975nm 18W 高功率单管激光芯片

High Power Single Emitter Diode Lasers, 975nm, 15W CW

DG-UMC-160-975-TE-18-5.0

产品特点 Features:

- 高输出功率
- 高电光转换效率
- 高亮度
- 高可靠性

- High Power
- High Power Conversion Efficiency
- High Brightness
- High Reliability

技术亮点 Technical highlights:

- 高功率、高效率外延设计
- 高质量外延材料生长
- 高亮度结构设计
- 腔面特殊钝化方法

- High Power and High Efficiency Epitaxia Design
- High-quality Epitaxial Material Growth
- High Brightness Structure Design
- Special Passivation Method for Cavity Surface

随着未来技术和工艺的改进，度亘会确认并通知产品的变更、升级

Item may change upon notice and acceptance by Dogain, due to future improvements of technology or processing

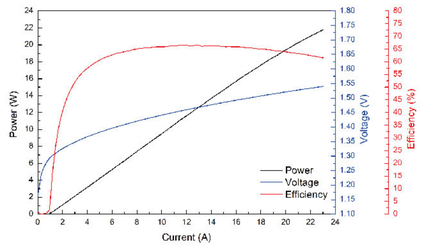
性能参数 Performance Parameters	符号 Symbo	最小值 Minimum	典型值 Typical	最大值 Maximum	单位 Unit
Operation					
输出功率 Optical output power	Po		18		W
中心波长 Wavelength (cw)	λc	965	975	985	nm
工作模式 Operation mode			CW		
Geometrical					
发光区宽度 Emission region width	E.W.	155	160	165	um
腔长 Cavity length	L	4995	5000	5005	um
宽度 Width	W	395	400	405	um
厚度 Thickness	D	140	145	150	um
Electro Optical Data					
电光转换效率 Electro-optic conversion efficiency	ηc	60	62		%
斜率效率 Slope efficiency	SE	0.98	1.01		W/A
阈值电流 Threshold current	Ith		1.05	1.15	A
工作电流 Operating current	Iop		19	21	A
工作电压 Operating voltage	Vop		1.55	1.65	V
光谱宽度（FWHM） Spectral width	Δλ		3	3.5	nm
波长温度系数 Wavelength tuning vs. temperature	Δλ/ΔT		0.35		nm/℃
垂直远场发散角（FWHM） Vertical F.F. divergence angle	θ⊥		28	30	Deg
水平远场发散角（FWHM） Horizontal F.F. divergence angle	θ//		7.5	8.5	Deg
TE 偏振度 TE Polarization		95			%

备注：本参数为产品进行COS封装，CW电流模式，导热板25℃下条件下的测试参数。

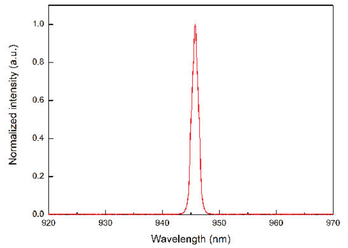
Note: These parameters were obtained by testing COS packaged products in the CW mode at 25℃.

可接受客户定制化产品 Accept customized products

Power -Current -Voltage -Efficiency



Spectral Characteristics



度亘激光技术(苏州)有限公司

苏州工业园金鸡湖大道99号纳米城20栋217室

0512-62385166

www.dogain-tech.com

sales@dogain-tech.com