

SMA Receptacle Packaged Laser Diode 658nm



Key features

- Visible light $\lambda = 658\text{nm}$
- Fibre output power 27mW
- SMA receptacle package
- Built-in AlGaInp monitor photodiode
- Laser diode with multi-quantum well structure
- Hermetically sealed active component
- High reliability

Applications

- Fibre optic fault locators
- Test equipment
- Scientific equipment

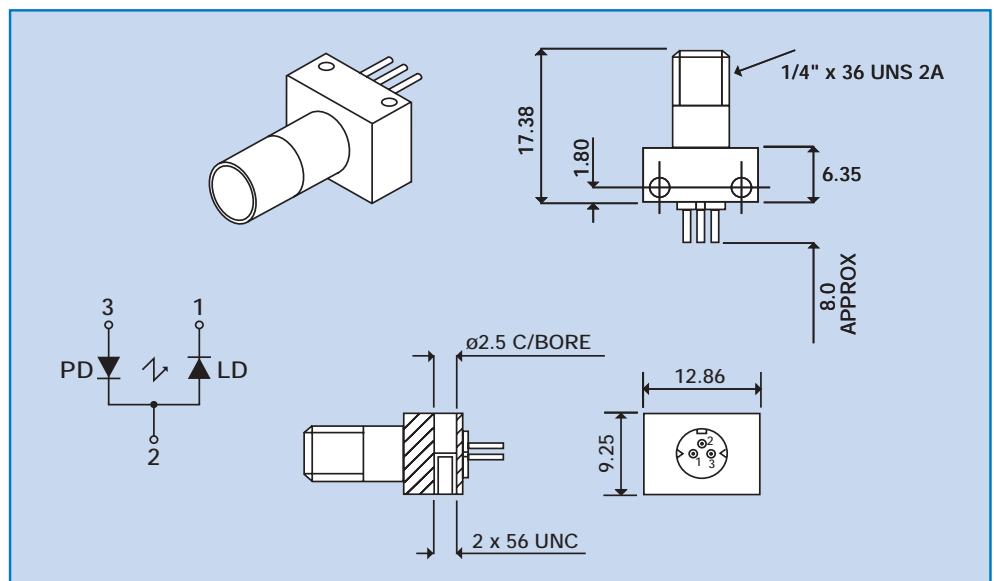
300-0025-01 658nm SMA Receptacle Packaged Laser Diode

The 300-0025-01 658nm SMA Receptacle Packaged Laser Diode provides 27.0mW (max) fibre output power when coupled to a 50 μm fibre.

Based on a 658nm band AlGaInp laser diode with MQW structure, the device has a laser diode reverse voltage of 2V, photodiode reverse voltage of 30V, monitor

current of 0.5mA, operating current of 65mA, threshold current of 30mA, operating voltage of 2.4V and operating temperature range of -10°C to +60°C.

OEM applications include visible fault location and test equipment for fibre optic cables and scientific equipment.



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300-0025-01 Specifications

Absolute Maximum Ratings (T_c = 25°C)

ITEM	SYMBOL	VALUE	UNIT
Fibre Output Power	P _f	27.0	mW
LD Reverse Voltage	V _{RLD}	2	V
PD Reverse Voltage	V _{RPD}	30	V
Operating Temperature	T _{opr}	-10, +60	°C
Storage Temperature	T _{stg}	-40, +85	°C

Optical & Electrical Characteristics All optical data refer to a coupled 50µm MM fibre, (T_c = 25°C).

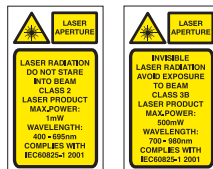
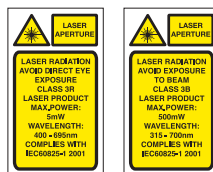
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	TESTING CONDITION
Fibre Output Power	P _f	23.0	25.0	27.0	mW	
Threshold Current	I _{th}	-	30	50	mA	CW
Peak Wavelength	λ	650	658	665	nm	P _f =25mW
Operating Current	I _{op}	-	65	85	mA	P _f =25mW
Operating Voltage	V _{op}	-	2.4	2.8	V	P _f =25mW
PD Monitor Current	I _m	0.3	0.5	0.7	mA	P _f =25mW RPD=5V

WARNING:

This laser device in operation produces visible and/or invisible laser radiation. Be sure to avoid direct exposure of human eyes to beams emitted from the laser diodes. Even though they are barely visible and/or invisible to the human eye, they can be extremely harmful. In particular, avoid looking directly into a laser diode or collimated beam along its optical axis when it is in operation. These devices are components to be used in producing a complete laser system. They do not emit radiation unless combined with other components by the end user.

NOTE: ESD precautions must be taken when handling this product.

Specifications subject to change without notice. E&OE



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 IIIIR

"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 IIIIB

"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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