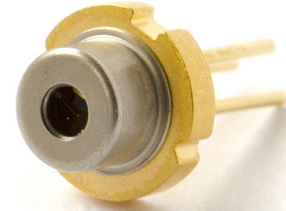


TG 450-S

Visible and UV laser diodes in TO56 package



Features:

Optical output power: 50mW (T_{case}=20°C)

Peak wavelength: 450+/- 2 nm @RT

Efficient radiation source for cw and pulsed operation

Single transverse mode semiconductor laser

Absolute maximum ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Allowable Reverse Current	I_r	1	[uA]
PD Reverse Voltage	V_r	5	[V]
Storage Temperature	$T_{storage}$	-10~85	[°C]
Operating Case Temperature	T_C	0~60*	[°C]

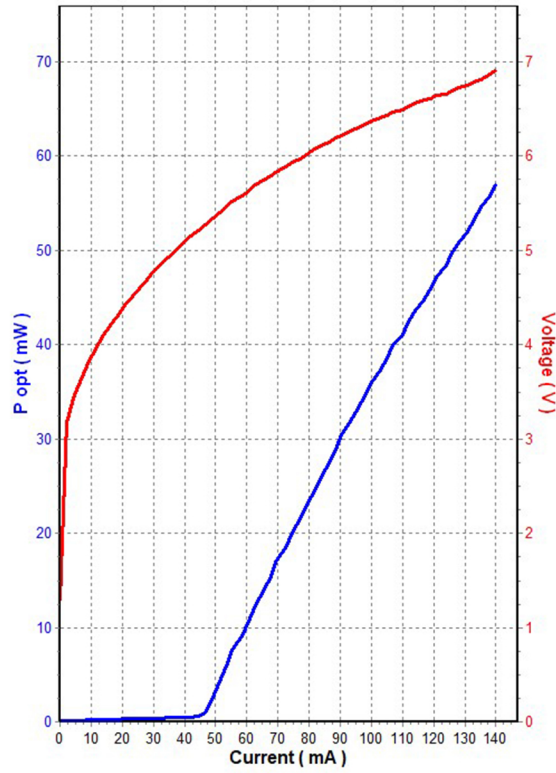
Electric/Optical Characteristics

Item	Condition	Symbol	Value	Unit
Optical Output Power	CW	P_O	50	[mW]
Peak Wavelength	$P_O=50mW$	λ_p	450 +/-2	[nm]
Threshold Current	CW	I_{th}	31-74	[mA]
Operating Current	$P_O=50mW$	I_{op}	82-136	[mA]
Temperature wavelength shift	$P_O=50mW$	DI	0.05	[nm/deg]
Beam divergence - Fast axis			32	deg
Beam divergence - Slow axis			7	deg

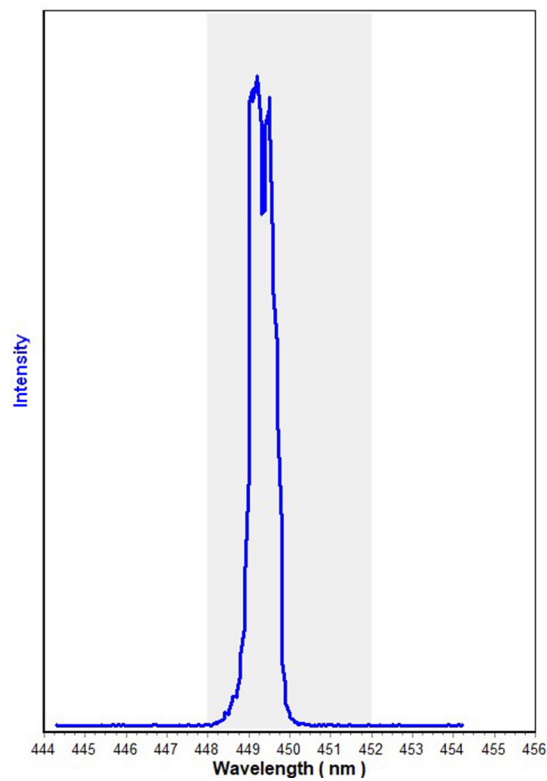
*Please notice that the laser diode is designate to operate at room temperature (20 deg. C). The temperature increase leads to the shorter lifetime and lower output current.

TG 450-S

Optical output power

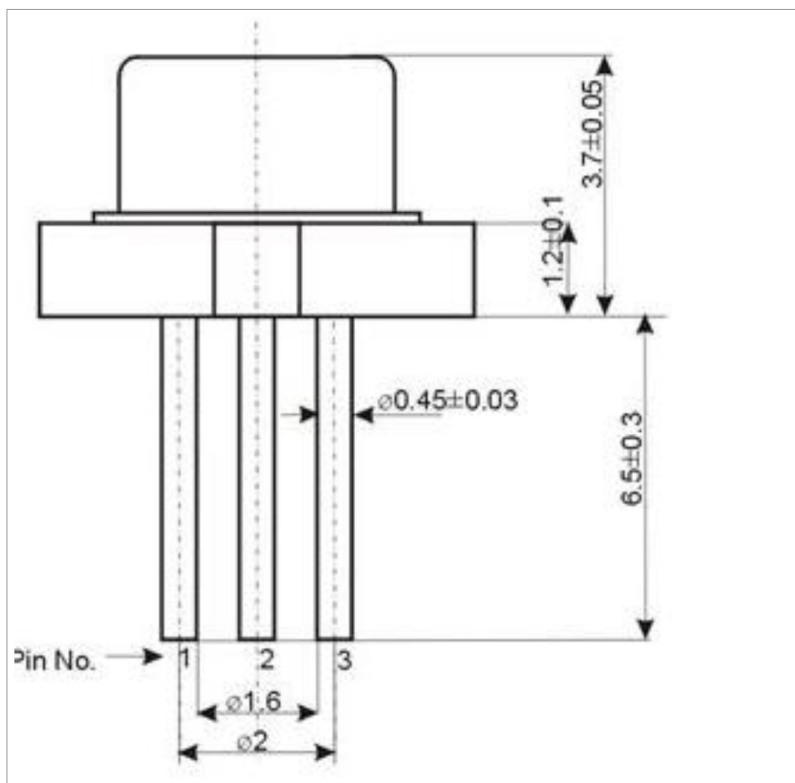


Wavelength



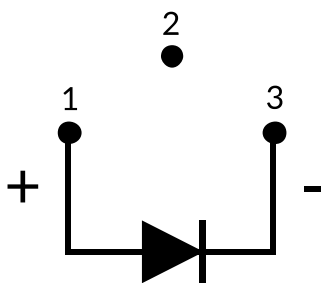
TG 450-S

Physical dimensions



Electrical connections

Laser is connected to isolated pins “1” and “3”. Pin “2” is connected with the case and not active.



- 1. LD Anode (+)
- 2. Case
- 3. LD Cathode (-)