## **LIGHT EMITTING DIODES** 1.6÷4.6 μm

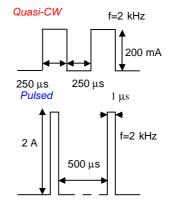
## Model LED38-TEC

## 3.8 μm 16 μW

- •Light Emitting Diodes *LED38-TEC* are designed for emitting at a spectral range around 3800 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- •Light Emitting Diodes *LED38-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 *LED38-TEC* in two recommended here regimes (Quasi-CW and Pulsed).

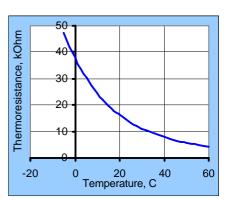
Parameters	Min	Тур	Max
Wavelength, μm	3.70	3.80	3.90
FWHM, μm	0.60	0.70	0.80
Optical Power, μW			
Quasi-CW @ 200 mA	12	16	20
Pulsed@2A	180	200	220
Switching Time, ns	10	30	50
Range of temperature			
control °C	-10÷+60		)
Emitting Area, μm	300x300		)
Soldering			
temperature	95 °C		
Package	TO-5 with thermocooler		
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Recommended regimes of LED operation



Main thermocooler parameters (without load)

I <sub>max</sub>	$Q_{max}$	$U_{max}$	$\Delta T_{max}$
(Amps)	(Watts)	(Volts)	°C
0.7	0.4	1.0	67



Package TO-5

