



DL-3150-101(-102)

Compact Flat Package Type Laser Diode

Overview

DL-3150-101(-102) is newly developed compact flat package type lasers, which is much different from conventional stem type lasers. The new structure of the frame lead type package enables optical systems to be light weighted and small-sized.

DL-3150-101(-102) is suitable for applications such as compact discs, CD-ROM systems, and video disc systems.

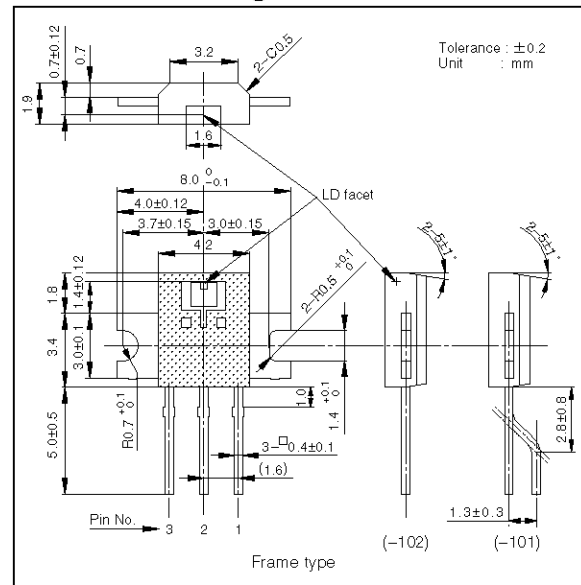
Features

- Compact flat package
- Index guided type
- Pin photodiode built-in for light output monitor

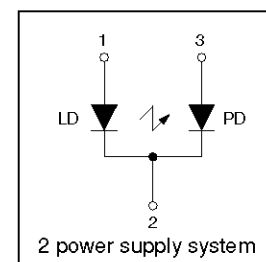
Absolute Maximum Ratings at Tc=25°C

Parameter	Symbol	Ratings	Unit
Light Output	Po	5	mW
Reverse Voltage	Laser	2	V
	PIN	30	
Operating Temperature	Topr	-10 to +60	°C
Storage Temperature	Tstg	-40 to +85	°C

Package Dimensions



Electrical Connection



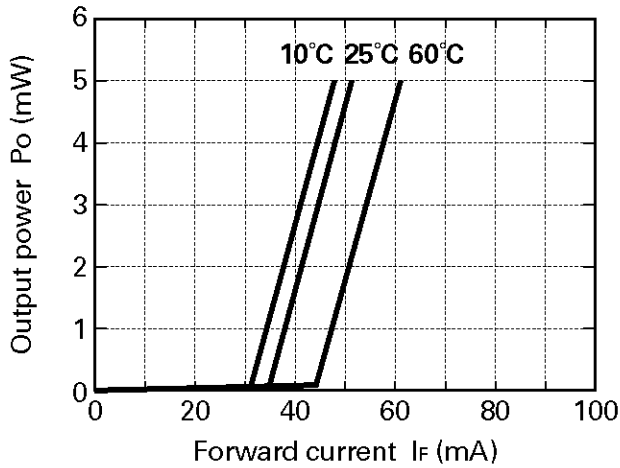
Electrical and Optical Characteristics at Tc=25°C

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	CW	—	35	50	mA
Operating Current	I _{op}	Po=3mW	—	45	60	mA
Operating Voltage	V _{op}	Po=3mW	—	1.8	—	V
Lasing Wavelength	λ _p	Po=3mW	—	790	805	nm
Beam Divergence ※)	Perpendicular	θ _⊥	25	35	45	deg.
	Parallel	θ _∥	8	10	14	deg.
Off Axis Angle	Perpendicular	Δθ _⊥	—	—	±3	deg.
	Parallel	Δθ _∥	—	—	±2	deg.
Differential Efficiency	dPo/dI _{op}	—	0.18	—	—	mW/mA
Monitoring Output Current	I _m	Po=3mW	0.05	0.20	0.40	mA
Astigmatism	As	Po=3mW	—	12	—	μm

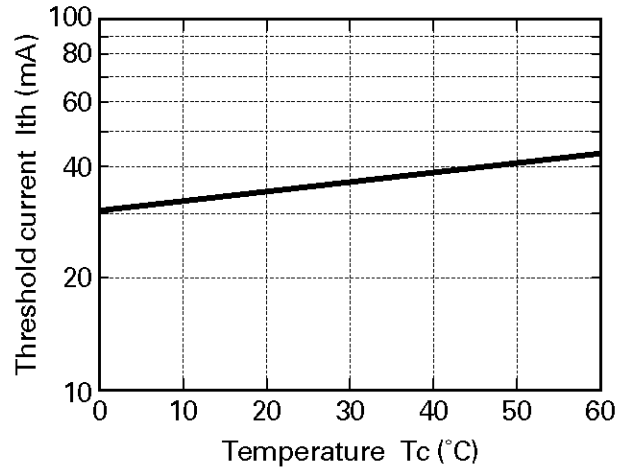
※) Full angle at half maximum note : The above product specifications are subject to change without notice.

Characteristics

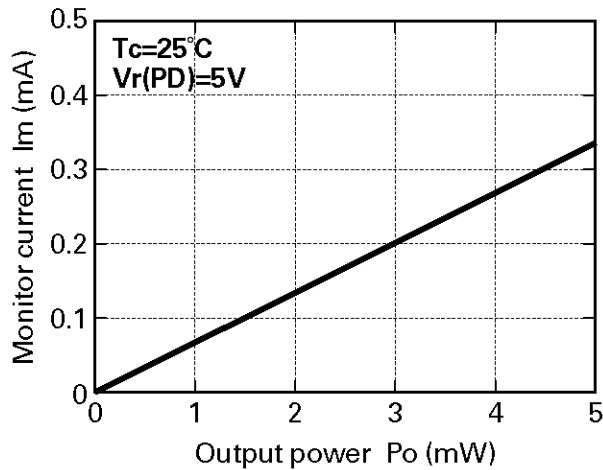
Output power vs. Forward current



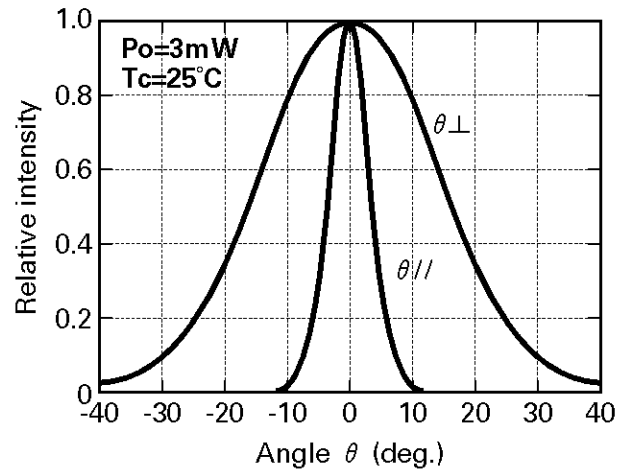
Threshold current vs. Temperature



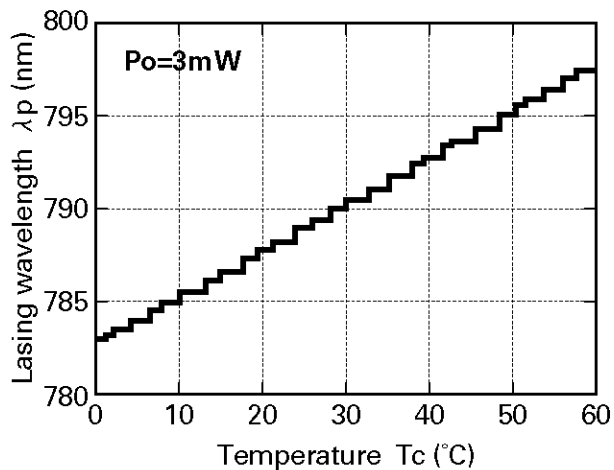
Monitor current vs. Output power



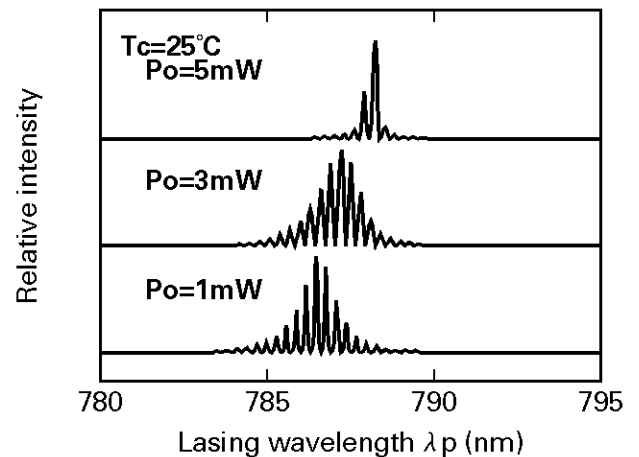
Beam divergence



Lasing wavelength vs. Temperature



Output power vs. Lasing wavelength



 **CAUTION**

1. No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster / crime-prevention equipment or the like, and the failure of which may directly or indirectly cause injury, death or property loss.
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Precautionary instructions in handling gallium arsenic products

Special precautions must be taken in handling this product because it contains, gallium arsenic, which is designated as a toxic substance by law. Be sure to adhere strictly to all applicable laws and regulations enacted for this substance, particularly when it comes to disposal.

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