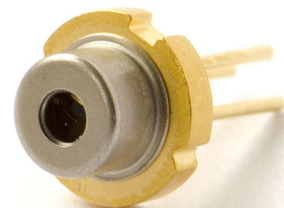


## TG 418-S

Visible and UV laser diodes in TO56 package



### Features:

Optical output power: 50mW (T<sub>case</sub>=20°C)

Peak wavelength: 418 +/- 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 <sub>r</sub>	1	[uA]
PD Reverse Voltage	V <sub>r</sub>	5	[V]
Storage Temperature	T <sub>storage</sub>	-10~85	[°C]
Operating Case Temperature	T <sub>C</sub>	0~60*	[°C]

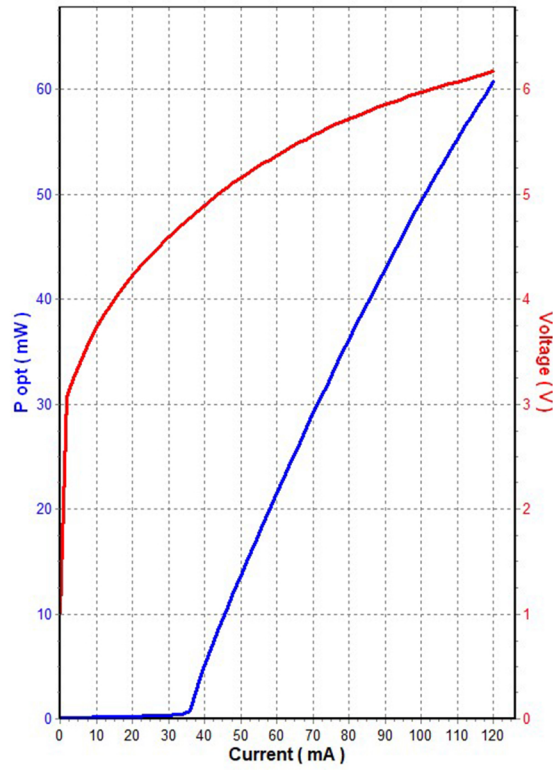
### Electric/Optical Characteristics

Item	Condition	Symbol	Value	Unit
Optical Output Power	CW	P <sub>O</sub>	50	[mW]
Peak Wavelength	P <sub>O</sub> =50mW	λ <sub>p</sub>	418 +/-2	[nm]
Threshold Current	CW	I <sub>th</sub>	30-60	[mA]
Operating Current	P <sub>O</sub> =50mW	I <sub>op</sub>	90 - 130	[mA]
Temperature wavelength shift	P <sub>O</sub> =50mW	DI	0.05	[nm/deg]
Beam divergence - Fast axis			32	deg
Beam divergence - Slow axis			7	deg

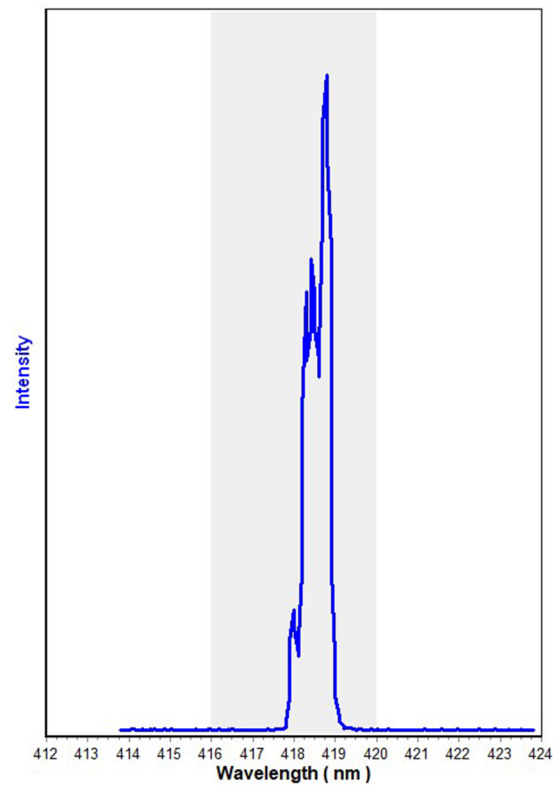
\*Please notice that the laser diode is designate to operate at room temperature (20 deg. C). The temperature increase leads to the shorter lifetime and lower output current.

# TG 418-S

## Optical output power

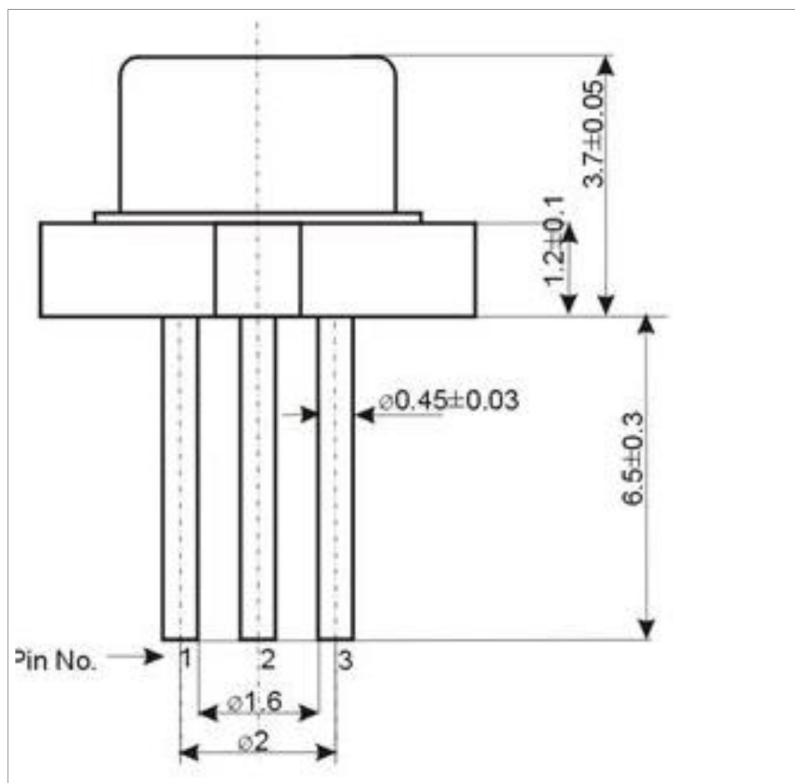


## Wavelength



# TG 418-S

## Physical dimensions



## Electrical connections

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

