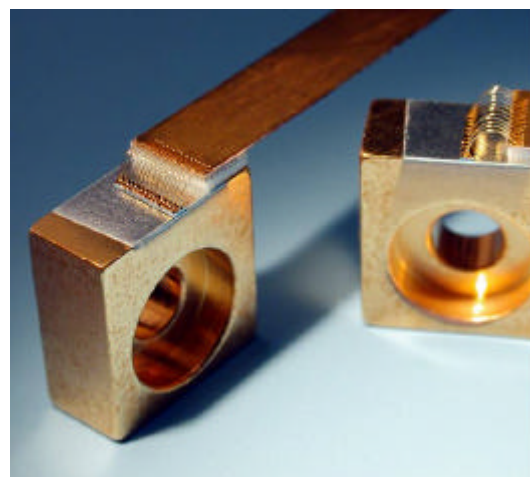


GaSb Diode Laser

BA_1930_01_SE

Features

- Single emitter with 150 μm stripe width
- 1 W output power
- 44° divergence perpendicular (FWHM)
- highly reliable

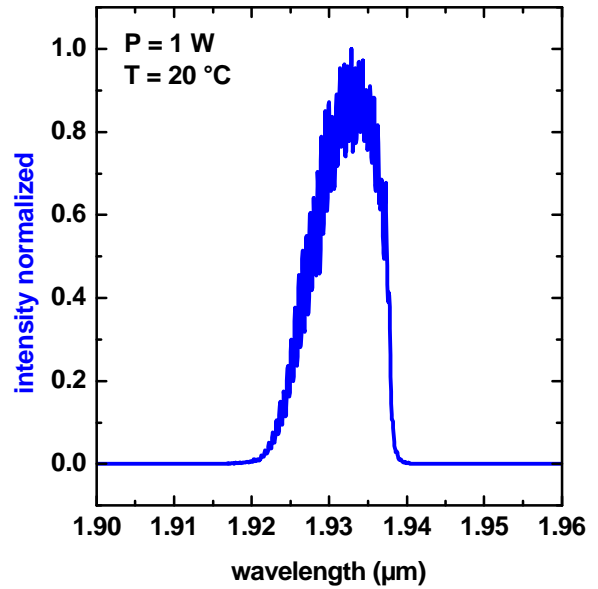
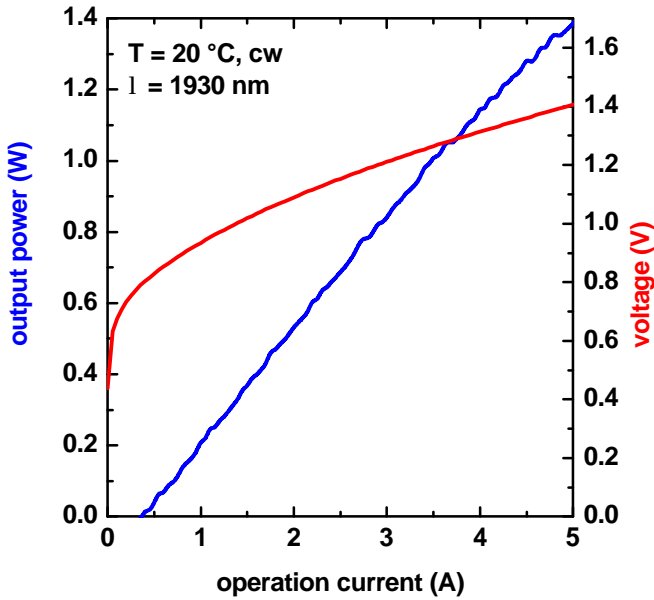


Description / Applications:

m2k-laser is now offering high-power diode lasers in the wavelength regime 1.9 μm to 2.1 μm . The lasers can be used for medical applications (e.g. laser surgery), optical pumping of mid-infrared solid-state lasers (e.g. pump source of Ho:YAG) or for material processing (e.g. marking and welding of transparent plastics). The broad-area, gain-guided lasers are based on the (AlGaIn)(AsSb) material system, epitaxially grown on GaSb substrates. Different variants such as single emitters or laser bars are available now. The single emitters are mounted onto c-mounts and feature output powers up to 1 W. The fast axis beam divergence is as low as 44° FWHM due to an improved waveguide design.

Characteristics of BA_1930_01_SE diode lasers (all measurements have been done at 20 °C in cw operation)

Parameter	Min	Typ	Max	Unit
Center wavelength	1910	1930	1950	nm
Temp. coefficient of wavelength		12		nm / K
Curr. coefficient of wavelength		10		nm / A
Output power		1		W
Slope efficiency	0.29	0.32		W / A
Threshold current		0.35	0.40	A
Operational current @ 1W		3.5	4.0	A
Cavity length		1000		μm
Stripe width		150		μm
Divergence parallel		10	11	°
Divergence perpendicular		44	47	°



Package Information

Package	Thickness	Unit
C-Mount	3.0	mm
others	on request	

