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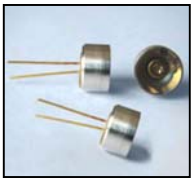
LED18FC-PR



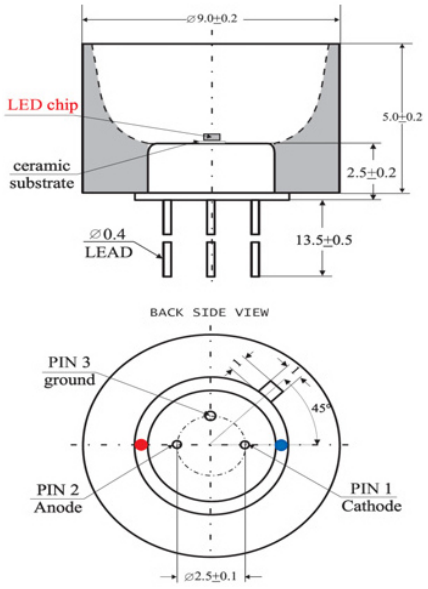
TECHNICAL DATA

Mid-Infrared Light Emitting Diode, Flip-Chip Design

Light Emitting Diodes with central wavelength 1.85 µm 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.
LED18FC-PR has a stable ouput power and a lifetime more then 80000 hours.

Features

- Structure: GaInAsSb/AlGaAsSb, Flip-Chip Design
- Peak Wavelength: typ. 1.85 µm
- Optical Ouput Power: typ. 0.9 mW qCW
- Package: TO-18, with PR and without window

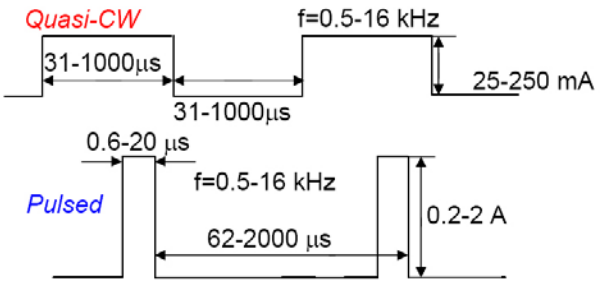


(Unit: mm)

Specifications

Item	Condition	Rating			Unit
		Min.	Typ.	Max.	
Peak Wavelength	T=300 K	1.80	1.85	1.89	µm
FWHM	150 mA CW	100	150	200	nm
Quasi-CW Optical Power	200 mA qCW	0.7	0.9	1.4	mW
Pulsed Optical Power	1 A	15	20	35	mW
Switching Time	T=300 K	10	20	30	ns
Operation Voltage	200 mA qCW				V
Operating Temperature	-240 … +50				°C
Emitting Area	670x770				µm
Soldering Temperature	180				°C
Package	TO-18, with non-removeable cap and transparent window				

Operating Regime



Quasi-CW

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

Pulsed

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

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Typical Performance Curves