

LED34-HIGH-SMD3

TECHNICAL DATA

Mid-Infrared Light Emitting Diode, SMD

Light Emitting Diodes with central wavelength 3.40 µm series are based on heterostructures grown on InAs substrates by MOCVD. InAs is used in the active layer. Wide band gap solid solutions InAsSbP with P content 50% are used for god electron confinement.

LED34-HIGH-SMD3 has a stable ouput power and a lifetime more then 80000 hours.

Features

- Structure: InAsSb/InAsSbP •
- Peak Wavelength: typ. 3.40 µm
- Optical Ouput Power: typ. 65 µW qCW
- Package: SMD 3x3 mm



ltem	Condition	Rating			
		Min.	Typ.	Max.	Unit
Peak Wavelength	T=300 K	3.30	3.40	3.49	μm
FWHM	150 mA CW	300	400	500	nm
Quasi-CW Optical Power	200 mA qCW	45	65	80	mW
Pulsed Optical Power	1 A	480	600	720	mW
Switching Time	T=300 K	10	20	30	ns
Operation Voltage	200 mA qCW				V
Operating Temperature	-240 +50				°C
Emitting Area	300x300				μm
Soldering Temperature	180				°C
Package	SMD type package 3x3 mm based on hig thermal conductivity ceramics				igh

Specifications

Operating Regime



Quasi-CW

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

Pulsed

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



Typical Performance Curves



Package



- Tiny package for surface mounting
- Anode and cathode are led to the metalized areas on the back side of the ceramic surface
- Material Low Temperature Co-fired Ceramic (LTCC):
 - thermal conductivity 25 W/mK
 - thermoresistance 8 °C/W