

# LED<sub>36</sub>



### **TECHNICAL DATA**

## **Mid-Infrared Light Emitting Diode**

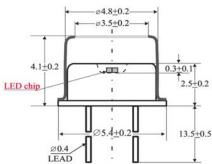
Light Emitting Diodes with central wavelength 3.65 µm series are based on heterostructures grown on InAs substrates by MOCVD. InAsSb is used in the active layer. Wide band gap solid solutions InAsSbP with P content 50% are used for good electron confinement.

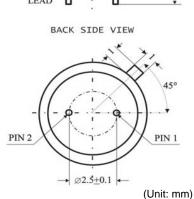
LED36 has a stable ouput power and a lifetime more then 80000 hours.

#### Features

- Structure: InAsSb/InAsSbP
- Peak Wavelength: typ. 3.65 µm
- Optical Ouput Power: typ. 30 µW qCW
- Package: TO-18, with cap and without window



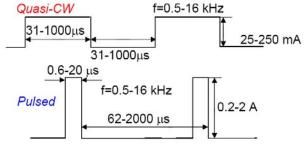




**Specifications** 

ltem	Condition	Rating			Unit
		Min.	Тур.	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				°C
Emitting Area	300x300				μm
Soldering Temperature	180				°C
Package	TO-18, with non-removeable cap and with window				hout

#### **Operating Regime**



#### Quasi-CW

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

#### Pulsed

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



#### **Typical Performance Curves**

