



DL-3150-101(-102)

Compact Flat Package Type Laser Diode

Overview

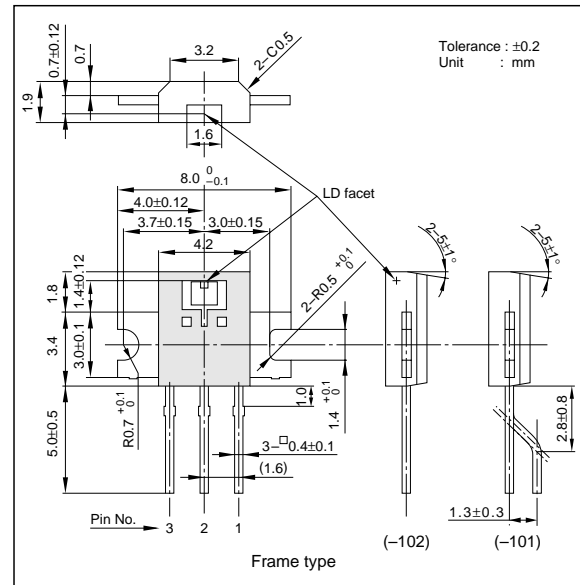
DL-3150-101(-102) is newly developed compact flat package type lasers, which is much different from conventional stem type lasers. The new structure of the frame lead type package enables optical systems to be light weighted and small-sized.

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

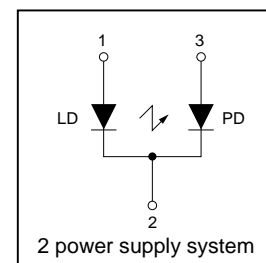
Package Dimensions



Absolute Maximum Ratings at Tc=25°C

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

Electrical Connection



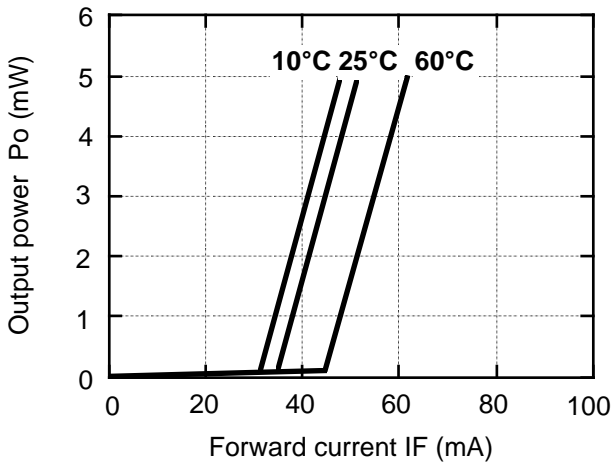
Electrical and Optical Characteristics at Tc=25°C

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	λ_p	Po=3mW	-	790	805	nm
Beam Divergence	Perpendicular	θ_{\perp}	25	35	45	deg.
	Parallel	θ_{\parallel}	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

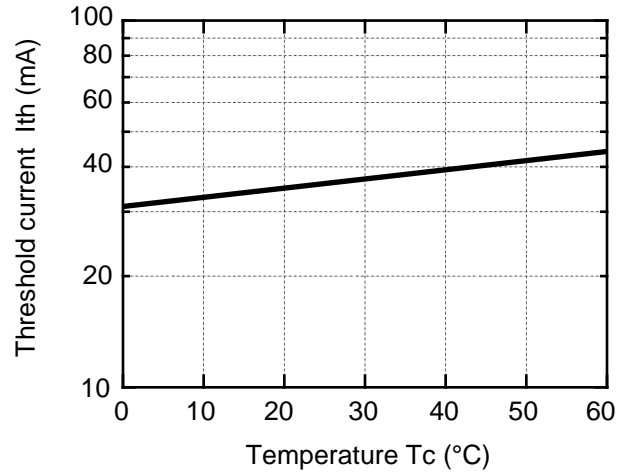
*) Full angle at half maximum note : The above product specifications are subject to change without notice.

Characteristics

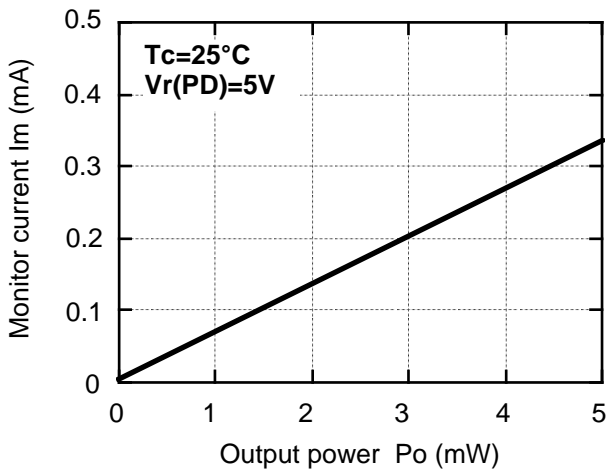
Output power vs. Forward current



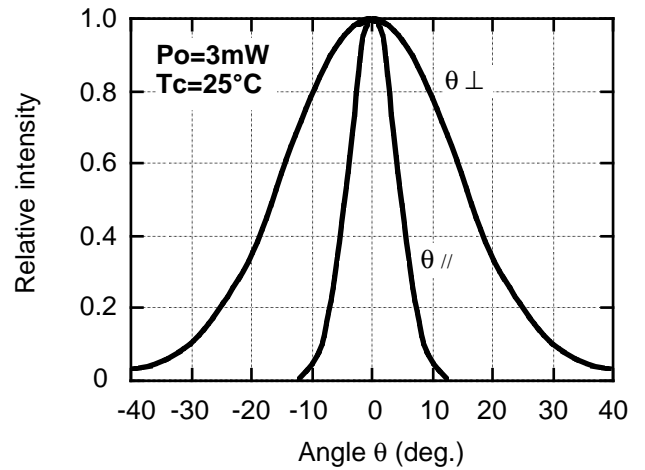
Threshold current vs. Temperature



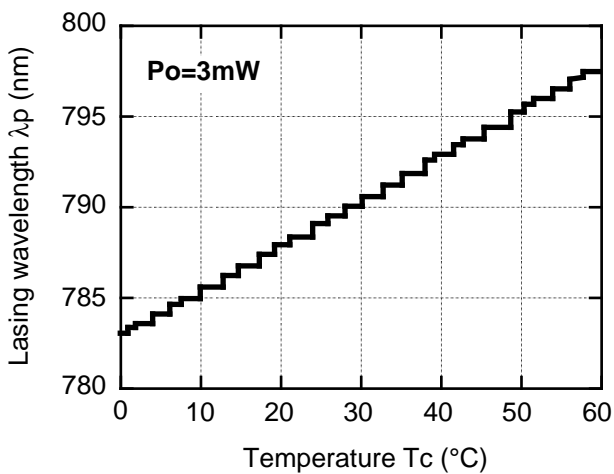
Monitor current vs. Output power



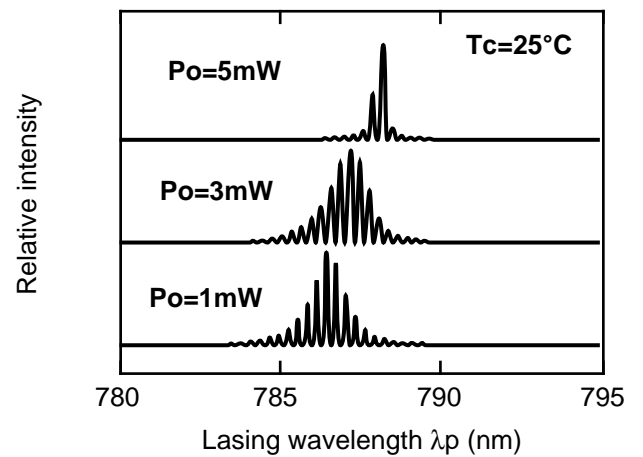
Beam divergence



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.
2. Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - 1) Accept full responsibility and indemnify and defend SANYO ELECTRIC CO.,LTD., it's affiliates, subsidiaries and distributors or any of their officers and employees, jointly and severally, against any and all claims and litigation and all damages, costs and expenses associated with such use.
 - 2) Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., it's affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
3. Information (including circuit diagrams and circuit parameters) disclosed herein is for example only; it is not guaranteed for mass production, SANYO believes the information disclosed herein is accurate and reliable, but no guarantees are made or implied regarding it's use or any infringements of intellectual property rights or other rights of third parties.

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.

Manufactured by ; **Tottori SANYO Electric Co., Ltd.**
Electronics Device Bussiness Headquarters LED Division
5-318, Tachikawa-cho, Tottori City, 680-8634 Japan
TEL: +81-857-21-2137 FAX: +81-857-21-2161

This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.