

# Egismos *DATASHEET*

## *Dia.12mm 532nm DPSS Green Laser Modules Key features*

Visible light  $\lambda=532\text{nm}$   
Output power  $<1\text{mW}$ ,  $<5\text{mW}$   
Dimension 12mm x 50mm  
Stable Output Power

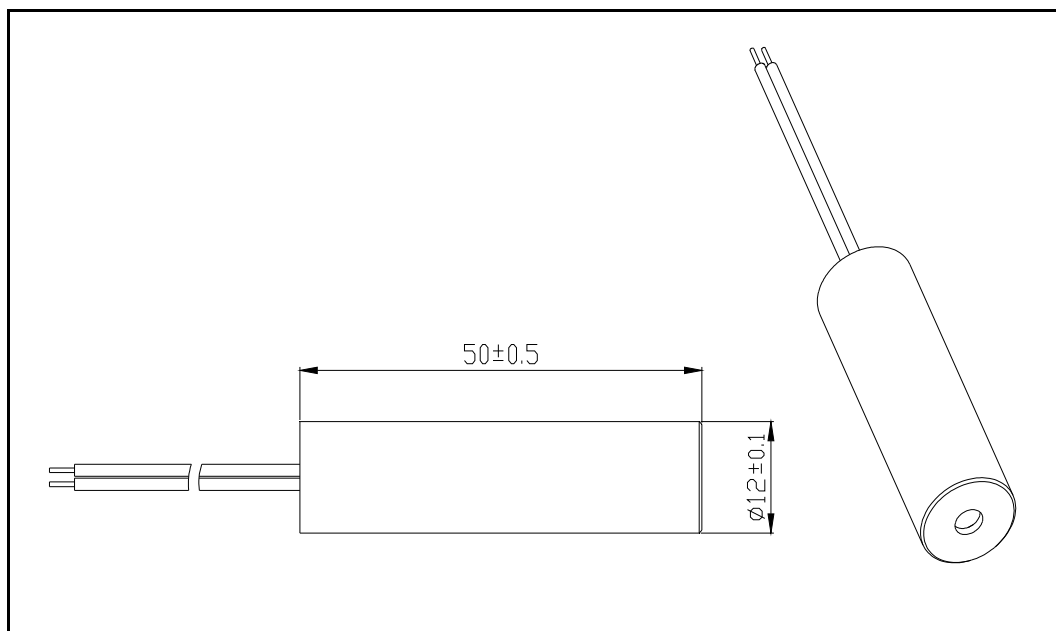
### *Applications*

Green laser light source  
Brighter visibility  
Industrial alignment  
Custom made requirement

### *Laser Diode Solutions*

The 532nm DPSS Green Laser Modules produce a collimated output beam with output powers of  $<1\text{mW}$  or  $<5\text{mW}$ . Operating voltage is from 2.8V to 5V DC at an operating current of 100~300mA, 130mA typ. ( $<1\text{mW}$ ) or 160mA typ. ( $<5\text{mW}$ ). Beam divergence is  $<1.5\text{mrad}$  and operating temperature range is  $10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ . The modules consist of a aluminum housing, laser diode, crystal, drive circuit and collimating/focusing lens.

Electrical connections are made via external flying leads. The lens can be adjusted to produce either a collimated beam or fix focused spot. The compact design has made SB3532/HB3532 series DPSS green laser modules suitable for most applications and easily modified for custom made requirements.



**Egismos**

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## Specifications (typical @tc=25°C)

Item.	symbol	SB35321R SB35325R	HB35321R HB35325R
Mode		CW / TTL modulation 10K Hz (option)	CW / TTL modulation (option)
Wavelength	$\lambda$	532nm	532nm
Laser Pattern		Round	Round
Diameter x Length	$\Phi \times L$	12 x 50 mm	12 x 50 mm
Output Power	Po	<1mW, <5mW	<1mW, <5mW
Power Stability		Modulation average $\leq \pm 20\%$	$\leq \pm 10\%$ within operating temperature
Collimated Beam Size		<20mm at 10m	<15mm at 10m, min. <10mm at 10m
Collimated Beam Divergence		<2.0mrad	<1.5mrad (min. <1.0mrad)
Operating Voltage(DC)	Vo	2.8-5.0V	2.8-5.0V
CW Operating Current	Io	80~200mA, 250mA max.	120~280mA., 300mA max
Operating Temperature	To	+15°C to +35 °C for modulation mode Room temperature for CW mode	+10°C to +40°C (max. 0°C to +50°C)
Storage Temperature		-40 °C to +85 °C	-40°C to +85 °C
Boresight(Coaxial)		--	<1 degree (min. <10mm/m)
Span Angle		--	--
Housing Material		Brass/Anodized Aluminum	Brass/Anodized Aluminum
Mean time to failure(MTTF)		>3,000 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 2 / CLASS 2M

"Caution", visible laser light less than 1.0mW. Class 2M is for the spread laser beam, less than 1.0mW in 7mm aperture at 10cm distance. Considered eye safe, normal exposure to this type of beam will not cause permanent damage to the retina.

### CLASS 3A

"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 3B

"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.



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