



LSN638-50

Applications

- . Flow cytometer
- . Hematology analyzer
- . DNA sequencing
- . Semicoductor Testing

Specifications				
Product Model	LSN638-50			
Mechanical Specifications	Conditions	Min	Typ	Max
Width x Height (mm)		-	40x45	-
Length (mm)		-	70	70.5
Weight (g)		-	-	250
Housing Material		Grey Anodized Aluminum		
Optical Specificaitons	Conditions	Min	Typ	Max
Wavelength (nm)	P=50mW	635	638	641
Maximum Output Power (mW)	CW Mode	49	50	52
RMS Power Stability	$\Delta T < 3^{\circ}\text{C}$, 8h	-	-	2%
RMS Noise	20Hz-20MHz	-	-	0.05%
Peak to Peak Noise	20Hz-20KHz	-	-	0.5%
Output Power Mode		CW/PULSE		
Laser Class		3B		
Polarization Extinction Ratio		100:1	-	-
Polarization Orientation	Vertical	-5°	-	5°
Pointing Stability (μrad)	25±2°C, 2h	-	-	30
Pointing Stability Over Temperature (μrad/°C)		-	-	5
Warm-up Time (minutes)	from cold start	-	5	-

Beam Specifications	Conditions	Min	Typ	Max
Beam Divergrnce(mrad) ⁽¹⁾	1/e ²	-	-	1.0
Beam Dimensions(mm) ⁽²⁾	1/e ²	0.70	0.80	0.90
Beam Asymmetry ⁽²⁾		85%	90%	-
M ²	TEM ₀₀	-	1.2	-
Beam Alignment Off-axis Angle (mrad)		-	-	2.5
Beam Height from Base Plate (mm)		-	19	-
Beam Position from Reference(mm) ⁽³⁾		-	0.5	-
Electrical Specificaitons	Conditions	Min	Typ	Max
Operating Voltage (DC, V)		12		
Operating Current (A)		2		
Output Power Control	CW /PULSE	Digital Modulation		
Power Control Type	CW Mode	APC		
	PULSE Mode	ACC		
Maximum Frequency (MHz)	PULSE Mode	-	-	10
Rise Time(ns)		-	5	-
Fall Time(ns)		-	5	-
Reliability	Conditions	Min	Typ	Max
Laser Head Baseplate Temperature (Max., °C)		50		
Operating Temperature (°C)		10	-	50
Storage Temperature (°C)		-20	-	60
Environmental Humidity (RH, %)		10	-	90

⁽¹⁾ Full Angle

⁽²⁾at Working Distance 100~300mm

⁽³⁾See mechanical drawing for exit beam location

Mechanical Specifications

