

NVG Inc. Adjustable Focus Laser Diode Modules



Fig. 1 — Adjustable Focus Laser Module 28 AWG

Fig. 2 — Adjustable Output Laser Module

Po = 1 to 4.8mW
Recommended Pot = approx. 150K to 500K

Fig. 3 — Visible Laser Diode

Po: 5mW
Class IIIa
Wide Spectrum Range, Standard Pinout

Fig. 4 — 6.4mm Laser Diode Housing Kit

Fig. 5 — 10.4mm Laser Diode Housing Kit

Fig. 6 — APC Laser Power Supply

Adjustable Output Power via On-Board Potentiometer

Fig.	Description	Wave-length (nm)	Iop (mA)	Size (mm)	Digi-Key Part No.	Price Each	NVG Part No.
1	Visible Laser Module*	660	10-30	17.02 x 10.44	38-1002-ND	32.66	M66051
1	Visible Laser Module*	650	25-40	17.02 x 10.44	38-1003-ND	37.00	M65051
1	Visible Laser Module*	640	55-70	17.02 x 10.44	38-1004-ND	72.00	M64051
1	Visible Laser Module*	635	45-70	17.02 x 10.44	38-1017-ND	76.00	M63551
1	Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1018-ND	56.00	M78051
1	Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1005-ND	64.00	M80851
1	Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1019-ND	68.00	M85051
1	Visible Laser Micro Module*	660	12-30	17.25 x 6.4	38-1020-ND	52.00	MM66051
1	Visible Laser Micro Module*	650	25-40	17.25 x 6.4	38-1021-ND	57.00	MM65051
1	Visible Laser Micro Module*	640	55-70	17.25 x 6.4	38-1022-ND	92.00	MM64051
1	Visible Laser Micro Module*	635	45-70	17.25 x 6.4	38-1023-ND	96.00	MM63551
1	Infrared Laser Micro Module*	780	45-70	17.25 x 6.4	38-1024-ND	76.00	MM78051
1	Infrared Laser Micro Module*	808	60-70	17.25 x 6.4	38-1025-ND	80.00	MM80851
1	Infrared Laser Micro Module*	850	45-65	17.25 x 6.4	38-1026-ND	88.00	MM85051
2	Adj. Output Visible Laser Module*	660	12-30	17.02 x 10.44	38-1010-ND	52.00	EPM66051
2	Adj. Output Visible Laser Module*	650	25-40	17.02 x 10.44	38-1011-ND	56.00	EPM65051
2	Adj. Output Visible Laser Module*	640	55-70	17.02 x 10.44	38-1012-ND	112.00	EPM64051
2	Adj. Output Visible Laser Module*	635	45-70	17.02 x 10.44	38-1013-ND	116.00	EPM63551
2	Adj. Output Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1014-ND	96.00	EPM78051
2	Adj. Output Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1015-ND	100.00	EPM80851
2	Adj. Output Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1016-ND	108.00	EPM85051
3	Visible Laser Diode	660	12-20	5.6	38-1006-ND	9.00	D66051
3	Visible Laser Diode	650	25-40	5.6	38-1007-ND	13.00	D65051
3	Visible Laser Diode	640	55-70	5.6	38-1008-ND	30.00	D64051
3	Visible Laser Diode	635	45-70	5.6	38-1027-ND	30.00	D63551
3	Infrared Laser Diode	780	45-70	5.6	38-1028-ND	24.00	D78051
3	Infrared Laser Diode	808	60-70	5.6	38-1029-ND	28.00	D80851
3	Infrared Laser Diode	850	45-65	5.6	38-1030-ND	32.00	D85051
4	Housing Kit, 6.4mm			17.25 x 6.4	38-1032-ND	20.00	HK-6.4
5	Housing Kit, 10.4mm			17.02 x 10.44	38-1000-ND	18.00	HK-10.4
6	Laser Driver Circuit (APC) for 10.4mm Housing			5.4 x 7.8	38-1009-ND†	14.00	NS102-200K
6	Laser Driver Circuit (APC) for 6.4mm Housing			5.0 x 9.0	38-1031-ND†	14.00	NS102A-200K
—	5.6mm to 9mm Adapter, Non-threaded				38-1033-ND	4.00	AD 5.6-9MM
—	5.6mm to 9mm Adapter, Threaded				38-1001-ND	5.00	THAD 5.6-9mm

* Module denotes complete assembly.

† For use with 660, 650, 640 and 635nm diodes only.

Quarton Inc. Visible Laser Diode Modules

FEATURES: • Built-in driver circuit, Small size • Class IIIa laser product • Operating Temperature: +10° to +40°C • Storage Temperature Range: -20° to +65°C • Typical Operating Voltage: 3.0V

Fig. 1

Fig. 2

Fig. 3

Fig. 4 — Line Generator

Beam Angle: 80°

Fig.	Emission Wavelength Typ. (nm)	Cw Optical Power (mW)	Operating Current (mA)	Digi-Key Part No.	1	Price Each	10	100
1	655	3±1	50±15	VLM-650-01LPA-ND	30.80	27.72	25.88	
1	635	3±1	50±15	VLM-635-01LPA-ND	70.40	63.36	59.14	
2	655	≤5	50±15	VLM-650-02LPA-ND	35.20	31.68	29.57	
2	635	≤5	50±15	VLM-635-02LPA-ND	76.67	69.00	64.40	
3	650	≤2.5	40±15	VLM-650-003-LPA-ND	19.80	17.82	16.64	
4	650	≤3	30±15	VLM-650-27-LPA-ND	52.95	47.66	44.48	

COHERENT® Visible Laser Diode Modules

Features: • Fully collimated lens • 2-year limited warranty • ESD protection (over 2200 volts) • Reverse polarity protection • Visual On/Off indicator • Regulated output power • Diode life of 100,000 hours. **Specifications:** • Operating Temperature: -10°C to +40°C • Storage Temperature: -40°C to +80°C • Laser Operation: Continuous Wave

Fig. 1

Fig. 2 — Variable Focus

Fig. 3 — Modulation & Variable Power

Fig. 4 — Industrial Housing

Fig. 5 — Adjustable Mount

Fig. 6

Fig.	Length (mm)	Emission Wavelength (nm)	Vop (Vdc)	Iop (mA)	Output Power (mW)	Laser Class	Beam Size/Angle (mm)	Digi-Key Part No.	Price Each	Coherent Part No.
Fixed Focus Visible Laser Module										
4	119.38	635	5-10	80-100	4.2	IIIa	5.0 x 1.2	188-1005-ND	272.40	0221-535-00
Fixed Focus Visible Module — Round Beam										
1	31.62	635	5-10	60-90	4.9	IIIa	1.4 Dia.	188-1013-ND	548.40	0221-700-01
Variable Focus Visible Laser Module										
2	50.80 Max	635	5-10	80-100	2.5	IIIa	5.0 x 1.2	188-1010-ND	205.20	0220-843-00
Modulation & Variable Power Visible Module										
3	46.86	670	6-10	—	4.2	IIIa	4.0 x 1.0	188-1015-ND	304.80	0221-202-00
3	60.35	670	6-10	—	.95	II	3.0 Dia.	188-1016-ND	336.00	0221-460-00
3	46.86	635	6-10	—	4.2	IIIa	5.0 x 1.2	188-1017-ND	325.20	0221-763-00
Accessories										
5	Adjustable mount for Fig. 4 lasers.....							188-1019-ND	38.40	0221-449-00
6	Industrial laser power supply for up to six lasers.....							188-1022-ND	252.00	0221-183-00

LUMEX® Visible and Infrared Diodes

Fig. 1

Fig. 2

Fig. 3

67-1542-ND
Lumex Master Catalog
CD-ROM \$1.95

Wave-length λ Typ. (nm)	Output Power (mW) max.	Current (mA) Ith Iop	Oper. Voltage (V)	Operating Temp. (°C)	Dia. D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Visible Laser Diodes — Fig. 1								
650	5	20 35	2.2	-10° to +40°	5.60	67-1500-ND	5.37	OED-LDP65001E
650	5	18 25	2.1	-10° to +70°	5.60	67-1501-ND	15.00	OED-LDP65001E
658	50	40 125	2.5	-10° to +40°	5.60	67-1646-ND	136.90	OED-LDH66003E
Infrared Laser Diodes — Fig. 2								
1550	5 (CW)	8	1.2	-40° to +85°	5.60	67-1504-ND	124.84	OED-LDC15001E
Detection Range λ (nm)	Rise/Fall Time (ns)	Forward Current (mA)	Reverse Voltage (V)	Operating Temp. (°C)	Diameter D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Pin Photo Diode — Fig. 3								
1100/1600	0.3	2	25	-40° to +85°	5.35	67-1505-ND	35.26	OED-PPD11075G-B

Panasonic® Visible Red Laser Diodes

FEATURES: • Oscillating wavelength 670nm: Luminous efficiency 2000 times a conventional laser • Low threshold oscillation: 25mA • Stable single transverse oscillation • Low astigmatism characteristics: <10μm. **SPECIFICATIONS:** Max. Optical Power Output: 5mW. Oscillating Wavelength: 670nm. Threshold Current: 25mA. Operating Current: 35mA. LD Operating Voltage: 2.5V. Radiation Horizontal Angle: 8°. Radiation Perpendicular Angle: 30°

Digi-Key Part No.	1	10	100	250	Panasonic Part No.
P460-ND	33.75	30.38	28.35	26.33	LN9R05MS

5.6mm type

1 LD cathode
2 Com. term. (LD anode)
3 Non. PD anode

More Product Available Online: www.digikey.com

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