



LDS-1310-005-FW



TECHNICAL DATA

Infrared Laser Diode

Features

- Output Power: 5 mW
- Typical 1310 nm Emission Wavelength
- Single mode
- High Reliability, High Efficiency

Applications

- Optical Fiber Communication
- Free-space Optical Communication

Specifications (25°C)

Item	Symbol	Min.	Typ.	Max.	Unit
Optical Specifications					
CW Output Power	P _O	-	5	-	mW
Center Wavelength	λ _C	1290	1310	1330	nm
Spectral Width	Δλ	-	≤ 3.0	-	nm
Emitting area	W x H	-	4 x 1	-	μm
Wavelength Temperature Coefficient		-	0.35	-	nm/°C
Beam Divergence	θ _⊥ x θ	-	40x20	-	Deg
Polarization			TE		
Electrical Specifications					
Slope Efficiency	E _S		> 0.2		W/A
Threshold Current	I _{TH}	-	≤ 15	-	mA
Operating Current	I _F	-	≤ 40	-	mA
Operating Voltage	U _F	-	≤ 1.5	-	V
Series Resistance	R _D	-	≤ 8	-	Ω
Monitor Current	I _{PD}	-	≥ 100	-	μA
Package Style			TO18		
Absolute Maximum Ratings					
Reverse Voltage	U _R		2.0		V
Operating Temperature	T _{OP}		+10 ... +30		°C
Storage Temperature	T _{STG}		-40 ... +85		°C



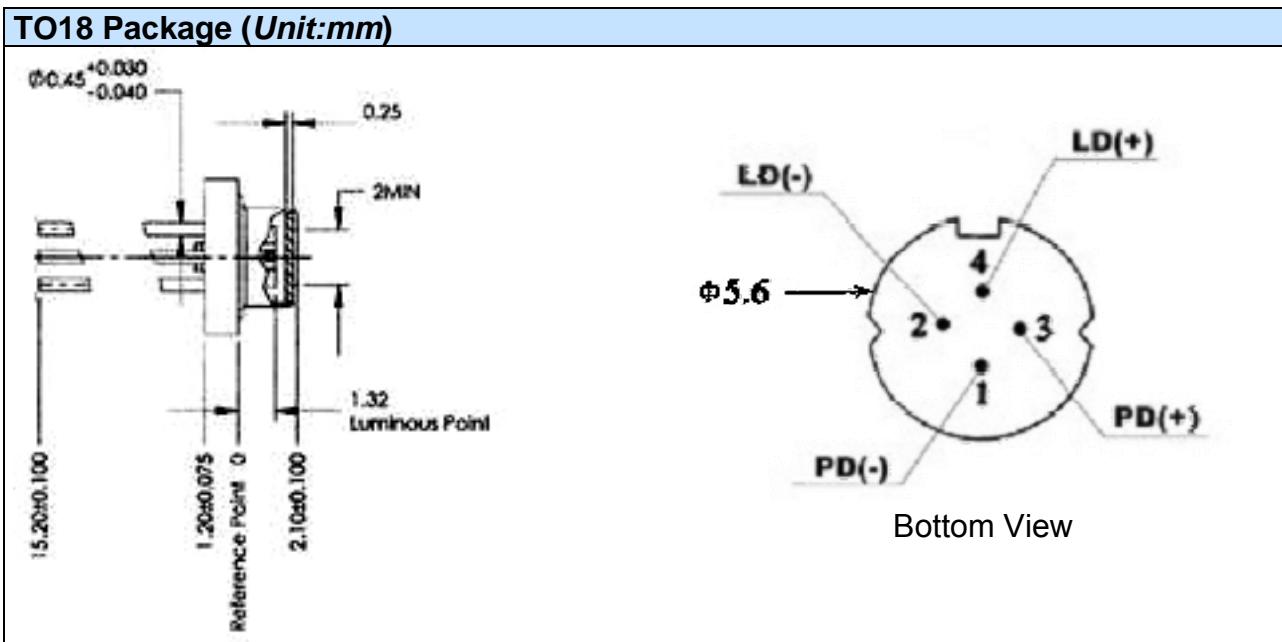


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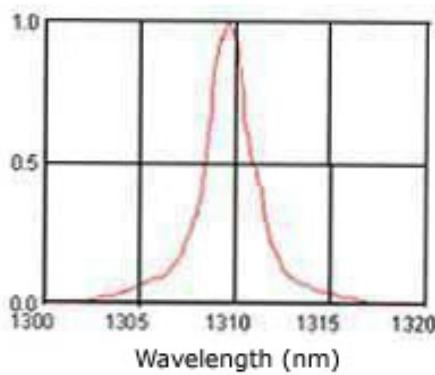
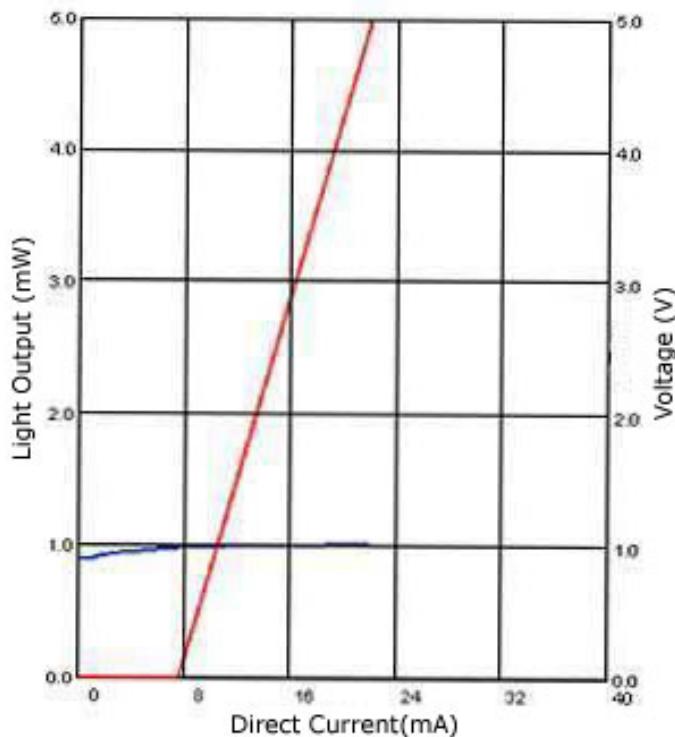
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Package Dimensions



Typical Performance Curves





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Notes

1. High power laser diodes are high energy laser devices. It is harmful to human body and health. Never look directly into the laser output port.
2. High power laser diodes could operate in forward voltage. The reverse current and voltage should not be higher than 25µA and 3V, respectively.
3. Heavy humidity can get dew on the LD then damage the LD.
4. The generated heat must be removed in time when the LD working.
5. The high temperature will effect the performance of the products. The lifetime can also be shortened by high temperature.
6. The operating current and optical power of laser must not be higher than the given rate current and power. The excessive current would accelerate aging and shorten lifetime, even damage the LD.
7. The semiconductor laser diode is a sensitive electronic device. Please observe precaution for handling electrostatic sensitive devices.