



## LED20FC



### TECHNICAL DATA

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

Light Emitting Diodes with central wavelength 2.02  $\mu\text{m}$  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. LED20FC has a stable output power and a lifetime more than 80000 hours.

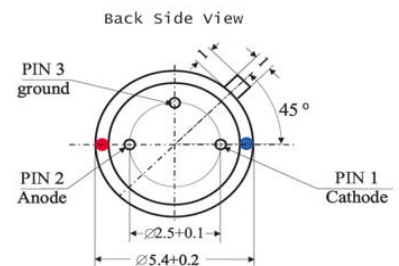
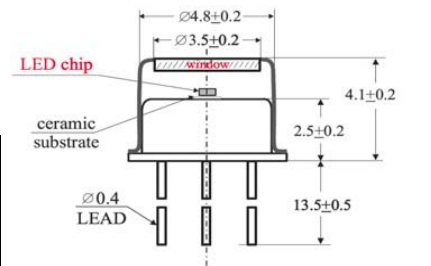
### Features

- Structure: GaInAsSb/AlGaAsSb, Flip-Chip Design
- Peak Wavelength: typ. 2.02  $\mu\text{m}$
- Optical Output Power: typ. 1.2 mW qCW
- Package: TO-18, with cap and window



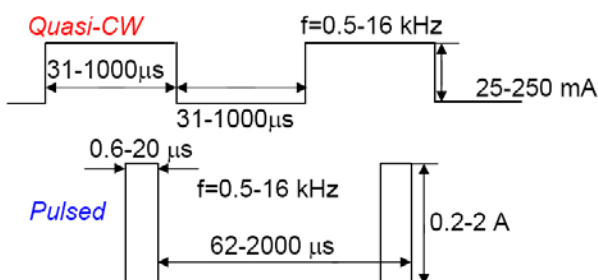
### Specifications

Item	Condition	Rating			Unit
		Min.	Typ.	Max.	
Peak Wavelength	T=300 K	2.00	2.02	2.09	$\mu\text{m}$
FWHM	150 mA CW	100	150	250	nm
Quasi-CW Optical Power	200 mA qCW	0.8	1.2	1.8	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 non-removeable cap and transparent 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

