

STD-UMB-30-19-808-TE-50-1.5

High-power Diode Laser Bars, 808nm, 50W CW



Features:

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

Technical Advantages:

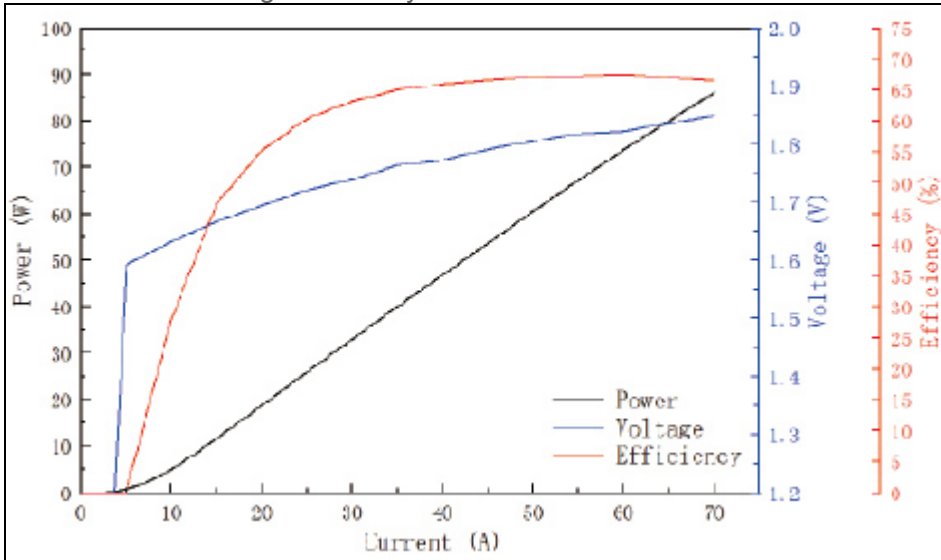
- High efficient epitaxial structure design
- High-quality epitaxial material growth
- Special passivation method for cavity surface

Specifications

	Symbol	Min.	Typical	Max.	Unit
Operation					
Optical output power	P _o		50		W
Wavelength	λ _o	803	808	813	nm
Operation mode			CW		
Dimensions					
Number of emitters			19		
Emission region width	E.W.	145	150	155	um
Emitter pitch	P		500		
Filling factor	F		30		
Bar width	B	9800	10000	10200	
Cavity length	L	980	1000	1020	um
Thickness	D	115	120	125	um
Electro-optical parameters					
Electro-optical efficiency	η	62	65		%
Slope efficiency	SE	1.2	1.3		W/A
Threshold efficiency	l _{th}		7	8	A
Operation current	I _{op}		42	44	A
Operation voltage	V _{op}		1.8	2	V
Spectral width FWHM	Δλ		2.8	3	nm
Wavelength shift vs. temp.	Δλ/ΔT		0.3		Nm/°C
Fast divergence angle	θ _⊥		35		Deg
Slow divergence angle	θ _∥		6		Deg

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

Power-Current-Voltage-Efficiency



Spectral Characteristics

