LIGHT EMITTING DIODES 1.6÷4.6 μm

Model LED17-TEC-PR 1.75 μm 0.9mW

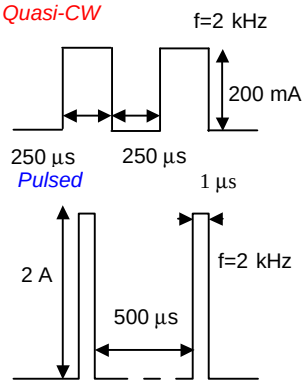
•Light Emitting Diodes ***LED17-TEC-PR*** are designed for emitting at a spectral range around 1750 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on GaSb substrates

•Light Emitting Diodes ***LED17-TEC-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: ***LED17*** can be used in optical pair with our photodiodes ***PD24***. Our standard ***LED Driver*** provides power supply of ***LED17-TEC-PR*** in two recommended here regimes (Quasi-CW and Pulsed).

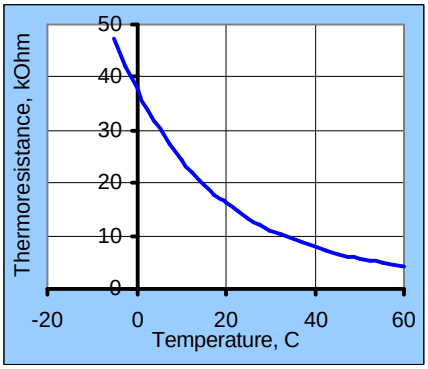
Parameters	Min	Typ	Max
Wavelength, μm	1.70	1.75	1.79
FWHM, μm	0.10	0.15	0.20
Optical Power, μW Quasi-CW @ 200 mA Pulsed@2A	0.7 15	0.9 20	1.1 25
Switching Time, ns	10	30	50
Range of temperature control °C	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 °C		
Package	TO-5 with Thermocooler,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