

### Plastic Mold Infrared LEDs

# KED861M31

#### Characteristics

- Transparent epoxy mold
- High power:22mW
- High speed response:25ns rise time
- Direct modulation

#### **Applications**

- Available for wireless digital transmission
- Optical switches
- Optical encoders
- Optical instruments
- Automatic control apparatus

### Chip Material

• GaAlAs

### Package

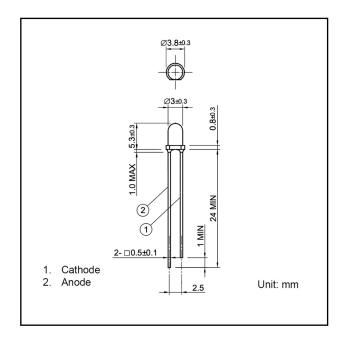
• MOLD

#### Diameter

• 3mm

### Resin Type

• clear





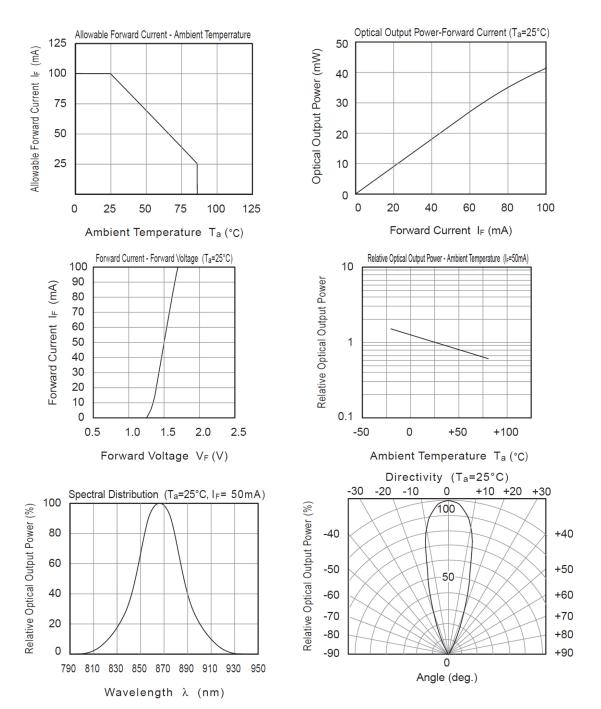
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V <sub>R</sub>	5	V	-
Forward current	I <sub>F</sub>	100	mA	-
Peak forward current	I <sub>FP</sub>	1	A	Pulse width=100µs Duty ratio=1%
Power dissipation	P <sub>D</sub>	150	mW	-
Operating temperature	T <sub>opr</sub>	-30 to +85		Avoid dew condensation
Storage temperature	T <sub>stg</sub>	-30 to +100		Avoid dew condensation
Soldering temperature	T <sub>sol</sub>	260		Soldering time less than 5 seconds

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

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Reverse Current	I <sub>R</sub>	-	-	10	μA	V <sub>R</sub> =5V
Forward voltage	V <sub>F</sub>	-	1.5	1.8	V	I <sub>F</sub> =50mA
Optical output power	P <sub>O</sub>	1	22	-	mW	I <sub>F</sub> =50mA
Peak wavelength		_	865	-	nm	I <sub>F</sub> =50mA
reak wavelength	р	-	803			
Spectral width		-	40	-	nm	I <sub>F</sub> =50mA
Half angle	2	-	30	-	deg.	I <sub>F</sub> =50mA
Rise time	tr	-	25	-	ns	I <sub>F</sub> =50mA
Fall time	tf	-	15	•	ns	I <sub>F</sub> =50mA







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