

LED34-HIGH-SMD5R



TECHNICAL DATA

Mid-Infrared Light Emitting Diode, SMD

Light Emitting Diodes with central wavelength 3.40 μ m 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-SMD5R 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

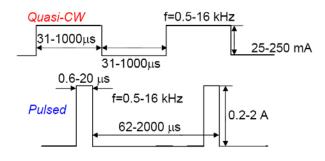
Package: SMD 5x5 mm with microreflector



Specifications

ltem	Condition	Rating			Unit
item	Condition	Min.	Тур.	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 5x5 mm based on high thermal conductivity ceramics with microreflector				

Operating Regime



Quasi-CW

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

Pulsed

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



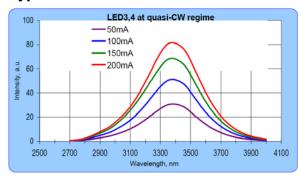
ROITHNER LASERTECHNIK GIRDH

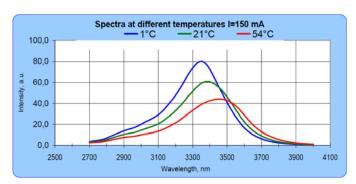
WIEDNER HAUPTSTRASSE 76

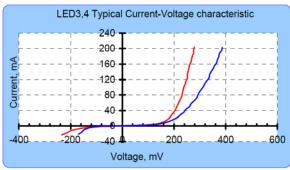
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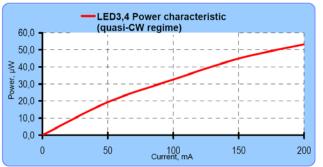


Typical Performance Curves

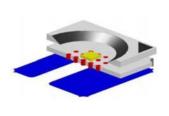








Package





ITEM	Symbol	Rule	
Basic Outline	A	5.0± 0.1mm	
Basic Outline	В	5.0± 0.1mm	
Cavity size	С	Мах 4.2Ф	
Top layer	D	Min 0.4mm	
Bottom layer	E	Min 0.4mm	
Thickness	F	Max 2mm	
Angle	G	Customize	

- · 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
- Microreflector provides the reduction of radiation divergence