

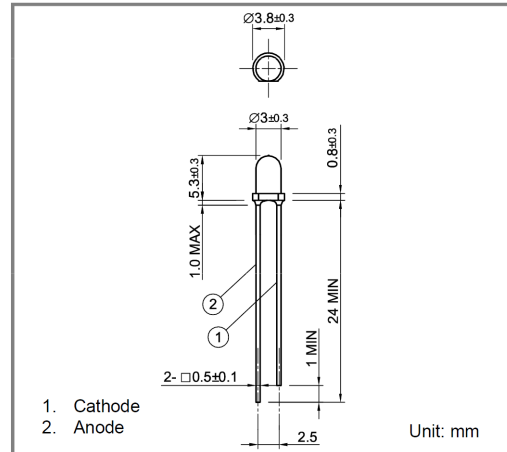
Plastic Mold Infrared LEDs KED871M31B

Features

- Transparent epoxy mold
- Direct modulation

Applications

- Optical switches
- Optical instruments
- Automatic control apparatus



Specifications

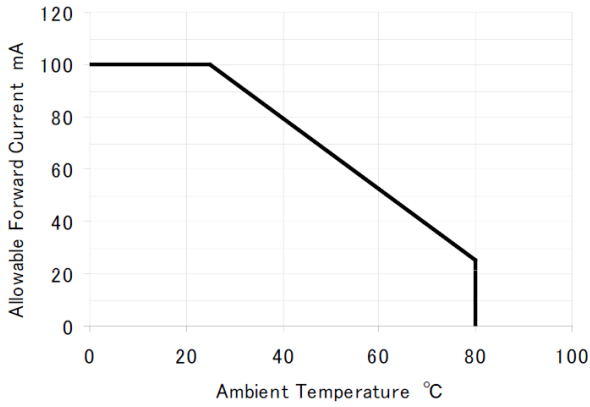
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	I_F	100	mA	
Peak forward current	I_{FP}	1	A	Puls width=100 μ s, Duty ratio=1%
Reverse voltage	V_R	4	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

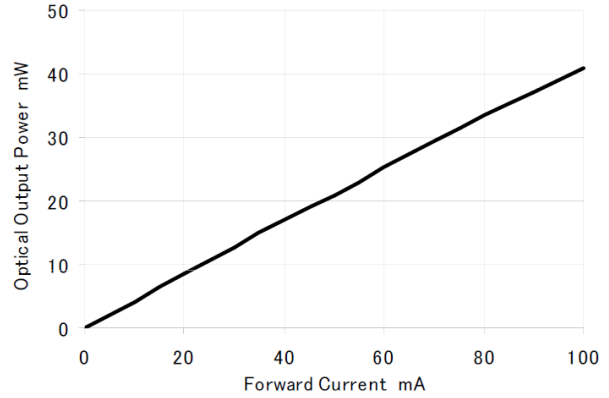
Electrical and Optical characteristics

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

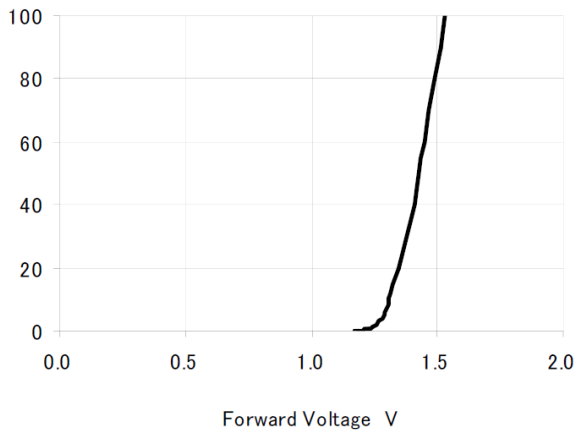
Allowable Forward Current – Ambient temperature



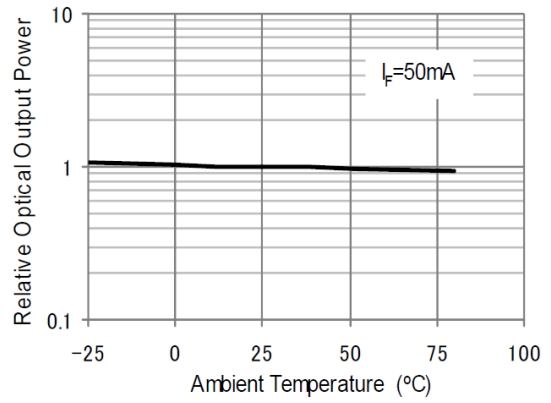
Optical Output Power – Forward Current (Ta=25°C)



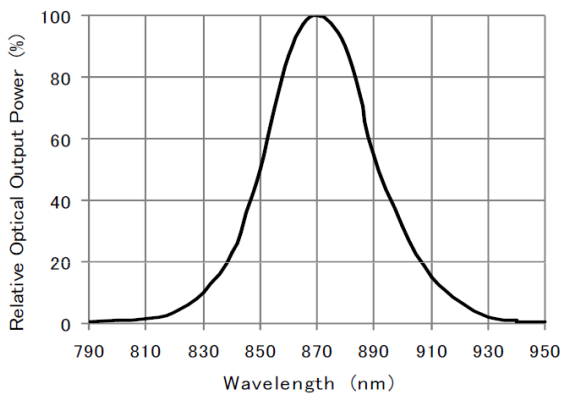
Forward Current – Forward Voltage (Ta=25°C)



Relative Optical Output Power – Ambient Temperature



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



Directivity (Ta=25°C)

