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 than 10000 hours.
- •Related products: Our standard *LED Driver* provides power supply of *LED43-TEC* in two recommended here regimes (Quasi-CW and Pulsed).

thermocooler and thermistor

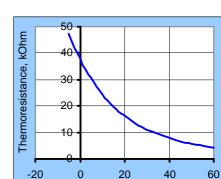


Main thermocooler parameters (without load)

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

Quasi-CN	[/] f	=2 kHz
	•	200 mA
250 μs <i>Pulsed</i>	250 μs	1 μs
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2 A		f=2 kHz
	500 μs	
	←	

Recommended regimes of LED operation

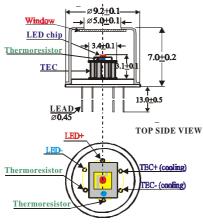


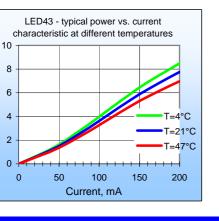
Temperature, C

Parameters Min Typ Max Wavelength, μm 4.10 4.20 4.30 0.75 0.90 1.05 FWHM, µm Optical Power, µW Quasi-CW @ 200 mA 8 10 12 Pulsed@2A 180 200 220 Switching Time, ns 10 30 50 Range of temperature control °C -10÷+60 300x300 Emitting Area, µm Soldering temperature 95 °C TO-5 with

Package TO-5

Package





Power, µW

