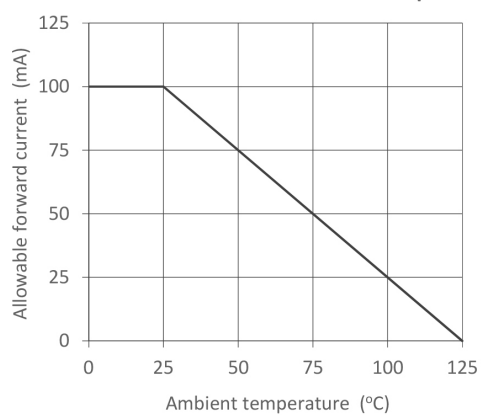
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	6	V	-
Forward current	I_F	100	mA	$T_a=25$
Peak forward current	I_{FP}	1.0	A	Pulse width=100 μ s Duty ratio=0.1%
Power dissipation	P_D	200	mW	-
Operating temperature	T_{opr}	-40 to +125		Avoid dew condensation
Storage temperature	T_{stg}	-55 to +125		Avoid dew condensation

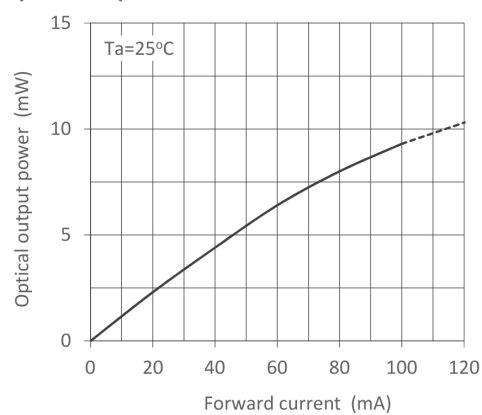
Electrical and Optical characteristics ($T_a=25$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	I_R	-	-	10	μ A	$V_R=6V$
Forward voltage	V_F	-	1.5	1.7	V	$I_F=100mA$
Optical output power	P_O	-	9.0	-	mW	$I_F=100mA$
Peak wavelength	λ_p	-	890	-	nm	$I_F=100mA$
Spectral width		-	50	-	nm	$I_F=100mA$
Half angle	2θ	-	14	-	deg.	$I_F=100mA$

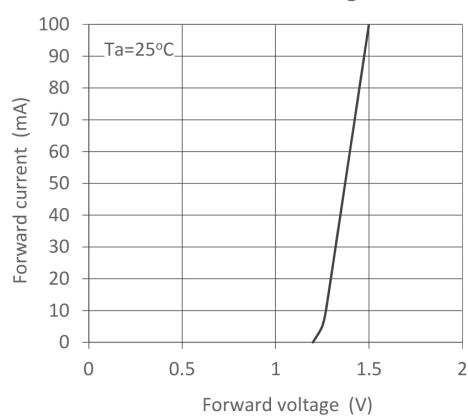
Allowable Forward Current-Ambient Temperature



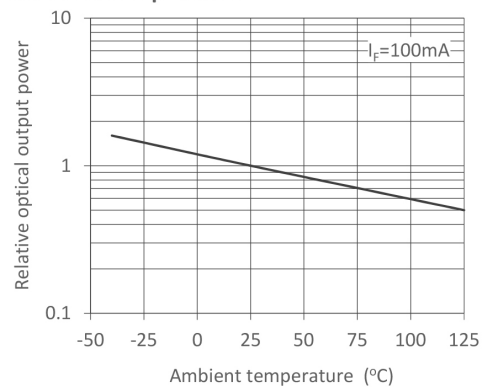
Optical Output Power - Forward Current



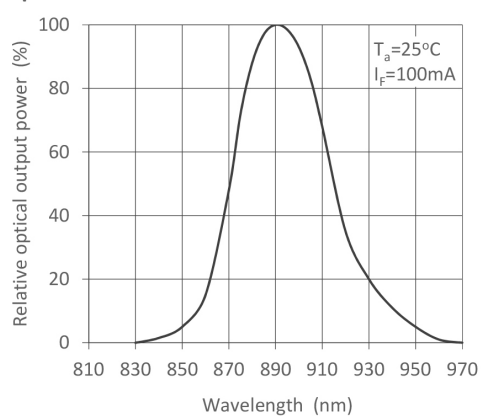
Forward Current - Forward Voltage



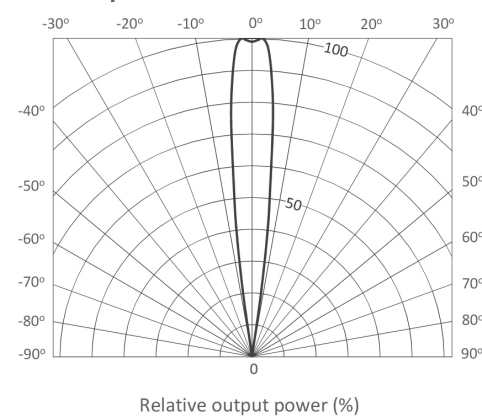
Relative Optical Output Power - Ambient Temperature



Spectral Distribution



Directivity



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