

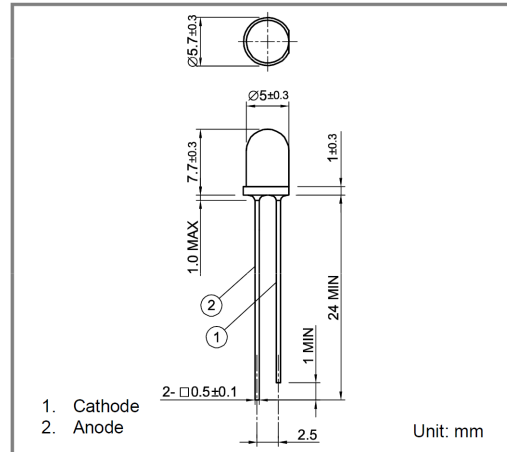
# Plastic Mold Infrared LEDs KED941M51C

## Features

- Transparent epoxy mold
- Direct modulation

## Applications

- Optical switches
- Optical instruments
- Automatic control apparatus



## Specifications

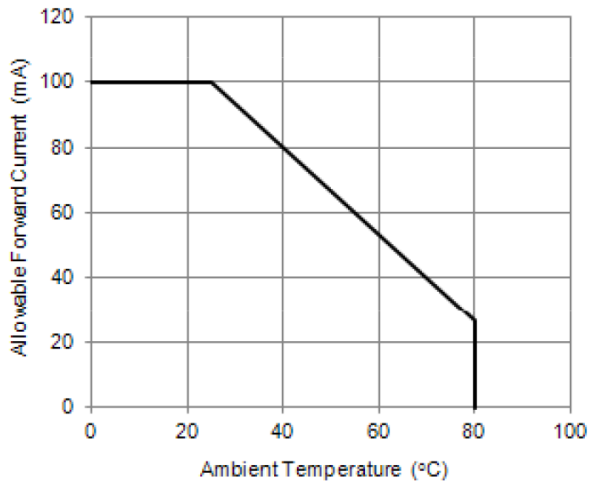
### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	$I_F$	100	mA	
Peak forward current	$I_{FP}$	1	A	Puls width=100 $\mu$ s, Duty ratio=1%
Reverse voltage	$V_R$	5	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

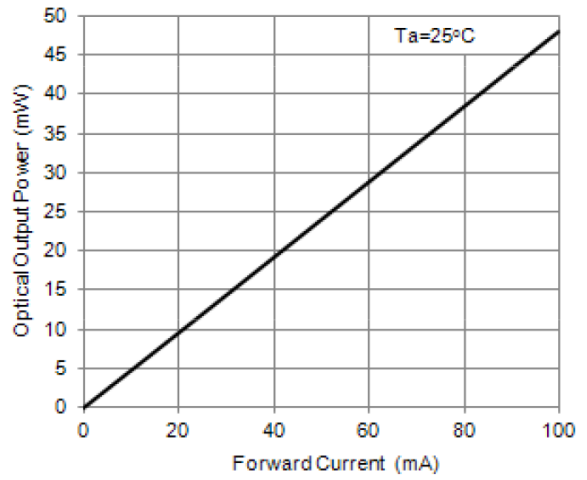
### Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	$V_F$		1.35	1.7	V	$I_F=50$ mA
Reverse Current	$I_R$			10	$\mu$ A	$V_R=5$ V
Optical output power	$P_O$		21		mW	$I_F=50$ mA
Peak wavelength	$\rho$		940		nm	$I_F=50$ mA
Spectral width			30		nm	$I_F=50$ mA
Half angle	2		20		deg	$I_F=50$ mA

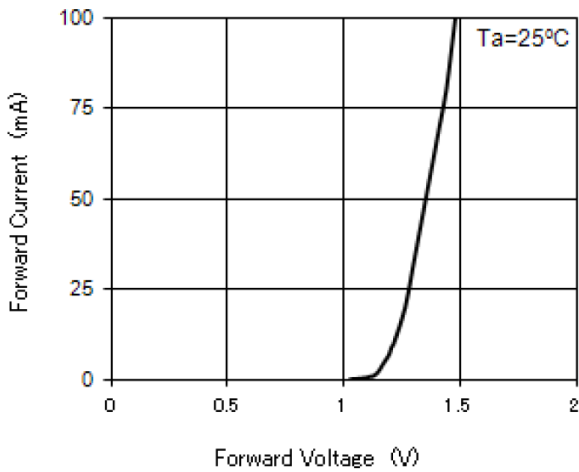
**Allowable Forward Current - Ambient Temperature**



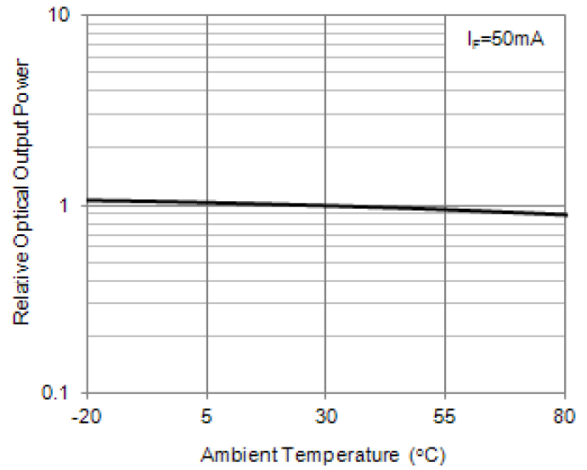
**Optical Output Power - Forward Current**



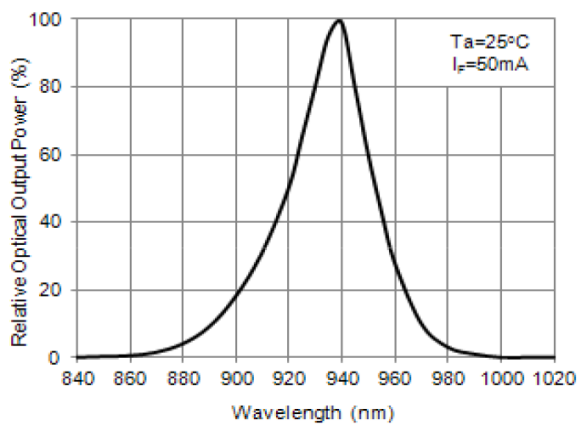
**Forward Current - Forward Voltage**



**Relative Optical Output Power - Ambient Temperature**



**Spectral Distribution**



**Directivity**

