

DoGain

High-Brightness Single Emitter Diode Lasers, 976nm, 12W cw

976nm 12W高亮度单管激光芯片

DG-UMC-100-976-TE-12-4.5

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		12		W
中心波长 Wavelength	λ_c	973.5	975.5	977.5	nm
冷波长@2A Wavelength@2A	λ_0	973.5	974.5	975.5	nm
工作模式 Operation mode			CW		
Geometrical					
发光区宽度 Emittier width	E.W.	95	100	105	μm
腔长 Cavity length	L	4495	4500	4505	μm
宽度 Width	W	395	400	405	μm
厚度 Thickness	D	135	145	155	μm
Electro Optical Data					
电光转换效率 Electro-optic conversion efficiency	η_c	62	66		%
斜率效率 Slope efficiency	SE	1.02	1.10		W/A
阈值电流 Threshold current	I_{th}		0.8	1.4	A
工作电流 Operating current	I_{op}		12	13	A
工作电压 Operating voltage	V_{op}		1.52	1.7	V
光谱宽度 Spectral width (FWHM)	$\Delta\lambda$		0.5	1	nm
波长温度系数 Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		0.06		nm/°C
水平远场发散角 (95E%) Horizontal F.F.divergence angle	$\theta_{//}$		7	9	Deg
垂直远场发散角 (95E%) Vertical F.F.divergence angle	$\theta_{\perp}$		47	52	Deg
TE 偏振度@5A TE Polarization@5A		95	96		%

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.

