

Plastic Mold Visible LEDs KED591M31A

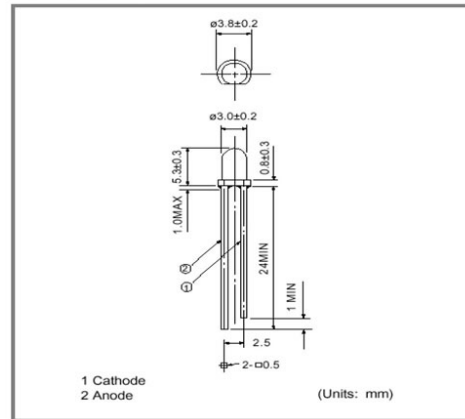
Features

- Transparent epoxy mold
- Direct modulation

Applications

- Optical switches
- Optical instruments
- Automatic control apparatus

Dimensions



Specifications

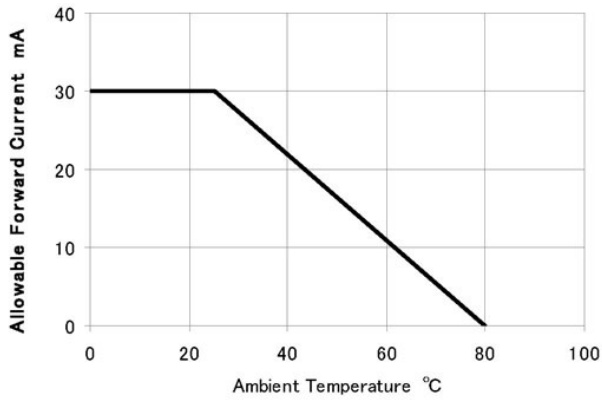
Absolute Maximum Ratings

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 μ 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

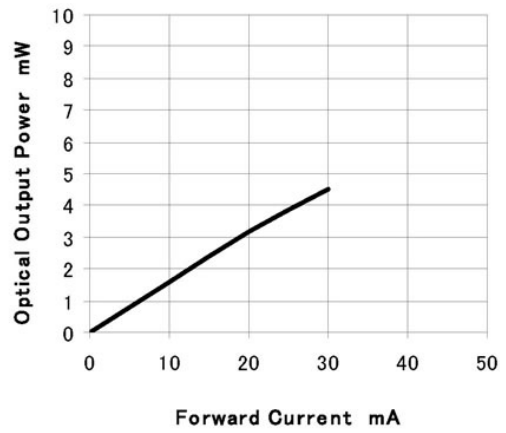
Electrical and Optical characteristics

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	μ 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	λ		590		nm	$I_F=20\text{mA}$
Spectral width			15		nm	$I_F=20\text{mA}$
Half angle	2		44		deg	$I_F=20\text{mA}$

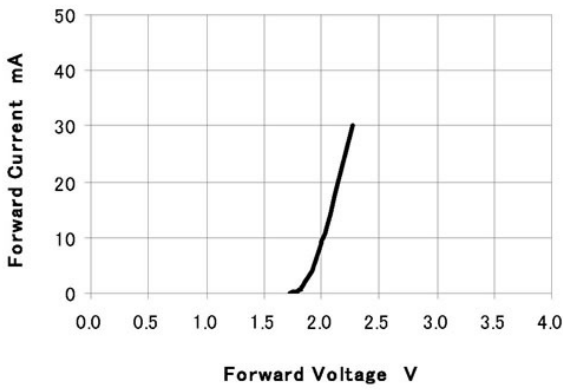
Allowable Forward Current – Ambient temperature



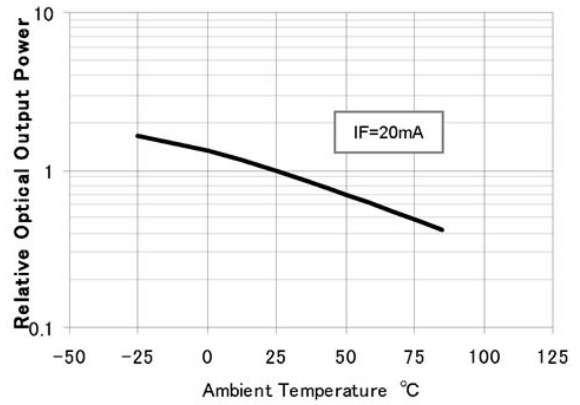
Optical Output Power – Forward Current (Ta=25°C)



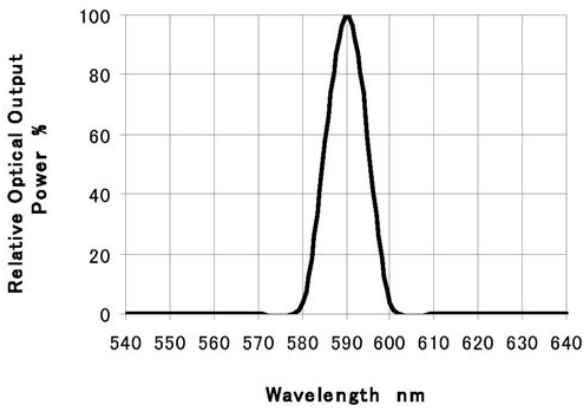
Forward Current – Forward Voltage (Ta=25°C)



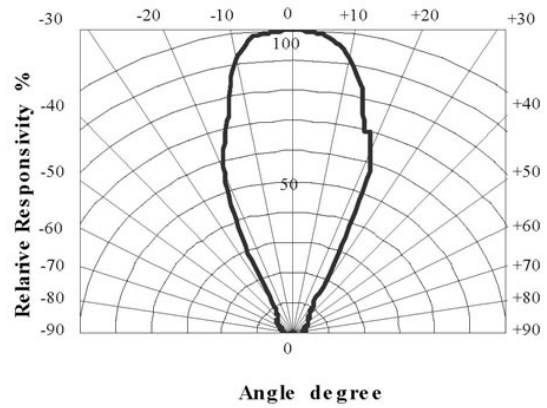
Relative Optical Output Power – Ambient Temperature



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



Directivity (Ta=25°C)



Specifications are subject to change without notice.