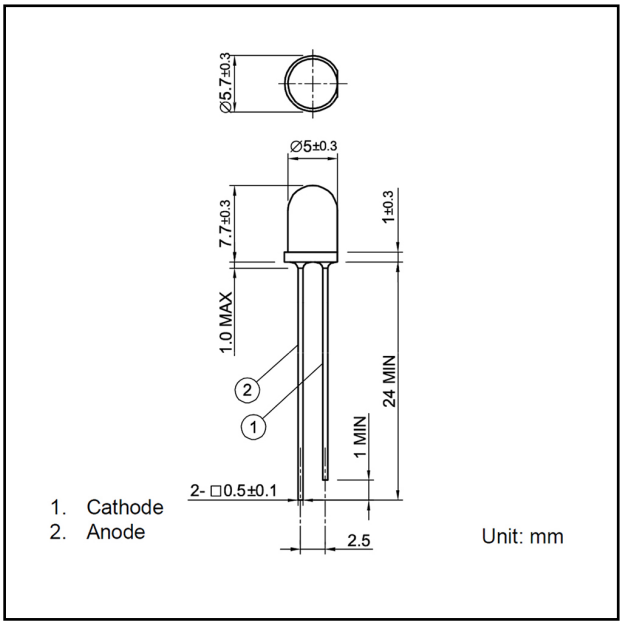
Plastic Mold Infrared LEDs

KED863M51



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

- ϕ5mm

Resin Type

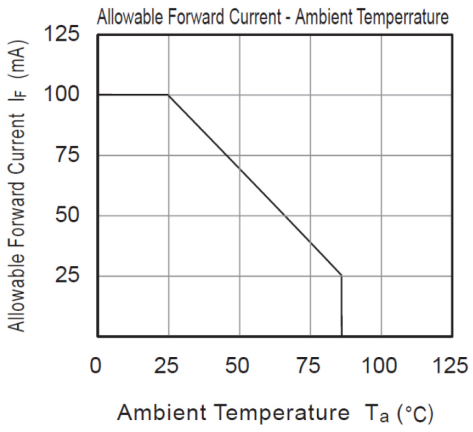
- clear

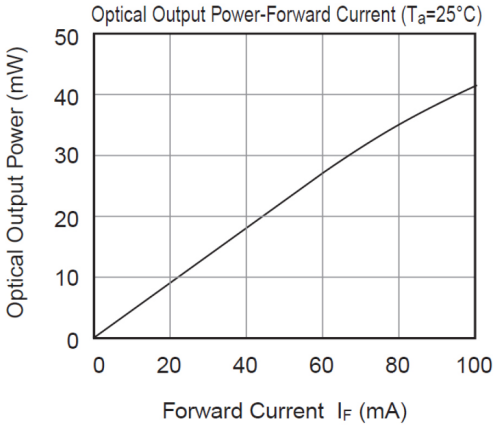
Absolute Maximum Ratings

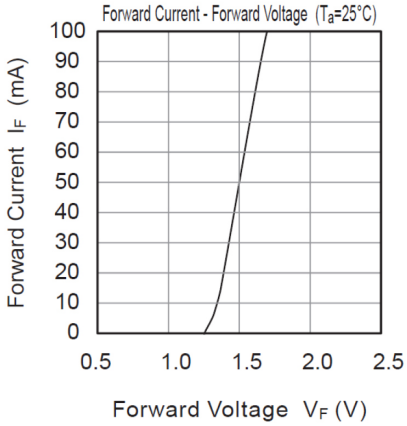
Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	5	V	-
Forward current	I_F	100	mA	-
Peak forward current	I_{FP}	1	A	Pulse width=100μs Duty ratio=1%
Power dissipation	P_D	150	mW	-
Operating temperature	T_{opr}	-30 to +85	°C	Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100	°C	Avoid dew condensation
Soldering temperature	T_{sol}	260	°C	Soldering time less than 5 seconds

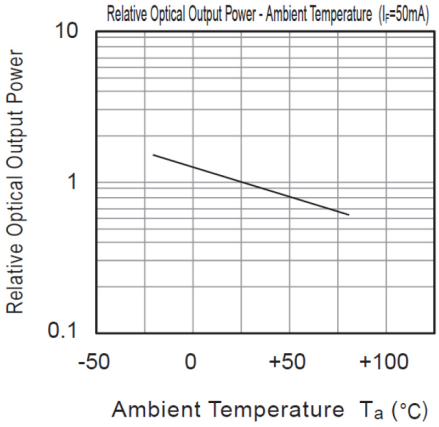
Electrical and Optical characteristics (T_a=25°C unless otherwise noted)

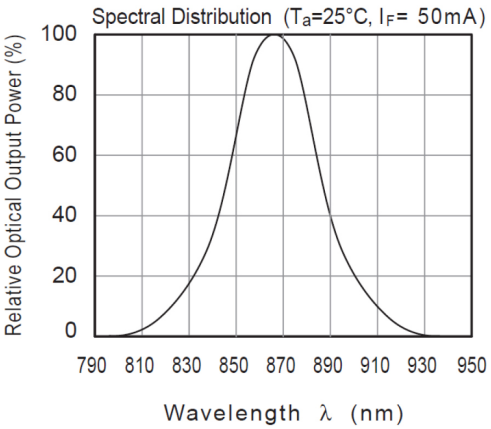
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	I_R	-	-	10	μA	V_R=5V
Forward voltage	V_F	-	1.5	1.8	V	I_F=50mA
Optical output power	P_O	-	22	-	mW	I_F=50mA
Peak wavelength	λ_p	-	865	-	nm	I_F=50mA
Spectral width	$\Delta\lambda$	-	40	-	nm	I_F=50mA
Half angle	2θ	-	50	-	deg.	I_F=50mA
Rise time	tr	-	25	-	ns	I_F=50mA
Fall time	tf	-	15	-	ns	I_F=50mA

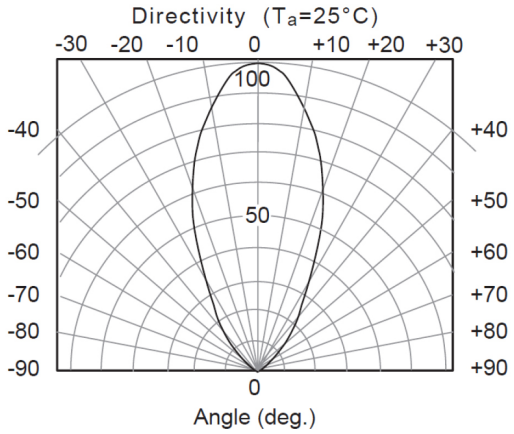












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