

## Plastic Mold Visible LEDs

### KED641M51

#### Characteristics

- Transparent epoxy mold
- Direct modulation

#### Applications

- Optical switches
- Optical instruments
- Automatic control apparatus

#### Emitting Color

- Red

#### Chip Material

- GaAlAs

#### Package

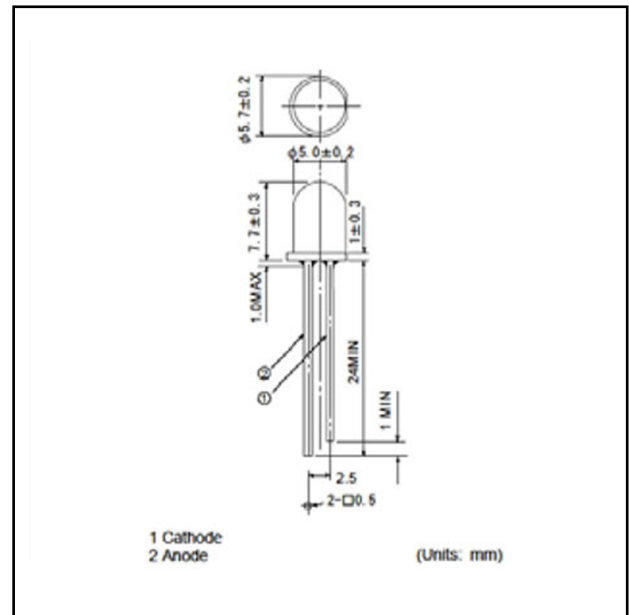
- MOLD

#### Diameter

- 5mm

#### Resin Type

- clear



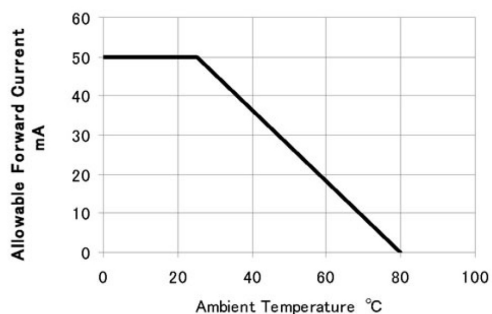
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	$V_R$	5	V	-
Forward current	$I_F$	50	mA	$T_a=25$
Peak forward current	$I_{FP}$	0.5	A	Pulse width=100 $\mu$ s Duty ratio=1%
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

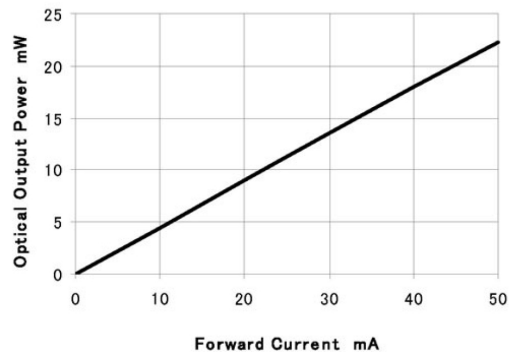
Electrical and Optical characteristics ( $T_a=25$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	$I_R$	-	-	10	$\mu$ A	$V_R=5V$
Forward voltage	$V_F$	-	2.2	2.5	V	$I_F=20mA$
Luminous Intensity	$I_v$	-	1700	-	mcd	$I_F=20mA$
Optical output power	$P_O$	-	9.0	-	mW	$I_F=20mA$
Peak wavelength	$\lambda_p$	-	635	-	nm	$I_F=20mA$
Spectral width		-	15	-	nm	$I_F=20mA$
Half angle	2	-	34	-	deg.	$I_F=20mA$

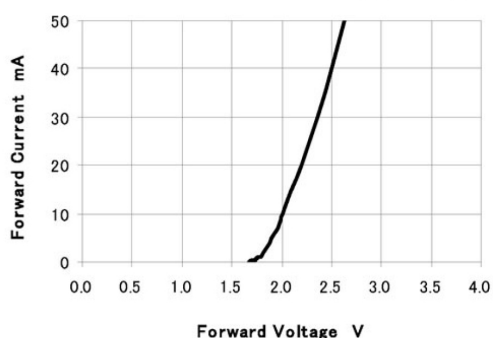
Allowable Forward Current – Ambient temperature



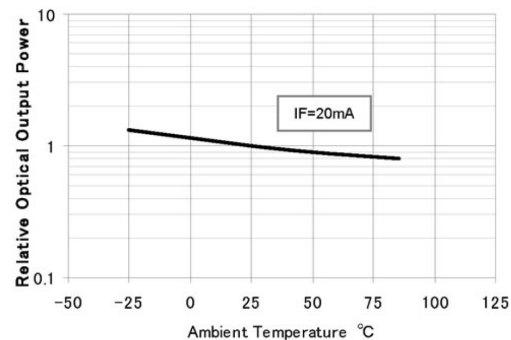
Optical Output Power – Forward Current (Ta=25°C)



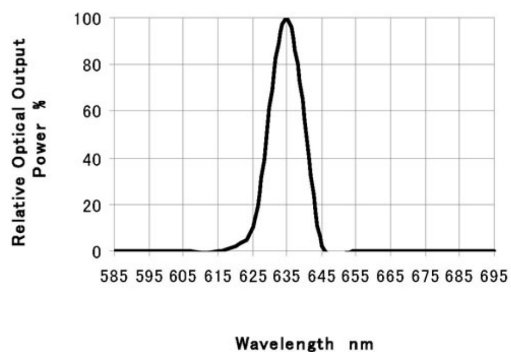
Forward Current – Forward Voltage (Ta=25°C)



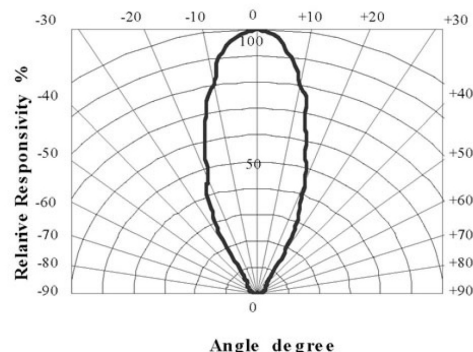
Relative Optical Output Power – Ambient Temperature



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



Directivity (Ta=25°C)



Specifications are subject to change without notice.

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