



## LDMP- SERIES HIGH POWER PULSED LASER DIODES



**LDMP-** series of pulsed laser diodes are MQW structure devices with InGaAsP active layers fabricated using advanced MOCVD epitaxial growth techniques. Devices are designed with pulse width FWHM of 50~100ns and repetition frequency up to 15 KHz. Standard TO9mm package with wavelengths of 905, different emitter sizes and stack layers are available for various applications such as range finder and optical measurement.

LDMP-0905

### Feature:

- High peak output Power: >50W
- InGaAsP/InGaAsP MQW Structure by MOCVD

### Maximum Rating:

Peak Reverse Voltage:  $V_{rm}$  2V

Case Temperature:

Operating  $-55^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$

Storage  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

Soldering 5 seconds,  $+200^{\circ}\text{C}$

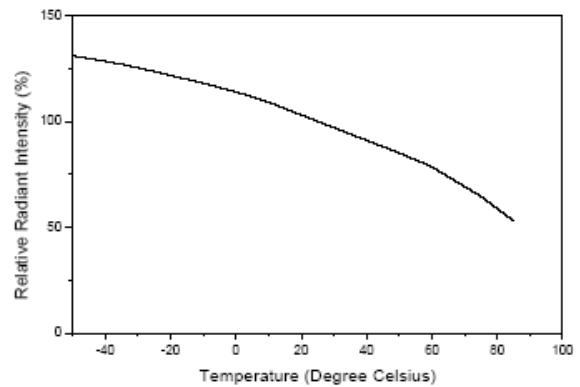
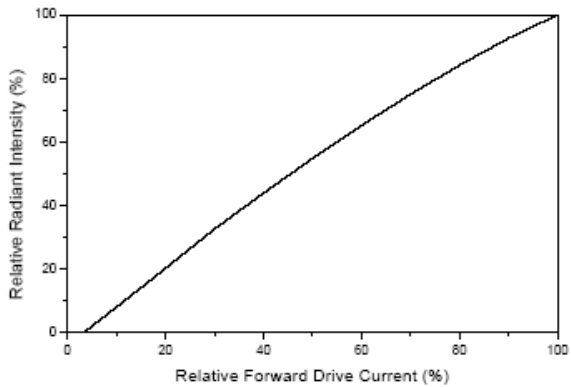


## Specifications (25°C):

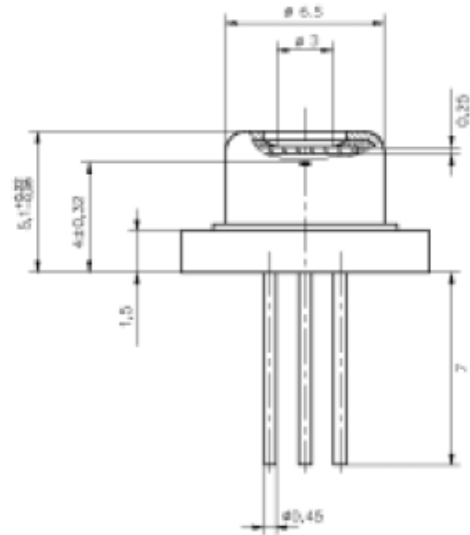
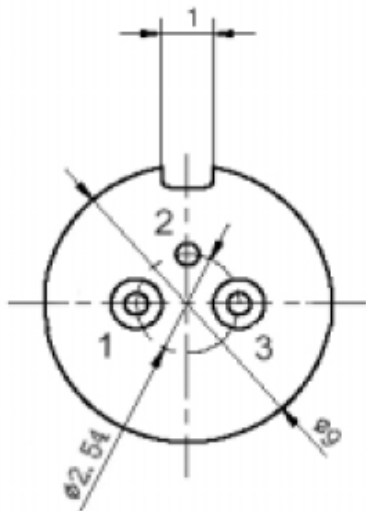
	Symbol	LDMP-0905-20W-51	LDMP-0905-050W-91	LDMP-0905-80W-93	Units
<b>Center Wavelength</b>	$\lambda_0$	905	905	905	nm
<b>Wavelength Tolerance</b>		$\pm 10$	$\pm 10$	$\pm 10$	
<b>Peak Forward Current</b>	If	50	50	50	A
<b>Peak Output Power</b>	Po	20	50	70	W
<b>Pulse Width Max.</b>	Tw	50~100	50~100	50~100	ns
<b>Duty Factor</b>	DF	0.05	0.05	0.05	%
<b>Peak Forward Volage</b>	Vf	40	50	52	V
<b>Beam Divergence FWHM</b>	$\theta // \times \theta \perp$	10x40	10x40	10x40	Degree
<b>Source Size</b>	WxH	370x1	400x6	370x200	$\mu\text{m}$
<b>Number of Laser Diode Element</b>		1	3	3	pcs.
<b>Package</b>		TO-5.6mm with 3 pins	TO-9mm	TO-9mm	



## Typical Performance



## TO $\Phi 9$ mm Package



1 is LD cathode; 2 is PD anode, 3 is PD cathode