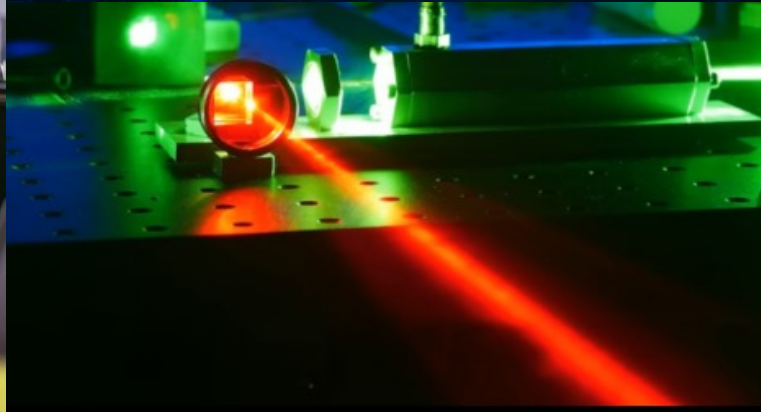
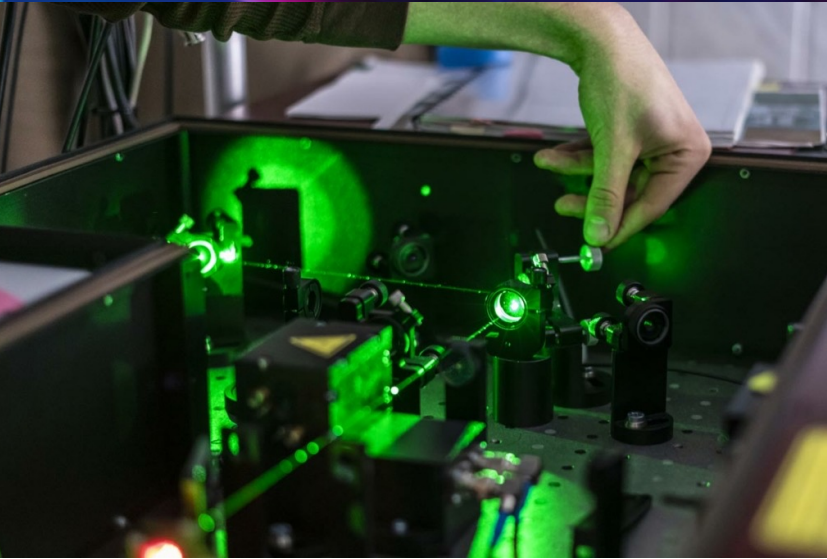


**PROFICIENT
IN LASER DESIGN**

www.jen-shine.com

Jen-Shine
LASER



JEN-SHINE CATALOG

LASER PRODUCTS FAMILY

2

0

2

5

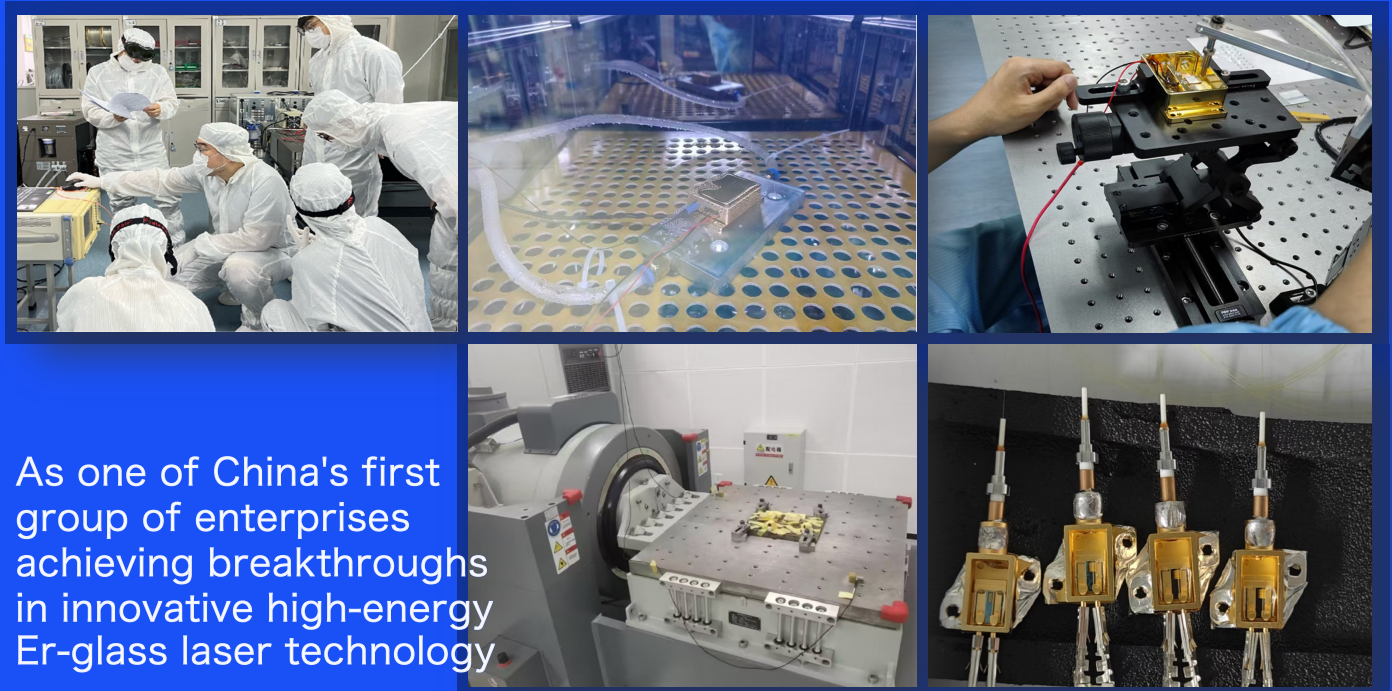


Jen-Shine, founded in 2015, is a high-tech enterprise proficient in the design, R&D, and production of:

- Erbium-glass lasers
- LD modules
- DFB lasers
- Microchip lasers
- Components



ABOUT US WELCOME



As one of China's first group of enterprises achieving breakthroughs in innovative high-energy Er-glass laser technology

we collaborate closely with leading Photo-electronic Research Institutes to constantly advance the innovation and development of China's independent laser technologies.

Our products are widely used in analytical instruments, radar ranging, "sensitive fields", and other industries, earning market recognition for their high reliability, precision, and customization capabilities. We adhere to independent design and R&D, breaking technological monopolies and empowering Chinese laser technology to reach global prominence. Jen-Shine will continue to deepen its core technological expertise, delivering cutting-edge laser solutions to clients worldwide and striving to fulfill its mission of "Intelligent Chinese Manufacturing, Illuminating the Future"!

TABLE OF CONTENT

1535nm EYE-SAFE DPSS LASERS

01

DIODE LASER MODULES

05

MICROCHIP LASERS

12

DFB LASERS

20

1535nm

EYE-SAFE DPSS LASERS

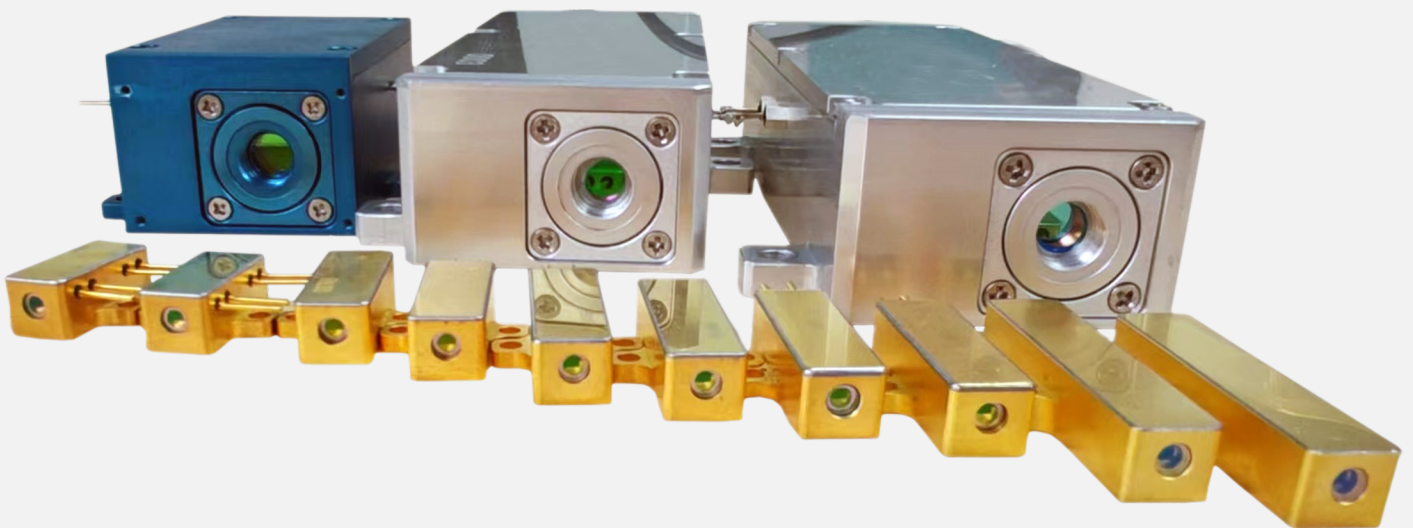
JS-1535 series, offer an eye-safe wavelength DPSSL laser, applied in range finding, targeting, monitoring, military, biomedical, etc. and so on fields. This series feature no tail pulse, stable pulse energy and excellent beam profile, with output power available up to **10mJ**.

The 1535nm laser

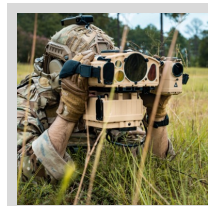
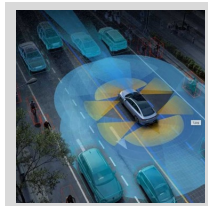
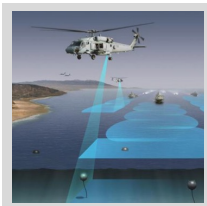
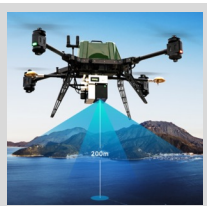
offers versatile advantages, making it widely applicable across various fields. Its eye-safe characteristics allows it to be used directly on the human eye without additional protective measures.

Main Features:

- Ultra compact
- Wide range 100 μ J ~ 10mJ
- 10Hz (100 ~ 500 μ J), 5Hz (800 μ J ~ 10mJ)
1, 2.5, 5kHz (50, 20, 10 μ J)
- 4, 7, 8, 10mrad
- Operation temperature -40 $^{\circ}$ C ~ 70 $^{\circ}$ C



Main application scenarios





	Pulse Energy	100µJ	200µJ	300µJ
Optical Parameters	Pulse width (ns)	6	5	6
	Repetition rate (Hz)	10		
	Beam full divergence (typ., mrad)	10	10	8
	Beam profile	TEM ₀₀		
	Energy Stability	3%		
Electrical Parameters	Operating current (A)	8	10	12
Other	Weight (g)	7	7	9
	Dimensions (mm)	21x8x7		25x8x7
	Operation temperature	-40°C ~ 70°C		
	Storage temperature	-55°C ~ 80°C		

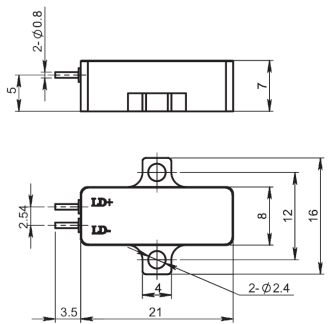


	Pulse Energy	400µJ	500µJ
Optical Parameters	Pulse width (ns)	6	
	Repetition rate (Hz)	10	
	Beam full divergence (typ., mrad)	8	
	Beam profile	TEM ₀₀	
	Energy Stability	3%	
Electrical Parameters	Operating current (A)	15	20
Other	Weight (g)	13	
	Dimensions (mm)	32x8x7	
	Operation temperature	-40°C ~ 70°C	
	Storage temperature	-55°C ~ 80°C	

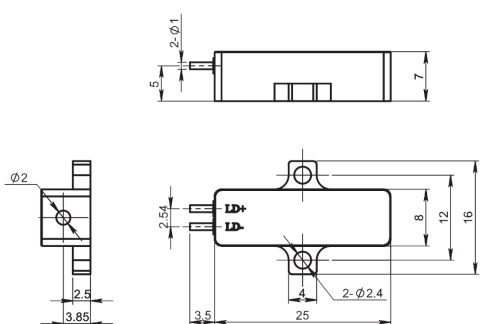
* All data above is the typical values obtained from tests at room temperature of 25°C, and the final data is subject to the final test report.

Mechanism

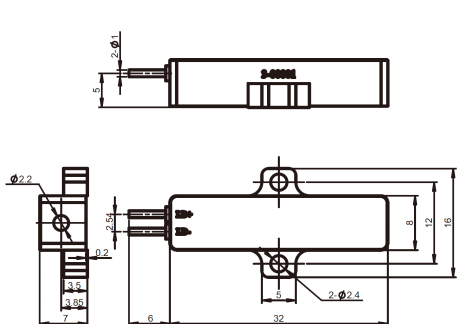
100/200µJ



300µJ



400/500µJ





	Pulse Energy	800μJ	1000μJ
Optical Parameters	Pulse width (ns)	8	
	Repetition rate (Hz)	5	
	Beam full divergence (typ., mrad)	7	
	Beam profile	TEM ₀₀	
	Energy Stability	3%	
Electrical Parameters	Operating current (A)	30	
Other	Weight (g)	20	
	Dimensions (mm)	40x9x7.65	
	Operation temperature	-40°C ~ 70°C	
	Storage temperature	-55°C ~ 80°C	

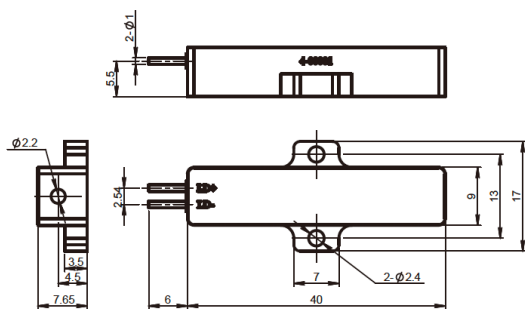


	Pulse Energy	4mJ	8mJ	10mJ
Optical Parameters	Pulse width (ns)	12	10	6
	Repetition rate (Hz)	5		
	Beam full divergence (typ., mrad)	4		
	Beam profile	TEM ₀₀		
	Energy Stability	5%		
Electrical Parameters	Operating current (A)	65	80	
Other	Weight (g)	107	223	223
	Dimensions (mm)	60x25x13.5	110x40x24	
	Operation temperature	-40°C ~ 70°C		
	Storage temperature	-55°C ~ 80°C		

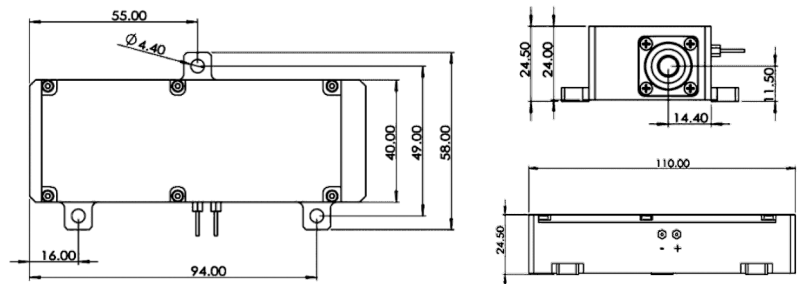
* All data above is the typical values obtained from tests at room temperature of 25°C, and the final data is subject to the final test report.

Mechanism

800/1000μJ



8/10mJ

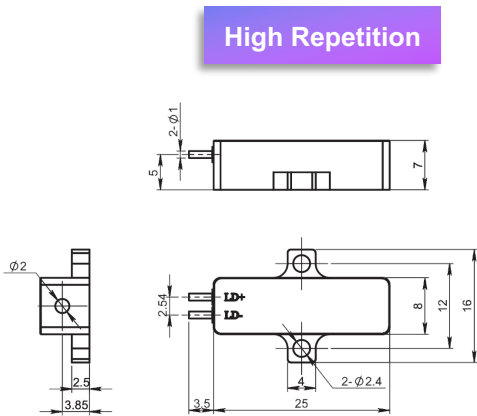




	Pulse Energy	50μJ	20μJ	10μJ
Optical Parameters	Pulse width (ns)	5	6	8
	Repetition rate (kHz)	1	2.5	5
	Beam full divergence (typ., mrad)	16	17	18
	Beam profile	TEM ₀₀		
	Energy Stability	3%		
Electrical Parameters	Operating current (A)	5		
Other	Weight (g)	9		
	Dimensions (mm)	25x8x7		
	Operation temperature	-40°C ~ 65°C		
	Storage temperature	-55°C ~ 80°C		

* All data above is the typical values obtained from tests at room temperature of 25°C, and the final data is subject to the final test report.

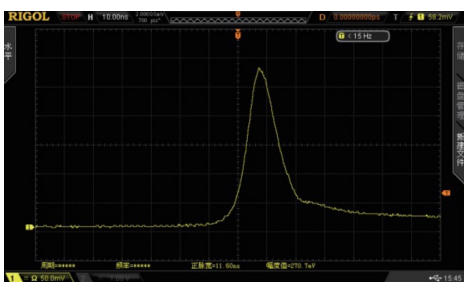
Mechanism



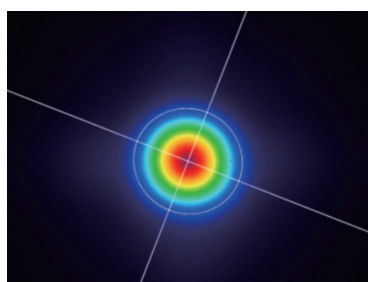
Ordering Info

Wavelength (nm)	Energy (μJ)	Part No.
1535	100	JS-1535-100-NED
	200	JS-1535-200-NED
	300	JS-1535-300-NED
	400	JS-1535-400-NED
	500	JS-1535-500-NED
	800	JS-1535-800-NED
	1000	JS-1535-1000-NED
	2000	JS-1535-2000-HED
	4000	JS-1535-4000-HED
	8000	JS-1535-8000-HED
	10000	JS-1535-10000-HED
	10	JS-1535-10-HRP
	50	JS-1535-20-HRP
	20	JS-1535-50-HRP

Typical Pulse



Beam Profile

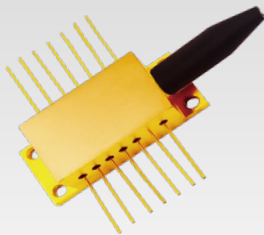


DIODE LASER MODULES

Jen-shine provide users with a wide range of excellent-performance diode lasers and accessories, also offer custom-develop service and technical support based on user's needs.

- Narrow-linewidth diode lasers provide single or dual-wavelength options, including 638nm, 785nm, 830nm, and 1064 nm. With an output power of 100mW to 1W, they feature integrated TEC (thermoelectric cooling), a photodiode (PD), and a thermistor for stable performance. These lasers are optimized for Raman spectroscopy applications.
- Diode lasers with various packaging options offer single or multi-wavelength outputs, including 450nm, 650nm, 808nm, 915nm, 940nm, 980nm, 1064nm, and 1470nm. With power outputs from 0.2W to 40W, they can be equipped with optional TEC, PD, and RT, along with a fiber detector and replaceable window. These features make them ideal for laser therapy and surgery applications.
- Raman probe with central wavelengths at 532nm, 785nm, 830nm and 1064nm. Features a spectral range of 176 - 4000 cm^{-1} and OD6 cutoff depth, optimized for Raman spectroscopy.

JS-14 PINS BTF



JS-785-OEMNL



JS RAMAN PROBE



JS-2 PINS-TBAW

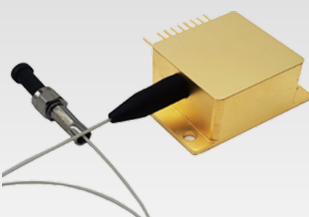


Raman Spectroscopy

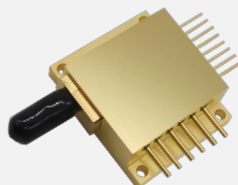


- ◆ Pumping Source
- ◆ Physical Therapy

JS-9 PINS-TBAW



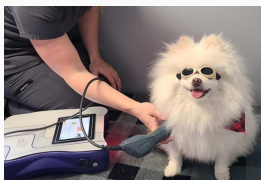
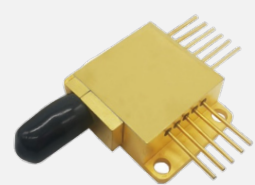
JS-14 PINS 2/3AW



JS-14 PINS-TBAW



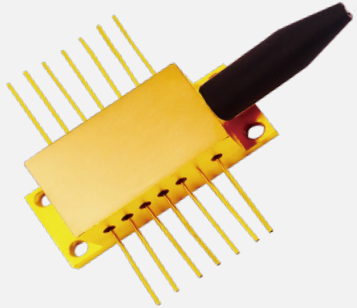
JS-11 PINS Free Space



- ◆ Pumping Source
- ◆ Physical Therapy
- ◆ Dentistry

Main application scenarios

DIODE LASER MODULES



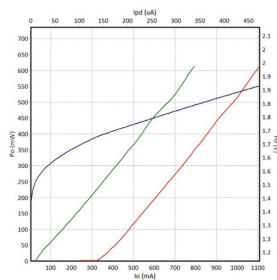
		JS-785-600-14BTF	
Optical Parameters	Center Wavelength/ λ_c (nm)	785±0.5	
	CW Output Power/Pop (mW)	600	
	3dB Width/ $\delta\lambda$ (nm)	<0.1	
	Wavelength Temperature Drift Coefficient/ $\delta\lambda/\delta T$ (nm/°C)	<0.01	
Electrical Parameters	Operating Current/Iop (A)	1.1	
	Threshold Current/Ith (A)	0.4	
	Operating Voltage/Vop (V)	1.9	
	Slope Efficiency/Es (W/A)	1.0	
	PD Current/Ipd (μA)	<1000	
	Thermistor/Rt (K Ω / β (25°C))	10±3%/3450	
	TEC Max Current/Imax (A)	2.2	
	TEC Max Voltage/Vmax (V)	8.75	
Fiber Parameters	Core Diameter/Dcore (μm)	105	
	Cladding Diameter/Dclad (μm)	125	
	Length/L (cm) (Customizable)	100±10	
	Numerical Aperture/NA	0.22	
	Connector	FC/PC, SMA905	
Other Parameters	Operating Temperature/Tc (°C)	15~35	
	Operating Relative Humidity/%	40~55	
	Storage Temperature/Ts (°C)	-20~70	
	Storage Relative Humidity/%	0~60	
	Lead Soldering Temperature (Time) (°C)	10	



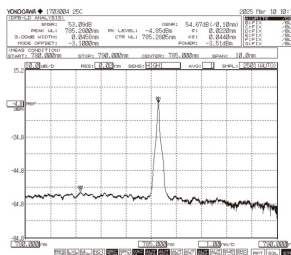
		JS-785-1200-OEMNNL			
		Min	Typ	Max	Unit
Center Wavelength/ λ_c		784.5	785	785.5	nm
CW Output Power/Pop		-	1200	-	mW
Spectral width (FWHM)		-	0.1	-	nm
Operating Current/Iop		-	1.2	2.5	A
Operating Voltage/Vop		-	5	-	V
TTL Control		0	-	1.2	V
Fiber		105/125um, NAO.22			
Connector		FC/PC			
Control Interface		PH2.0-10PIN, USB			
Operating Temperature/Tc		0	-	40	°C
Storage Temperature		-10	-	85	°C
Storage Relative Humidity		0	-	80	%RH

* All data above is the typical values obtained from tests at room temperature of 25°C, and the final data is subject to the final test report.

785nm



P-I-V Graph



Spectrum
SMSR>40dB

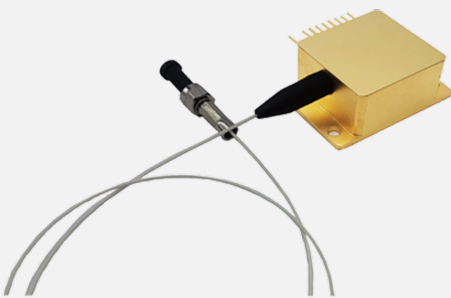


DIODE LASER MODULES



		Minimum	Maximum
		OPR Temp./Tc (°C)	10
Other Parameters	OPR Relative Humidity/%	-	75
	Storage Temp./Ts (°C)	-20	70
	Storage Relative Humidity/%	-	90
	Lead Soldering Temp. (Time) (°C)	-	250 (10 Sec.)

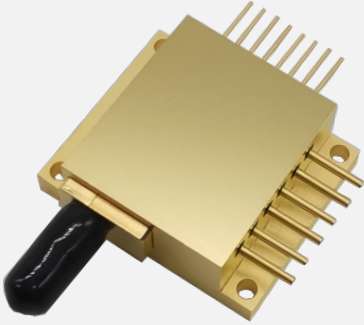
		JS-2PINS-TBAW			
Optical Parameters	Center Wavelength (nm)	808	940/980	1064	
	CW Output Power/Pop (W)	8	10	10	
	Wavelength Tolerance (nm)	±3,±10			
	Spectral Width / Δλ (nm)	<4			
	Temperature Drift of Wavelength / Δλ / ΔT (nm/°C)	0.3			
	Optional Feedback Protection Function	>40dB@1030-1070nm			
	Fiber Core/Cladding Diameter Dcore (μm)	105/125,200/220			
	Fiber Length / L (cm)	100±10 customizable			
	Numerical Aperture / NA	0.22			
	Connector	FC/PC,SMA905, bare ferrule			
Electrical Parameters	Threshold Current / I _{th} (A)	1.5	1.2	1.3	
	Operating Current / I _{op} (A)	11	13	13.5	
	Operating Voltage / V _{op} (V)	2.2	2.2	1.9	
	Slope Efficiency / η _{es} (W/A)	0.8	0.9	0.8	



		Minimum	Maximum
		OPR Temp./Tc (°C)	10
Other Parameters	OPR Relative Humidity/%	-	75
	Storage Temp./Ts (°C)	-20	70
	Storage Relative Humidity/%	-	90
	Lead Soldering Temp. (Time) (°C)	-	250 (10 Sec.)

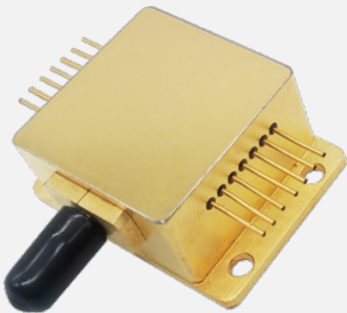
		JS-9 PINS-TBAW				
Optical Parameters	Center Wavelength (nm)	450	638	808	940/980	1064
	CW Output Power/Pop (W)	4	1	8.5	15	10
	Wavelength Tolerance (nm)	±3,±10				
	Spectral Width / Δλ (nm)	<4				
	Temp. Drift of Wavelength / Δλ / ΔT (nm/°C)	0.3				
	Fiber Core/Cladding Diameter Dcore (μm)	105/125,200/220				
	Fiber Length / L (cm)	100±10 customizable				
	Numerical Aperture / NA	0.22				
	Connector	FC/PC,SMA905, bare ferrule				
	Electrical Parameters	Threshold Current / I _{th} (A)	0.4	0.4	1.4	0.7
Operating Current / I _{op} (A)		3.5	1.5	11	18	13.5
Operating Voltage / V _{op} (V)		4.4	2	2	1.9	1.8
TEC Max Current I _{max} (A)		6				
TEC Max Voltage V _{max} (V)		9.8				
PD Parameter / I _{pd} (μA)		<2000				
Thermistor / Rt (kΩ/β (25))		10±1%/3450				
Slope Efficiency / η _{es} (W/A)		0.9	1.0	0.9	0.9	1.8

DIODE LASER MODULES



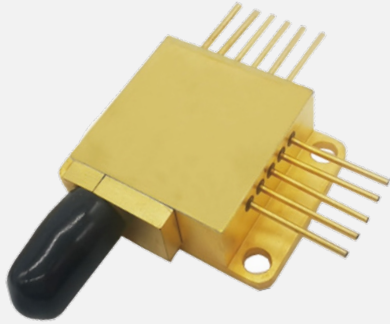
		Minimum	Maximum
Other Parameters	OPR Temp. /Tc (°C)	10	30
	OPR Relative Humidity/%	-	75
	Storage Temp. /Ts (°C)	-20	70
	Storage Relative Humidity/%	-	90
	Lead Soldering Temp. (Time) (°C)	-	250 (10 Sec.)

		JS-14 PINS 2/3AW				
Optical Parameters	Center Wavelength (nm)	638, 980		638,808,980		
	CW Output Power/Pop (W)	0.5	15	0.5	8.5	10
	Wavelength Tolerance (nm)	±10				
	Spectral Width / $\Delta\lambda$ (nm)	<6				
	Temp. Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	0.3				
Electrical Parameters	Threshold Current / I _{th} (A)	0.5	1.2	0.5	1.2	0.6
	Operating Current / I _{op} (A)	1.2	1.8	1.2	11	12
	Operating Voltage / V _{op} (V)	2.3	1.8	2.3	2	1.8
	Slope Efficiency / η_{es} (W/A)	0.9	0.9	0.9	1	1
	PD Parameter / I _{pd} (μA)	<3000				
	Thermistor / Rt (kΩ/β (25))	10±5%/3450				
Fiber Parameters	Fiber Core Diameter / d _{core} (μm)	200				
	Fiber Cladding Diameter / D _{clad} (μm)	220				
	Fiber Coating Diameter / D _{buffer} (μm)	400				
	Numerical Aperture / NA	0.22				
	Connector	SMA905				



		Minimum	Maximum
Other Parameters	OPR Temp. /Tc (°C)	10	30
	OPR Relative Humidity/%	-	75
	Storage Temp. /Ts (°C)	-20	70
	Storage Relative Humidity/%	-	90
	Lead Soldering Temp. (Time) (°C)	-	250 (10 Sec.)

		JS-14 PINS-TBAW				
Optical Parameters	Center Wavelength (nm)	450	808	940/980		1064
	CW Output Power/Pop (W)	4	9	10	20	10
	Wavelength Tolerance (nm)	±3,±10				
	Spectral Width / $\Delta\lambda$ (nm)	<4				
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	0.3				
	Fiber Core/Cladding Diameter D _{core} (μm)	105/125.200/220				
	Fiber Length / L (cm)	100±10 customizable				
	Numerical Aperture / NA	0.22				
	Connector	SMA905				
	Electrical Parameters	Threshold Current / I _{th} (A)	0.4	1.2	0.55	1
Operating Current / I _{op} (A)		3.5	10	11	23.5	10.5
Operating Voltage / V _{op} (V)		4.4	2	1.8	2	1.7
TEC Max Current I _{max} (A)		6				
TEC Max Voltage V _{max} (V)		9.8				
PD Parameter / I _{pd} (μA)		<3000				
Thermistor / Rt (kΩ/β (25))		10±1%/3450				
Slope Efficiency / η_{es} (W/A)		1.1	0.9	0.9	0.9	0.9

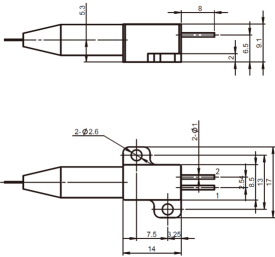


				JS-11 PINS Free Space						
Optical Parameters				Center Wavelength (nm)	808	1064	940,976,980			
				CW Output Power/Pop (W)	9	10	15			
				Wavelength Tolerance (nm)	± 10					
				Spectral Width / Δ λ (nm)	<4					
				Temperature Drift of Wavelength / Δ λ / ΔT (nm/°C)	0.3					
Electrical Parameters				Threshold Current / I _{th} (A)	1.2	1.2	1.2			
				Operating Current / I _{op} (A)	12	13	18			
				Operating Voltage / V _{op} (V)	2	2	2			
				Slope Efficiency / η _{es} (W/A)	0.9	0.9	0.9			
				PD Parameter / I _{pd} (μA)	<3000					
				Thermistor / Rt (kΩ/β (25))	10 ± 1%/3930					
Other Parameters		Minimum	Maximum	Fiber Parameters						
		OPR Temp. /Tc (°C)	10				30	Fiber Core Diameter / dcore (μm)	200	
		OPR Relative Humidity/%	-				75	Fiber Cladding Diameter / Dclad (μm)	220	
		Storage Temp. /Ts (°C)	-20				70	Fiber Coating Diameter / Dbuffer (μm)	400	
		Storage Relative Humidity/%	-				90	Fiber Length / L (cm)	100 ± 10 (Customizable)	
		Lead Soldering Temp. (Time) (°C)	-				250 (10 Sec.)	Numerical Aperture / NA	0.22	
				Connector	SMA905					

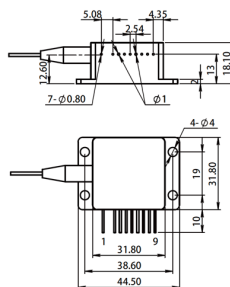
* All data above is the typical values obtained from tests at room temperature of 25°C, and the final data is subject to the final test report.

Mechanism

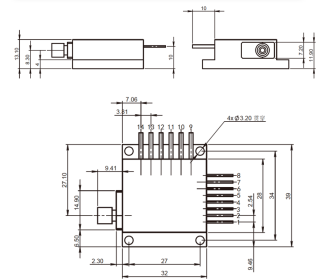
JS-2PINS-TBAW



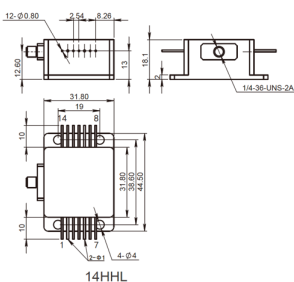
JS-9 PINS-TBAW



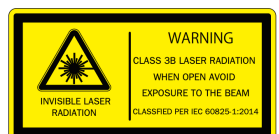
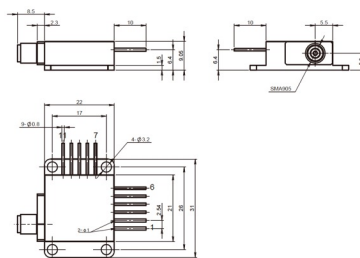
JS-14 PINS 2/3AW



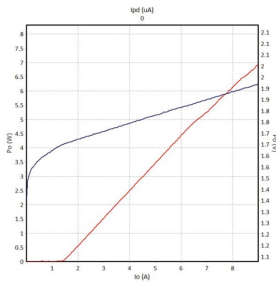
JS-14 PINS-TBAW



JS-11 PINS Free Space

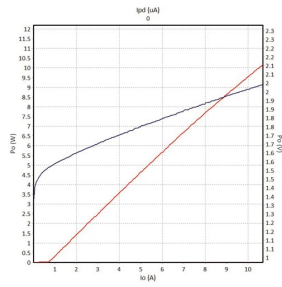


808nm



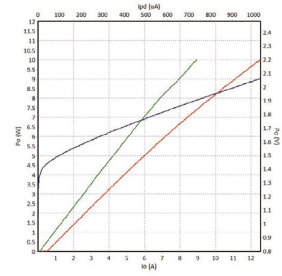
P-I-V Graph

940nm



P-I-V Graph

980nm



P-I-V Graph

Ordering Info

JS-9 PINS-TBAW

Wavelength (nm)	Power (W)	Part No.
450	4	JS-450-4-9TBAW
638	1	JS-638-1-9TBAW
808	8.5	JS-808-8.5-9TBAW
940	15	JS-940-15-9TBAW
980	15	JS-980-15-9TBAW
1064	10	JS-1064-10-9TBAW

JS-14 PINS-TBAW

Wavelength (nm)	Power (W)	Part No.
450	4	JS-450-8-14TBAW
808	9	JS-808-9-14TBAW
940	10	JS-940-10-14TBAW
980	20	JS-980-20-14TBAW
1064	10	JS-1064-10-14TBAW

JS-2 PINS-TBAW

Wavelength (nm)	Power (W)	Part No.
808	8	JS-808-8-2TBAW
940	10	JS-940-10-2TBAW
980	10	JS-980-10-2TBAW
1064	10	JS-1064-10-2TBAW

JS-11 PINS Free Space

Wavelength (nm)	Power (W)	Part No.
808	9	JS-808-2-11AW
940/976/980	15	JS-9XX-15-11AW
1064	10	JS-1064-10-11AW

JS-14 PINS 2/3AW

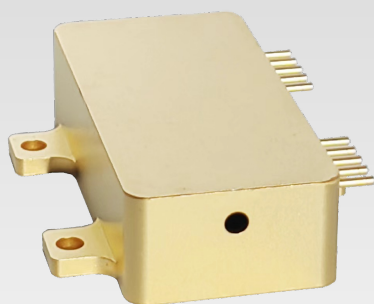
Wavelength (nm)	Power (W)	Part No.
638,980	0.5,15	JS-2W-0.5/15-14AW
638,808,980	0.5,8.5,10	JS-3W-0.5/8.5/10-14AW

MICROCHIP LASERS

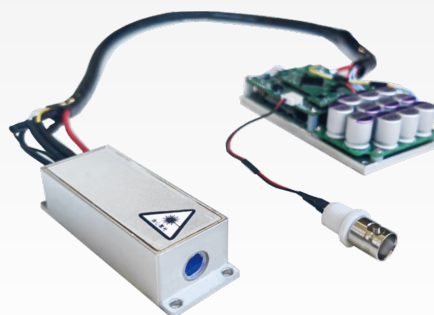
Microchip lasers (also known as solid-state lasers), thanks to their compact design, high stability, and precise temporal control, these microchip lasers are ideal for use as seed lasers in various applications.

Jen-shine's Microchip series, compact and robust single and dual-wavelength laser delivers high performance outputs at from 213nm to 1064nm, with adjustable pulse width (250ps - 1.5ns) and pulse energy up to 10mJ. Operating at repetition rates up to 20kHz, it serves as an ideal seed laser driver for precision applications, making it perfect for scientific, industrial, and medical uses requiring high energy, short-pulse laser performance.

JS-MPW DPSSL



JS-PQE Series



JS-Faraday Rotator

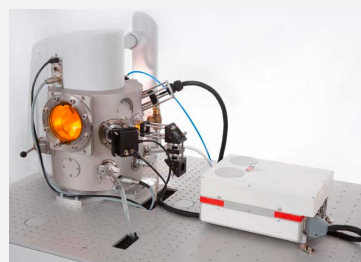
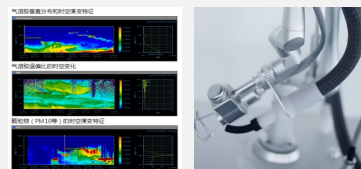


JS-HQE Series



Active Q-switched laser

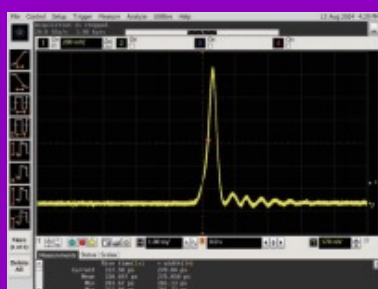
- ◆ Aesthetic laser equipment
- ◆ Laser induced fluorescence
- ◆ Laser meteorological radar
- ◆ Laser imaging radar
- ◆ MALDI-TOF MS
- ◆ LIBS



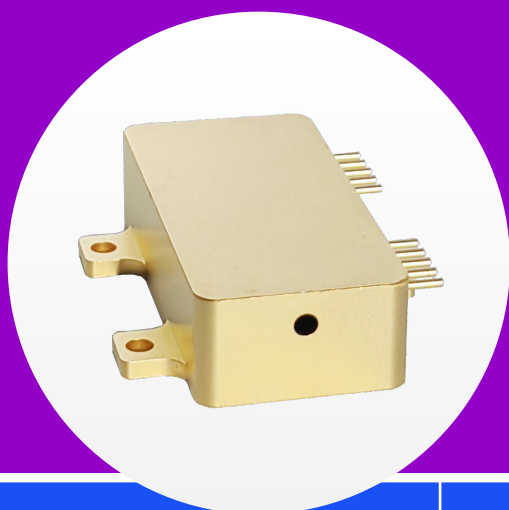
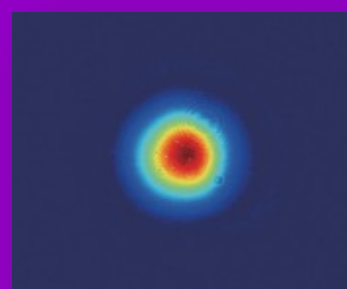
Microchip lasers are ideal for use as seed lasers in various applications.

JS-MPW DPSSL

Typical Pulse



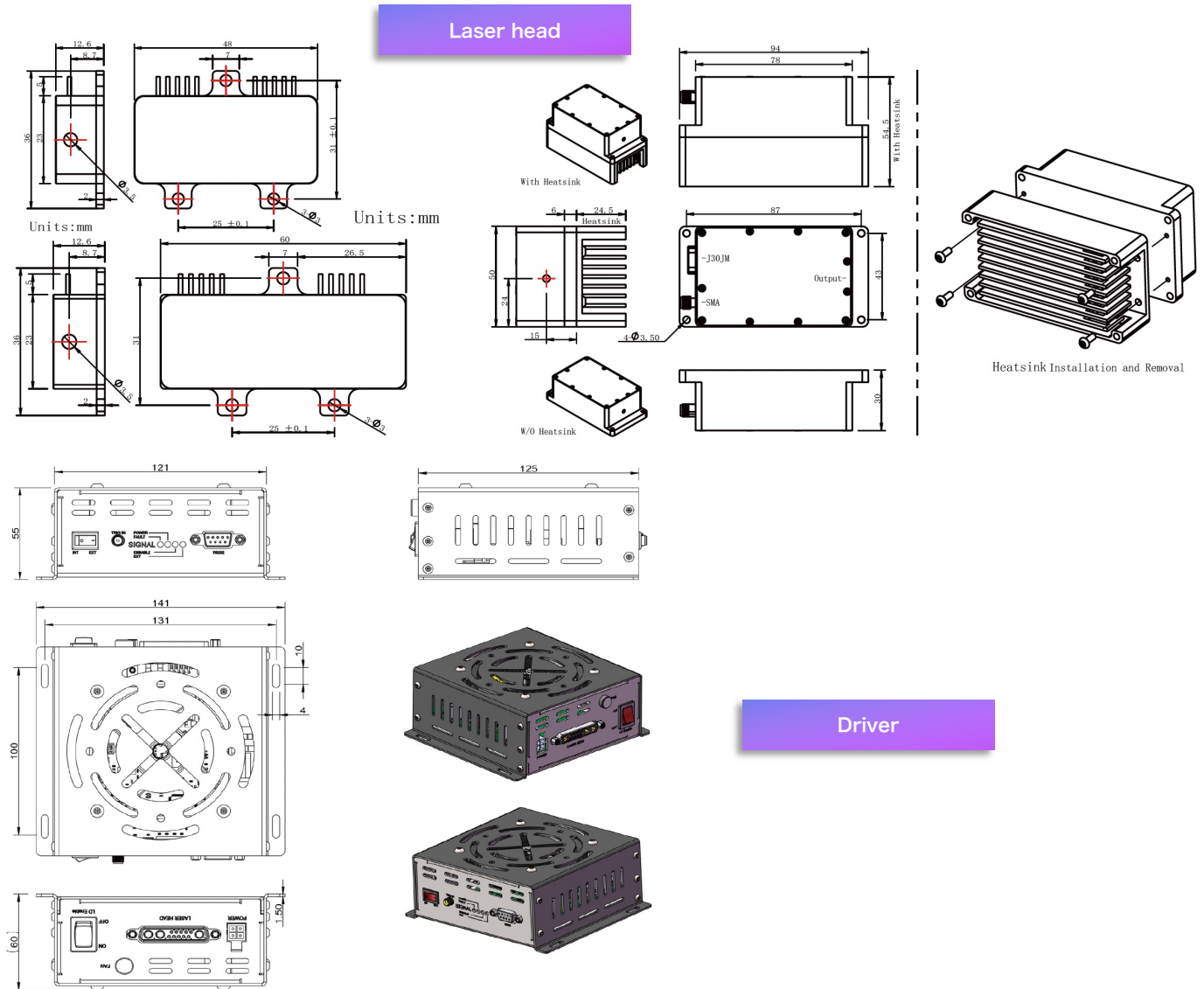
Beam Profile



	JS-MPW-S						JS-MPW-L								JS-MPW-M							
Wavelength (nm)	1064			532			1064				532				1064				532			
Repetition Rate (kHz)	0.01						1	2.5	5	10	1	2.5	5	10	1	2.5	10	20	1	2.5	10	20
Pulse Energy (μ J)	180	150	100	90	75	50	120	120	60	30	60	60	30	15	100	80	40	30	50	40	20	15
Average Power (mW)	1.8	1.5	1	0.9	0.75	0.5	120	300	300	300	60	150	150	150	100	200	400	600	50	100	200	300
Pulse Width (ps)	450	350	250	450	350	250	1500				1200				800	900	700	800				
Beam Quality (M^2)	<1.3						<1.3								<1.3							
Energy Stability (rms,8h)	<3%			<5%			<3%				<5%				<3%				<5%			
Beam Divergence (typ., mrad)	Horizontal @1/e ²		8				6				6	8	4	6	8	12	6	10	6	10	6	10
	Vertical @1/e ²		8				6				6	8	4	6	8	12	6	10	6	10	6	10
Polarization	Linear >100:1						Linear >100:1								Linear >100:1							
Cooling	Air cooled						Air cooled								Air cooled							
Power Supply	100-240 VAC, 50/60Hz						100-240 VAC, 50/60Hz								100-240 VAC, 50/60Hz							
Control Interface	RS232						RS232								RS232							
Trigger Input	TTL 0-5V						TTL 0-5V								TTL 0-5V							
Power Consumption (W)	<10						<30								<20							
Power Dimensions (W × H × L, mm)	125x60x141						125x60x141								125x60x141							
Laser Head Dimensions (W × H × L, mm)	50x30x94						50x30x94								50x30x94							
Operation Temperature (°C)	15-35						15-35								15-35							
Storage Temperature (°C)	0-60						0-60								0-60							

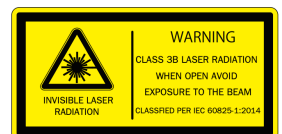
Microchip lasers are ideal for use as seed lasers in various applications.

Mechanism



Ordering Info

Wavelength (nm)	Part No.
1064/532	JS-1064/532-MPW-S
1064/532	JS-1064/532-MPW-L
1064/532	JS-1064/532-MPW-M



Microchip lasers are ideal for use as seed lasers in various applications.

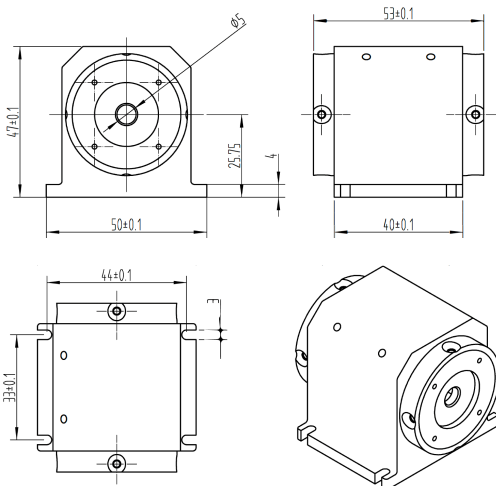
JS-Faraday Rotator



Faraday Rotator is an optical apparatus that can rotate the linearly-polarized light transmitted with be the angles on need, composed of input & output polarizer and rotator, secures the light to go in the single direction specified, widely applied for laser amplification, model locking and etc. so on.

	JS-FSRO-1064	
Wavelength	1064nm	
Clear Aperture	2.5mm	5mm
Rotation Angle	45° ±1°	
Extinction	> 30dB	
Transmission Efficiency	>95%	
Damage Threshold	5J/cm ²	10J/cm ²
Environmental Temperature	25°C	

Mechanism



Ordering Info

Wavelength (nm)	Clear Aperture (mm)	Part No.
1064	2.5	JS-1064-25-FSRO
1064	5	JS-1064-50-FSRO

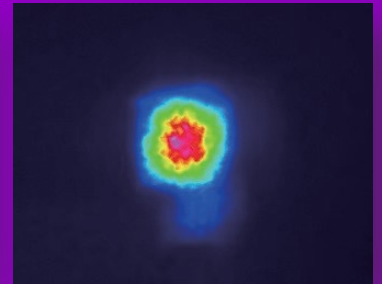
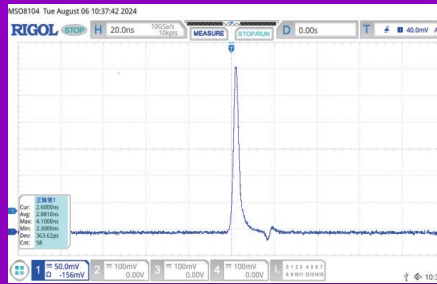
Lead time: 4 weeks upon full payment arrival

Microchip lasers are ideal for use as seed lasers in various applications.

JS-PQE Series

Typical Pulse

Beam Profile

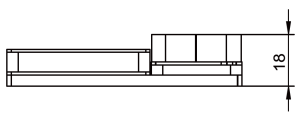
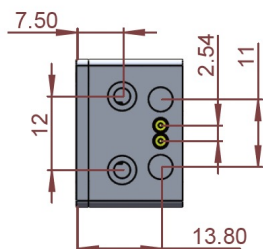
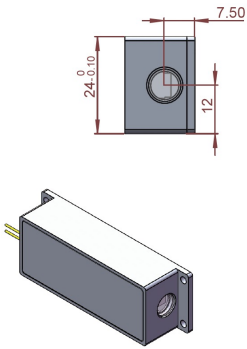
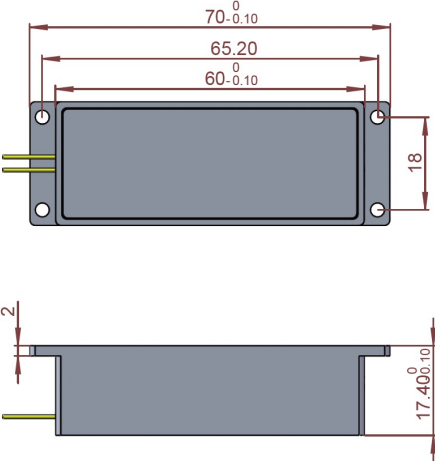


		JS-PQE Series							
Wavelength (nm)		1064				532			
Repetition Rate (Hz)		1-10	50	100	1-10	50	100		
Pulse Width (ns)		<3	<5	<2.5	<3	<5	<2.5		
Pulse Energy (mJ)		>10	>6	>5	>2	>5	>3	>2.5	>1
Energy Stability (rms,8h)		<3%				<5%			
Beam Diameter (mm)		~2							
Beam Profile		/	90% near Gaussian	near Gaussian	near Gaussian	/	90%near Gaussian	near Gaussian	near Gaussian
Beam Divergence (mrad)	Horizontal @1/e ²	<5							
	Vertical @1/e ²								
Polarization		Linear >100:1							
Cooling		Air cooled							
Power Supply		24VDC							
Power Consumption (W)		<15@10Hz							
Power Dimensions (W×H×L,mm)		45×18×82.1	56×46×120			45×18×82.1	56×46×120		
Laser Head Dimensions (W×H×L,mm)		24×17.4×70	102×31.2×131.5			24×17.4×70	102×31.2×131.5		
Operation Temperature (°C)		15-35							
Storage Temperature (°C)		0-60							

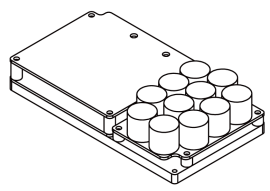
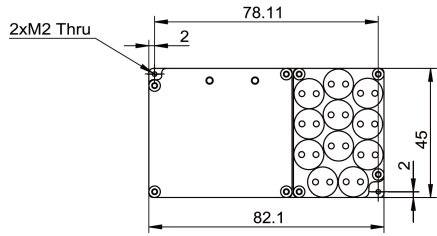
Microchip lasers are ideal for use as seed lasers in various applications.

Mechanism

Laser head

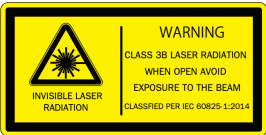


Driver



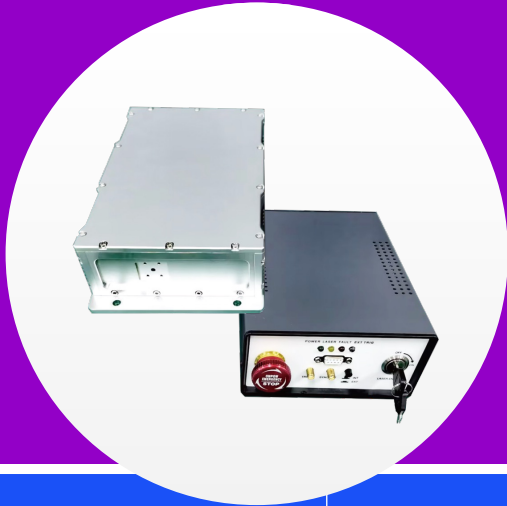
Ordering Info

Wavelength (nm)	Part No.
1064	JS-1064-PQE
532	JS-532-PQE

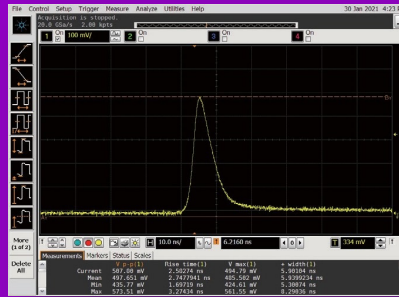


Microchip lasers are ideal for use as seed lasers in various applications.

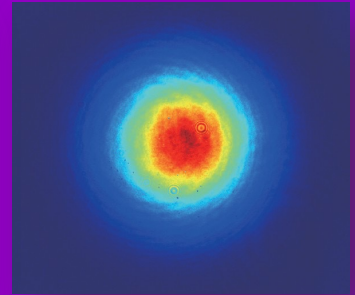
JS-HQE Series (Active Q-switched Laser)



Typical Pulse



Beam Profile

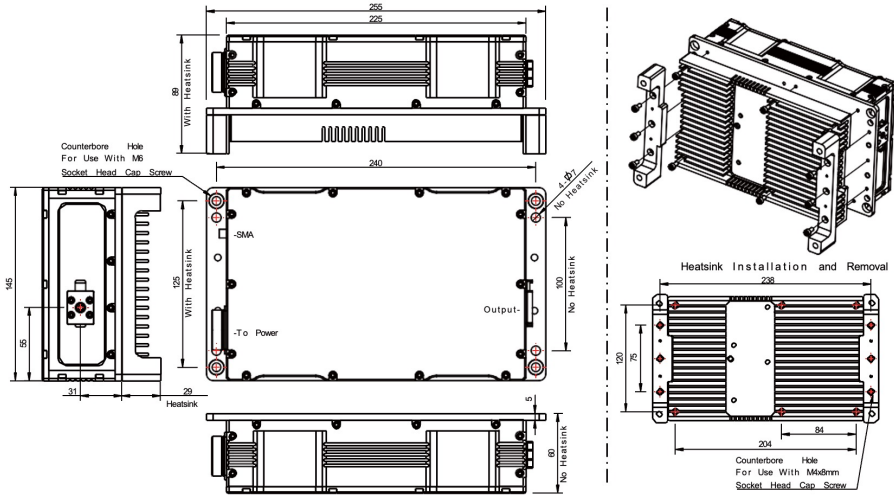


		HQE-A				HQE-B					HQE-C	
Wavelength (nm)		1064		532		1064		532			1064/532	
Repetition Rate (kHz)		1-5	5-10	1-5	5-10	1-5	1-2	1-4	1-5	1-2	1-4	5-10
Pulse Width (ns)		<1				<1.5	<3		<1.5	<3		<8
Max Pulse Energy (μJ)		300	200	150	100	400	3000	1000	200	1500	500	>200@532 >150@1064
Time Jitter (ns)		<1				<1					<1	
Energy Stability (rms.8h)		<3%		<5%		<3%			<5%			<3%@1064 <5%@532
Beam Quality (M ²)		<1.3				<1.8					<1.5	
Beam Divergence (mrad)	Horizontal @1/e ²	<16				<15					<5	
	Vertical @1/e ²	<16				<15					<5	
Polarization		Linear >100:1				Linear >100:1					Linear >100:1	
Cooling		Air cooled				Air cooled					Air cooled	
Power Supply		100-240 VAC, 50/60Hz				100-240 VAC, 50/60Hz					100-240 VAC 50/60Hz	
Control Interface		RS232				RS232					RS232	
Trigger Input		TTL 0-5V				TTL 0-5V					TTL 0-5V	
Power Consumption (W)		<100				<100					<200	
Power Dimensions (W×H×L,mm)		150x70x200				150x70x200					150x70x200	
Laser Head Dimensions (W×H×L,mm)		145x60x255 ; 145x89x255 (With Heat Sink)				200x60x255 ; 200x89x255 (With Heat Sink)					150x90x300	
Operation Temperature (°C)		15-35				15-35					15-35	
Storage Temperature (°C)		0-60				0-60					0-60	

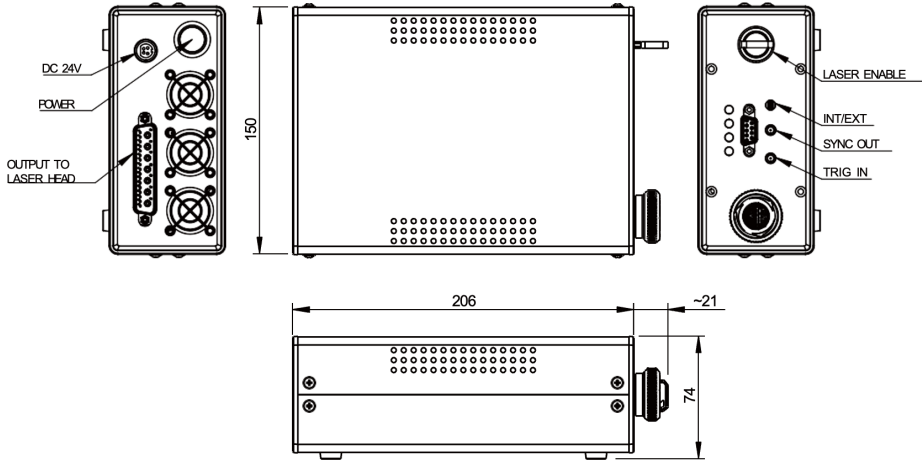
Microchip lasers are ideal for use as seed lasers in various applications.

Mechanism

Laser head



Driver



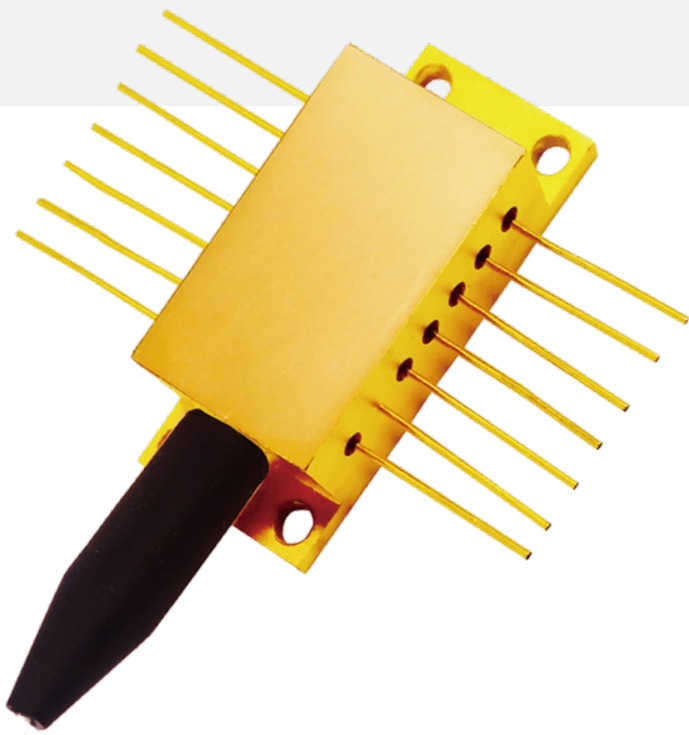
Ordering Info

Wavelength (nm)	Part No.
1064	JS-1064-HQE-A
532	JS-532-HQE-A
1064	JS-1064-HQE-B
532	JS-532-HQE-B
1064/532	JS-1064/532-HQE-C



Distributed Feedback DFB LASERS

DFB (Distributed Feedback) lasers have diverse applications across various fields due to their unique properties.



They are known for their stable, single-mode operation, narrow linewidth, and precise wavelength control, making them suitable for high-speed telecommunications, medical diagnostics, sensing, and scientific research.



Gas detection

The DFB laser can be used for the precise detection of gas components.



Optical fiber communications

Widely applied in the 5G field

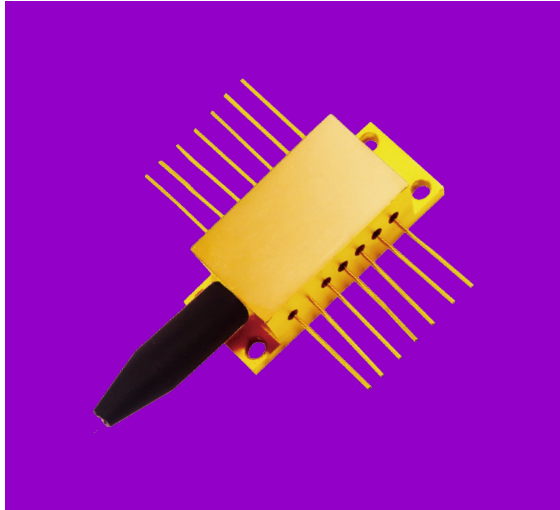
Jen-shine's NL-DFB series offer a high-performance MQW DFB laser diode in a butterfly package, deliver the power required for advanced optical transmitter systems. Additionally, its integrated thermo-electric cooler (TEC) ensures stable operation across a wide range of environmental conditions.

Vehicle radar Applied to automotive autonomous driving



DFB LASERS

DFB (Distributed Feedback) lasers have diverse applications across various fields due to their unique properties.



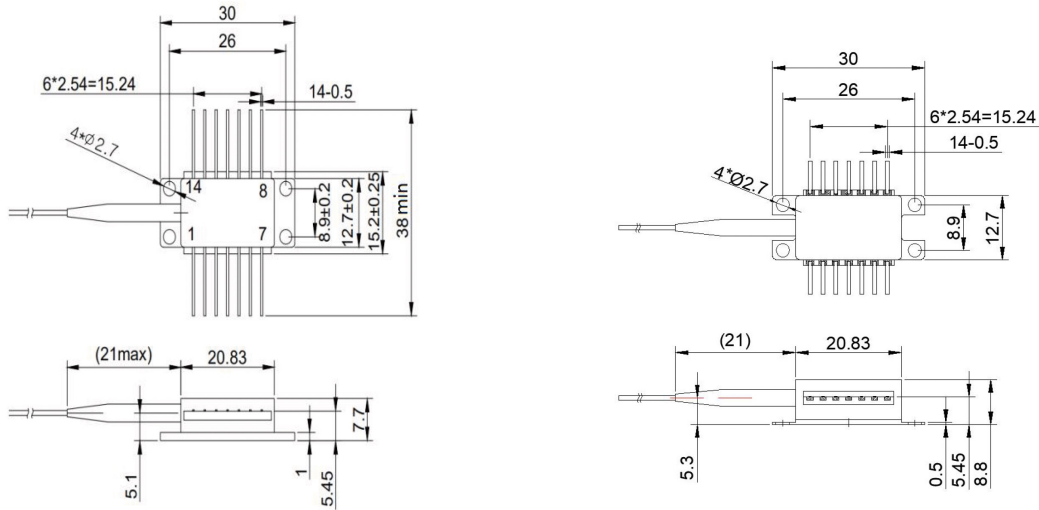
- ◆ Compact & Light weight
- ◆ Built-in thermistor & TEC
- ◆ Superior beam quality
- ◆ Single-mode/PM fiber pigtail

		JS-NL-DFB					
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions	
Optical Output Power	P_o	-	-	100	mW	CW	
Threshold Current	I_{th}	-	-	55	mA	CW, T=25°C	
Forward Voltage	V_f	-	1.5	3	V	CW, T=25°C	
Operating Current	I_{op}	-	-	700	mA	CW, T=25°C	
Center Wavelength	λ_c	λ_c-3	λ_c	λ_c+3	nm	CW, T=25°C	
Side-mode Suppression Ratio	SMSR	35	40	-	dB	CW, T=25°C	
Optical Isolation	 	35	-	-	dB	CW, T=25°C	
Laser Line Width	$\Delta\lambda_L$	-	-	10	MHz	CW, T=25°C	
Spectral Width (-20 dB)	$\Delta\lambda$	-	0.1	1.0	nm	CW, T=25°C	
Wavelength Temp. Coefficient	$\Delta\lambda/\Delta T$	-	0.08	0.12	nm/°C	-	
Monitor Current	I_{mon}	50	-	2000	μA	$V_f=5 V$	
Thermistor Resistance	R_t	9.5	10.0	10.5	K Ω	T=25°C	
Thermistor B-Value	 	-	3950	-	K	25°C/50°C	
Polarization Extinction Ratio	PER	17	-	-	dB	Slow axis alignment	
Operating Temp.	T_c	-20	-	70	°C	-	
Storage Temperature	T_{stg}	-40	-	85	°C	-	
Reverse Voltage	V_r	-	-	3	V	-	
Forward Current	I	-	-	800	mA	-	
TEC Voltage	V_{tec}	-	-	2.6	V	-	
TEC Current	I_{tec}	-	-	1.5	A	-	
Lead Soldering Temp.	-	-	-	260	°C	-	
Lead Soldering Time	-	-	-	10	S	-	

DFB LASERS

DFB (Distributed Feedback) lasers have diverse applications across various fields due to their unique properties.

Mechanism



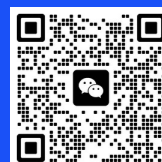
Ordering Info

Part No.	Wavelength (nm)	Output Power (mW)	Type & Fiber selection	Connector	PIN	Line width	IS
JSLD=LD	1064	5	BP=Type00 PM	00=NO	14	01 3K	0=NO
JSSLD=SLED	1310	50	BS=Type00 SM	FA=FC/APC	10	02 5K	1=1
JSNLD=Narrow line width	1550	100	CP=Type01 PM	FU=FC/UPC	8	03 10K	2=2
JSPLD= Pulsed laser	1560	...	CS=Type01 SM	SA=SC/APC	6	04 100K	
JSSOA=SOA	...	more available	CSB=Type01B SM	...		05 150K	
JSTLD=Tunable laser	more available wavelength	more available output power	CPB=Type01B PM	more available connector type		06 200K	
...			CSC=Type01C SM			07 300K	
more available packaging type			CPC=Type01C PM			08 500K	
			CSD=Type01D SM			09 1M	
			CPD=Type01D PM			10 3M	
			...			11 5M	
			more available type & fiber selection			12 10M	



PROFICIENT IN LASER DESIGN

www.jen-shine.com



Various options and configurations are available on request. Feel free to contact us to find your needs between options.