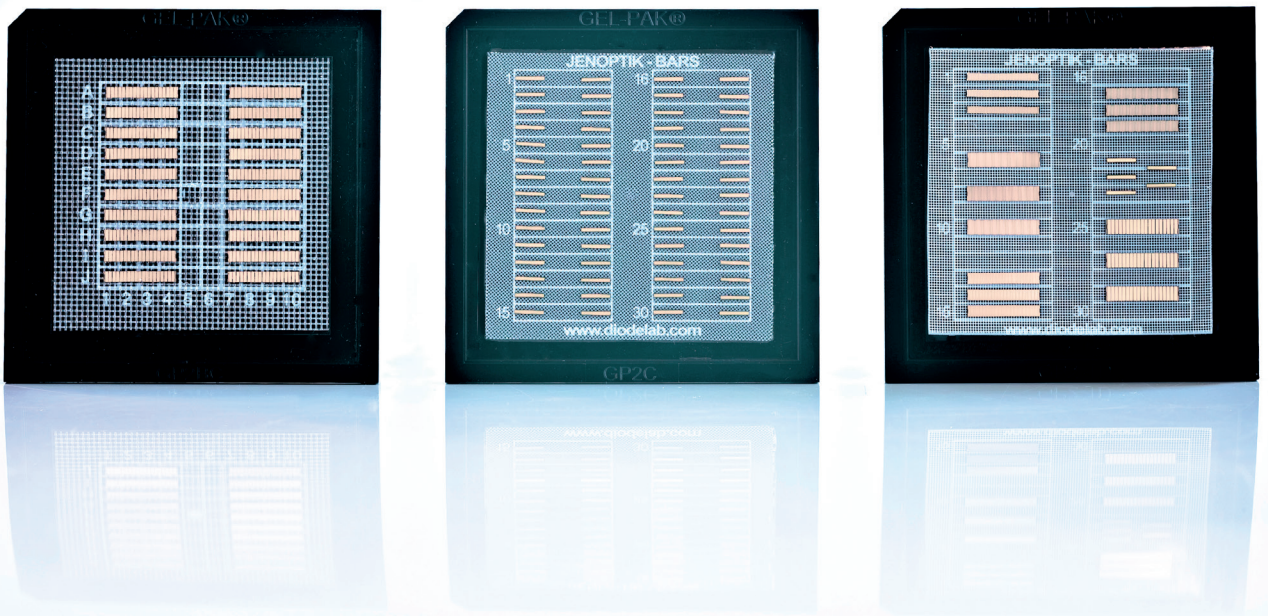


JENOPTIK

High-power diode laser bars: 940 nm, 200 W cw

JDL-BAB-50-23-940-TE-200-4.0

Features
- High laser power
- High efficiency
- Long lifetime, high reliability
- Excellent beam characteristics

Applications
- Pumping of solid-state lasers and fiber lasers
- Industrial, scientific and medical systems
- Printing industry
- Defense and security

High-power diode laser bars | 940 nm, 200 W cw

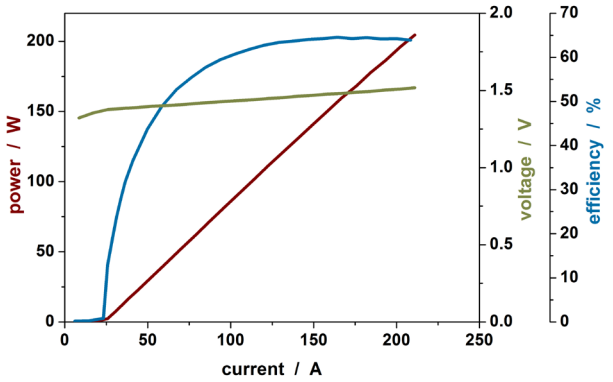
JDL-BAB-50-23-940-TE-200-4.0

Specifications	JDL-BAB-50-23-940-TE-200-4.0				
Operation*	**Symbol**	**Min**	**Nom**	**Max**	**Unit**
Wavelength (cw)	λ	937	**940**	943	nm
Optical Output Power	P_{opt}		**200**		W
Operation Mode			**cw, switched**		
Power Modulation			**100**		%
Geometrical					
Number of Emitters			**23**		
Emitter Width	W	195	**200**	205	µm
Emitter Pitch	P		**400**		µm
Filling Factor	F		**50**		%
Bar Width	B	9600	**9800**	10000	µm
Cavity Length	L	3980	**4000**	4020	µm
Thickness	D	115	**120**	125	µm
Electro Optical Data*					
Fast Axis Divergence (FWHM)	$\theta_{\perp}$		**23**	26	°
Fast Axis Divergence**	$\theta_{\perp}$		**42**	45	°
Slow Axis Divergence at 200 W (FWHM)	$\theta_{\parallel}$		**6**	8	°
Slow Axis Divergence at 200 W**	$\theta_{\parallel}$		**7**	9	°
Pulse Wavelength	λ	925	**928**	931	nm
Spectral Bandwidth (FWHM)	$\Delta\lambda$		**3**	4	nm
Slope Efficiency***	η	1.0	**1.1**		W/A
Threshold Current	I_{th}		**24**	27	A
Operating Current	I_{op}		**206**	224	A
Operating Voltage	V_{op}		**1.5**	1.6	V
Series Resistance	R_s		**0.6**	0.7	mΩ
Degree of TE Polarization	α	98			%
EO Conversion Efficiency***	η_{tot}	60	**63**		%

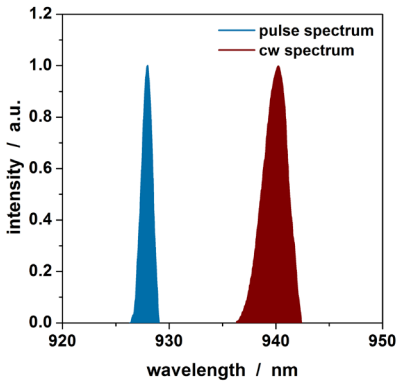
* Mounted on a heat sink with Rth = 0.3 K/W, coolant temperature 25 °C, operating at nominal power
** Full width at 95 % power content
*** Item may change upon notice and acceptance by JENOPTIK Diode Lab GmbH, due to future improvements of technology or processing

Note: Nominal data represents typical values.
Safety Advice: Laser bars are the active components in high-power diode lasers in accordance to IEC standard class 4 laser products. As delivered, laser bars cannot emit any laser beam. The laser beam can only be released if the bars are connected to a source of electrical energy. In this case, IEC-Standard 60825-1 describes the safety regulations to be taken to avoid personal injury.

Power - Current - Voltage - Characteristics*



Spectral Characteristics*



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11/2017 | Specifications may change in compliance with our quality management system.