

# LIGHT EMITTING DIODES 1.6÷4.6 μm

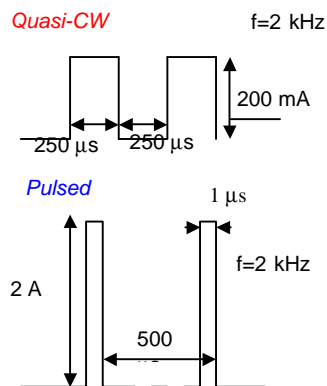
## Model LED46-TEC-PR 4.6 μm 6 μW

- Light Emitting Diodes **LED46-TEC-PR** are designed for emitting at a spectral range around 4600 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- Light Emitting Diodes **LED46-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: Our standard **LED Driver** provides power supply of **LED46-TEC-PR** in two recommended here regimes (Quasi-CW and Pulsed).



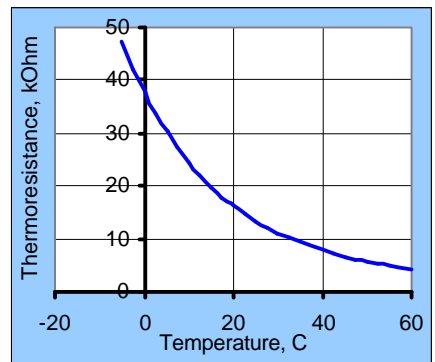
Parameters	Min	Typ	Max
Wavelength, μm	4.40	4.50	4.60
FWHM, μm	1.00	1.10	1.20
Optical Power, μW			
Quasi-CW @ 200 mA	4	6	8
Pulsed @ 2A	100	120	140
Switching Time, ns	10	30	50
Range of temperature control °C	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 °C		
Package	TO-5 with thermocooler, thermistor and Parabolic Reflector		

Recommended regimes of LED operation



Main thermocooler parameters (without load)

max (Amps)	Q <sub>max</sub> (Watts)	U <sub>max</sub> (Volts)	ΔT <sub>max</sub> °C
0.7	0.4	1.0	67



Package TO-5 with Parabolic Reflector

