



LIGHT EMITTING DIODES 1.6÷4.6 μm

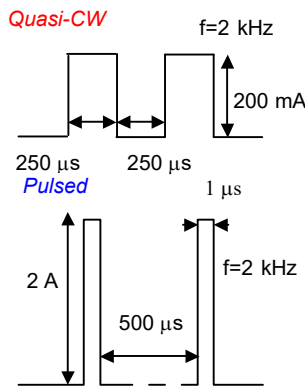
Model **LED22-TEC** 2.25 μm 1.1 mW

- Light Emitting Diodes **LED22-TEC** are designed for emitting at a spectral range around 2250 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on GaSb substrates
- Light Emitting Diodes **LED22-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: **LED22** can be used in optical pair with our photodiodes **PD24**. Our standard **LED Driver** provides power supply of **LED22-TEC** in two recommended here regimes (Quasi-CW and Pulsed).



| Parameters | Min | Typ | Max |
|---------------------------------|---------------------------------------|------|------|
| Wavelength, μm | 2.20 | 2.25 | 2.29 |
| FWHM, μm | 0.15 | 0.20 | 0.25 |
| Optical Power, μW | | | |
| Quasi-CW @ 200 mA | 0.9 | 1.1 | 1.3 |
| Pulsed@2A | 25 | 28 | 30 |
| 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)

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

