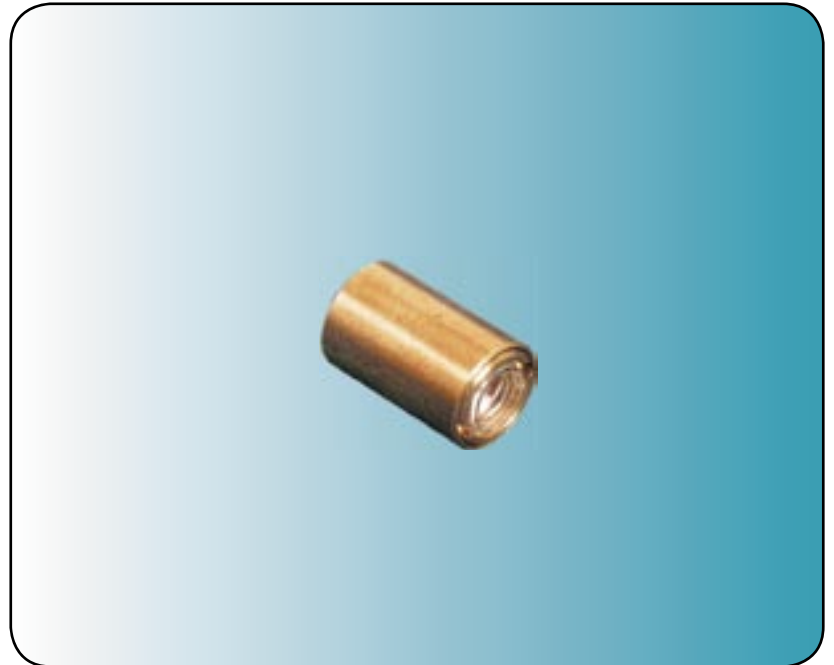


Imatronic Sigma

Features

- Entry point low cost diode module
- User Focusable
- Ideal for experimental & educational use.
- Simple CW brass body construction.
- Compact design for restricted installations
- Potted for better heat dissipation



Applications

- Alignment and Positioning
- Bar Code Readers
- Dimensional Scanning
- Metrology
- Event Detection
- Robot Control
- Target Designation
- Edge Detection
- Analysis
- Security
- Optical Fibre Testing
- Entertainment (Laser TAG)

The Sigma laser diode module is a complete laser solution in a compact package.

All the essential components are included, and the result is a low cost, easy to use device suitable for prototyping, feasibility studies, educational and experimental use.

The output beam is user focussable, and will produce small spots of very high brightness.

The metal body is in intimate contact with the heat producing components and the thermal potting ensures coolest operation.



| | SIGMA/635/1 | SIGMA/650/3 |
|---------------------------------|----------------------|--------------------|
| | 635/1 | 650/3 |
| OPTICAL | | |
| Output Power (mW +/- 10%) | 0.9 | 3 |
| Laser Classification | 2 | 3R |
| Power Stability (%) | < 3 | < 3 |
| Wavelength (nm) | 635 +/- 5 | 650 +/- 5 |
| Wavelength vs Temp (nm/oC) | 0.2 | |
| Focus Range (mm) | 100 to infinity | |
| Beam Size at Aperture (mm) | 4 x 2 typical | |
| Beam Size at Nearest Focus (µm) | < 100 | |
| Beam Divergence (mrad) | < 0.5 | |
| Astigmatism (µm) | < 10 | |
| Beam Position (mrad) | < 25 | |
| Pointing Stability (mrad) | < 2 | |
| ELECTRICAL / MECHANICAL | | |
| Supply Voltage – Red Lead (V) | +3.5 Vdc to +5.0 Vdc | |
| Supply Voltage – Black Lead (V) | 0 | |
| Operating Current (mA) | 45 | |
| Length (mm) | 16.5 | |
| Diameter (mm) | 10.4 | |
| Mass (g) | 10 | |
| Supply Lead Length (mm) | 65 | 65 |
| ENVIRONMENTAL | | |
| Operating Temperature (°C) | -10 to +40 | |
| Storage Temperature (°C) | -40 to +85 | |
| Operating Humidity (%rh) | 90 | |
| MTTF at 25 °C (x 1,000) | > 15 | |

LASER SAFETY

Our lasers are compliant to IEC 60825-1 standards. The lasers fall within one of the following classifications depending on power and wavelength. The examples of the labels supplied with the units are shown below.



OEM Laser Label



Class 2 Laser Label



Class 3R Laser Label

QUALITY & WARRANTY

The Imatronic range is supplied with a 12 month parts and labour warranty. And our manufacturing operations are certified to ISO9001.



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



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For further information about the imatronic SIGMA range you can contact your local distributor or you can contact Global Laser in the UK.

Your Local Distributor Is: