Sintec Optronics

STD-UMC-160-915-TE-18-5.0

High Power Single Emitter Diode Lasers, 915nm, 18W CW

Features:

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

Technical Advantages:

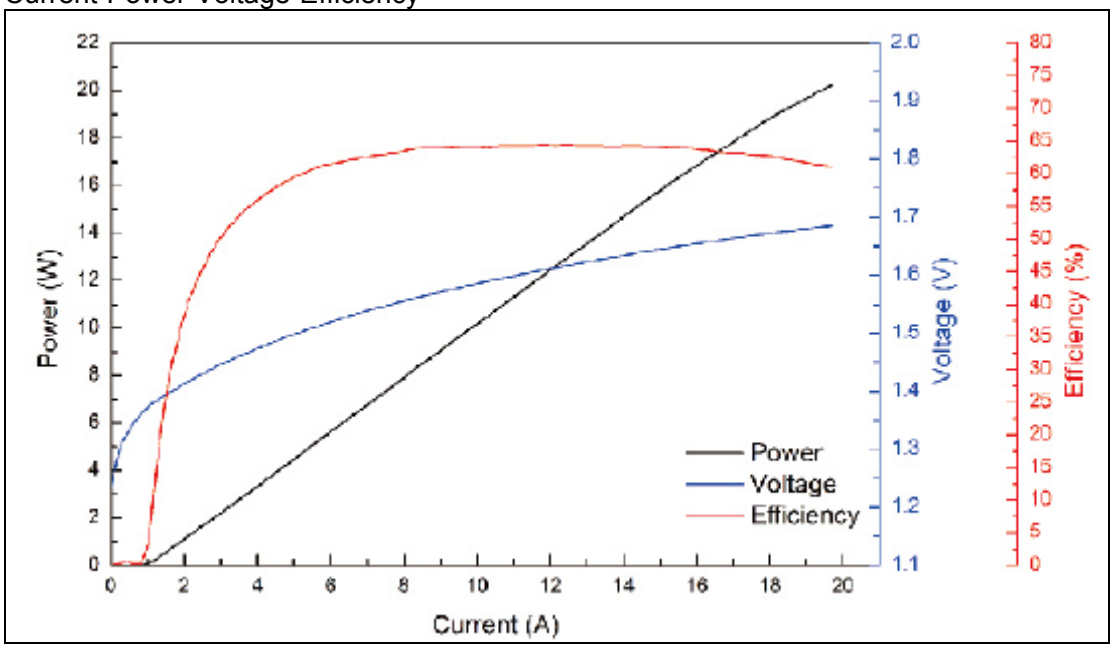
- High efficient epitaxial structure design
- High-quality epitaxial material growth
- Special passivation method for cavity surface

Specifications

	Symbol	Min.	Typical	Max.	Unit
Operation					
Optical output power	Po		12		W
Wavelength	λo	905	915	925	nm
Operation mode			CW		
Dimensions					
Emission region width	E.W.	95	100	105	um
Cavity length	L	4495	4500	4505	um
Width	W	395	400	405	um
Thickness	D	140	145	150	um
Electro-optical parameters					
Electro-optical efficiency	η	60	62		%
Slope efficiency	SE	1.05	113		W/A
Threshold efficiency	Ith		0.7	0.8	A
Operation current	Iop		11.5	12.5	A
Operation voltage	Vop		1.62	1.7	V
Spectral width FWHM	△λ		3	3.5	nm
Wavelength shift vs. temp.	△λ/△T		0.35		Nm/°C
Vertical far field divergence angle	$\theta_{\perp}$		31	33	Deg
Horizontal far field divergence angle	$\theta_{//}$		7.5	8.5	Deg
Polarization	TE	95			%

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

Current-Power-Voltage-Efficiency



Spectral Characteristics