

## Infrared LEDs

## KEDE1458K

### Characteristics

- p=1450nm
- Transparent epoxy mold
- Direct modulation

## Applications

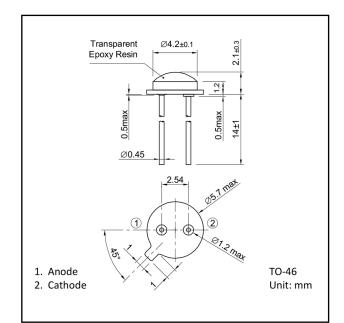
- Optical switches
- Optical instruments
- Water sensors
- Humidity sensors

## Chip Material

• InGaAsP

#### Package

• STEM





## Absolute Maximum Ratings

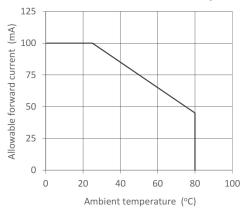
Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V <sub>R</sub>	5	V	-
Forward current	I <sub>F</sub>	100	mA	T <sub>a</sub> =25
Peak forward current	I <sub>FP</sub>	1.0	A	Pulse width=100µs Duty ratio=0.1%
Power dissipation	P <sub>D</sub>	130	mW	T <sub>a</sub> =25
Operating temperature	T <sub>opr</sub>	-20 to +80		Avoid dew condensation
Storage temperature	T <sub>stg</sub>	-30 to +100		Avoid dew condensation

## Electrical and Optical characteristics (Ta=25 unless otherwise noted)

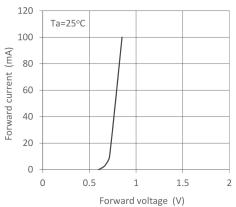
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Reverse Current	I <sub>R</sub>	-	-	10	μA	V <sub>R</sub> =1V
Forward voltage	V <sub>F</sub>	-	0.8	1.3	V	I <sub>F</sub> =50mA
Optical output power	Po	-	3.0	-	mW	I <sub>F</sub> =50mA
Peak wavelength	р	1400	1450	1500	nm	I <sub>F</sub> =50mA
Spectral width		-	100	-	nm	I <sub>F</sub> =50mA
Half angle	2	-	110	-	deg.	I <sub>F</sub> =50mA



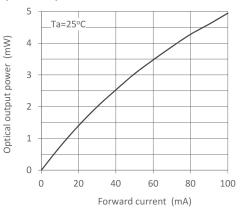
Allowable Forward Current-Ambient Temperature



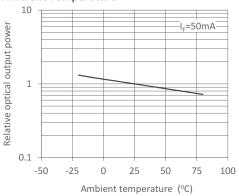


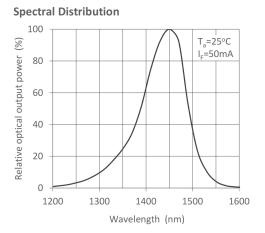




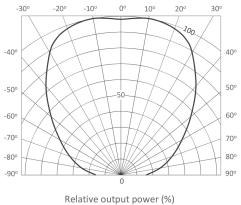








Directivity





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