



## MIRO33A6

## Technical Specifications (T = 22 °C)

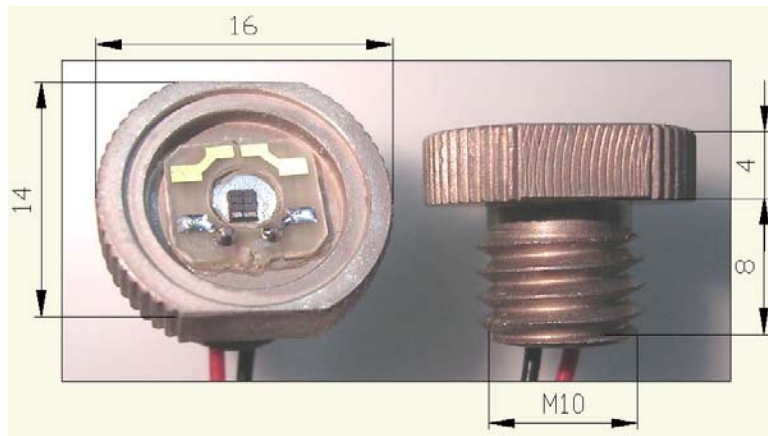
### Optically pumped IR light emitting diodes

Peak wavelength	$\lambda_{max}$	$\mu\text{m}$	3.25±0.05
Spectral width FWHM		$\mu\text{m}$	0.35÷0.40
Current test conditions:	Pulse duration	$\tau$	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	$P_{pulsed}$	$\mu\text{W}$	750
CW power of the LEDs attached to a heatsink at I = 70 mA	$P_{CW}$	$\mu\text{W}$	220
Switching time	$\tau$	ns	≤100

### Packaging and beam parameters

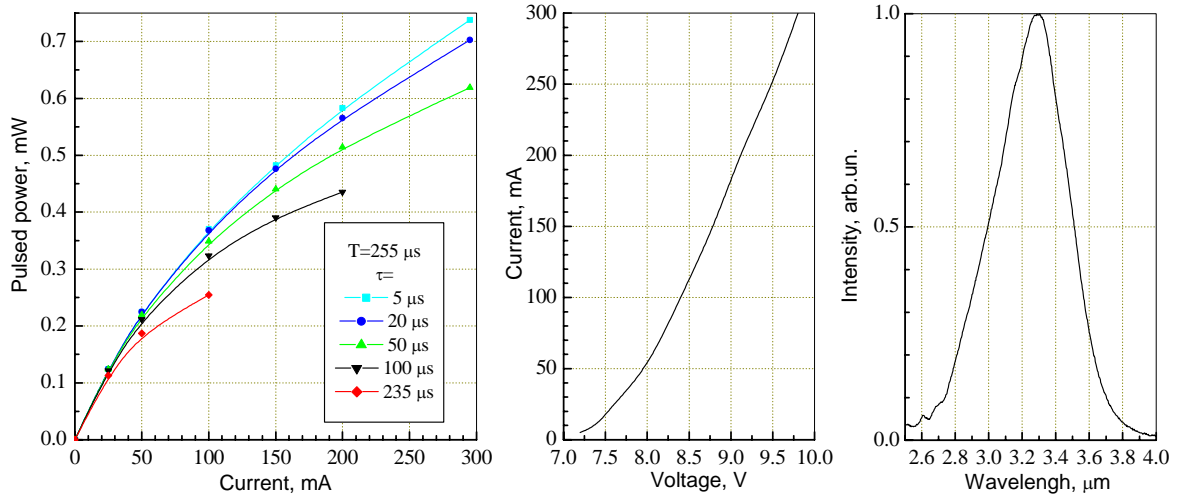
House code	Thread	Emission area size	Far-field pattern FWHM	Operation (storage) conditions	Polarity
		mm <sup>2</sup>	deg.	°C	
Screw10	M10×1	1.4×1.7	≈120	-25÷+45	black wire is negative

Pump source view

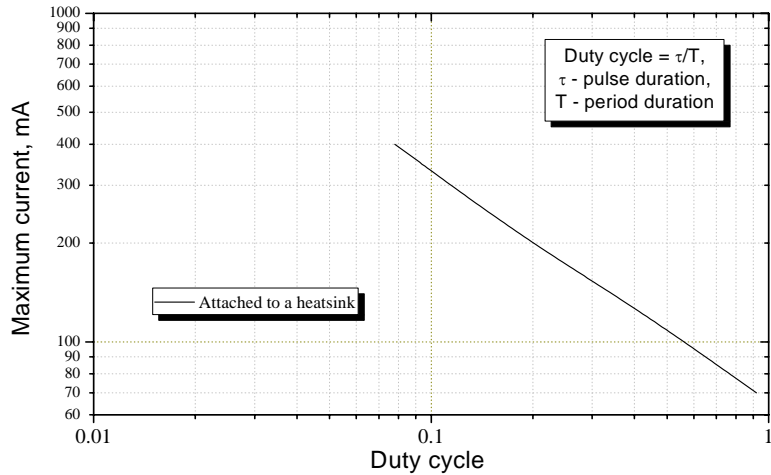


- ✓ All devices are stressed at 80°C and I = 50 mA (cw) for 10 hrs before final test and shipping to a customer.
- ✓ In addition to mid-IR radiation LEDs emit NIR pumping radiation  $\lambda = 0.87 \mu\text{m}$  as well. This "parasitic" emission can be cut off by filters or by a detector window.
- ✓ 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

