

LIGHT EMITTING DIODES 1.6÷4.6 μm

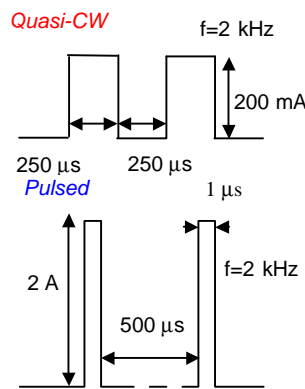
Model **LED46-TEC** **4.6 mm 6 mW**

- Light Emitting Diodes **LED46-TEC** are designed for emitting at a spectral range around 4600 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- Light Emitting Diodes **LED46-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 **LED46-TEC** in two recommended here regimes (Quasi-CW and Pulsed).

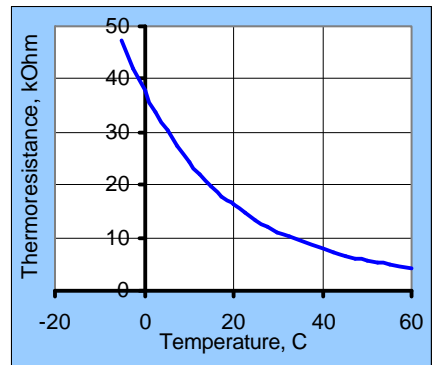


Parameters	Min	Typ	Max
Wavelength, μm	4.40	4.50	4.60
FWHM, μm	1.00	1.10	1.20
Optical Power, μW			
Quasi-CW @ 200 mA	4	6	8
Pulsed @ 2A	100	120	140
Switching Time, ns	10	30	50
Range of temperature control $^{\circ}\text{C}$	-10÷+60		
Emitting Area, μm	300x300		
Soldering temperature	95 $^{\circ}\text{C}$		
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} $^{\circ}\text{C}$
0.7	0.4	1.0	67



Package TO-5

