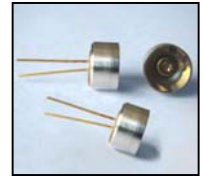




# LED36-PR-WIN



## 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.

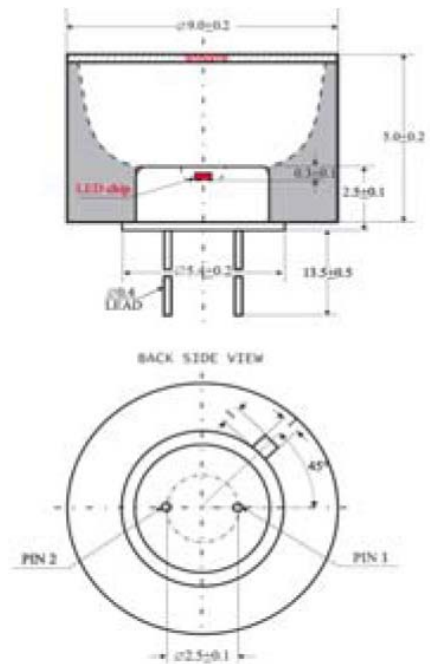
#### Features

- 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 window



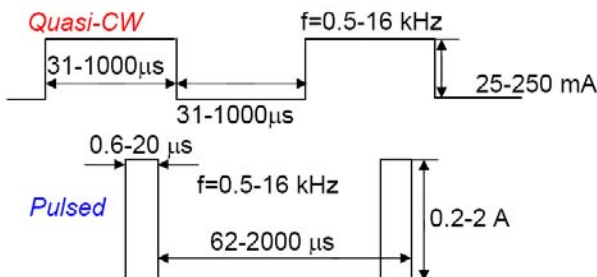
#### Specifications

Item	Condition	Rating			Unit
		Min.	Typ.	Max.	
Peak Wavelength	T=300 K	3.60	3.65	3.70	$\mu\text{m}$
FWHM	150 mA CW	0.40	0.50	0.60	$\mu\text{m}$
Quasi-CW Optical Power	200 mA qCW	20	30	40	$\mu\text{W}$
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				$\mu\text{m}$
Soldering Temperature	180				$^{\circ}\text{C}$
Package	TO-18, with parabol reflector and 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

