



## 905nm 21W 100ns Pulsed Laser Diode



- **Product Description**

These laser diodes feature high peak power under pulsed operation.

Different variants offer varying peak output powers and emission widths.

- **Product features**

High peak power; High-speed response; High repetition frequency; Compact

TO package; Low drive voltage

- **Part Number**

MP-PLD-NS-100-905-21W



## ● Application area

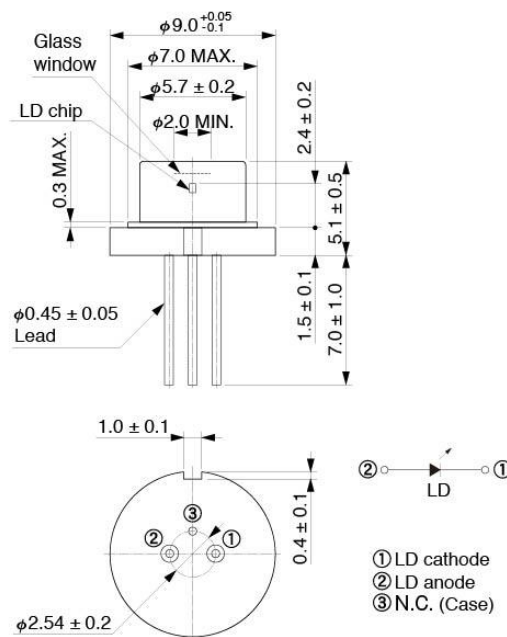
Laser ranging | Fiber-optic sensing | Medical aesthetics | Industrial marking |

Quantum communication

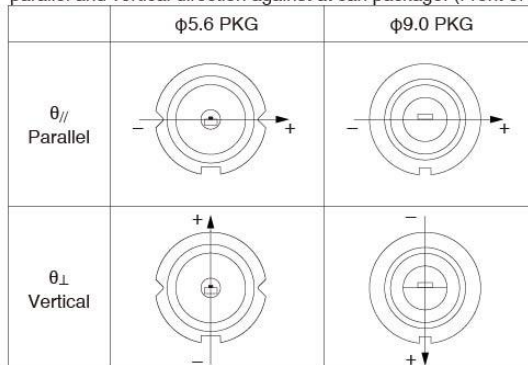
## ● Core parameters

Working wavelength	Output power
905nm	21W

## ● Dimension Drawing



Directions of far field patterns (FFP), parallel and vertical direction against at can package. (Front of view)





## ● General Parameters

### Technical parameters

Model	Value
Type	3 Stack PLDs
Pulse forward current	10 A
Pulse duration	100 ns
Duty Cycle	0.075 %
Operating temperature	- 40 to + 85 °C
Storage temperature	- 40 to + 125 °C
Peak luminous wavelength Min. value	895 nm
Peak emission wavelength typical	905 nm
Peak luminescence wavelength Max. value	915 nm
Light pulses output typical values	21 W
Spectral radiation half-bandwidth typical	6 nm
Typical values for operating voltages	11 V
Rising time Max. value	2 ns
Luminous width	70 × 10 μm
Beam Divergence Angle_Parallel Min. value	7 °
Beam divergence angle_parallel typical value	11 °
Beam divergence angle_parallel Max. value	15 °
Beam Divergence Angle_Vertical Min. value	18 °
Beam divergence angle_vertical typical value	23 °

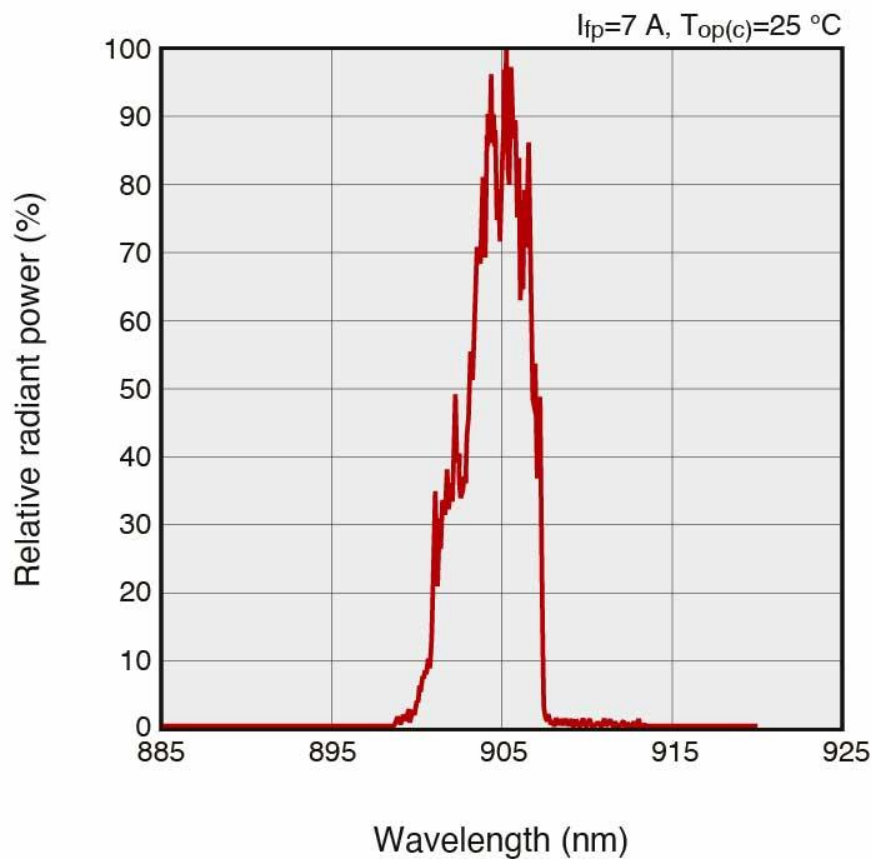
Beam Divergence Angle_Vertical Max. value	28 °
Typical value of laser pumping threshold current	0.4 A
Encapsulation	dia. 5.6CD

## Product characteristics:

Peak radiated power - pulsed forward current and operating voltage

None

## Emission spectrum



LEZ3B0073



## General parameters

Model	Name	Type	Pulse forward current	Peak emission wavelength typical	Light pulses output typical values	Luminous width	Encapsulation
MP-PLD-NS-10 0-905-70W	Pulsed laser diodes	3 Stack PLDs	25 A	905 nm	70 W	230 × 10 μm	Ceramic
MP-PLD-NS-10 0-870-21W	Pulsed laser diodes	3 Stack PLDs	10 A	870 nm	21 W	70 × 10 μm	dia. 5.6CD
MP-PLD-NS-10 0-870-20W	Pulsed laser diodes	Single Emitter PLDs	25 A	870 nm	20 W	230 × 1 μm	dia. 9.0CD
MP-PLD-NS-10 0-905-21W	Pulsed laser diodes	3 Stack PLDs	10 A	905 nm	21 W	70 × 10 μm	dia. 5.6CD



<b>MP-PLD-NS-10</b>  <b>0-905-75W</b>	<b>Pulsed</b>  <b>laser</b>  <b>diodes</b>	<b>3</b>  <b>Stack</b>  <b>PLDs</b>	<b>30 A</b>	<b>905 nm</b>	<b>75 W</b>	<b>230 ×</b>  <b>10 μm</b>	<b>dia.</b>  <b>5.6CD</b>
<b>MP-PLD-NS-10</b>  <b>0-905-100W</b>	<b>Pulsed</b>  <b>laser</b>  <b>diodes</b>	<b>3</b>  <b>Stack</b>  <b>PLDs</b>	<b>40 A</b>	<b>905 nm</b>	<b>100 W</b>	<b>360 ×</b>  <b>10 μm</b>	<b>dia.</b>  <b>5.6CD</b>