

EGISMOS *DATASHEET*

High-End 532nm DPSS Green Laser Diode Modules Key features

Visible light $\lambda=532\text{nm}$
Output power $<1\text{mW}$, $<5\text{mW}$
Dimension $12\text{mm} \times 36\text{mm} / 12\text{mm} \times 42\text{mm}$
High stability; High performance

Applications

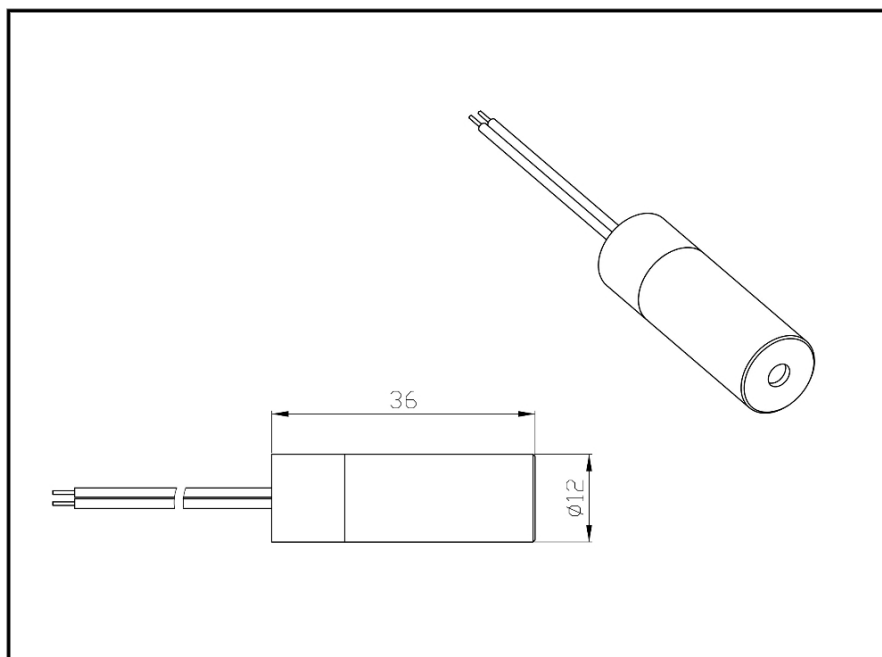
Green laser light source
Brighter visibility
Industrial alignment
Patient position

Laser Diode Solutions

The high-end 532nm DPSS Green Laser Diode Modules produce a collimated output beam with output powers of $<1\text{mW}$ or $<5\text{mW}$. Operating voltage is from 2.8V to 6V DC at an operating current of 150~300mA, 180mA typ. ($<1\text{mW}$) or 240mA typ. ($<5\text{mW}$). For -L (Low Power Consumption) model, the operating current is only 80mA typ. ($<1\text{mW}$) and 120mA typ. ($<5\text{mW}$). Beam divergence is $<0.5\text{mrad}$ and operating temperature range is 15°C to $+40^\circ\text{C}$. The modules consist of a brass housing, laser diode, crystal, drive circuit and collimating/focusing lens. Electrical connections are made via external flying leads. The lens may be adjusted to produce either a collimated beam or focused spot. The compact design has made HB3532/HB3532-L series DPSS green laser diode modules suitable for general purpose OEM application.



HB3532
Laser Module



EGISMOS

<http://www.egismos.com>

TEL: +1-888-3481454

FAX: +1-604-4339864

E-Mail: sales@egismos.com

Egismos *DATASHEET*

Specifications (typical @ $t_c=25^{\circ}\text{C}$)

Item.	symbol	HB35321D/R (-L: Low Current) HB35325D/R (-L: Low Current)	HB35321L/C (-L: Low Current) HB35325L/C (-L: Low Current)
Mode		CW (-L: Modulation Control)	CW (-L: Modulation Control)
Wavelength	λ	532nm	532nm
Laser Pattern		Dot/ Round (Better Beam Pattern)	Line/Cross
Dimeter x Length	$\Phi \times L$	D: 12 x 36 mm / R: 12 x 42 mm	12 x 42 mm
Output Power	P_o	<1mW, 0.7~0.9mW <5mW, 3.5~4.2mW	<1mW, 0.8~1.0mW (Class 2M) <5mW, 3.5~4.2mW
Power Stability		< 20%, min. <10%	<20%, min. <10%
Collimated Beam Size		<24mm at 10m / R: <6mm at 10m	Width <2mm, Band <2mm at 5m
Collimated Beam Divergence		<1.2mrad / R: <0.3 mrad	<0.2 mrad
Operating Voltage (DC)	V_o	2.8-6.0V	2.8-6.0V
CW Operating Current	I_o	150~300mA typ., (-L: 60~150mA)	150~300mA typ., (-L: 60~150mA)
Operating Temperature	T_o	+15 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ (-L: +5 $^{\circ}\text{C}$ to +45 $^{\circ}\text{C}$)	+15 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$ (-L: +5 $^{\circ}\text{C}$ to +45 $^{\circ}\text{C}$)
Storage Temperature		-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
Bore Sight/ Span Angle		<12mm/m min. < 5mm/m	Span angle: Any angle $\pm 3^{\circ}$
Housing Material		Brass/Aluminum	Brass/Aluminum
Mean time to failure (MTTF)		>5,000 hrs	>5,000 hrs



Laser Safety

The light emitted from these devices has been set in accordance with IEC60825. However, staring into the beam, whether directly or indirectly, must be avoided. IEC60825 classifies laser products into three different categories depending on light emitted, wavelength and eye safety.

CLASS II

"Caution", visible laser light less than 1.0mW. Considered eye safe, normal exposure to this type of beam will not cause permanent damage to the retina.

CLASS III R

"Danger", visible laser light between 1.0mW and 5.0mW. Considered eye safe with caution. Focusing of this light into the eye could cause some damage.

CLASS III B

"Danger", infrared (IR), and high power visible lasers considered dangerous to the retina if exposed. NB: It is important to note that while complying with the above classifications, unless otherwise stated, our laser diode products are not certified and are designed solely for use in OEM products. The way in which the device is used in the final product may alter its original design classification, and it is the responsibility of the OEM to ensure compliance with the relevant standards.



<http://www.egismos.com>

TEL: +1-888-3481454

FAX: +1-604-4339864

E-Mail: sales@egismos.com