

350mW 405nm Diode Laser

Absolute maximum ratings (Tc=25°C)

Parameter	Symbol	Value	Unit	
Optical output power	CW	P_{CW}	350	mW
	Pulsed	P_P	1100	mW
Reverse voltage	V_R	2	V	
Operating temperature	CW	T_{CW}	+ ~ +50	°C
	Pulsed	T_P	+ ~ +50	°C
Storage temperature	T_{STR}	+ ~ +80	°C	
Soldering temperature	T_{SLD}	350	°C	

Optical and Electrical Characteristics (Tc=25°C)

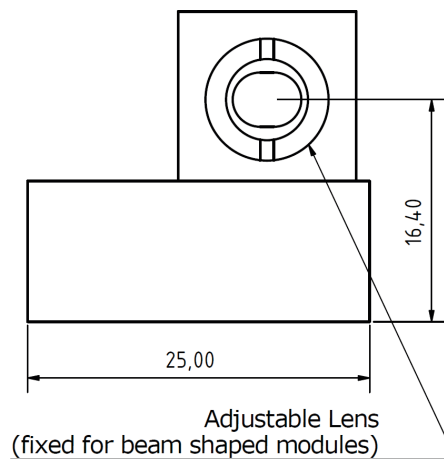
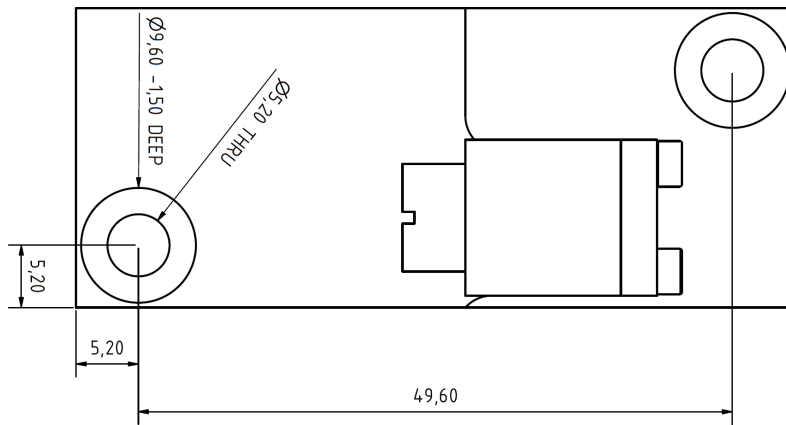
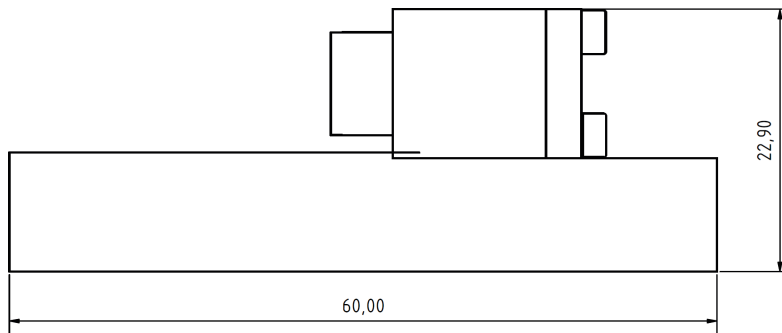
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold current	I_{th}	-	-	140	200	mA
Operating current	I_{op}	$P_{cw}=300mW$	250	325	400	mA
Operating voltage	V_{op}		-	4.5	5.5	V
Wavelength	λ_{Peak}		400	405	414	nm
1/e2 Intensity angle <small>(Note 3,5)</small>	$\theta_{//}(1/e2)$		8	14	20	°
1/e2 Intensity angle <small>(Note 3,5)</small>	$\theta_{\perp}(1/e2)$		36	41	46	°
Misalignment angle <small>(Note 4,5)</small>	$\Delta\theta_{//}(1/e2)$		-3	-	3	°
Misalignment angle <small>(Note 4,5)</small>	$\Delta\theta_{\perp}(1/e2)$		-4	-	4	°
Slope efficiency	η		-	1.4	1.8	2.2
Polarization angle <small>(Note 6)</small>	-	$P_o = 50mW$	-5	-	5	°
Polarization ratio <small>(Note 6)</small>	P_i	NA = 0.13	100	-	-	-
Pulse operating current <small>(Note 7)</small>	I_p	-	-	-	1000	mA
Beam Size	4σ	-	-	4 x 4 4 x 1	-	mm
Beam Divergence at full angle	-	-	0.7	0.9	1	mrad

Note 1) Initial value, CW operation.
 Note 2) Tc= case temperature
 Note 3) Full angle of 13.5% of peak intensity.
 Note 4) Misalignment angle of 13.5% of peak intensity.
 Note 5) Parallel to junction plane (Y-Z plane)
 Note 6) Reference standard: JIS-C-5943
 Note 7) Pulse operation (pulse width: 02μs ; duty cycle: 50%).

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LDM-405-350-C
LDMC-405-350

Dimensions



Connecting wires:

Red: PLUS

Black: MINUS

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