

LIGHT EMITTING DIODES 1.6÷4.6 μm

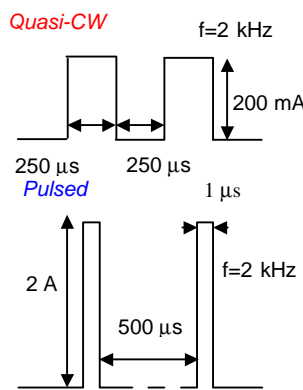
Model **LED43-TEC** 4.3 μm 10 μW

- Light Emitting Diodes **LED43-TEC** are designed for emitting at a spectral range around 4300 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- Light Emitting Diodes **LED43-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 **LED43-TEC** in two recommended here regimes (Quasi-CW and Pulsed).



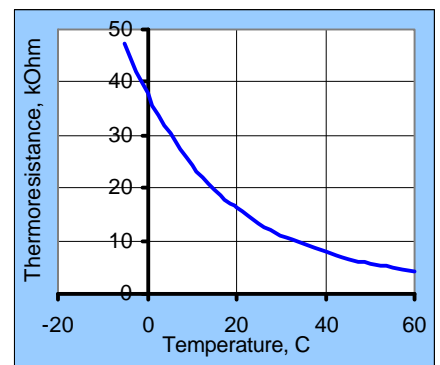
| Parameters | Min | Typ | Max |
|---|---------------------------------------|-----------|-----------|
| Wavelength, μm | 4.10 | 4.20 | 4.30 |
| FWHM, μm | 0.75 | 0.90 | 1.05 |
| Optical Power, μW Quasi-CW @ 200 mA Pulsed@2A | 8 180 | 10 200 | 12 220 |
| Switching Time, ns | 10 | 30 | 50 |
| Range of 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 |



Package TO-5

