

LIGHT EMITTING DIODES 1.6÷4.6 μm

Model LED17-TEC 1.75 μm 0.9mW

- Light Emitting Diodes **LED17-TEC** are designed for emitting at a spectral range around 1750 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on GaSb substrates
- Light Emitting Diodes **LED17-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: **LED17** can be used in optical pair with our photodiodes **PD24**. Our standard **LED Driver** provides power supply of **LED17-TEC** in two recommended here regimes (Quasi-CW and Pulsed).

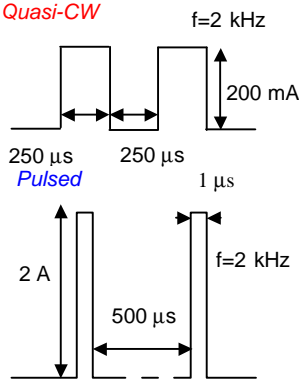


Main thermocooler parameters (without load)

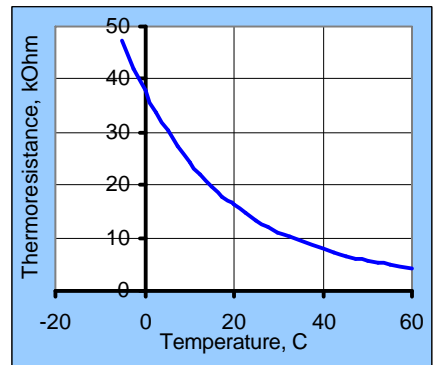
Parameters	Min	Typ	Max
Wavelength, μm	1.70	1.75	1.79
FWHM, μm	0.10	0.15	0.20
Optical Power, μW			
Quasi-CW @ 200 mA	0.7	0.9	1.1
Pulsed @ 2A	15	20	25
Switching Time, ns	10	30	50
Range of temperature control °C	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 °C		
Package	TO-5 with thermocooler and thermistor		

Recommended regimes of LED operation

Quasi-CW



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



Package TO-5

