

## Plastic Mold Infrared LEDs

### KED871M31B

#### Characteristics

- Transparent epoxy mold
- Direct modulation

#### Applications

- Optical switches
- Optical instruments
- Automatic control apparatus

#### Chip Material

- GaAlAs

#### Package

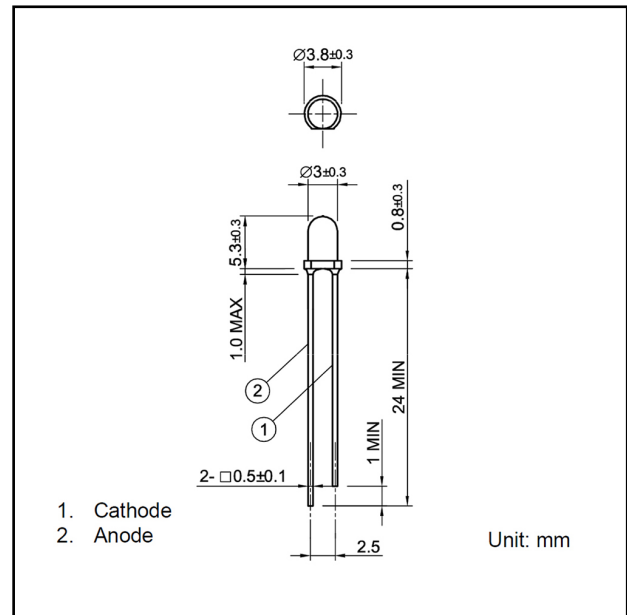
- MOLD

#### Diameter

- 3mm

#### Resin Type

- clear



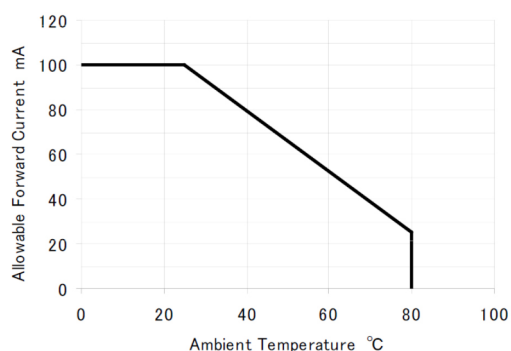
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	$V_R$	4	V	-
Forward current	$I_F$	100	mA	-
Peak forward current	$I_{FP}$	1	A	Pulse width=100 $\mu$ s Duty ratio=1%
Power dissipation	$P_D$	150	mW	-
Operating temperature	$T_{opr}$	-20 to +80		Avoid dew condensation
Storage temperature	$T_{stg}$	-30 to +100		Avoid dew condensation

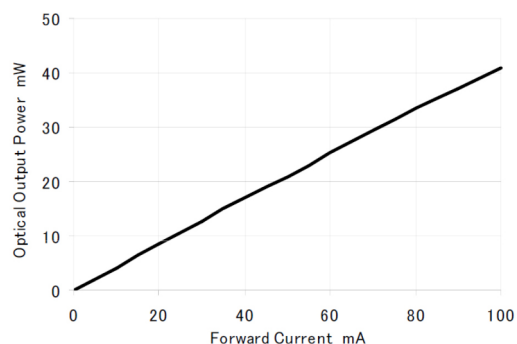
Electrical and Optical characteristics (T<sub>a</sub>=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	$I_R$	-	-	10	$\mu$ A	$V_R=4V$
Forward voltage	$V_F$	-	1.4	1.7	V	$I_F=50mA$
Optical output power	$P_O$	-	21	-	mW	$I_F=50mA$
Peak wavelength	$\lambda_p$	-	870	-	nm	$I_F=50mA$
Spectral width		-	45	-	nm	$I_F=50mA$
Half angle	2	-	29	-	deg.	$I_F=50mA$

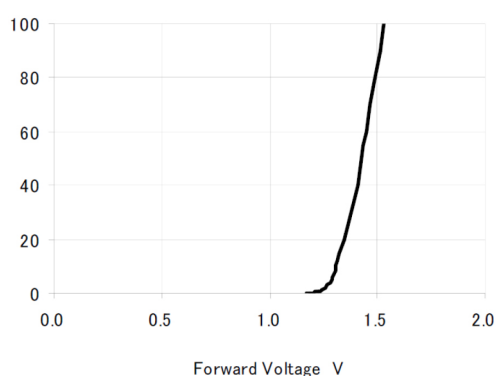
Allowable Forward Current – Ambient temperature



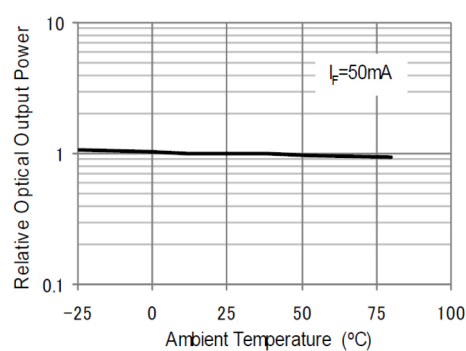
Optical Output Power – Forward Current (Ta=25°C)



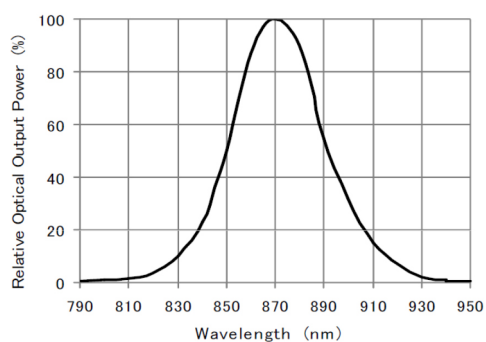
Forward Current – Forward Voltage (Ta=25°C)



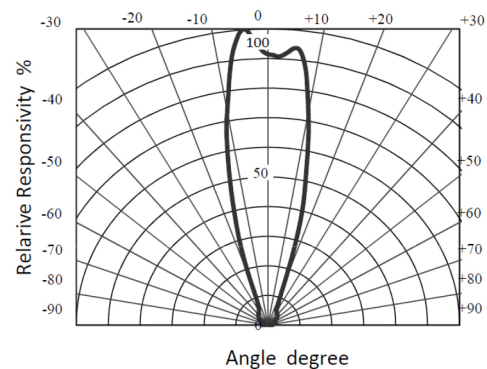
Relative Optical Output Power – Ambient Temperature



Spectral Distribution (Ta=25°C, If=50mA)



Directivity (Ta=25°C)



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## Dexerials Corporation

1724 Shimotsuboyama, Shimotsuke-shi, Tochigi 323-0194, Japan

TEL: +81-285-39-7950 <https://www.dexerials.jp/en/>