

Point Source LEDs

KED160RAXH

Characteristics

- High reliability and long life
- 160 μ m emitting area

Applications

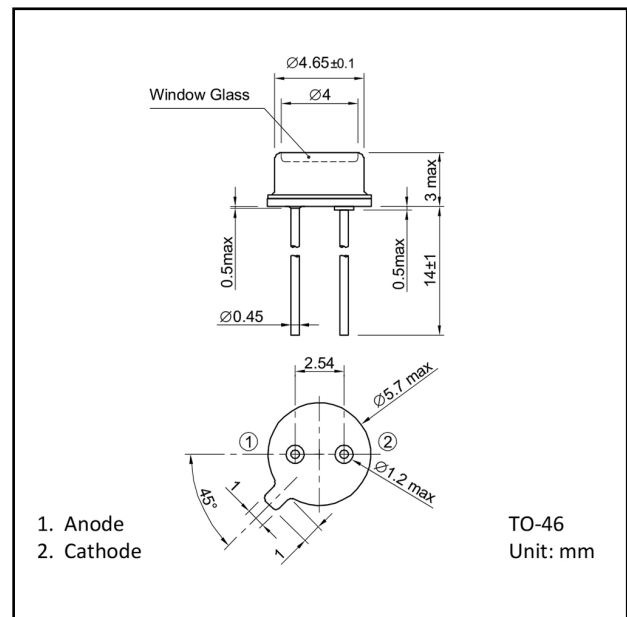
- High speed optical sensors
- Optical encoders

Chip Material

- GaAlAs

Package

- TO-CAN



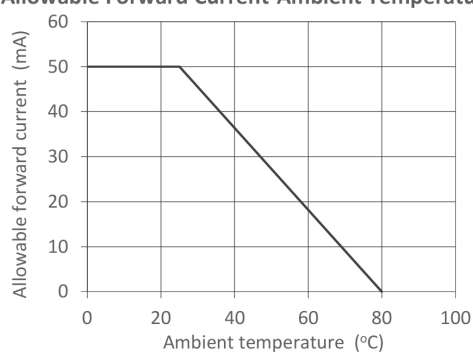
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	3	V	-
Forward current	I_F	50	mA	$T_a=25$
Operating temperature	T_{opr}	-20 to +80		Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100		Avoid dew condensation

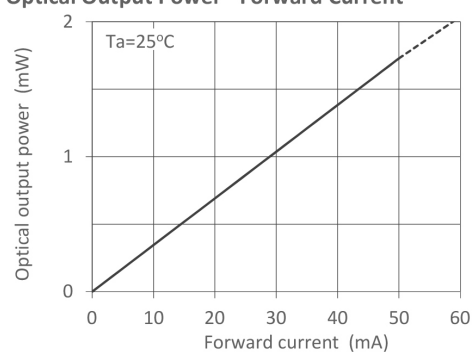
Electrical and Optical characteristics ($T_a=25$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Current	I_R	-	-	10	μA	$V_R=3V$
Forward voltage	V_F	-	2.2	2.5	V	$I_F=20mA$
Optical output power	P_O	-	0.8	-	mW	$I_F=20mA$
Peak wavelength	λ_p	-	650	-	nm	$I_F=20mA$
Half angle	2θ	-	115	-	deg.	$I_F=20mA$
Cutoff frequency	f_c	-	20	-	MHz	$I_F=20mA$

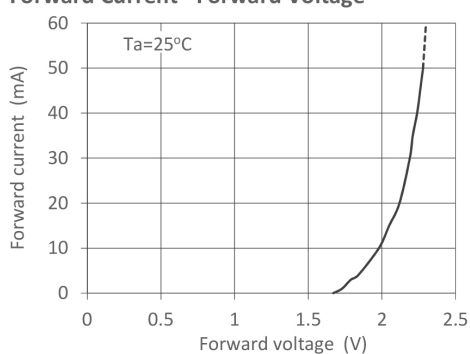
Allowable Forward Current-Ambient Temperature



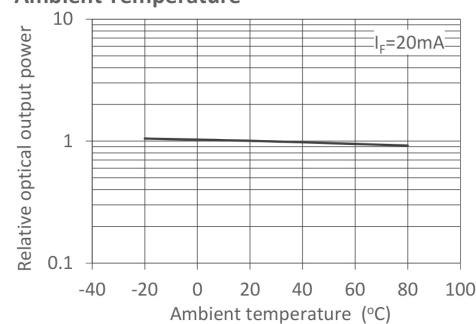
Optical Output Power - Forward Current



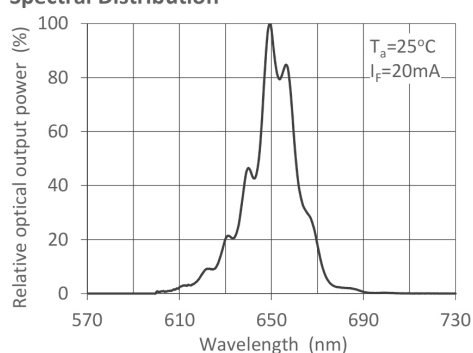
Forward Current - Forward Voltage



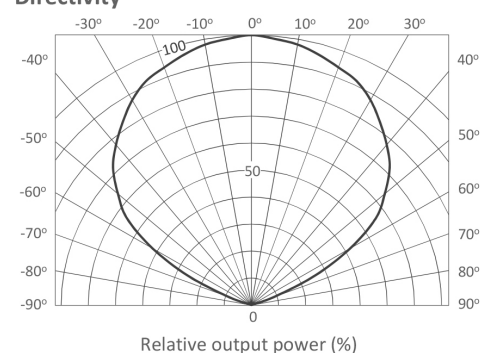
Relative Optical Output Power - Ambient Temperature



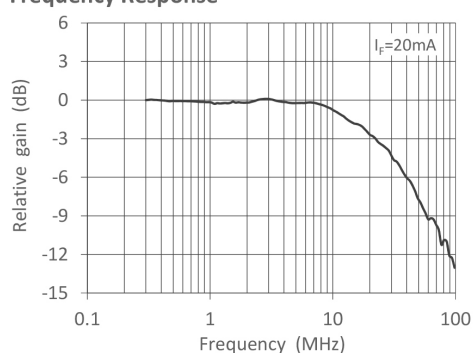
Spectral Distribution



Directivity



Frequency Response



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Dexerials Corporation

1724 Shimotsuboyama, Shimotsuke-shi, Tochigi 323-0194, Japan

TEL: +81-285-39-7950 <https://www.dexerials.jp/en/>