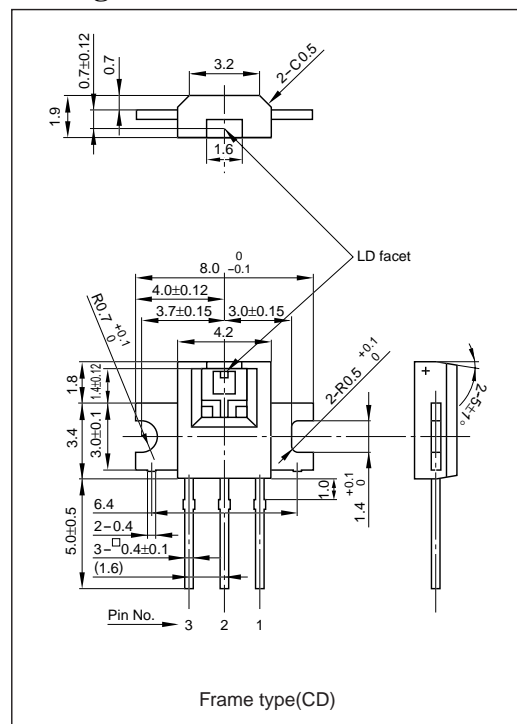


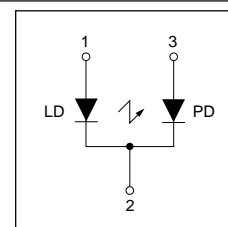
**DL-3150-105****Infrared Laser Diode (Frame Type)****Features**

- Wavelength : 790 nm (Typ.)
- Frame type
- Compact lightweight thin package
- Straight leads

**Package Dimensions****Absolute Maximum Ratings at Tc=25°C** (as per JISC 7032)

Parameter	Symbol	Condition	Ratings	Unit	
Light Output	Po	Kink free	5	mW	
Reverse Voltage	Laser PIN	VR	-	2	V
			-	30	
Operating Temperature	Topr	1)	-10 to +70	°C	
Storage Temperature	Tstg	1)	-40 to +85	°C	
Soldering Temperature	Tsol	2)	260	°C	

- 1) Case temperature  
2) Soldering Time ≤ 3s, 1.6 mm from the root of a lead.

**Pin Connection****Electrical and Optical Characteristics** 3) 4) 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	1.6	1.8	2.3	V	
Peak Lasing Wavelength 5)	λ p	Po=3mW	-	790	800	nm	
Light Output Power	Po	-	-	3	-	mW	
Beam 6) Divergence	Perpendicular	θ ⊥	Po=3mW	25	35	45	°
	Parallel	θ //	Po=3mW	8	10	14	°
Off Axis Angle	Perpendicular	Δ θ ⊥	Po=3mW	-	-	±3	°
	Parallel	Δ θ //	Po=3mW	-	-	±2	°
Differential Efficiency	dPo/dIop	Po=3mW	0.18	0.35	-	mW/mA	
Monitoring Output Current	Im	Po=3mW	0.05	0.20	0.40	mA	

- 3) Initial values 4) All the above values are evaluated with Tottori Sanyo's measuring apparatus  
5) Wafer lot go/no-go decision criteria 6) Full angle at half maximum

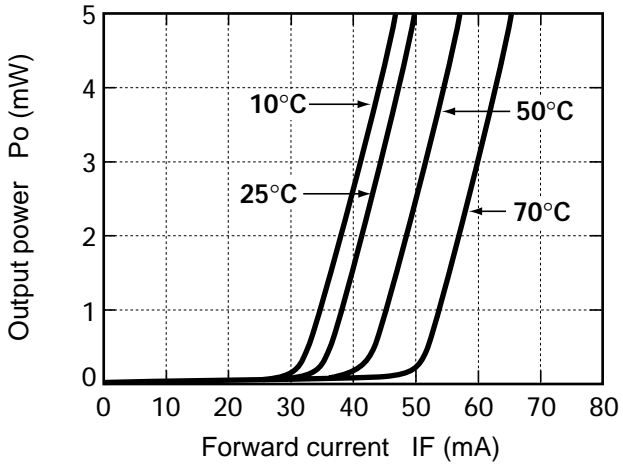
Note : The above product specification are subject to change without notice.

**SANYO Electric Co., Ltd. Semiconductor Company**

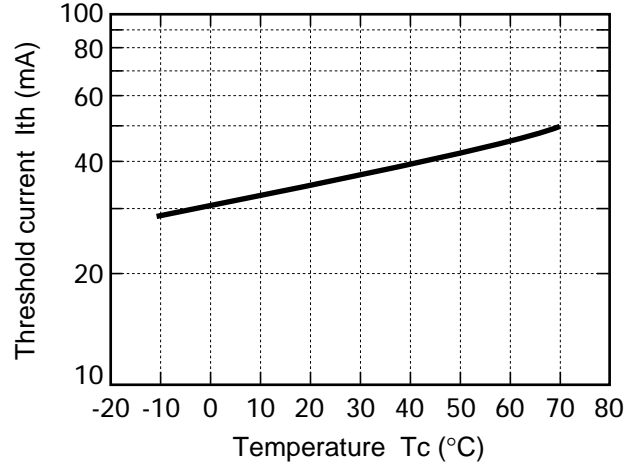
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

## Characteristics

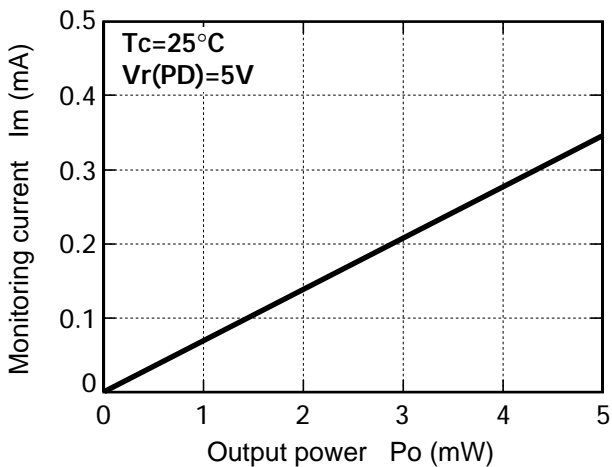
Output power vs. Forward current



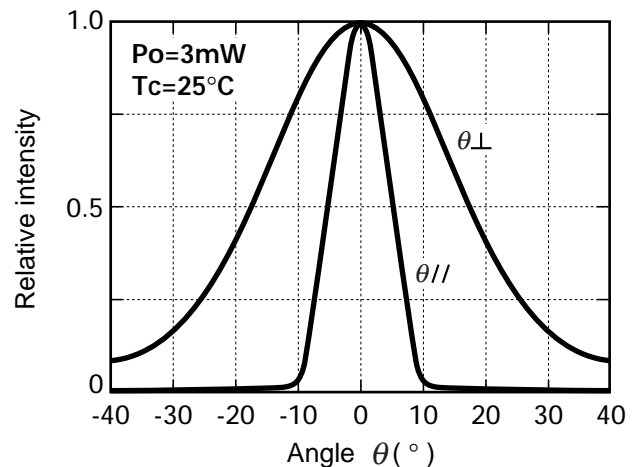
Threshold current vs. Temperature



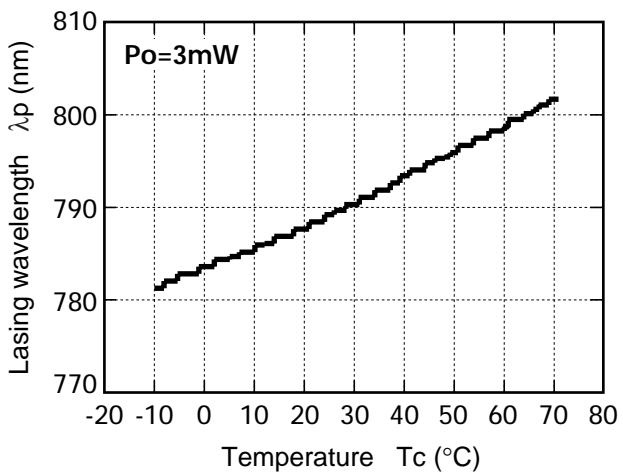
Monitoring current vs. Output power



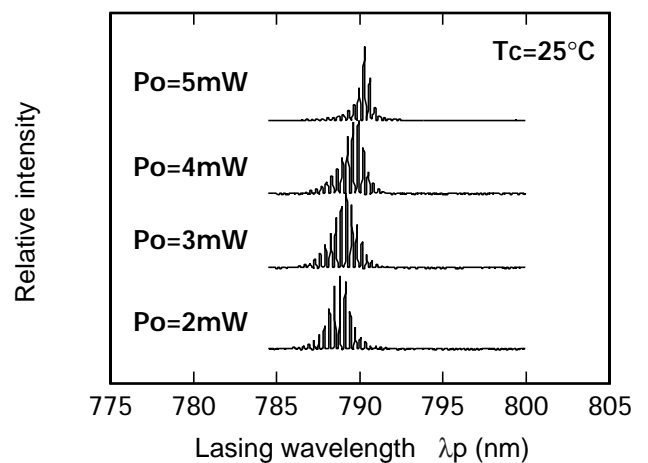
Beam divergence



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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## 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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