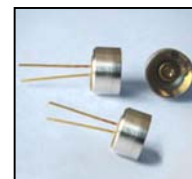




LED36-PR



TECHNICAL DATA

Mid-Infrared Light Emitting Diode

Light Emitting Diodes with central wavelength $3.65 \mu\text{m}$ series are based on heterostructures grown on InAs substrates by MOCVD. InAsSb is used in the active layer. Wide band gap solid solutions InAsSbP with P content 50% are used for good electron confinement.

LED36-SMD3 has a stable output power and a lifetime more than 80000 hours.

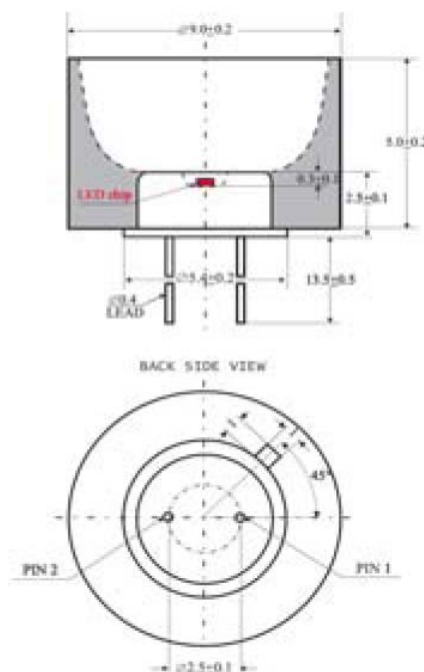
Features

- Structure: InAsSb/InAsSbP
- Peak Wavelength: typ. $3.65 \mu\text{m}$
- Optical Output Power: typ. $30 \mu\text{W}$ qCW
- Package: TO-18, with PR and without window



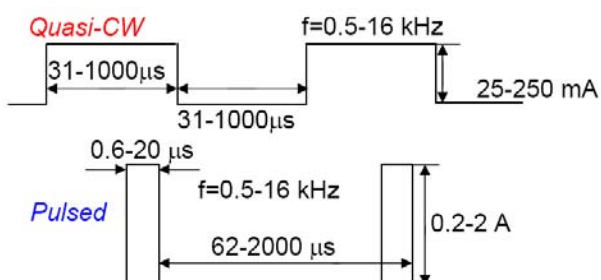
Specifications

Item	Condition	Min.	Rating Typ.	Max.	Unit
Peak Wavelength	T=300 K	3.60	3.65	3.70	μm
FWHM	150 mA CW	0.40	0.50	0.60	μm
Quasi-CW Optical Power	200 mA qCW	20	30	40	μW
Pulsed Optical Power	1 A	180	200	220	mW
Switching Time	T=300 K	10	20	30	ns
Operation Voltage	200 mA qCW	0.2	-	1.0	V
Operating Temperature	-240 ... +50				$^{\circ}\text{C}$
Emitting Area	300x300				μm
Soldering Temperature	180				$^{\circ}\text{C}$
Package	TO-18, with parabol reflector and without 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

