

# LIGHT EMITTING DIODES 1.6÷5.0 μm

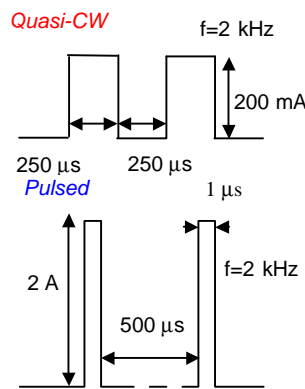
## Model LED50-TEC 5.0 mm 1 mW

- Light Emitting Diodes **LED50-TEC** are designed for emitting at a spectral range around 5000 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- Light Emitting Diodes **LED50-TEC** 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 **LED50-TEC** in two recommended here regimes (Quasi-CW and Pulsed).

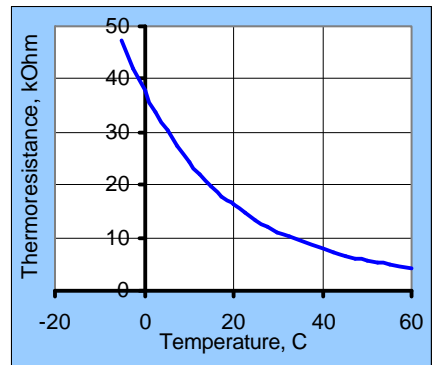


Parameters	Min	Typ	Max
Wavelength, μm	4.75	4.90	5.05
FWHM, μm	1.20	1.35	1.50
Optical Power, μW Quasi-CW @ 200 mA Pulsed@2A	0,8 100	1.0 120	1.5 140
Switching Time, ns	10	30	50
Range of temperature control °C	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 °C		
Package	TO-5 with thermocooler and thermistor		

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

