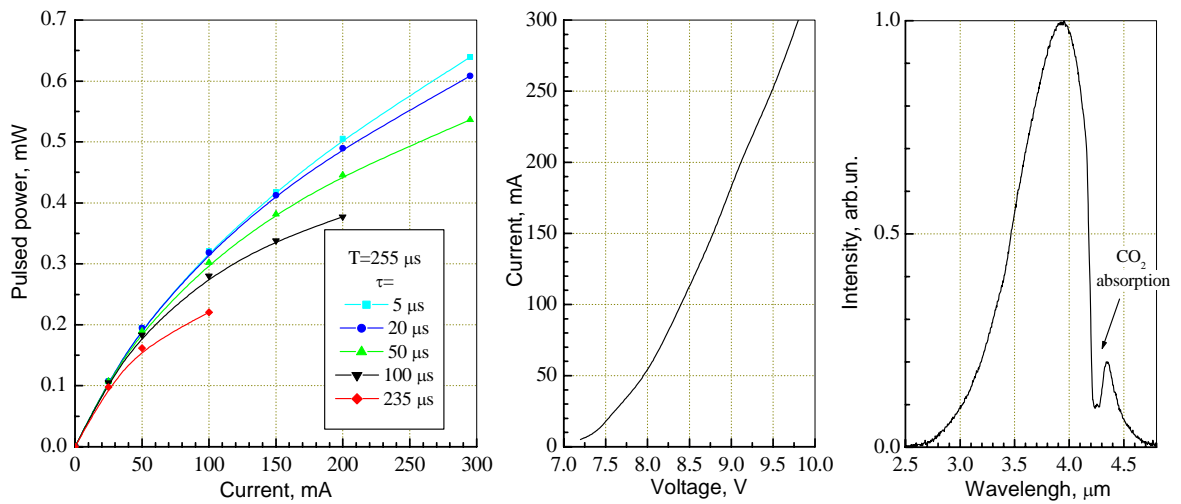


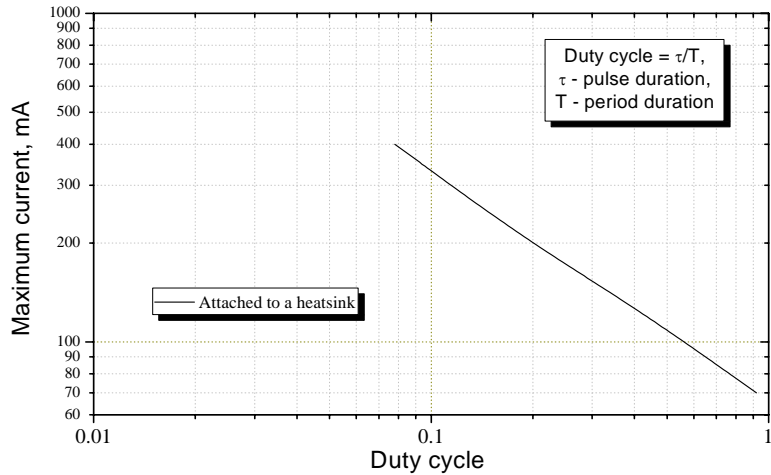


| MIRO39A6 | | Technical Specifications (T = 22 °C) | | | |
|--|--|--------------------------------------|------------------------|---|------------------------|
| Optically pumped IR light emitting diodes | | | | | |
| Peak wavelength | | λ_{max} | μm | 3.9±0.05 | |
| Spectral width FWHM | | | μm | 0.75±0.05 | |
| Current test conditions: | Pulse duration | τ | μs | 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} | μW | 650 | |
| CW power of the LEDs attached to a heatsink at I = 70 mA | | P_{CW} | μW | 190 | |
| Switching time | | τ | ns | ≤100 | |
| Packaging and beam parameters | | | | | |
| House code | Thread | Emission area size | Far-field pattern FWHM | Operation (storage) conditions | Polarity |
| | | mm ² | 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"> ✓ All devices are stressed at 80°C and I = 50 mA (cw) for 10 hrs before final test and shipping to a customer. ✓ In addition to mid-IR radiation LEDs emit NIR pumping radiation $\lambda = 0.87 \mu\text{m}$ as well. This "parasitic" emission can be cut off by filters or by a detector window. ✓ Heatsink is essential for normal LED operation especially in the CW mode. | | | | |

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

