

product offered by



LASER LAB SOURCE
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PRODUCT DATA SHEET

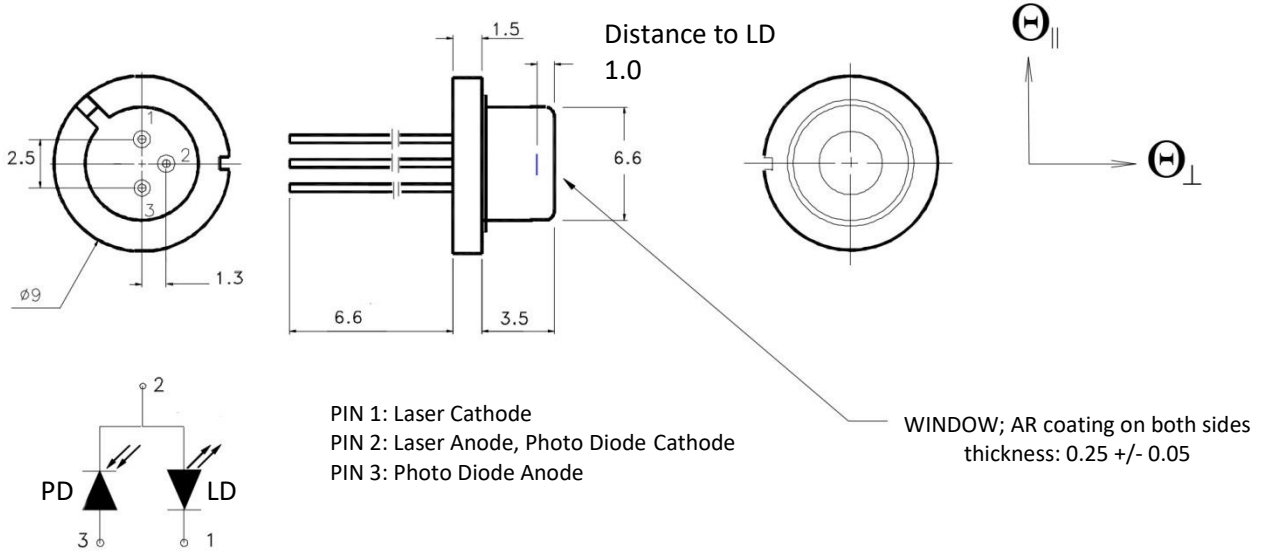
Laser Diode

Model FB-S1750-5SOT148

Specification	Symbol	Typical	Unit
Laser Emitter			
Peak Wavelength	λ_{op}	1750±20	nm
CW Optical Output Power	P_{op}	5	mW
Operation Current	I_{op}	<90	mA
Operation Voltage	U_{Id}	0,8±0,3	V
Threshold Current	I_{th}	<60	mA
Beam Divergence (FWHM)	$\theta_{ }$	10±2	degree
Beam Divergence (FWHM)	θ_{\perp}	45±3	degree
Spectrum Half-Width (FWHM)	$\Delta\lambda$	<5	nm
Emitting Area	$W \times d$	6x1	$\mu\text{m} \times \mu\text{m}$
Wavelength Temperature Coefficient	$\Delta\lambda/\Delta T$	4	Å/degree
Operation Power Temperature Coefficient	$\Delta P/\Delta T$	0.2±0.05	mW/degree
Operation Current Temperature Coefficient	$\Delta I/\Delta T$	0.8±0.05	mA/degree
Mode Structure	SM	TE ₀₀	-
Operation Temperature	T_{op}	25	degree
Operation Temperature Range		-40... +50	degree
Storage Temperature Range		-40... +80	degree
Operation Mode	CW Pulse	Continuous Wave	-
Photo Diode Monitor			
Monitor Current		1-100	μA
PD Reverse Voltage		<5	V

Note: To guarantee reliable operation of laser diode SOT-148 package must be mounted onto copper carrier with TEC (Peltier element) keeping constant temperature.

Drawings:



PIN 1: Laser Cathode
 PIN 2: Laser Anode, Photo Diode Cathode
 PIN 3: Photo Diode Anode

WINDOW; AR coating on both sides
 thickness: 0.25 +/- 0.05

PRODUCT WARRANTY:

This product is sold with a full one year warranty. The warranty includes all parts and labor. It is warranted to be free from defects in material and workmanship for a period of one year from the date of shipment. The warranty does not include damage to the product due to customer mishandling or use of the product outside of its specified maximum ratings.

INSTALLATION SUPPORT OR TECHNICAL SUPPORT FOR THIS PRODUCT:

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Part of the Laser Lab Source Group:
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