LIGHT EMITTING DIODES 1.6÷4.6 μm

Model LED29-TEC 2.9 mm 8 mW

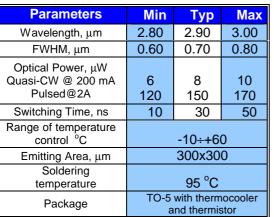
- •Light Emitting Diodes LED29-TEC are designed for emitting at a spectral range around 2900 nm. Thermocooler and thermoresistor are mounted inside 9 mm package TO-5. Heterostructures (HS) are grown on InAs substrates
- •Light Emitting Diodes LED29-TEC are developed for using in optical gas sensors and medical diagnostics. Such construction gives possibility for temperature stabilization of LED parameters. Lifetime is more then 10000 hours.
- •Related products: LED29 can be used in optical pair with our photodiodes PD36. Our standard LED Driver provides power supply of LED29-TEC in two recommended here regimes (Quasi-CW and Pulsed).



Main thermocooler parameters (without load)

I _{max} (Amps)	Q _{max} (Watts)	U _{max} (Volts)	ΔT _{max} °C
0.7	0.4	1.0	67

Parameters	Min	Тур	Max
Wavelength, μm	2.80	2.90	3.00
FWHM, μm	0.60	0.70	0.80
Optical Power, μW Quasi-CW @ 200 mA Pulsed@2A	6 120	8 150	10 170
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		



Package TO-5

Quasi-CW f=2 kHz 200 mA 250 μs 250 μs Pulsed f=2 kHz 2 A 500 μs

Recommended regimes of LED operation

