

1550nm high peak power pulse laser spectrum

width 15nm 25W



● Product Description

Idealphotonics' pulsed semiconductor lasers are high brightness CVLL 1550nm pulsed laser diodes with up to 75W output power. CVLL devices are well suited for most range finding applications requiring eye safe operation.

● Product features

High reliability/high efficiency、 Stable output from -40°C to +85°C、 Single and stacked devices up to 375W、 Fiber-coupled devices up to 188W、



Custom packaging available、 High-power monolithic STAC、 Excellent reliability、 Customer-specific wavelengths available

● Part Number

MP-PLD-NS-1550-25W

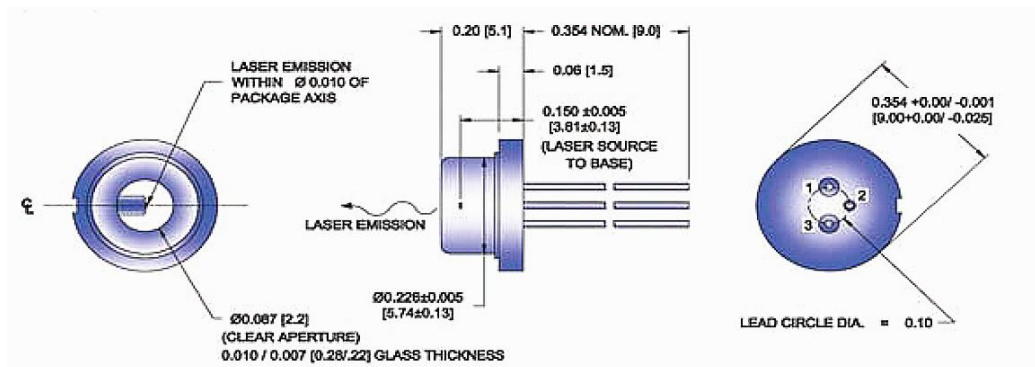
● Application area

Range finding、 Weapon simulation、 Surveying equipment、 Homeland security、 LiDAR、 Adaptive cruise control

● Core parameters

Peak Wavelength	Spectral Width	Rise Time
1550nm	15nm	1ns

● Dimension Drawing





● General Parameters

Parameter

(Drive Conditions: 100ns 45Amps 1kHz @ 25°C unless stated otherwise)

Parameter	symbol	Min.	Typical	Max.	Unit
Peak wavelength	λ	1530	1550	1570	nm
Spectral width	$\Delta\lambda$	10	15		nm
Rise time	T_r		1		ns
Operating current	I_{op}		75		A
Peak power	P_p		25		W
Threshold current (typ)	I_{th}		2		A
Duty cycle			0.07		%
Light spot divergence			10 x 24		deg
Drive voltage	V_f		1.3	2	V
Operating temperature	T_o	0	25	85	deg
Temperature wavelength coefficient	0.55				nm/°C

Maximum limit parameters

Parameter	Unit	Min.	Typical	Max.
Case temperature	°C	-5	25	85
Chip temperature	°C	0	25	85
Drive current	A	0	45	75
Drive voltage	V	0.8	1.2	1.8