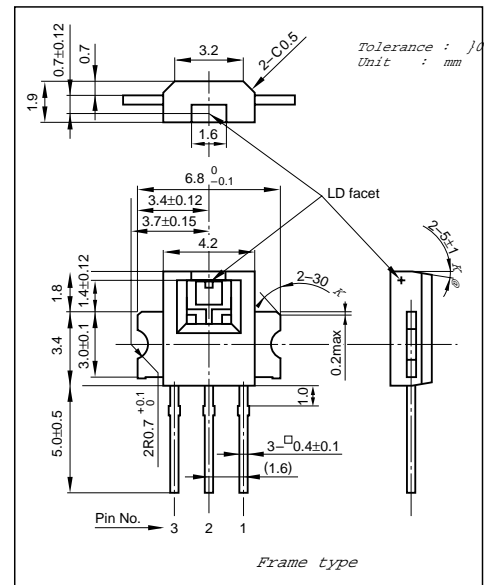


**DL-3150-103****Compact Flat Package Type Laser Diode****Overview**

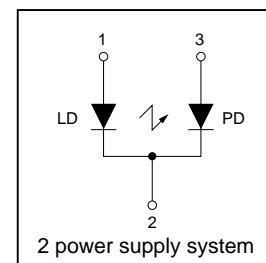
DL-3150-103 is newly developed compact flat package type lasers, which is much different from conventional stem type lasers. The new structure of the frame lead type package enables optical systems to be light weighted and small-sized. DL-3150-103 is suitable for applications such as compact discs, CD-ROM 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	Rated	Unit
Light Output	CW	Po	5	mW
Reverse Voltage	Laser	VR	2	V
	PIN		30	
Operating Temperature		Topr	-10 to +70	°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	$\lambda_p$	Po=3mW	-	790	805	nm	
Beam Divergence	Perpendicular	$\theta_{\perp}$	Po=3mW	25	35	40	deg.
	Parallel	$\theta_{\parallel}$	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	-	$\mu\text{m}$	

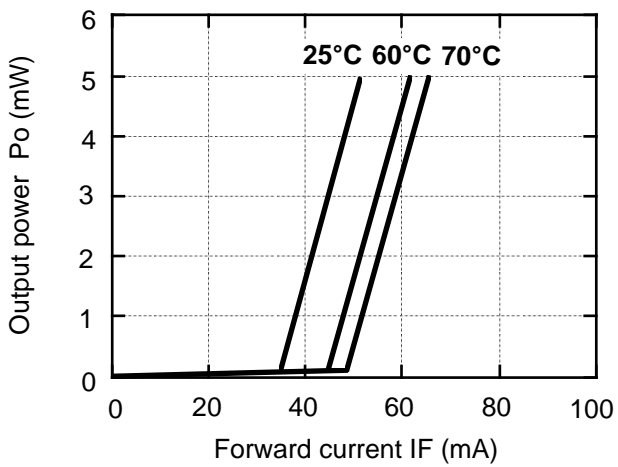
1) Full angle at half maximum Note : The above product specification are subject to change without notice.

**SANYO Electric Co.,Ltd. Semiconductor Business Headquarters**

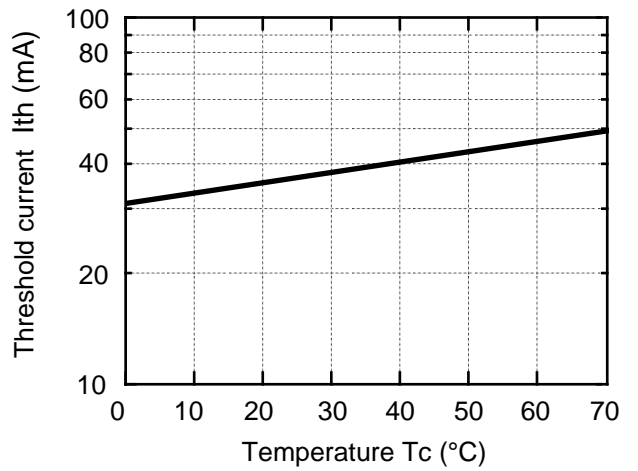
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

## Characteristics

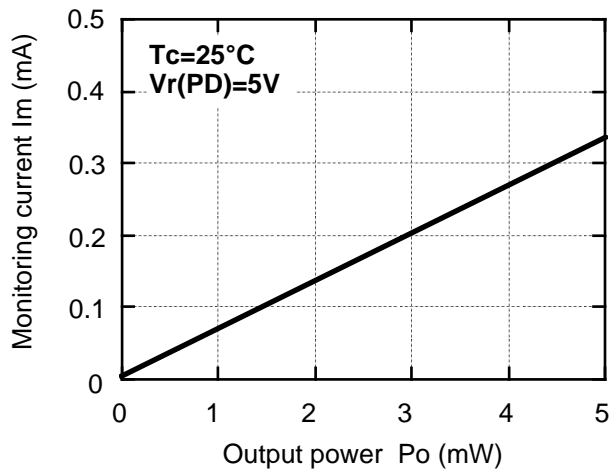
### Output power vs. Forward current



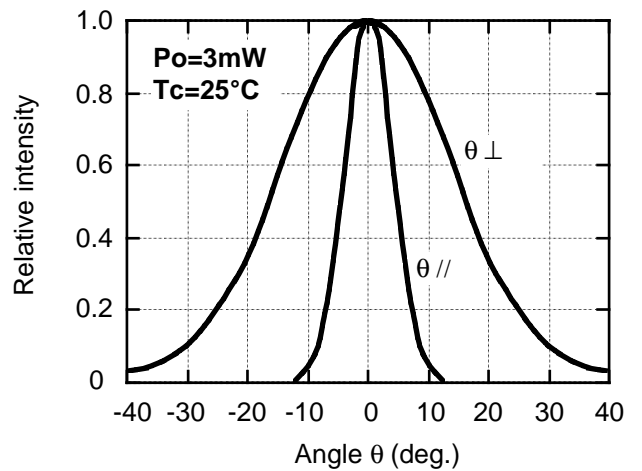
### Threshold current vs. Temperature



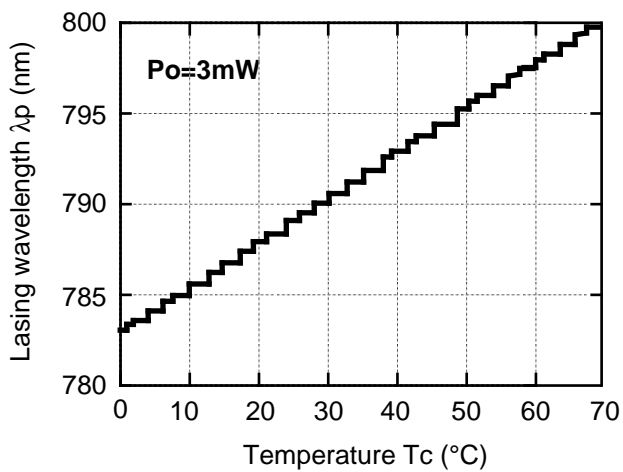
### Monitoring current vs. Output power



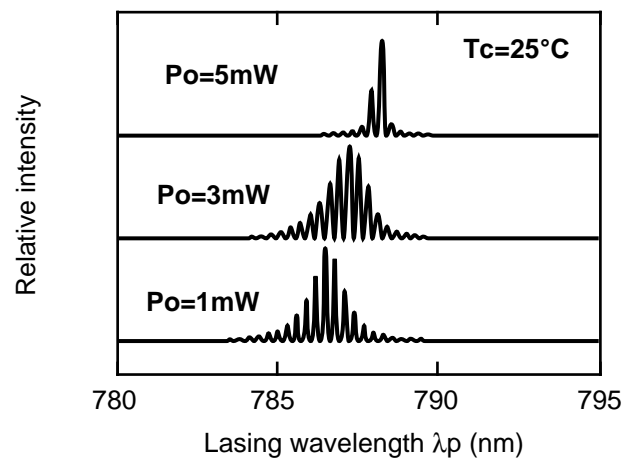
### Beam divergence



### Lasing wavelength vs. Temperature



### Lasing wavelength vs. Output power



 **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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  - 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.

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