



LDM150

Ø7mm Minituare Red Laser Modules

LDM150

The LDM150 is a self-contained OEM laser module. At just 7mm in diameter the extremely compact laser module is the smallest housing diameter from Global Laser. It is suited for applications where space is critical and a cost effective solution is required.

Available in the red wavelength of 635nm with power options of 0.36mW (class 1), 1mW (class 2) and 3mW (class 3R).

Each laser module is fitted with a user adjustable plastic aspheric lens which produces an elliptical output and offers a small output beam diameter and focused spot size. It also features the benefits of long lifetime, low voltage DC operation, reverse polarity protection and an isolated housing.

A range of accessories are available including a mounting clamp, laser safety glasses and laser enhancement glasses are available to complement the LDM150 range.



Specifications

	LDM150/635/0.36	LDM150/635/1	LDM150/635/3
Part Numbers			
RS Part Number	TBC	TBC	TBC
Global Laser Part Number	1450-14-000	1450-15-000	1450-16-000
Mechanical Information			
Mass (grams)	3		
Dimensions (mm)	Ø7 x 27.4		
Housing	Anodised Aluminium		
Isolated Body	Yes		
Lead Length (mm)	220		
Connector Type	Flying Leads		
Optical Information			
Output Power (mW)	0.36	1	3
Wavelength (nm)	635		
Laser Class (IEC 60825:1 2014)	1	2	3R
Beam Size at Aperture (mm)	3x1		
Beam Divergence (mRad)	<0.5		
Bore Sighting (mrad)	<25		
Minimum Spot Size (µm)	<40		
Environmental Information			
Operating Case Temperature (°C)	-10 to +45		
Storage Temperature (°C)	-10 to +85		
Operating Humidity (%RH)	90 (non condensing)		
MTTF @ 25°C (hrs)	≥29,000		
Electrical Specifications			
Input Voltage (Vdc) (Red Lead - Pin 1)	3.5 to 5.0		
Input Voltage (Vdc) (Black Lead - Pin 2)	0		
Operating Current Drive Circuit (mA)	4 (Typ)		
Operating Current (mA)	≤50		
Reverse Polarity Protection	Yes		
NOTES All specifications are typical @ 25°C			

Optional Accessories

The LDM150 has a wide range of options to suit a variety of applications. These options include a mounting clamp, enhancement glasses and laser safety glasses.

Mounting Clamp

The heavy duty mounting clamp allows the LDM150 to be securely fixed at any required direction or angle. The base plate has a series of threaded holes which allows the clamp to be fixed directly onto a machine or workbench.

RS Part Number	Global Laser Part Number	Description
TBC	1239-01-000	Heavy Duty Mounting Clamp (7mm Ø)



Heavy Duty Mounting Clamp

Laser Safety Glasses

To compliment the LDM150 range there are a number of laser safety glasses. These provide a protection or block out for a wide range of wavelengths. All glasses are provided in an over glasses style which can be worn over prescription glasses. Below is list of the available options in RS Components. Please refer to the individual datasheets for full specification.

RS Part Number	Global Laser Part Number	Description
RS2107355	1990-24-000	190 to 398nm Laser Safety Glasses
RS697-3525	1990-00-000	395 to 540nm Laser Safety Glasses
RS697-3529	1990-01-000	630 to 700nm Laser Safety Glasses
RS697-3531	1990-03-000	615 to 700nm Laser Safety Glasses
RS697-3538	1990-02-000	870 to 1085nm Laser Safety Glasses
RS2107354	1990-23-000	1010 to 1500nm Laser Safety Glasses



Over Glasses Style

Laser Enhancement Glasses

To compliment our wide range of alignment laser diode modules we have introduced a range of Laser Enhancement Glasses. One set which enhance projections in the red wavelength range (630-670nm) and another in the green wavelength range (510-580nm). These work by blocking light in other wavelengths, thus improving the visibility in outdoors or bright lighting condition's. The glasses also meet ANSI Z87 impact standard.

RS Part Number	Global Laser Part Number	Description
RS127-1570	1997-02-000	Red Laser Enhancement Glasses
TBC	1997-05-000	Green Laser Enhancement Glasses



Red Laser Enhancement Glasses

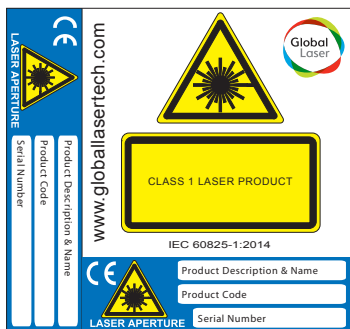


Green Laser Enhancement Glasses

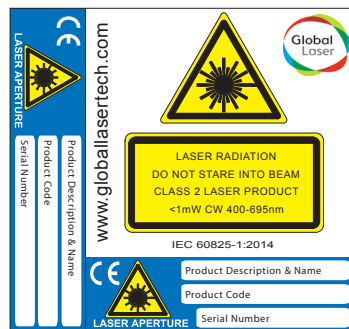
Please Note: these are not laser safety glasses, but are conventional safety glasses that enhance the visibility of green wavelengths and do not protect the wearer's eye from the laser. It is recommend that these glass are only used with lasers were the output power conforms to class 2 and 2M.

Laser Safety

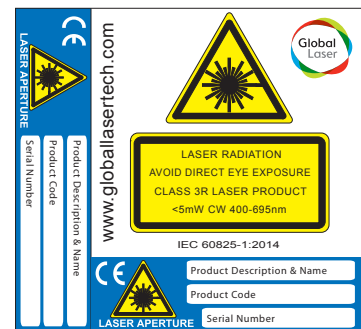
Our lasers are compliant to IEC 60825-1:2014 standards. The lasers fall within one of the following classifications depending on power and wavelength. Examples of the labels are shown below.



Class 1 Laser Label



Class 2 Laser Label



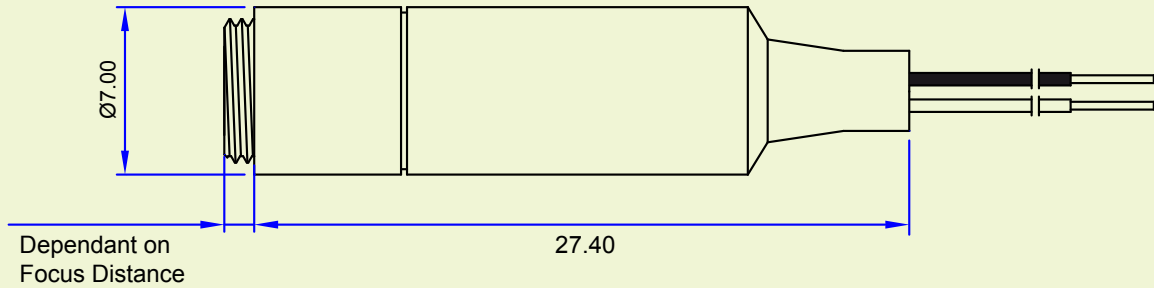
Class 3R Visible Laser Label

Quality & Warranty

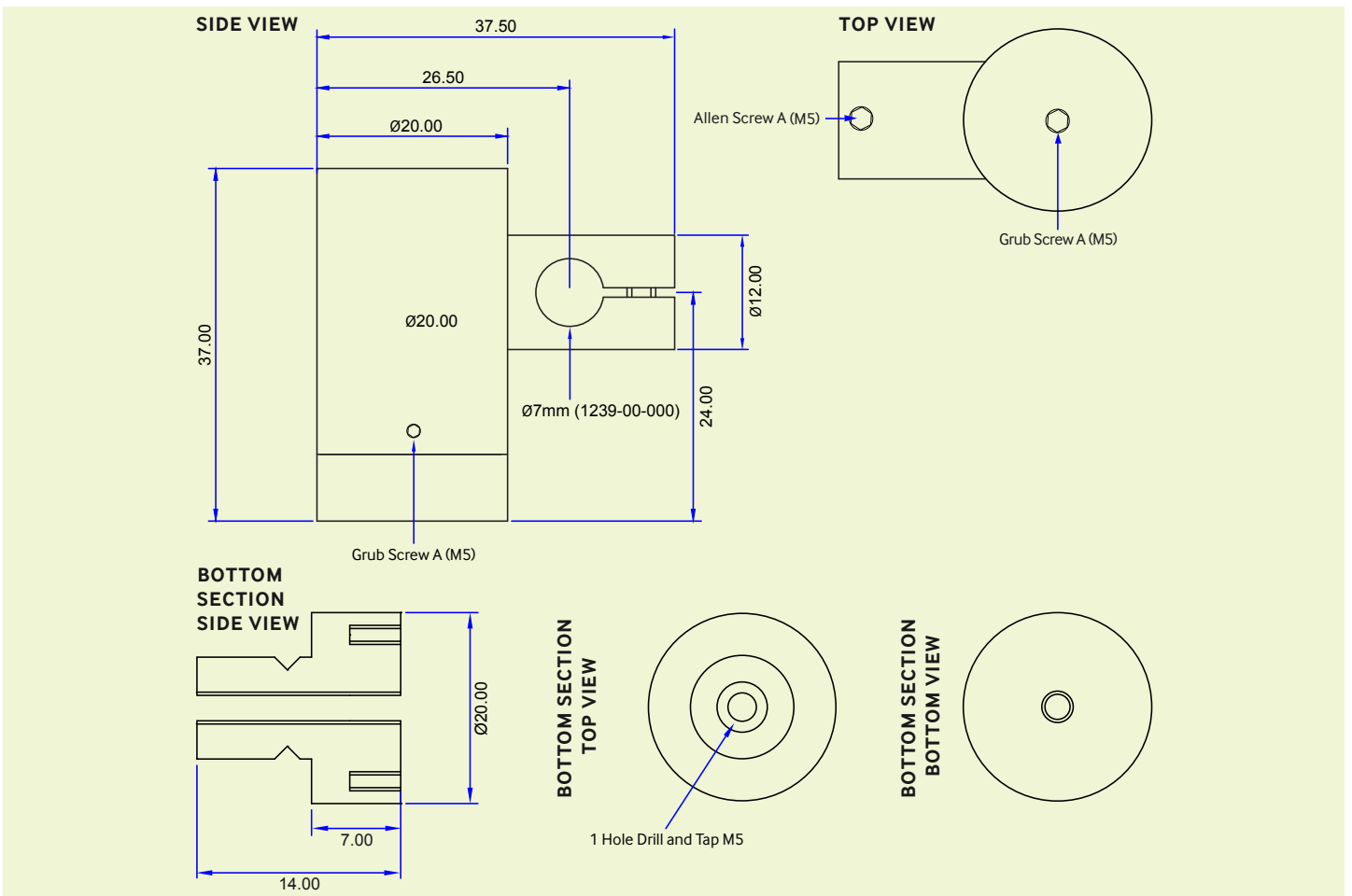
The LDM150 range is supplied with a 12 month parts and labour warranty. Our manufacturing operations are certified to ISO9001:2015.

Mechanical Dimensions

LDM150 Outline



Heavy Duty Mounting Clamp Ø7mm



Please Note: Global Laser reserve the right to change descriptions and specifications without notice



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