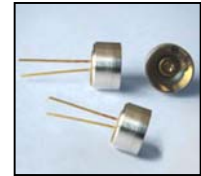




# LED21-PR



## TECHNICAL DATA

### Mid-Infrared Light Emitting Diode

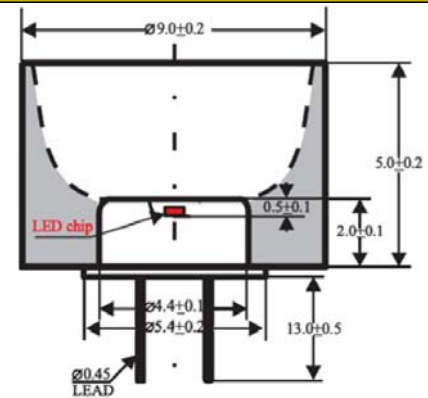
Light Emitting Diodes with central wavelength 2.15  $\mu\text{m}$  series are based on heterostructures grown on GaSb substrates. They are developed for using in optical gas sensors and medical diagnostics. LED21-PR has a stable output power and a lifetime more than 80000 hours.

#### Features

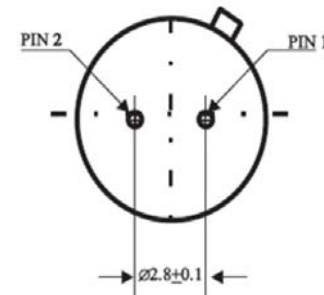
- Structure: GaInAsSb/AlGaAsSb
- Peak Wavelength: typ. 2.15  $\mu\text{m}$
- Optical Output Power: typ. 1.1 mW qCW
- Package: TO-18, with PR and without window

#### Specifications

Item	Condition	Rating			Unit
		Min.	Typ.	Max.	
Peak Wavelength	T=300 K	2.10	2.15	2.19	$\mu\text{m}$
FWHM	150 mA CW	150	200	250	nm
Quasi-CW Optical Power	200 mA qCW	0.9	1.1	1.3	mW
Pulsed Optical Power	1 A	25	28	30	mW
Switching Time	T=300 K	10	30	50	ns
Operation Voltage	200 mA qCW				V
Operating Temperature		-240 ... +50			$^{\circ}\text{C}$
Emitting Area		300x300			$\mu\text{m}$
Soldering Temperature		180			$^{\circ}\text{C}$
Package		TO-18, with parabolic reflector and without window			

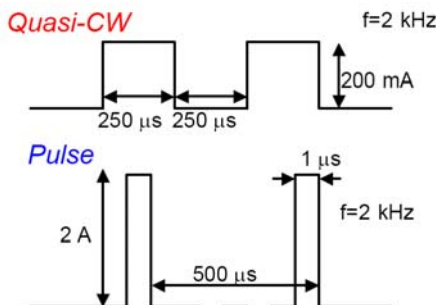


BACK SIDE VIEW



(Unit: mm)

#### Operating Regime



#### Quasi-CW

- Maximum current 220 mA
- Recommended current 150-200mA

#### Pulsed

- Maximum current 1 A (puls length 500 ns, repetition rate 2kHz)



## Typical Performance Curves

