



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

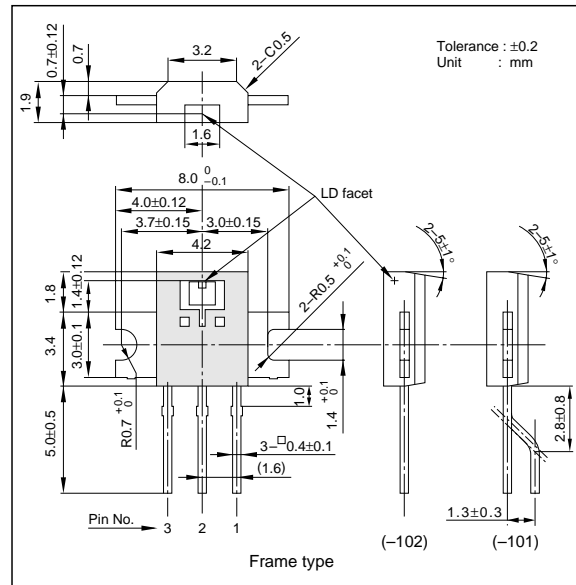
Parameter	Symbol	Ratings	Unit	
Light Output	Po	5	mW	
Reverse Voltage	Laser PIN	VR	2	V
			30	
Operating Temperature	Topr	-10 to +60	°C	
Storage Temperature	Tstg	-40 to +85	°C	

Electrical and Optical Characteristics at Tc=25°C

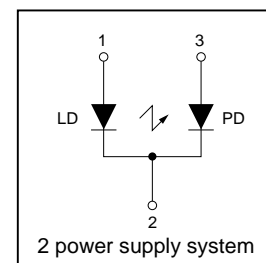
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	Ith	CW	-	35	50	mA	
Operating Current	Iop	Po=3mW	-	45	60	mA	
Operating Voltage	Vop	Po=3mW	-	1.8	2.3	V	
Lasing Wavelength	λ_p	Po=3mW	-	790	805	nm	
Beam \ast) Divergence	Perpendicular	θ_{\perp}	Po=3mW	25	35	45	deg.
	Parallel	θ_{\parallel}	Po=3mW	8	10	14	deg.
Off Axis Angle	Perpendicular	$\Delta\theta_{\perp}$	-	-	± 3	deg.	
	Parallel	$\Delta\theta_{\parallel}$	-	-	± 2	deg.	
Differential Efficiency	dPo/dIop	-	0.18	-	-	mW/mA	
Monitoring Output Current	Im	Po=3mW	0.05	0.20	0.40	mA	
Astigmatism	As	Po=3mW	-	12	-	μm	

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

Package Dimensions

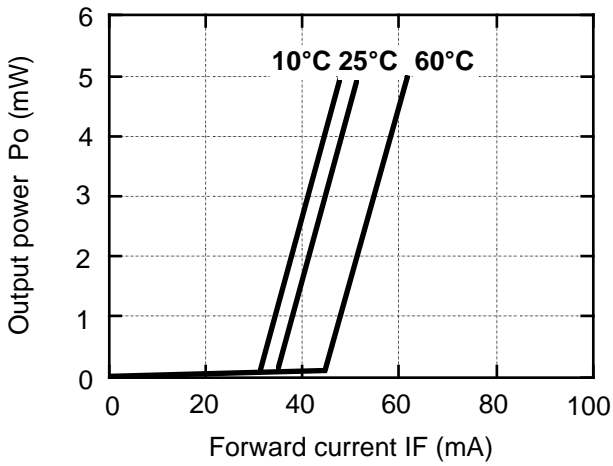


Electrical Connection

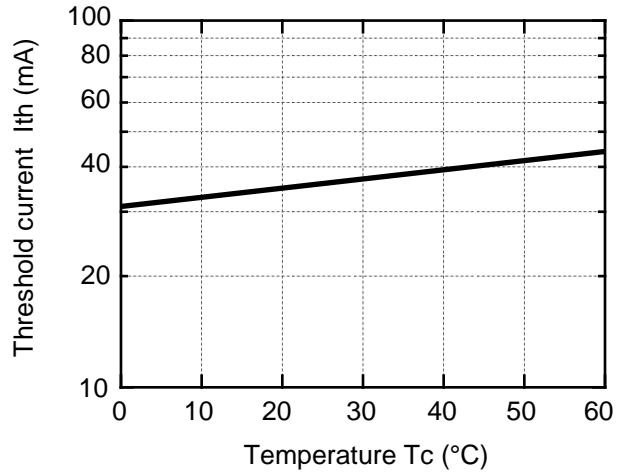


Characteristics

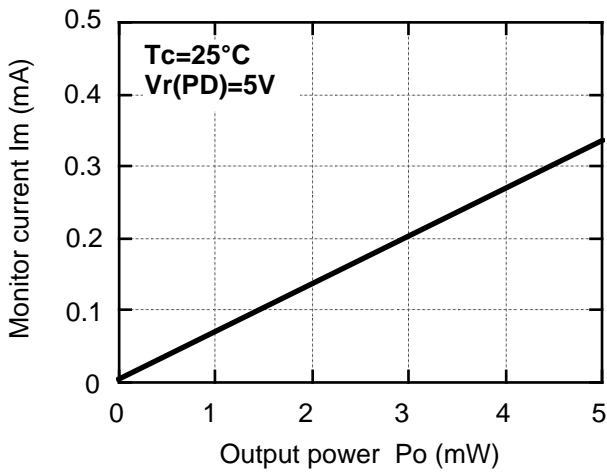
Output power vs. Forward current



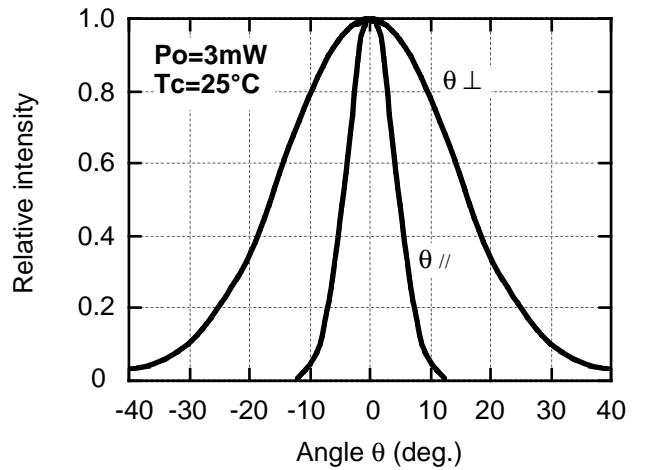
Threshold current vs. Temperature



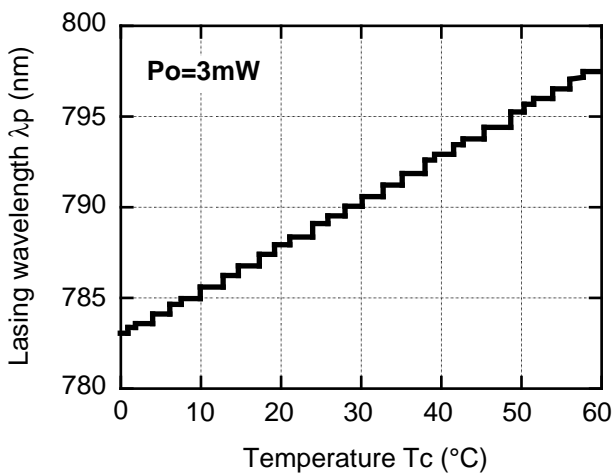
Monitor current vs. Output power



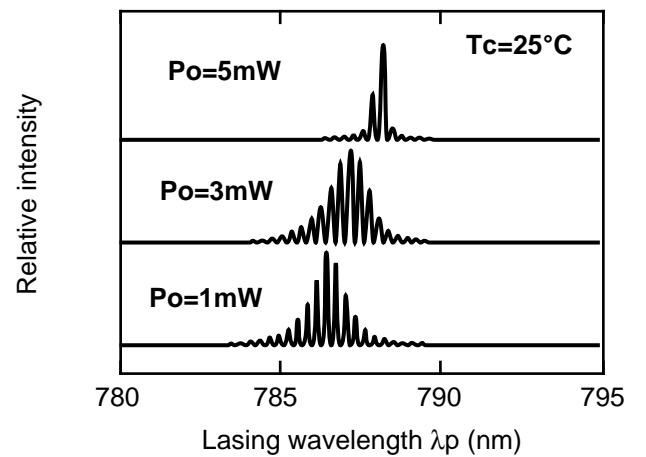
Beam divergence



Lasing wavelength vs. Temperature



Output power vs. Lasing wavelength



 **CAUTION**

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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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