

DoGain

High-power Single Emitter Diode Lasers, 975nm, 42W cw

975nm 42W高功率单管激光芯片

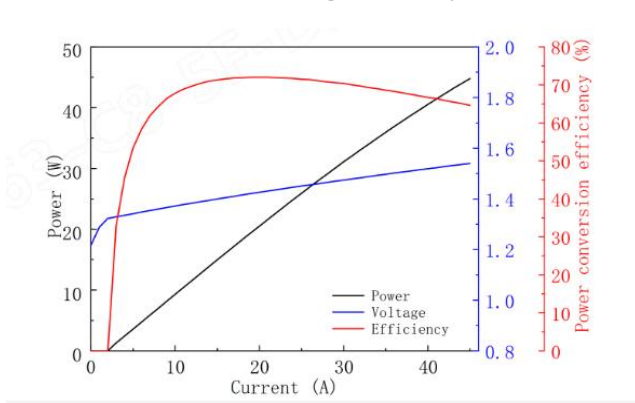
DG-UMC-290-975-TE-42-5.5

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	973	976	979	nm
冷波长@4A Wavelength@4A	λ_0	964	966	968	nm
工作模式 Operation mode			CW		
Geometrical					
发光区宽度 Emitter 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	61	65		%
斜率效率 Slope efficiency	SE	1.00	1.05		W/A
阈值电流 Threshold current	I_{th}		1.85	2.2	A
工作电流 Operating current	I_{op}		42	44	A
工作电压 Operating voltage	V_{op}		1.55	1.70	V
光谱宽度 Spectral width (FWHM)	$\Delta\lambda$		4	5	nm
波长温度系数 Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		0.35		nm/°C
水平远场发散角 (95E%) Horizontal F.F.divergence angle	$\theta_{//}$		8.5	10	Deg
垂直远场发散角 (95E%) Vertical F.F. divergence angle	$\theta_{\perp}$		52	56	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

