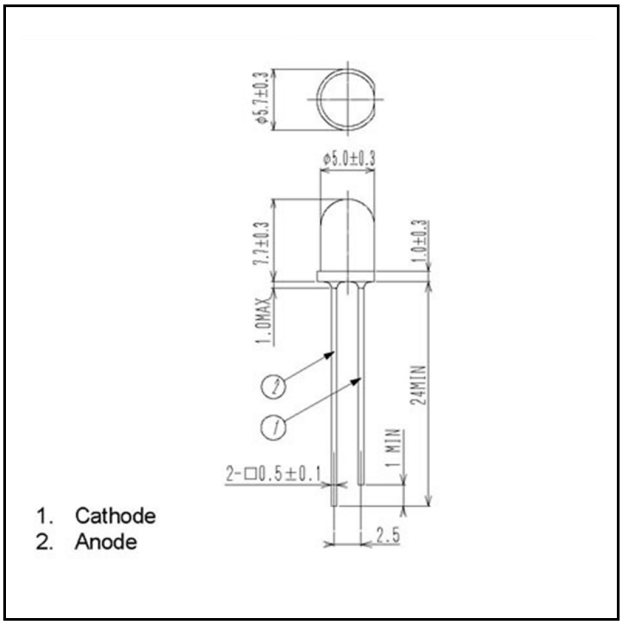
Plastic Mold Infrared LEDs

KEDE1301M51



Characteristics

- High output power
- Sharp directivity
- Direct modulation

Applications

- Optical switches
- Optical instruments

Chip Material

- InGaAsP

Package

- MOLD

Diameter

- φ5mm

Resin Type

- clear

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Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	3	V	-
Forward current	I_F	100	mA	-
Peak forward current	I_{FP}	1	A	Pulse width=100μs Duty ratio=1%
Power dissipation	P_D	130	mW	-
Operating temperature	T_{opr}	-30 to +85	℃	Avoid dew condensation
Storage temperature	T_{stg}	-30 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	μA	V_R=1V
Forward voltage	V_F	-	0.9	1.3	V	I_F=50mA
Optical output power	P_O	-	2.2	-	mW	I_F=50mA
Peak wavelength	λ_p	-	1300	1350	nm	I_F=50mA
Spectral width	$\Delta\lambda$	-	100	-	nm	I_F=50mA
Half angle	2θ	-	40	-	deg.	I_F=50mA

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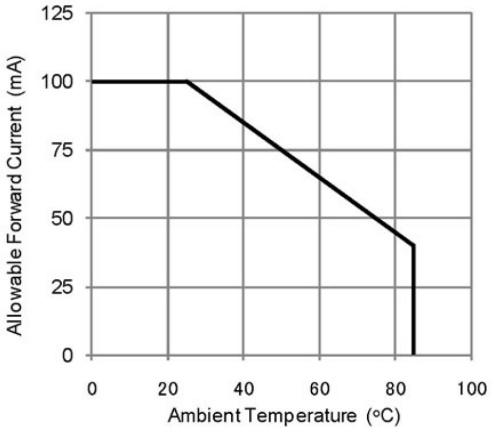
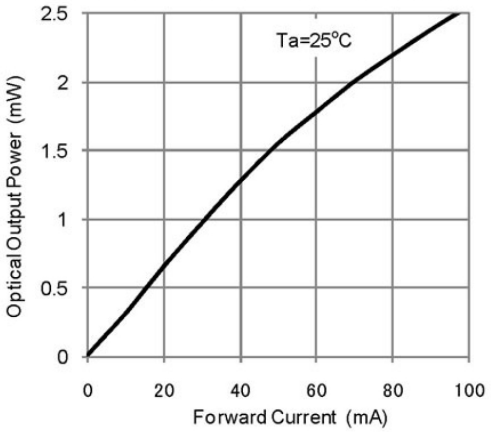
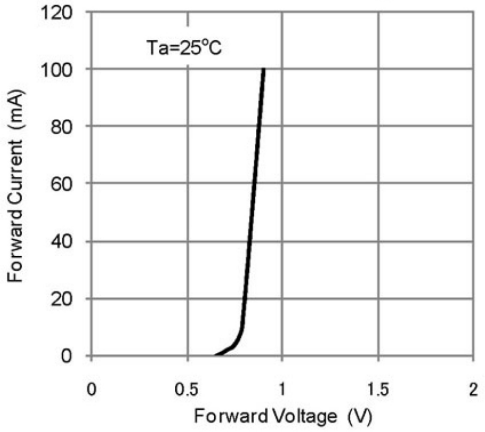
Allowable Forward Current - Ambient Temperature



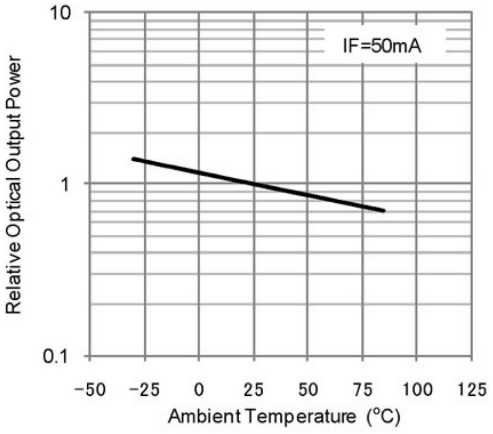
Optical Output Power - Forward Current



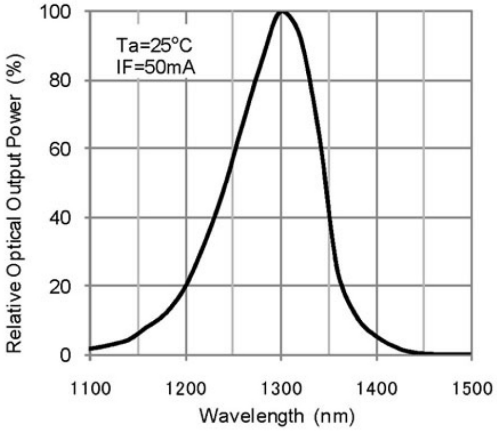
Forward Current - Forward Voltage



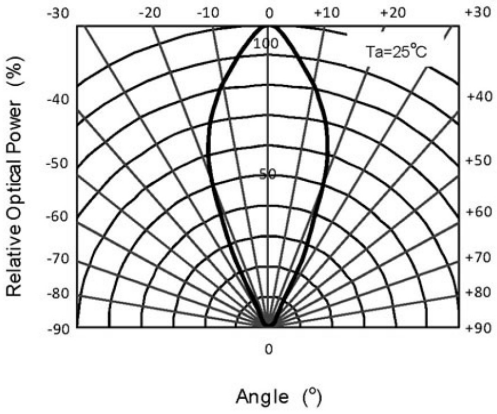
Relative Optical Output Power-Ambient Temperature



Spectral Distribution



Directivity



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