

STD-UMB-50-47-976-TE-200-4.0

High-power Diode Laser Bars, 976nm, 200W CW



Features:

- High electrical-optical conversion efficiency
- High stability
- High reliability
- Long lifetime

Technical Advantages:

- High efficient epitaxial structure design
- High-quality epitaxial material growth
- Special passivation method for cavity surface

Specifications

	Symbol	Min.	Typical	Max.	Unit
Operation					
Optical output power	P _o		200		W
Wavelength	λ _o	973	976	979	nm
Operation mode			CW		
Dimensions					
Number of emitters			47		
Emission region width	E.W.	95	100	105	um
Emitter pitch	P		200		
Filling factor	F		50		
Cavity length	L	3990	4000	4010	um
Thickness	D	115	120	125	um
Electro-optical parameters					
Electro-optical efficiency	η	62	65		%
Slope efficiency	SE	1.1	1.2		W/A
Threshold efficiency	l _{th}		25	28	A
Operation current	I _{op}		195	210	A
Operation voltage	V _{op}		1.55	1.6	V
Spectral width FWHM	Δλ		3	4	nm
Wavelength shift vs. temp.	Δλ/ΔT		0.35		Nm/°C
Fast divergence angle	θ _⊥		27	30	Deg
Slow divergence angle	θ _∥		6	8	Deg

Remark: Tested with MCC packaged products in the CW mode at 25°C.