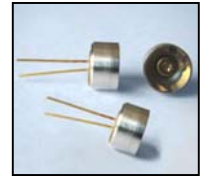




# LED21FC-PR-WIN



## TECHNICAL DATA

### Mid-Infrared Light Emitting Diode, Flip-Chip Design

Light Emitting Diodes with central wavelength 2.15  $\mu\text{m}$  series are based on heterostructures grown on GaSb substrates by LPE. Solid solutions AlGaAsSb are used in the active layer. Wide band gap solid solutions AlGaAsSb with Al content 64% are used for good electron confinement. LED21FC-PR-WIN has a stable output power and a lifetime more than 80000 hours.

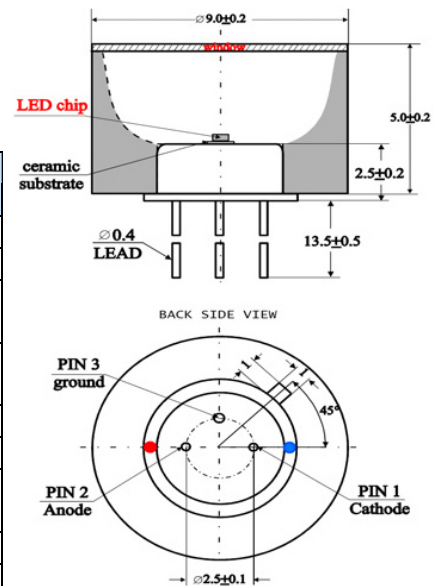
#### Features

- Structure: GaInAsSb/AlGaAsSb, Flip-Chip Design
- Peak Wavelength: typ. 2.15  $\mu\text{m}$
- Optical Output Power: typ. 1.2 mW qCW
- Package: TO-18, with PR and window



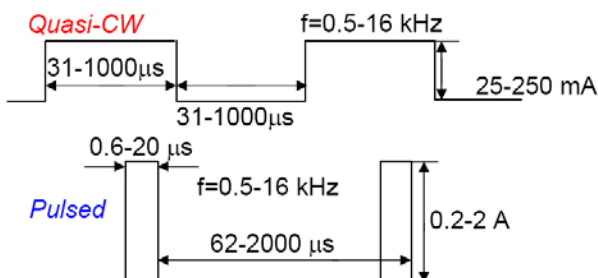
#### Specifications

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	100	150	250	nm
Quasi-CW Optical Power	200 mA qCW	0.8	1.2	2	mW
Pulsed Optical Power	1 A	20	30	40	mW
Switching Time	T=300 K	10	20	30	ns
Operation Voltage	200 mA qCW				V
Operating Temperature		-240 ... +50			$^{\circ}\text{C}$
Emitting Area		670x770			$\mu\text{m}$
Soldering Temperature		180			$^{\circ}\text{C}$
Package		TO-18, with parabolic reflector and quartz window			



(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

