

# Plastic Mold Visible LEDs KED591M31A

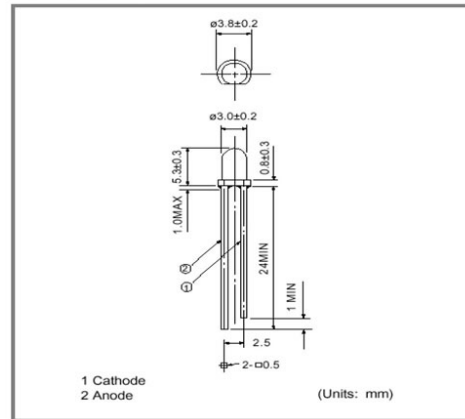
## Features

- Transparent epoxy mold
- Direct modulation

## Applications

- Optical switches
- Optical instruments
- Automatic control apparatus

Dimensions



## Specifications

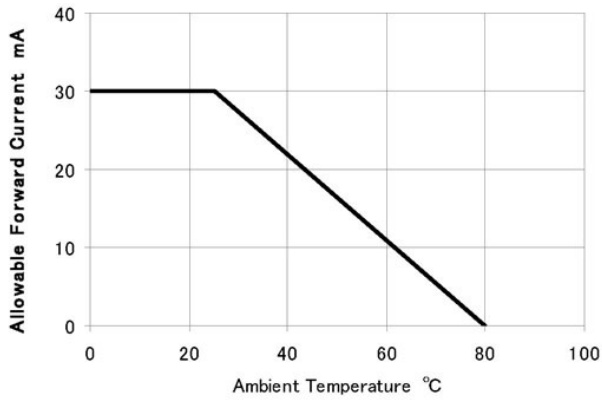
### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	$I_F$	30	mA	$T_a=25$
Peak forward current	$I_{FP}$	0.3	A	Puls width=100 $\mu$ s, Duty ratio=1%
Reverse voltage	$V_R$	5	V	
Power dissipation	$P_D$	120	mW	
Operating temperature	$T_{opr}$	-20 to +80		Avoid dew condensation
Storage temperature	$T_{stg}$	-20 to +100		Avoid dew condensation

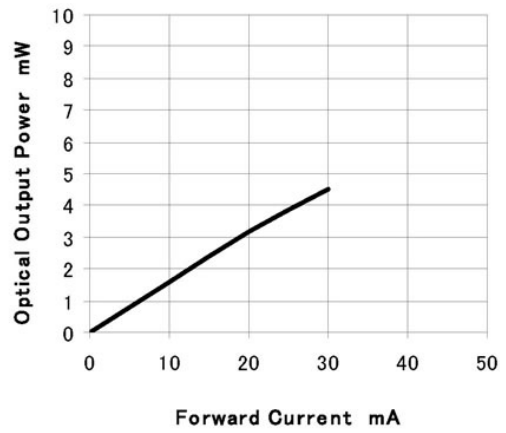
### Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	$V_F$		2.2	2.5	V	$I_F=20\text{mA}$
Reverse Current	$I_R$			10	$\mu$ A	$V_R=5\text{V}$
Luminous Intensity $I_v$	$L_V$		1800		mcd	$I_F=20\text{mA}$
Optical output power	$P_O$		3.2		mW	$I_F=20\text{mA}$
Peak wavelength	$\lambda_p$		590		nm	$I_F=20\text{mA}$
Spectral width			15		nm	$I_F=20\text{mA}$
Half angle	$2\theta$		44		deg	$I_F=20\text{mA}$

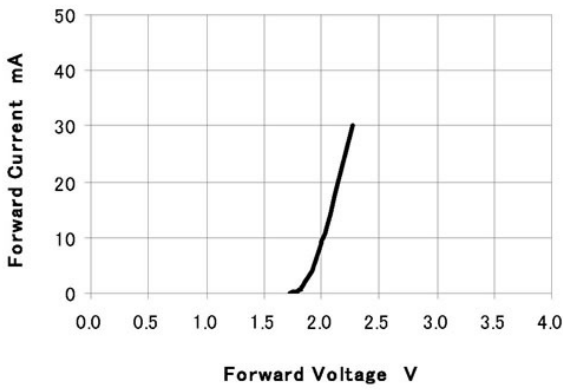
**Allowable Forward Current – Ambient temperature**



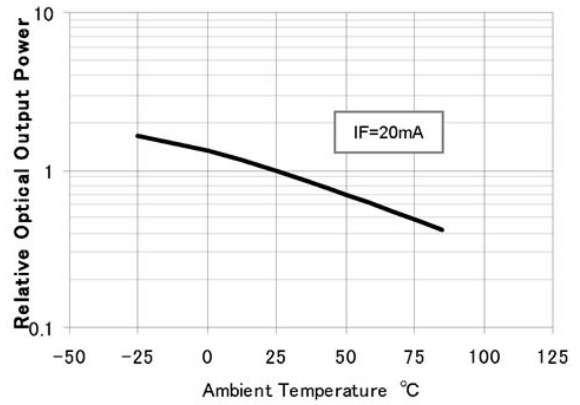
**Optical Output Power – Forward Current (Ta=25°C)**



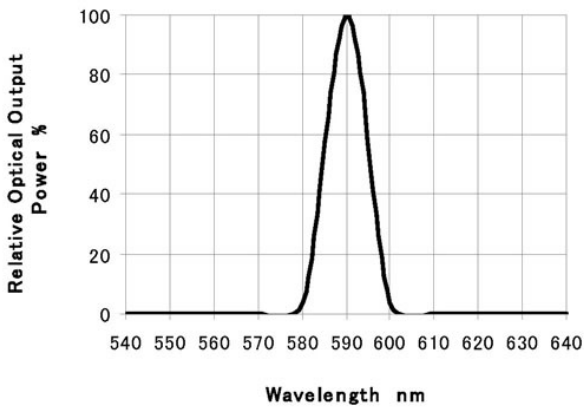
**Forward Current – Forward Voltage (Ta=25°C)**



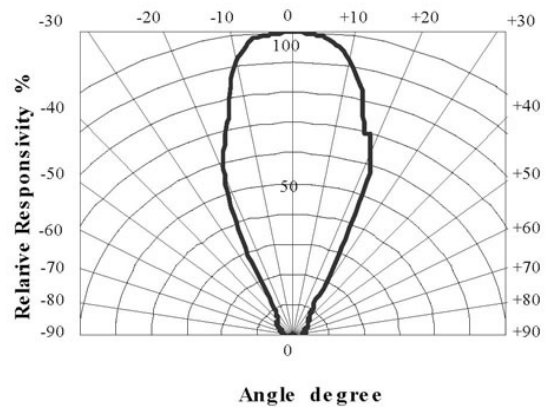
**Relative Optical Output Power – Ambient Temperature**



**Spectral Distribution (Ta=25°C, IF=20mA)**



**Directivity (Ta=25°C)**



Specifications are subject to change without notice.