

LDM-520-1000-C
LDMC-520-1000



Advanced Photonic Sciences

1W 520nm Diode Laser

Absolute Maximum Ratings

Item	Symbol	Absolut max. Ratings	Unit
Forward Current (Tc=25°C)	If	2.0	A
Allowable Reverse Current (Tc=25°C)	Ir (LD)	85	mA
Storage Temperature	Tstg	-40 ~ +85	°C
Operating Case Temperature	Tc	0 ~ +50	°C

Optical Characteristics

Item	Condition	Symbol	Min	Typ	Max	Unit
Optical Output Power	If=1.6A	Po	0.85	1.0	-	W
Dominant Wavelength	If=1.6A	λ_d	518	525	532	nm
Threshold Current	CW	Ith	250	300	350	mA
Slope Efficiency	CW	η	-	0.6	0.8	W/A
Operating Voltage	If=1.6A	Vop	4.0	-	6.0	V
Diode Beam Divergence (1/e ²)	If=1.6A	$\theta_{//}$	5	14	20	deg.
		θ_{\perp}	30	40	50	deg.
Emission Point Accuracy	If=1.6A	$\Delta\theta_{\perp}$	-5.0	-	5.0	deg.
Beam Size (4 σ)	If=1.6A	-	-	4x4* 4x1	-	mm
Module Beam Divergence (full angle)	If=1.6A	θ	0.5	0.8* 2.7	1.1	mrad

*for modules with beam shaping

Wires

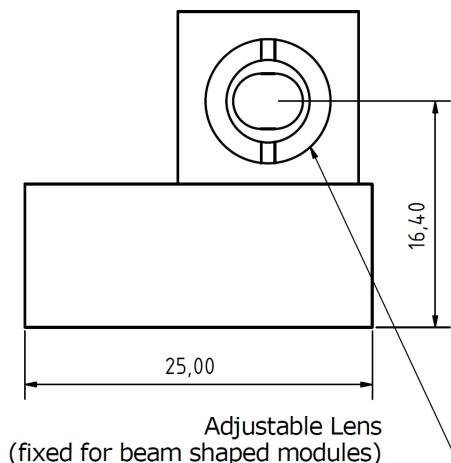
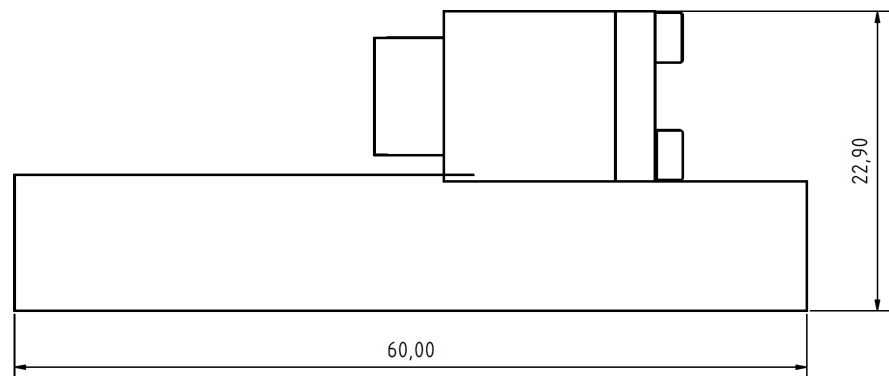
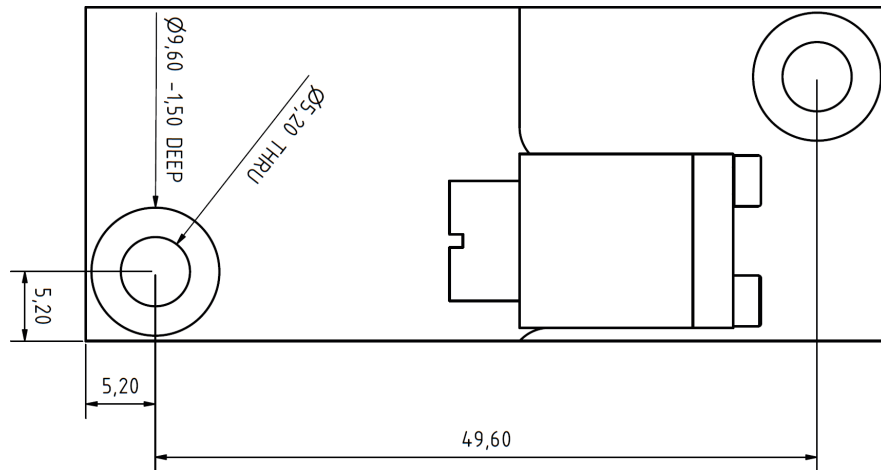
Red = Plus

Black = Minus

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Dimensions



Connecting wires:

Red: PLUS
Black: MINUS

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