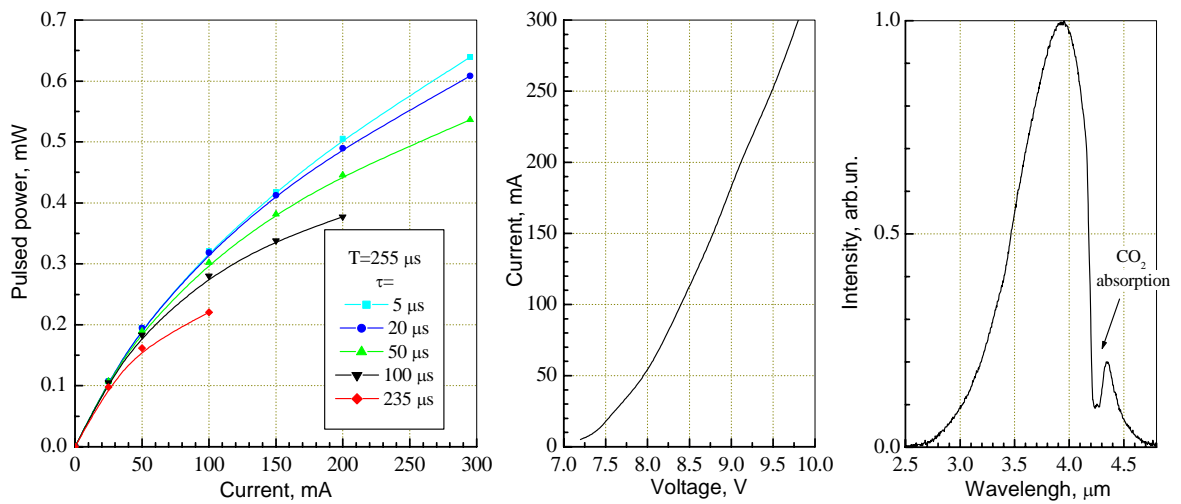


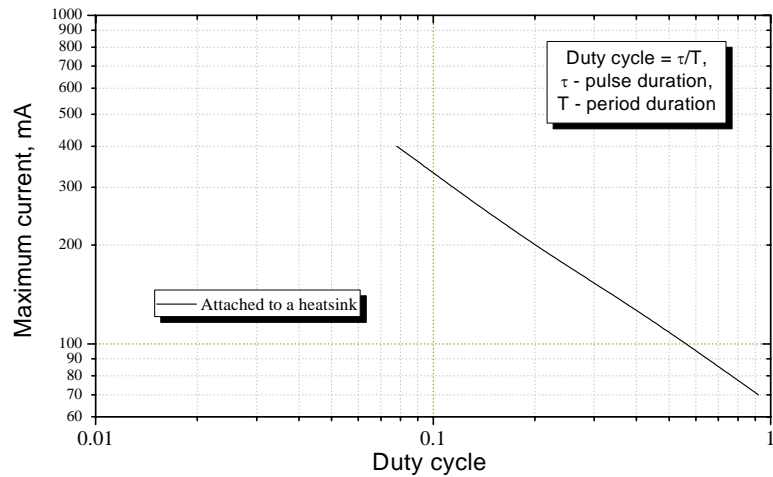


MIRO39A6		Technical Specifications (T = 22 °C)			
<b>Optically pumped IR light emitting diodes</b>					
Peak wavelength		$\lambda_{max}$	$\mu\text{m}$	3.9±0.05	
Spectral width FWHM			$\mu\text{m}$	0.75±0.05	
Current test conditions:	Pulse duration	$\tau$	$\mu\text{s}$	5	
	Pulse period	T		255	
Number of emitting elements		-	ps	6 in serial connection	
Voltage at drive current I = 0.3 A		$U_{pulsed}$	V	9.7	
Max. drive current		$I_{max}$	A	To be specified according to the graphs below and heatsink conditions	
Pulsed power at I = 0.3 A		$P_{pulsed}$	$\mu\text{W}$	650	
CW power of the LEDs attached to a heatsink at I = 70 mA		$P_{CW}$	$\mu\text{W}$	190	
Switching time		$\tau$	ns	≤100	
<b>Packaging and beam parameters</b>					
House code	Thread	Emission area size	Far-field pattern FWHM	Operation (storage) conditions	Polarity
		mm <sup>2</sup>	deg.	°C	
Screw10	M10×1	1.4×1.7	≈120	-25÷+45	black wire is negative
Pump source view					
	<ul style="list-style-type: none"> <li>✓ All devices are stressed at 80°C and I = 50 mA (cw) for 10 hrs before final test and shipping to a customer.</li> <li>✓ In addition to mid-IR radiation LEDs emit NIR pumping radiation <math>\lambda = 0.87 \mu\text{m}</math> as well. This "parasitic" emission can be cut off by filters or by a detector window.</li> <li>✓ Heatsink is essential for normal LED operation especially in the CW mode.</li> </ul>				

### Current vs. Voltage, Current vs. Output Power and Emission Spectrum at 22 °C.



### Maximal current vs. operation conditions



### Output power and emission spectra maximum vs. temperature and far-field pattern

