

# 1550nm 30W Pulsed Laser Diodes

## Model: OPT1550TO30-R



### Features

- 3 stack PLD
- Laser wavelength: 1550 nm
- Emitting area 190 $\mu$ m  $\times$  10 $\mu$ m
- Peak output power:  $\geq$  30 w

### Applications

- Range finding
- Laser radar
- Laser ranging
- Safety monitoring
- Scientific research test

### Optical Characteristics at $t_{RT}=25\text{ }^{\circ}\text{C}$

	Min.	Typ.	Max.	Units
Wavelength of peak radiant intensity $\lambda_m$	1530	1550	1570	nm
Spectral bandwidth $\Delta\lambda$ at 50% intensity points		15		nm
Wavelength temperature coefficient		0.55		nm/ $^{\circ}\text{C}$
Beam spread (50% peak intensity)				
Parallel to junction plane //		10		Degrees
Perpendicular to junction plane $\perp$		8		Degrees

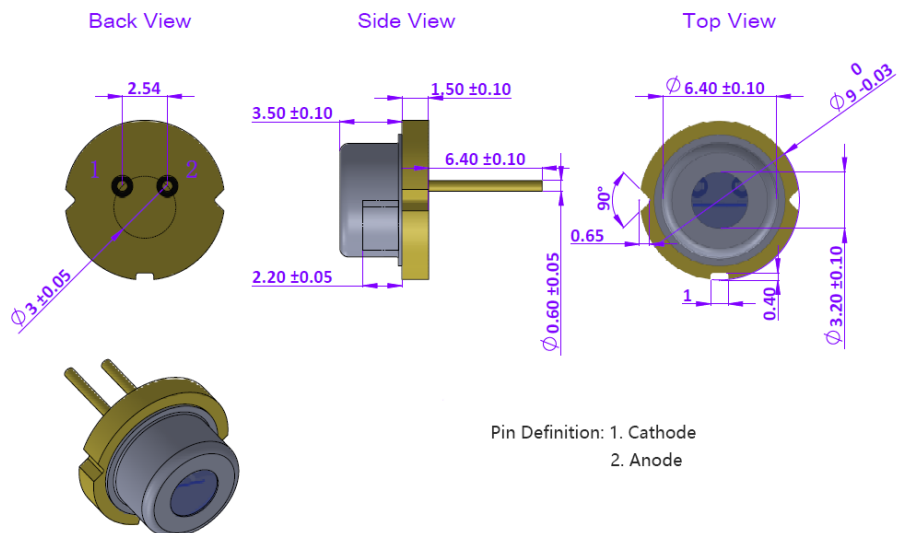
### Optical Characteristics at $t_{RT}=25\text{ }^{\circ}\text{C}$ , $t_w=200\text{ ns}$ , $D=0.1\%$ , $I_F=50\text{ A}$

Parameter		Units
Number of elements	1 $\times$ 3	
Peak output power (typ.)	30	W
Emitting area	190 $\times$ 10	$\mu$ m
Threshold, $I_{th}$ typ.	600	mA
Forward voltage at $I_F$	20	V

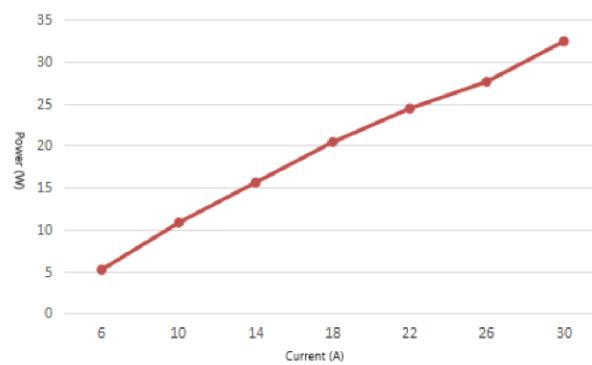
### Absolute Maximum Ratings

Maximum ratings	Limiting values
Max. current	33A
Peak reverse voltage	20V
Pulse duration	200ns
Duty factor	0.1%
Temperature	
- Storage	-40°C to +850°C
- Operating	-40°C to +75°C
Lead soldering	
- 10 seconds max at	260°C

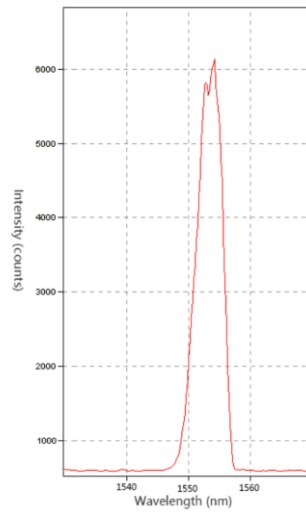
### Package Drawings



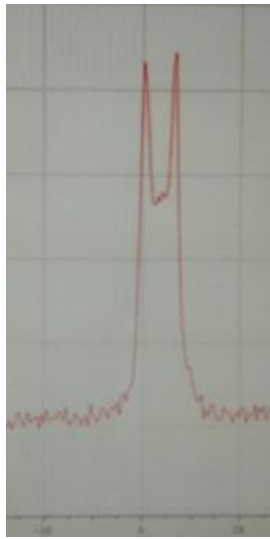
Power vs. Current



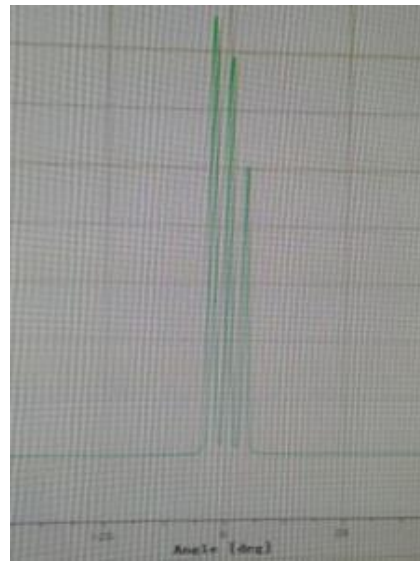
Curve of spectrum



Parallel to junction plane //



Perpendicular to junction plane  $\perp$



Near-field light spots

