



RLAS-1064

Key Features:

Narrow Laser Linewidth
 High Power Stability
 Low Power Consumption
 High Reliability

Applications:

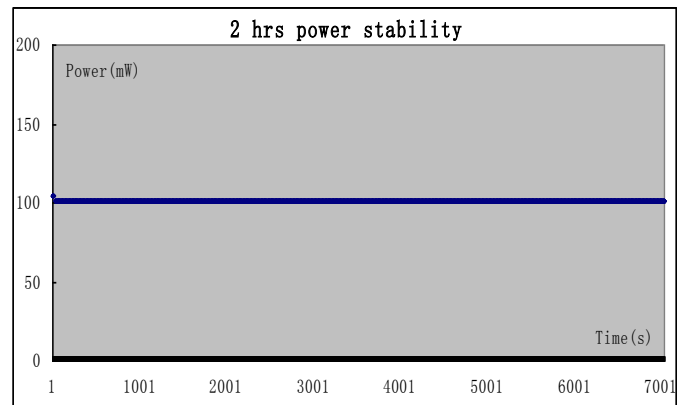
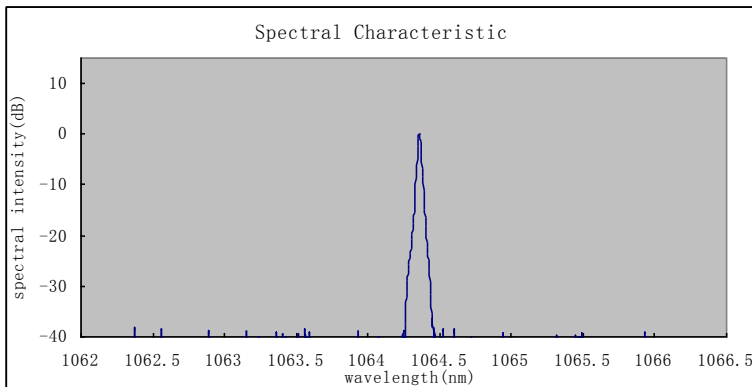
Raman Spectrograph
 Sensing
 Bio-medical

Model Number		RLAS-1064					
Optical Parameters		Specs				Conditions	
		Min	Typ		Max		
Wavelength		1063.8nm	1064.3nm		1064.8nm		
Line Width		-	0.05nm		0.1nm	FWHM	
Central Wavelength Stability	2hours	-	-		15pm	RMS	
	Over-life	-	-		30pm	RMS	
Central Wavelength Shift	Over Operating Temp Range	-	-		15pm/°C	RMS	
Output Power		-	100mW	200mW	500mW	-	Free beam
Output Power		-	100mW ^①	200mW ^②	500mW	-	
Power Stability	2hours @ Constant Temp	-	-		±2%	ACC, peak to peak	
	Over Operating Temp Range	-	-		±5%	ACC, peak to peak	
Polarization Ratio		-	Horizontal >100:1	Nonlinear	Nonlinear	-	Free space
Operating Temperature (Case)		-20°C	-		70°C	-	ACC
Noise		-	-		0.2%	-	RMS
Beam Diameter		-	0.15mm		-	-	At output window, free space
Beam Divergence		-	22mrad	8mrad	10mrad	-	Full angle, 1/e ²
Roundness		80%	90%		100%	-	Free space
M-Square		-	1.2		1.3	-	Free space
SMSR		35dB	-		-	-	
Warm up Time		-	-		1 minute	-	Module
Optical Fiber		105/125um Multimode Fiber,0.2~0.22NA or Single-mode Fiber				-	Fiber coupled
Connector		FC/PC or to be Customized				-	Fiber coupled
Electrical Parameters							
LD Working Current		-	<700	<1800	-	-20°C~70 °C	
LD Working Voltage		-	<2.5V	<2.8V	-		
Internal TEC	Voltage	-	-		4.8V	Room temperature	
	Current	-	-		2.5A	Room temperature	
Internal Temperature Sensor		-	10KΩ@25°C		-		

Module	Input Voltage	4.8VDC	5VDC	5.2VDC	
	Input Current	4A	-	-	
	Input Voltage Ripple	-	-	1%	
	DC Plug	-	ϕ5.5/ϕ2.1	-	⊖ — ⊕
Mechanical Parameters					
Laser Head Dimensions	Length	29.8mm	30mm	30.2mm	
	Width	12.5mm	12.7mm	12.9mm	
	Height	9.3mm	9.37mm	9.5mm	
Module Dimensions	Length	89.8mm	90mm	90.2mm	
	Width	59.8mm	60mm	60.2mm	
	Height	26.8mm	27mm	27.2mm	
Beam Alignment Tolerance	Angle	-	7mrad	17.5mrad	Free space
Laser Weight		-	16.5g	-	Free space
Module Weight		-	510g	-	Laser head + Module
Reliability					
Operating Humidity		-	5%~85% R.H.	-	
Storage Temperature		-40℃	-	+85℃	
Shock		-	500g, 1ms, 6 shocks	-	3 axes, 2 shocks/axis
Vibration		-	20~2000Hz, 0.02g ² /Hz	-	3 axes, 1hr/axis
Expected Lifetime (MTTF)		10000hrs	-	-	Room temperature

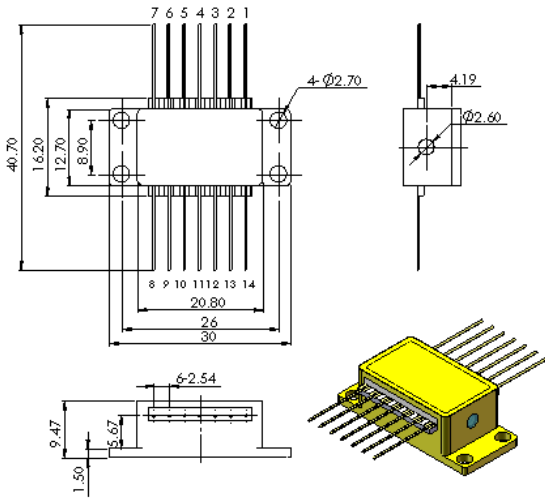
Note: ①② Multimode Fiber Coupled or Single-mode Fiber Coupled for 100mW and 200mW

Typical Output Performance

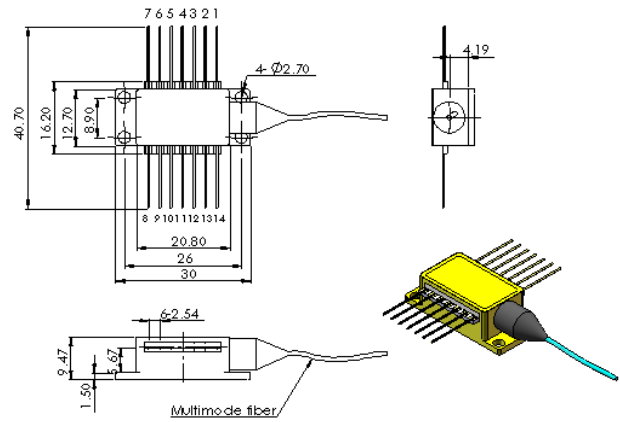


Dimensions (Unit: mm)

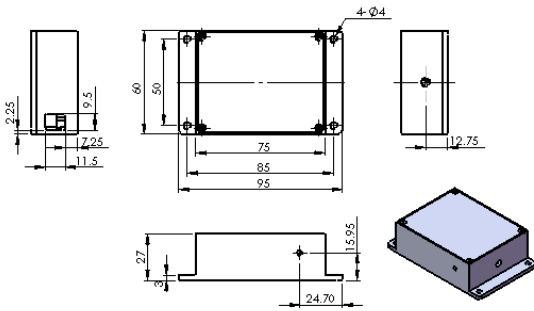
Free Space



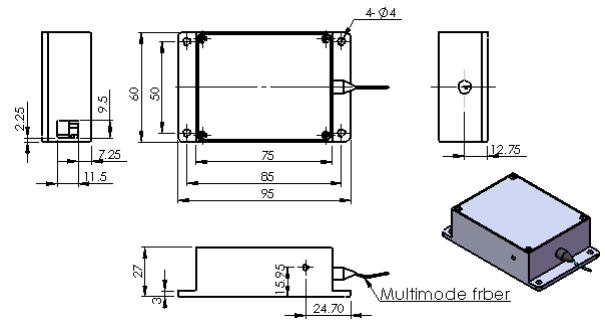
Fiber Coupled (SM/MM)



Module with Free Space



Module with Fiber Coupled (SM/MM)



Pin Configuration:

1	TEC+	8	LD+
2	PD-	9	LD-
3	Idle	10	Idle
4	Idle	11	Idle
5	Idle	12	Idle
6	RH	13	PD+
7	RH	14	TEC-