



LED36-TEC



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

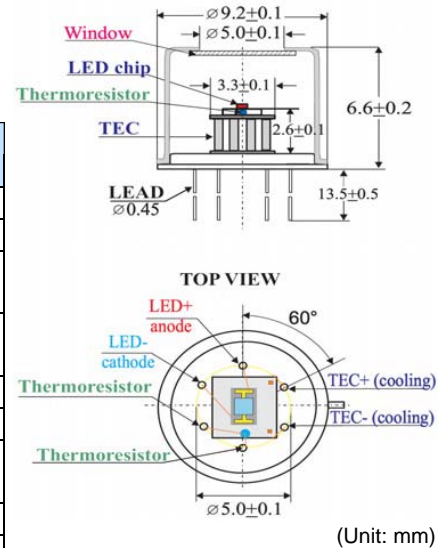
Features

- Structure: InAsSb/InAsSbP
- Peak Wavelength: typ. 3.65 μm
- Optical Output Power: typ. 30 μW qCW
- Package: TO-5, with TEC, thermistor and window

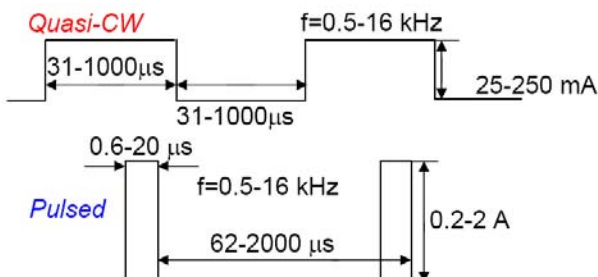


Specifications

Item	Condition	Rating			Unit
		Min.	Typ.	Max.	
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-5, with built-in thermocooler, thermoresistor, with cap and window				



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

