

# Plastic Mold Infrared LEDs KEDE1301M51

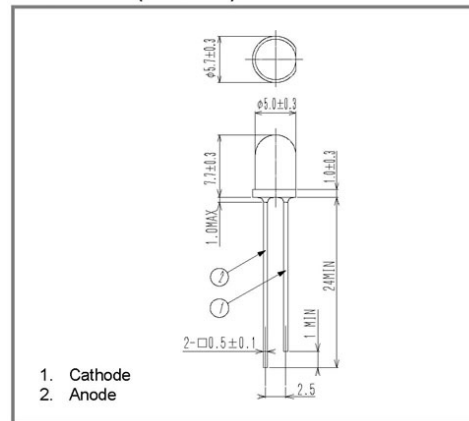
## Features

- High output power
- Sharp directivity
- Direct modulation

## Applications

- Optical switches
- Optical instruments

Dimensions (unit: mm)



## Specifications

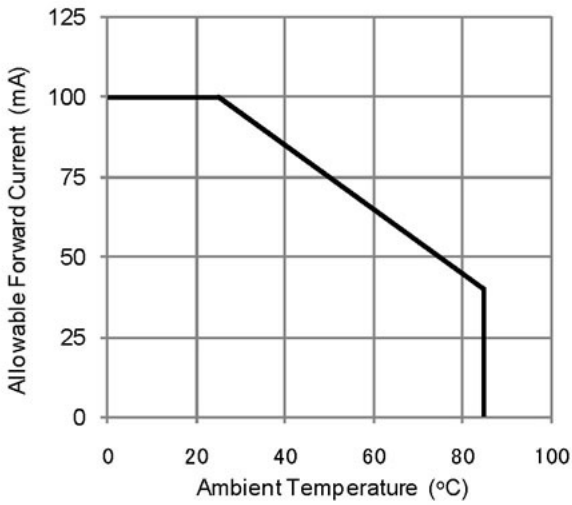
### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	$I_F$	100	mA	
Peak forward current	$I_{FP}$	1	A	Puls width=100 $\mu$ s, Duty ratio=1%
Reverse voltage	$V_R$	3	V	
Power dissipation	$P_D$	130	mW	
Operating temperature	$T_{opr}$	-30 to +85		Avoid dew condensation
Storage temperature	$T_{stg}$	-30 to +100		Avoid dew condensation

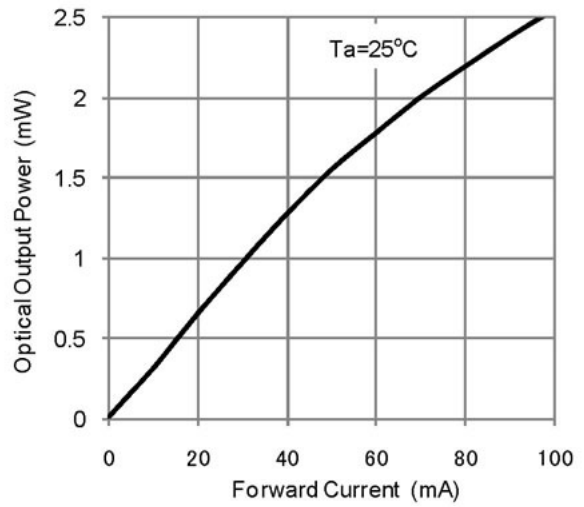
### Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	$V_F$		0.9	1.3	V	$I_F=50\text{mA}$
Reverse Current	$I_R$			10	$\mu\text{A}$	$V_R=1\text{V}$
Optical output power	$P_O$		2.2		mW	$I_F=50\text{mA}$
Peak wavelength	$\rho$		1300	1350	nm	$I_F=50\text{mA}$
Spectral width			100		nm	$I_F=50\text{mA}$
Half angle	2		40		deg	$I_F=50\text{mA}$

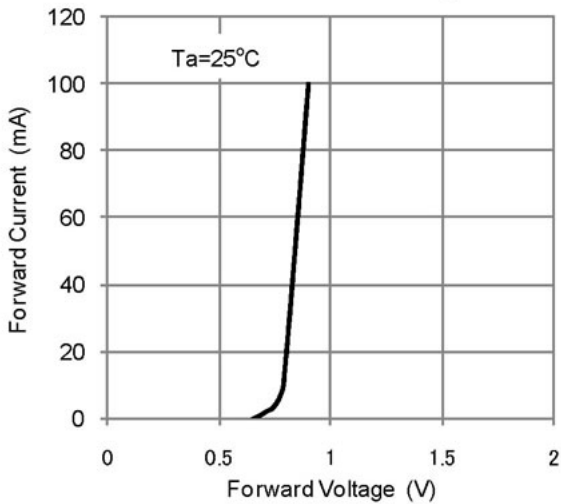
**Allowable Forward Current - Ambient Temperature**



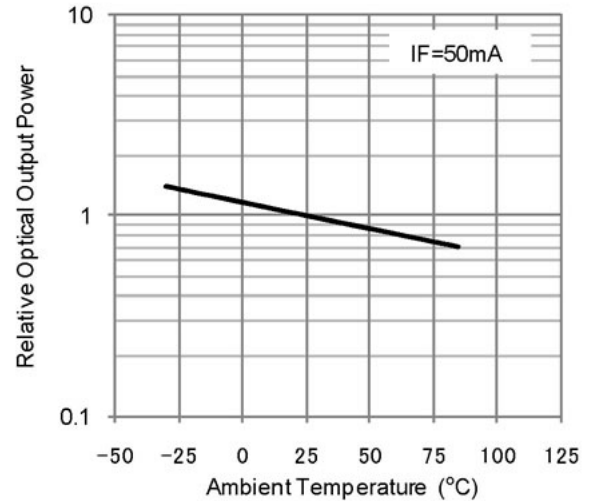
**Optical Output Power - Forward Current**



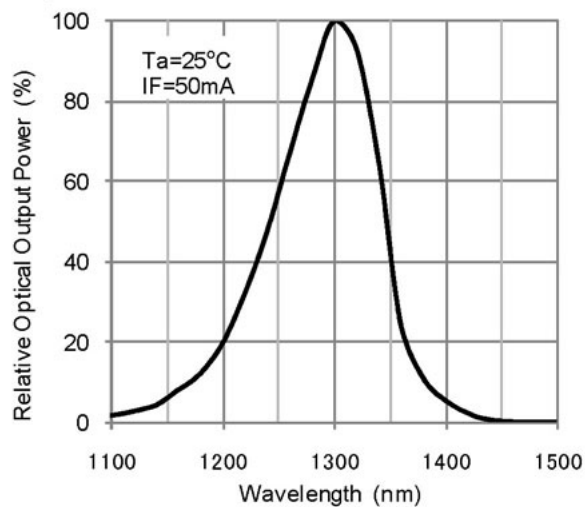
**Forward Current - Forward Voltage**



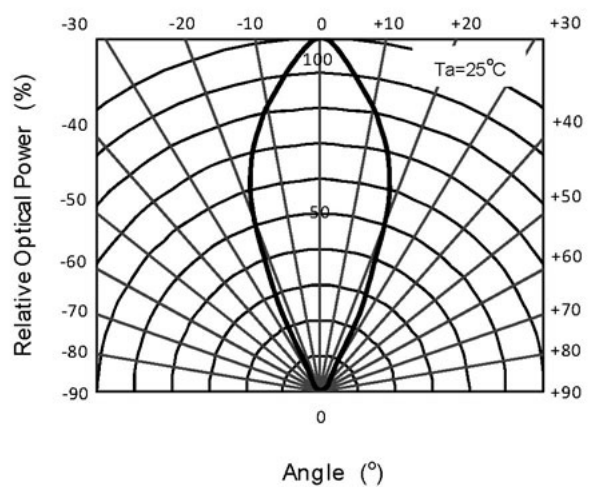
**Relative Optical Output Power - Ambient Temperature**



**Spectral Distribution**



**Directivity**



Specifications are subject to change without notice.