Sintec Optronics

STD-UMC-100-808-TE-6-4.0

High Power Single Emitter Diode Lasers, 808nm, 6W CW

Features:

- High output power
- High power conversion efficiency
- High brightness
- High reliability

Technical Advantages:

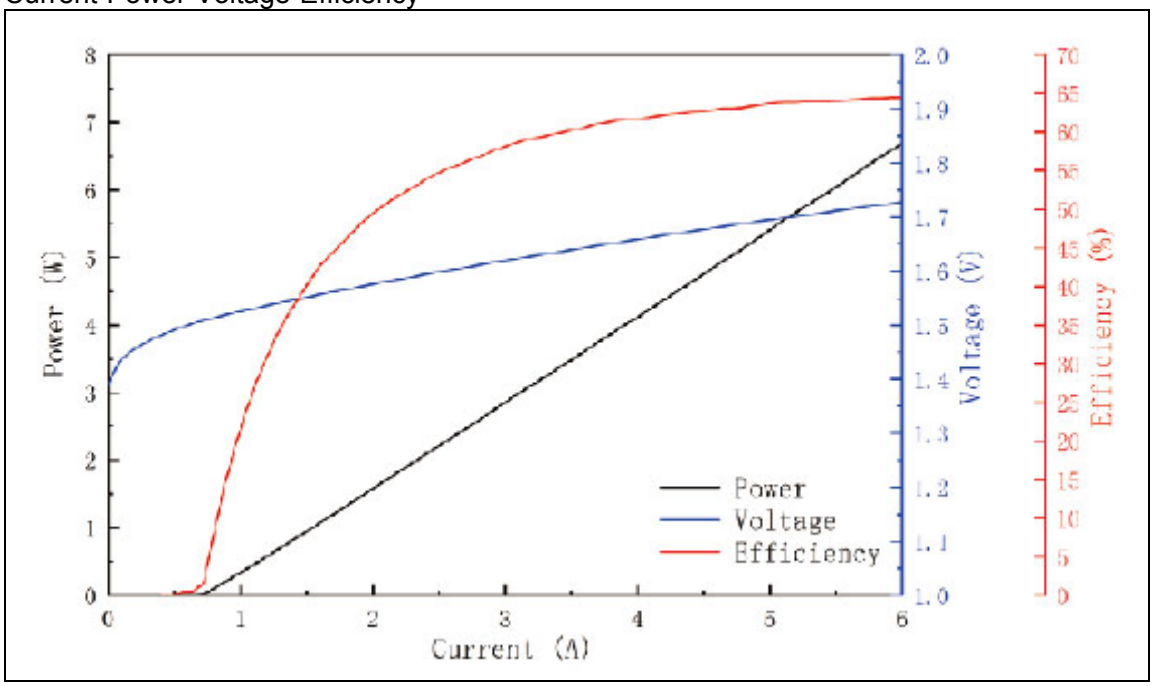
- High efficient epitaxial structure design
- High-quality epitaxial material growth
- Special passivation method for cavity surface

Specifications

	Symbol	Min.	Typical	Max.	Unit
Operation					
Optical output power	Po		10		W
Wavelength	λo	803	808	813	nm
Operation mode			CW		
Dimensions					
Emission region width	E.W.	95	100	105	um
Cavity length	L	3980	4000	4020	um
Width	W	480	500	520	um
Thickness	D	115	120	125	um
Electro-optical parameters					
Electro-optical efficiency	η	58	60		%
Slope efficiency	SE	1.1	1.2		W/A
Threshold efficiency	Ith		0.75	0.8	A
Operation current	Iop		5.7	6.0	A
Operation voltage	Vop		1.75	1.8	V
Spectral width FWHM	△λ		1.5	2.5	nm
Wavelength shift vs. temp.	△λ/△T		0.3		Nm/°C
Vertical far field divergence angle	$\theta_{\perp}$		30	35	Deg
Horizontal far field divergence angle	$\theta_{/\!/}$		6	8	Deg
Polarization	TE	95			%

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

Current-Power-Voltage-Efficiency



Spectral Characteristics