



1.6W 450nm Diode Laser

LDM-450-1600-C
LDMC-450-1600

Absolute Maximum Ratings

Item	Symbol	Absolut max. Ratings	Unit
Forward current (Tc=25°C)	If	1600	mA
Reverse voltage (Tc=25°C)	Vr (LD)	2	V
Storage Temperature	Tstg	-40~85	°C
Operating Case Temperature	Tc	-10 ~ +70	°C

Optical Characteristics

Item	Condition	Symbol	Min	Typ	Max	Unit
Optical Output Power	If=1200mA	Po	-	1600	-	mW
Dominant Wavelength	If=1200mA	λ_d	440	450	460	nm
Threshold Current	CW	Ith	140	-	300	mA
Slope Efficiency	CW	η	1.0	-	1.8	mW/mA
Operating Voltage	If=1200mA	Vop	-	4.8	6.0	V
Diode Beam Divergence (1/e ²)	If=1200mA	$\theta_{//}$	-	7	-	deg.
		θ_{\perp}	19	23	27	deg.
Beam Size (4 σ)	If=1200mA	-	-	4x4* 4x1	-	mm
Module Beam Divergence (full angle)	If=1200mA	θ	-	0.8* 2.5	-	mrad

*for module with beam shaping optics

Wires

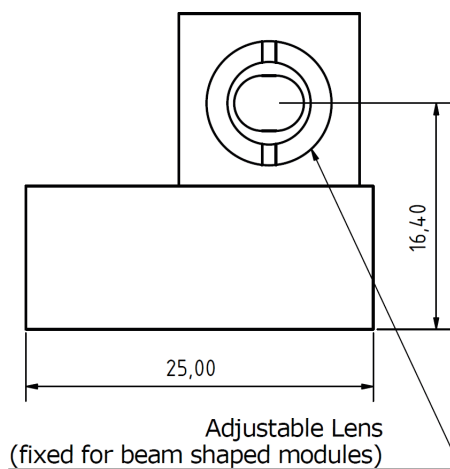
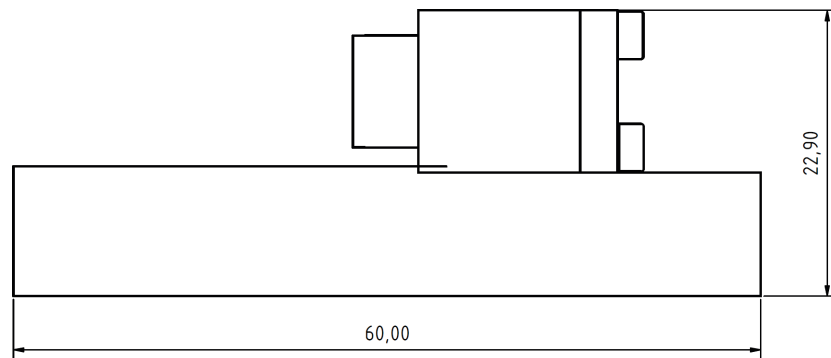
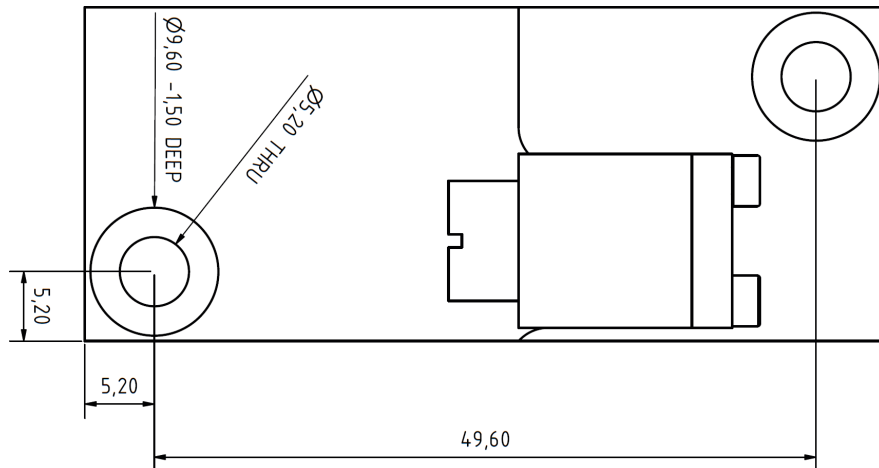
Red = Plus

Black = Minus

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Dimensions



Connecting wires:

Red: PLUS

Black: MINUS

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