

TG 446-S Visible and UV laser diodes in TO56 package

Features:

Optical output power: 50mW (Tcase=20°C) Peak wavelength: 446+/- 2 nm @RT Efficient radiation source for cw and pulsed operation Single tranverse mode semiconductor laser

Absolute maximum ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Allowable Reverse Current	۱ _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]

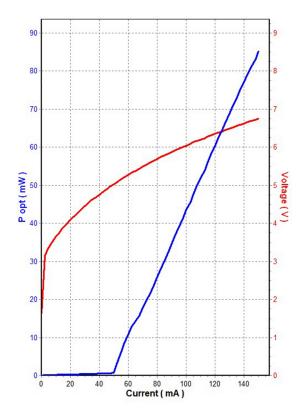
Electric/Optical Characteristics

Item	Condition	Symbol	Value	Unit
Optical Output Power	CW	P_{O}	50	[mW]
Peak Wavelength	P _o =50mW	λ_{p}	446 +/-2	[nm]
Threshold Current	CW	I_{th}	42-68	[mA]
Operating Current	P _o =50mW	l _{op}	98-150	[mA]
Temperature wavelength shift	P _O =50mW	DI	0.05	[nm/deg]
Beam divergence - Fast axis			32	deg
Beam divergence - Slow axis			7	deg

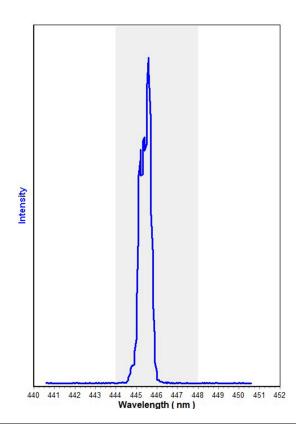
*Please notice that the laser diode is designate to operate at room temperature (20 deg. C). The temperature increase leads to the shorter lifetime and lower output current.



Optical output power

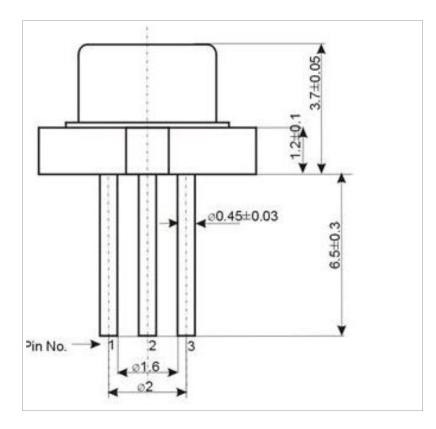


Wavelength





Physical dimentions



Electrical connections

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

