

LIGHT EMITTING DIODES 1.6÷5.0 μm

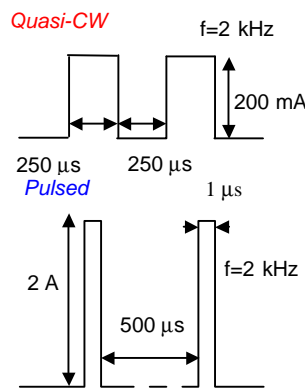
Model LED50-TEC 5.0 mm 1 mW

- 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).

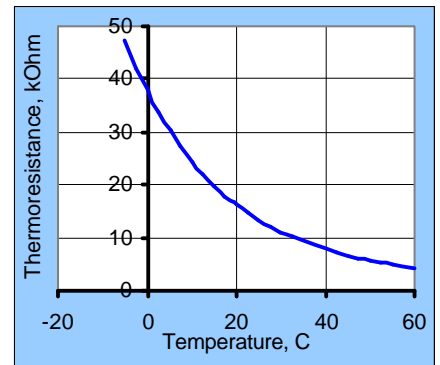


| Parameters | Min | Typ | Max |
|---------------------------------|---------------------------------------|------|------|
| Wavelength, μm | 4.75 | 4.90 | 5.05 |
| FWHM, μm | 1.20 | 1.35 | 1.50 |
| Optical Power, μW | | | |
| Quasi-CW @ 200 mA | 0,8 | 1.0 | 1.5 |
| Pulsed@2A | 100 | 120 | 140 |
| Switching 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 and thermistor | | |

Recommended regimes of LED operation Main thermocooler parameters (without load)



| max (Amps) | Q _{max} (Watts) | U _{max} (Volts) | ΔT _{max} °C |
|------------|--------------------------|--------------------------|----------------------|
| 0.7 | 0.4 | 1.0 | 67 |



Package TO-5

