

DoGain

High-power Single Emitter Diode Lasers, 780nm, 20W cw

780nm 20W高功率单管激光芯片

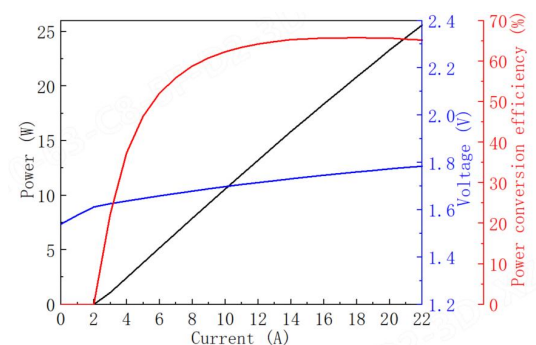
DG-UMC-400-780-TM-20-4.5

性能参数 Performance parameters	符号 Symbol	最小值 Minimum	典型值 Typical	最大值 Maximum	单位 Unit
Operation					
输出功率 Optical output power	P_o		20		W
中心波长 Wavelength	λ_c	777	780	783	nm
冷波长@3A Wavelength@3A	λ_0	775	777	779	nm
工作模式 Operation mode			CW		
Geometrical					
发光区宽度 Emittier width	E.W.	395	400	405	μm
腔长 Cavity length	L	4495	4500	4505	μm
宽度 Width	W	595	600	605	μm
厚度 Thickness	D	105	115	125	μm
Electro Optical Data					
电光转换效率 Electro-optic conversion efficiency	η_c	62	65.5		%
斜率效率 Slope efficiency	SE	1.15	1.3		W/A
阈值电流 Threshold current	I_{th}		2	4	A
工作电流 Operating current	I_{op}		17.5	20	A
工作电压 Operating voltage	V_{op}		1.76	1.85	V
光谱宽度 Spectral width (FWHM)	$\Delta\lambda$		2	5	nm
波长温度系数 Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		0.3		nm/°C
水平远场发散角 (95%E) Horizontal F.F. divergence angle	$\theta_{//}$		10	12	Deg
垂直远场发散角 (95%E) Vertical F.F. divergence angle	$\theta_{\perp}$		72	76	Deg
TM 偏振度@5A TM Polarization@5A		95.0	96.0		%

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

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

⚙ Power-Current-Voltage-Efficiency



⚙ Spectral characteristics

