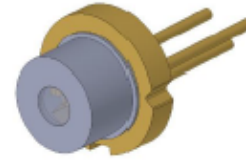


905nm 65W Pulsed Laser Diodes

Model: OPT905TO65-R



Features

- 3stack PLD
- Laser wavelength: 905 nm
- Peak output power: ≥ 65 W
- Optical aperture size: $110 \mu\text{m} \times 13 \mu\text{m}$

Applications

- LiDAR
- Laser ranging
- Safety monitoring
- Scientific research test

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

	Min.	Typ.	Max.	Units
Wavelength of peak radiant intensity λ_m	895	905	915	nm
Spectral bandwidth $\Delta\lambda$ at 50% intensity points	5	6	8	nm
Wavelength temperature coefficient		0.28		nm/ $^\circ\text{C}$
Beam spread (50% peak intensity)				
Parallel to junction plane //	12	14	20	Degrees
Perpendicular to junction plane \perp	20	22	25	Degrees

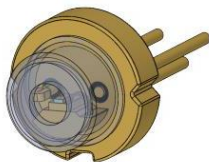
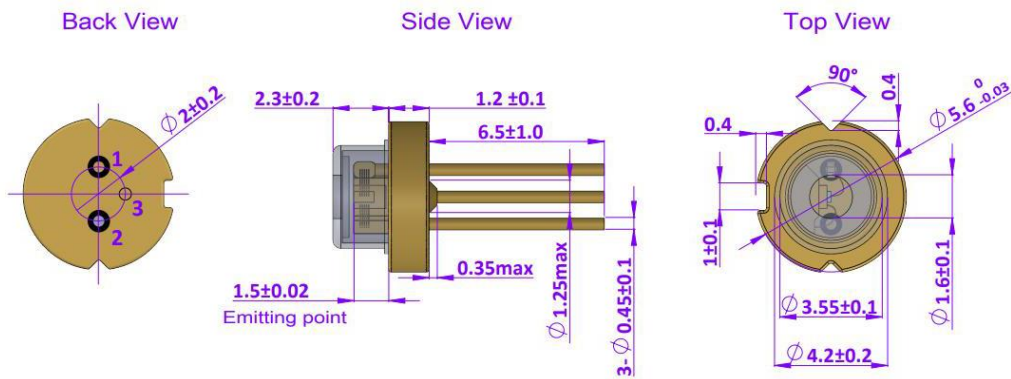
Optical Characteristics at $t_{RT} = 25^\circ\text{C}$, $t_w = 100$ ns, $D = 0.01\%$, $I_F = 20$ A

Parameter		Units
Number of elements	1×3	
Peak output power (typ.)	65	W
Emitting area	110×13	μm
Threshold, I_{th} typ.	350	mA
Forward voltage at I_F	13.7	V

Absolute Maximum Ratings

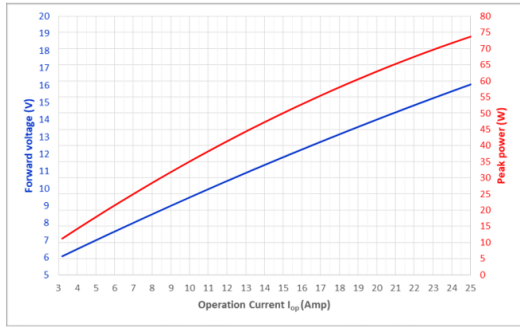
Maximum ratings	Limiting values
Max. current	25A
Peak reverse voltage	20V
Pulse duration	100ns
Duty factor	0.1%
Temperature	
- Storage	-40°C to +105°C
- Operating	-40°C to +85°C
Lead soldering	
- 10 seconds max at	260°C

Package Drawings

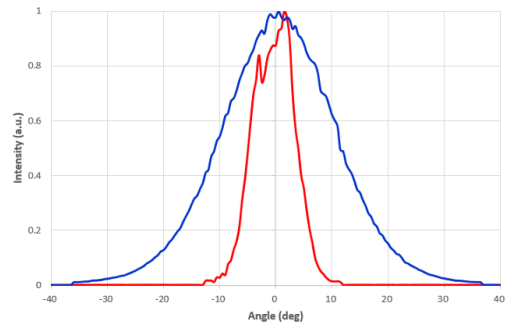


Pin definition: 1. Anode
2. NC
3. Cathode

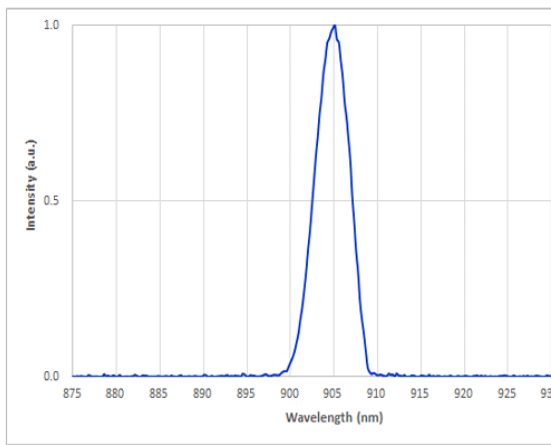
Power-Voltage-Current Characteristics



Far Field Pattern Characteristics



Spectral Characteristics



Near Field Pattern (NFP)

