Ordering number : EN5871A

Infrared Laser Diode

DL-3150-101(-102)

Compact Flat Package Type Laser Diode

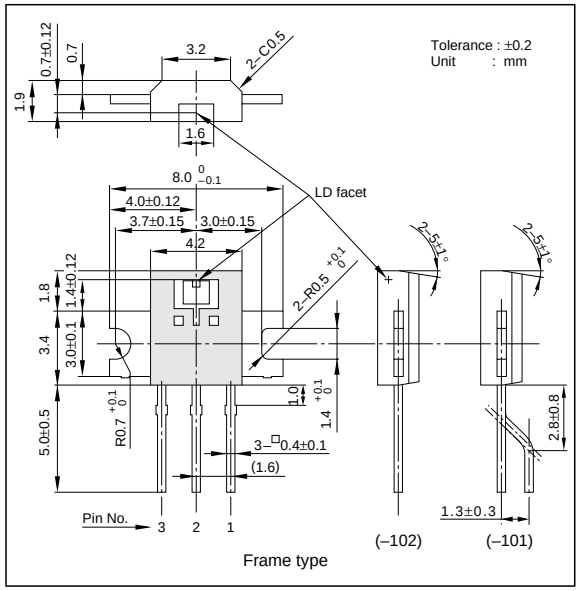
Overview

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

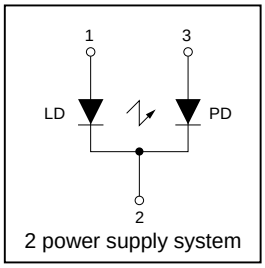
Package Dimensions



Absolute Maximum Ratings at Tc=25°C

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

Electrical Connection



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		λp	Po=3mW	–	790	805	nm
Beam ❋) Divergence	Perpendicular	θ⊥	Po=3mW	25	35	45	deg.
	Parallel	θ//	Po=3mW	8	10	14	deg.
Off Axis Angle	Perpendicular	Δθ⊥	–	–	–	±3	deg.
	Parallel	Δθ//	–	–	–	±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

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

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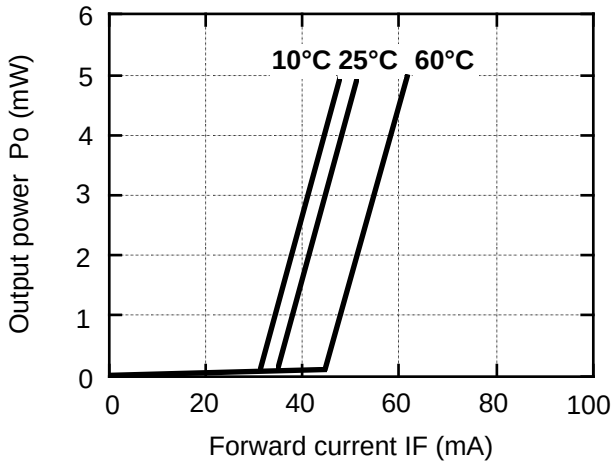
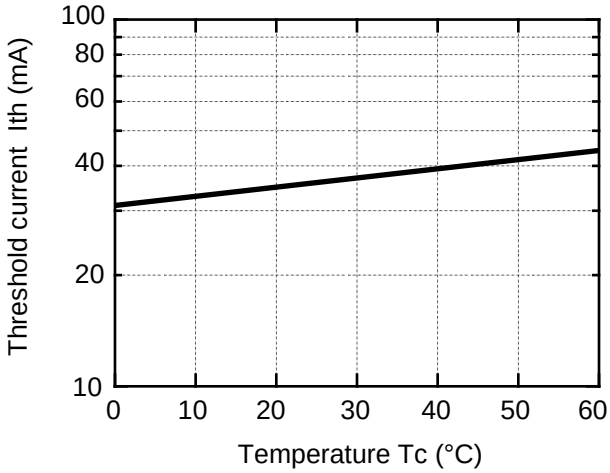
Characteristics

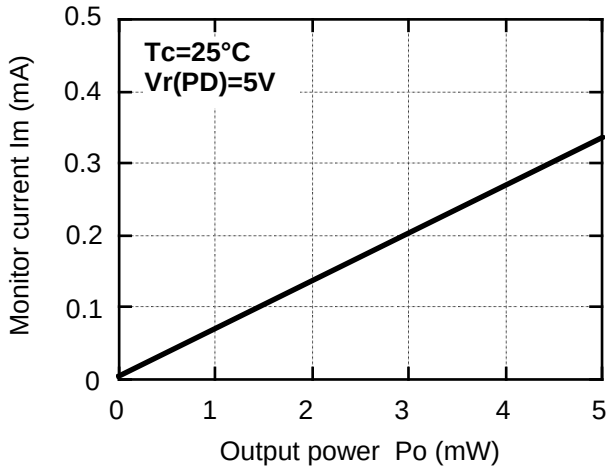
Output power vs. Forward current



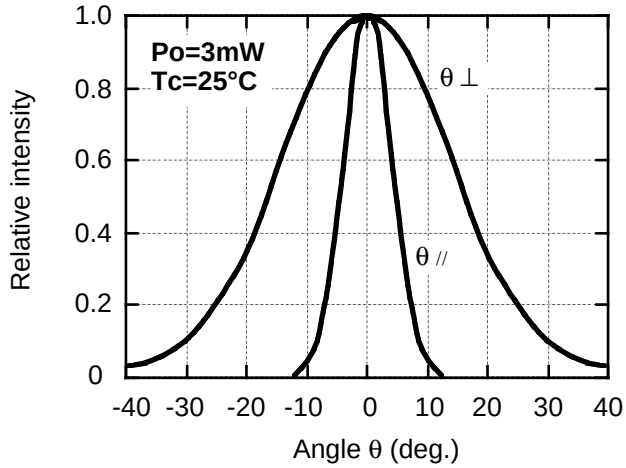
Threshold current vs. Temperature



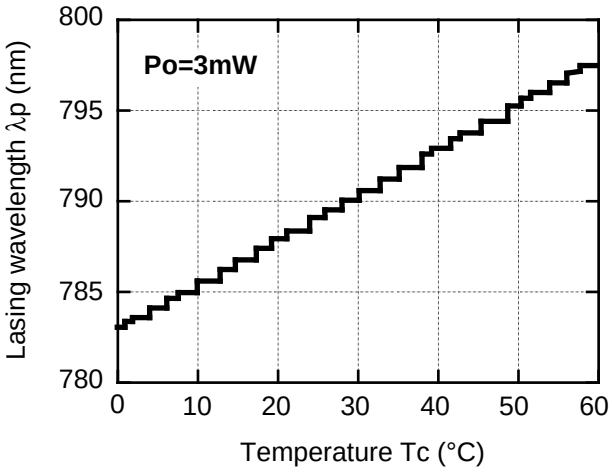
Monitor current vs. Output power



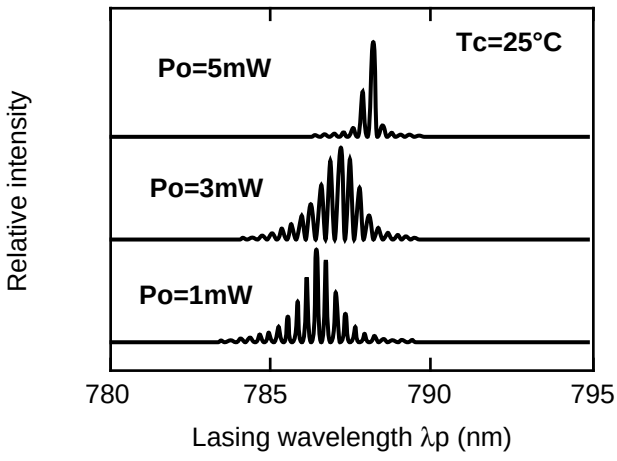
Beam divergence



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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