

Red LEDs

KED351RKD

Characteristics

- High power with a double heterojunction
- Transparent epoxy lens
- Broad directivity
- Direct modulation

Applications

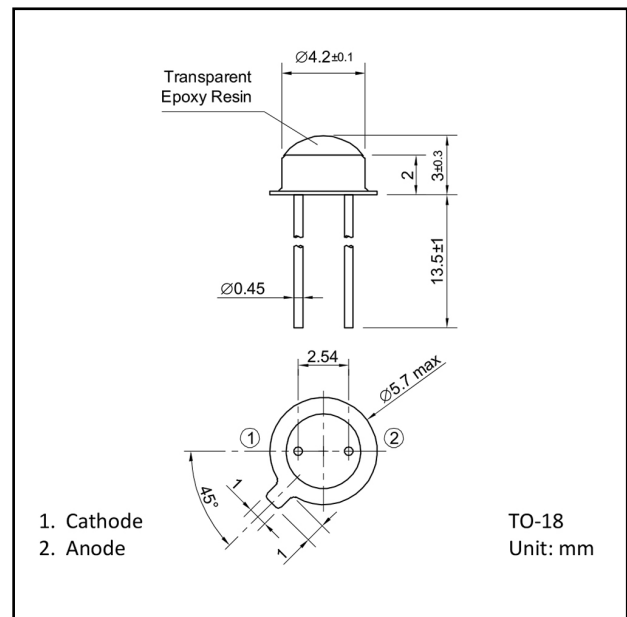
- Optical switches
- Optical encoders
- Optical instruments
- Automatic control apparatus

Chip Material

- GaAlAs

Package

- STEM



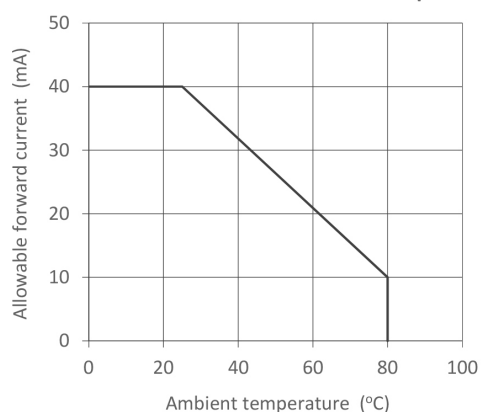
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	6	V	-
Forward current	I_F	40	mA	$T_a=25$
Peak forward current	I_{FP}	0.5	A	Pulse width=100μs Duty ratio=0.1%
Power dissipation	P_D	90	mW	$T_a=25$
Operating temperature	T_{opr}	-20 to +80		Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100		Avoid dew condensation

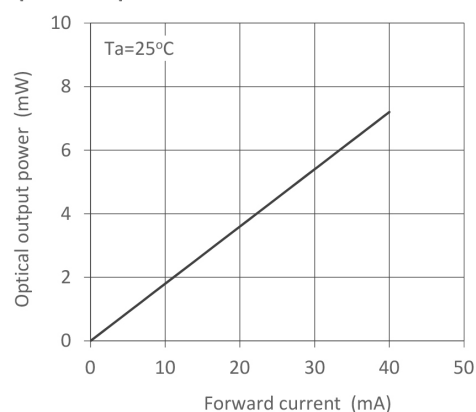
Electrical and Optical characteristics ($T_a=25$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	I_R	-	-	10	μA	$V_R=6V$
Forward voltage	V_F	-	1.8	2.3	V	$I_F=20mA$
Optical output power	P_O	-	3.6	-	mW	$I_F=20mA$
Peak wavelength	λ_p	-	660	-	nm	$I_F=20mA$
Spectral width		-	20	-	nm	$I_F=20mA$
Half angle	2	-	32	-	deg.	$I_F=20mA$

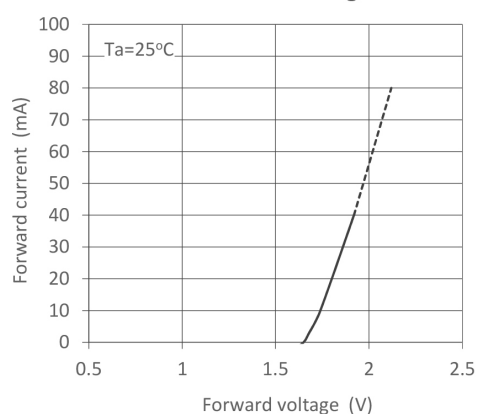
Allowable Forward Current-Ambient Temperature



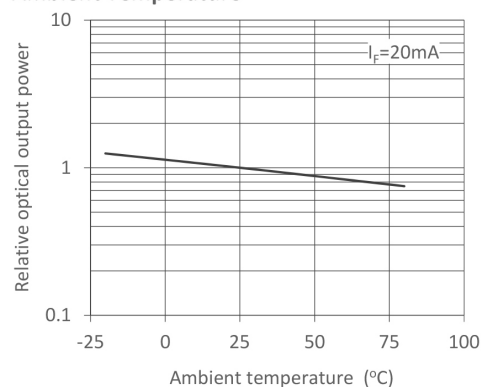
Optical Output Power - Forward Current



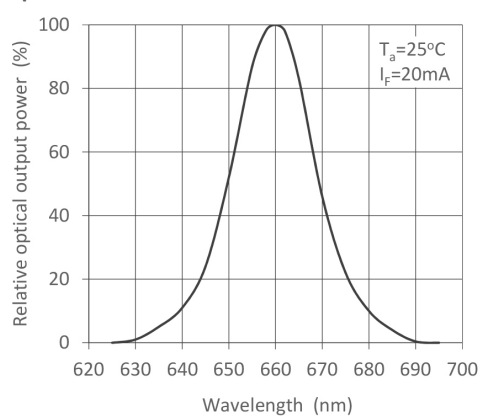
Forward Current - Forward Voltage



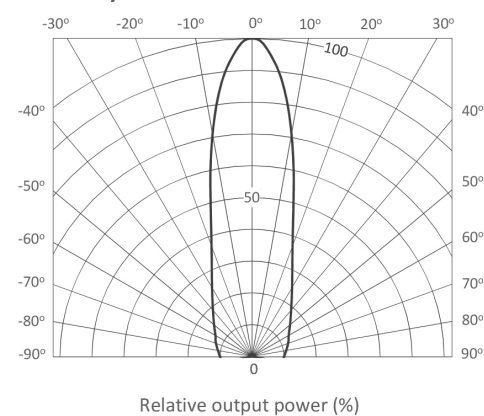
Relative Optical Output Power - Ambient Temperature



Spectral Distribution



Directivity



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