LIGHT EMITTING DIODES 1.6÷4.6 μm

Model LED31-TEC-PR 3.1 mm 14 mW

•Light Emitting Diodes ***LED31-TEC-PR*** are designed for emitting at a spectral range around 3100 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates

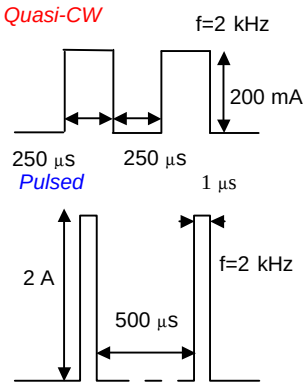
•Light Emitting Diodes ***LED31-TEC-PR*** are developed for using in optical gas sensors and medical diagnostics. Such construction gives possibility for temperature stabilization of LED parameters. Lifetime is more then 10000 hours.

•Related products: ***LED31*** can be used in optical pair with our photodiodes ***PD36***. Our standard ***LED Driver*** provides power supply of ***LED31-TEC-PR*** in two recommended here regimes (Quasi-CW and Pulsed).



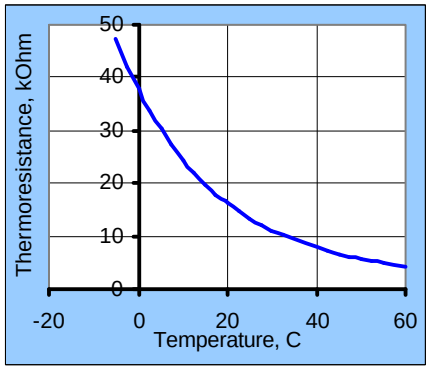
Parameters	Min	Typ	Max
Wavelength, μm	3.00	3.10	3.20
FWHM, μm	0.60	0.70	0.80
Optical Power, μW Quasi-CW @ 200 mA Pulsed@2A	12 180	14 200	16 220
Switching Time, ns	10	30	50
Range of temperature control °C	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 °C		
Package	TO-5 with Thermocooler, Thermistor and Parabolic Reflector		

Recommended regimes of LED operation



Main thermocooler parameters (without load)

I_{max} (Amps)	Q_{max} (Watts)	U_{max} (Volts)	ΔT_{max} °C
0.7	0.4	1.0	67



Package TO-5 with Parabolic Reflector

