

# LIGHT EMITTING DIODES 1.6÷4.6 $\mu\text{m}$

## Model LED43-TEC-PR 4.3 $\mu\text{m}$ 10 $\mu\text{W}$

- Light Emitting Diodes **LED43-TEC-PR** 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-PR** 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-PR** in two recommended here regimes (Quasi-CW and Pulsed).

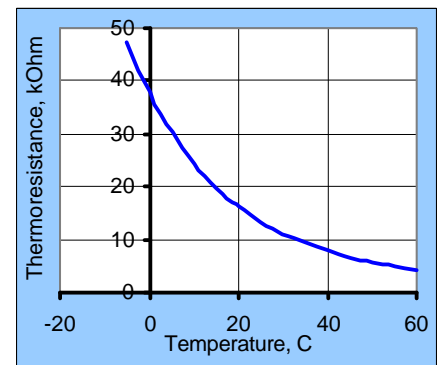
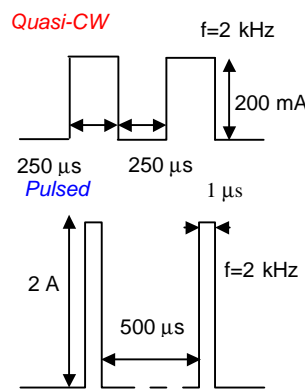


Main thermocooler parameters (without load)

$I_{\text{max}}$ (Amps)	$Q_{\text{max}}$ (Watts)	$U_{\text{max}}$ (Volts)	$\Delta T_{\text{max}}$ $^{\circ}\text{C}$
0.7	0.4	1.0	67

Parameters	Min	Typ	Max
Wavelength, $\mu\text{m}$	4.10	4.20	4.30
FWHM, $\mu\text{m}$	0.75	0.90	1.05
Optical Power, $\mu\text{W}$ Quasi-CW @ 200 mA Pulsed@2A	8 180	10 200	12 220
Switching Time, ns	10	30	50
Range of temperature control $^{\circ}\text{C}$	-10÷+60		
Emitting Area, $\mu\text{m}$	300x300		
Soldering temperature	95 $^{\circ}\text{C}$		
Package	TO-5 with Thermocooler, Thermistor and Parabolic Reflector		

Recommended regimes of LED operation



Package TO-5 with Parabolic Reflector

