

DoGain

High-power Single Emitter Diode Lasers, 915nm, 42W cw

915nm 42W高功率单管激光芯片

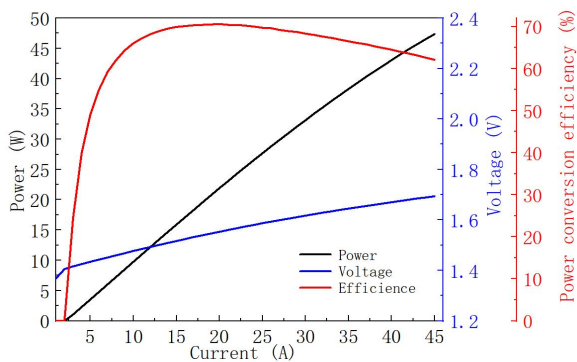
DG-UMC-290-915-TE-42-5.5

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		42		W
中心波长 Wavelength	λ_c	905	915	925	nm
冷波长@3.0A Wavelength@3.0A	λ_0	900	905	910	nm
工作模式 Operation mode			CW		
Geometrical					
发光区宽度 Emittier width	E.W.	285	290	295	μm
腔长 Cavity length	L	5495	5500	5505	μm
宽度 Width	W	495	500	505	μm
厚度 Thickness	D	135	145	155	μm
Electro Optical Data					
电光转换效率 Electro-optic conversion efficiency	η_c	60	64		%
斜率效率 Slope efficiency	SE	1.00	1.12		W/A
阈值电流 Threshold current	I_{th}		2.2	2.8	A
工作电流 Operating current	I_{op}		40.5	42	A
工作电压 Operating voltage	V_{op}		1.62	1.8	V
光谱宽度 Spectral width (FWHM)	$\Delta\lambda$		3.5	5	nm
波长温度系数 Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		0.35		nm/ $^{\circ}\text{C}$
水平远场发散角 (95E%) Horizontal F.F. divergence angle	$\theta_{//}$		9	11	Deg
垂直远场发散角 (95E%) Vertical F.F. divergence angle	$\theta_{\perp}$		48	52	Deg
TE 偏振度@5A TE Polarization@5A		95.0	97.0		%

备注：本参数为产品进行COS封装，CW电流模式，导热板25°C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°C.

⚙ Power-Current-Voltage-Efficiency



⚙ Spectral characteristics

