Plastic Mold Infrared LEDs

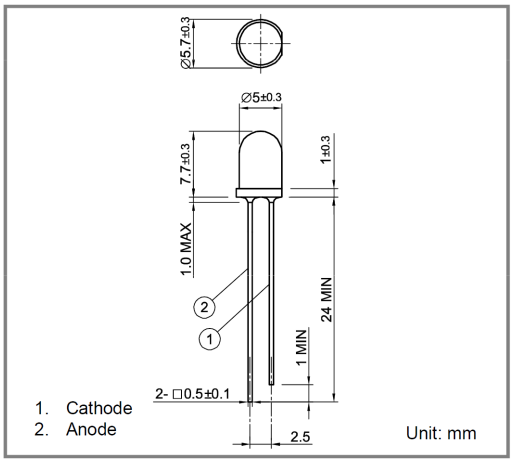
KED941M51B

Features

- Transparent epoxy mold
- Direct modulation

Applications

- Optical switches
- Optical instruments
- Automatic control apparatus



Specifications

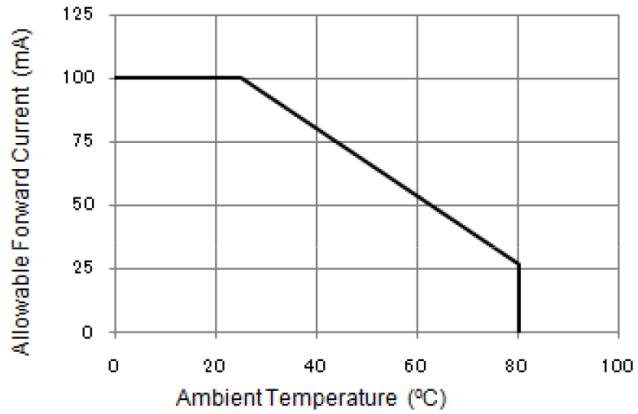
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	I_F	100	mA	
Peak forward current	I_{FP}	1	A	Puls width=100μs, Duty ratio=1%
Reverse voltage	V_R	6	V	
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
Soldering temperature	T_{sol}	260	℃	Soldering time less than 5 seconds

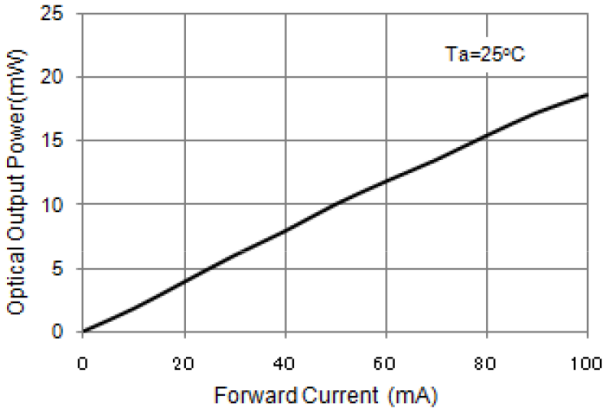
Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	V_F		1.3	1.6	V	I_F=50mA
Reverse Current	I_R			10	μA	V_R=6V
Optical output power	P_O		10		mW	I_F=50mA
Peak wavelength	λp		940		nm	I_F=50mA
Spectral width	Δλ		50		nm	I_F=50mA
Half angle	2θ		28		deg	I_F=50mA

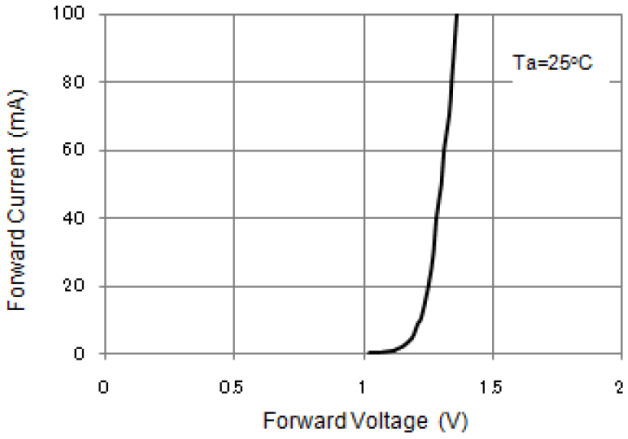
Allowable Forward Current – Ambient temperature



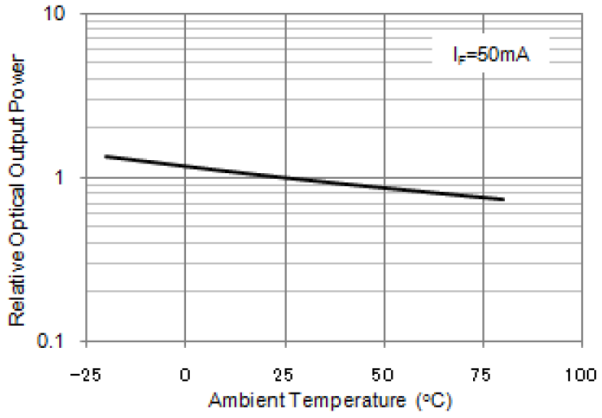
Optical Output Power – Forward Current



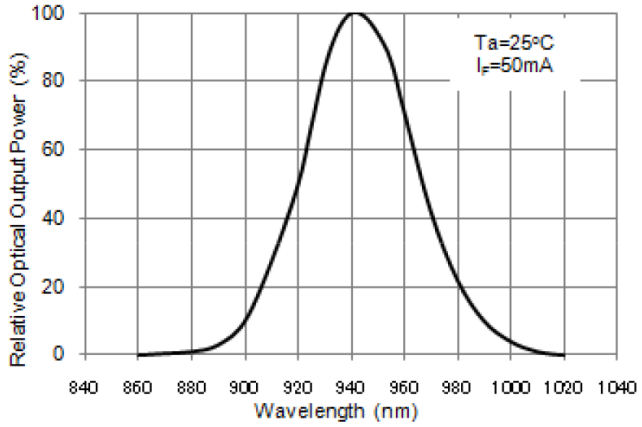
Forward Current – Forward Voltage



Relative Optical Output Power – Ambient Temperature



Spectral Distribution



Directivity