Safe Handling

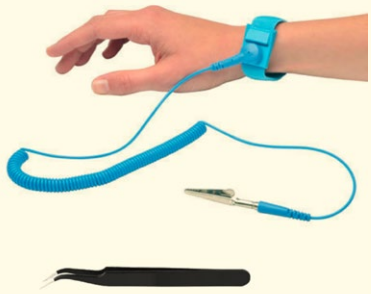
Protecting Your Laser Diode from Electrostatic Discharge (ESD)

Despite being very reliable under normal operating conditions, diode lasers can be destroyed or damaged by electrical or static discharges (ESD). Precautionary guidelines to handling such lasers are required to prevent damage to the laser – which can decrease performance immediately or over time.

RECOMMENDATIONS:

Reduce the likelihood of ESD

- Use grounded tweezers and a wrist strap.
- Use in a static-free environment only.
- Work only on a surface that is grounded or surface with anti-static floors and a case ground.
- For more protection, specify the area that you are working in as “ESD Controlled” and use a dedicated grounding device and an air ionizer for charge control.
- Store the laser properly when not being used, such as a Faraday cage.



When not in use, follow this procedure

- Short the pins using conductive foam or by wrapping wire pin to pin.
- Store in a conductive bag labeled “static sensitive”.

Headquarters:288,Woolands Loop, #04-00,Singapore 738100
(+65)31638599 (+65)31588700 info@ld-pd.com www.ld-pd.com

SAFE USE AND HANDLING INFORMATION

Thermal Management

Laser diodes generate heat during operation and may be susceptible to damage due to excessive heat. A mounting of thermal sinking solution must be sufficient to maintain device within operational specifications. Use of a thermal pad is highly recommended.

Solder Guidance

S Series Submounts: Solder at max 250°C for ⩽5 seconds with an ESD safe soldering tool. B Series, T Series, H Series and 2 Series: Connector pins are plated gold over nickel. Please note that use of improper soldering techniques has a high likelihood of causing device failure.

Pin Trimming

Pin trimming or clipping is not recommended as it is highly likely that it will result in failure of internal components. Evidence of trimming or clipping pins will void the manufacturer' s warranty. If you require shorter pins or fewer pins, contact info@ld-pd.com to discuss custom package options.

TEC Control

Laser diodes generate heat during operation and may be susceptible damage due to excessive heat. A mounting or thermal sinking solution must be sufficient to maintain device within operational specifications. Use of a thermal pad is highly recommend.

Fiber Bend Radius

Fiber-coupled packages are subject to bend radius requirements. Generally, the optical bend radius limit is ⩽10X the outer jacket diameter, however specific bend radius requirements apply by fiber type.

Contact info@ld-pd.com or your account manager to obtain the necessary information.

Fiber End Cleaning

Dirt and debris must be removed from a fiber and fiber connector when present. Failure to properly maintain the fiber end face will likely result in the failure of the component. For best results, it is recommend that the end users clean the fiber end face by applying a small amount of to a texwipe or particle-free cloth and dragging the fiber from the wet portion to the dry portion of the cloth. The use of fiber cleaning tools may also be a suitable method of cleaning.