



LDM650/1LJM

- Red Laser Module
- 650 nm, <1 mW
- APC (Automatic Power Control)
- Aspheric acrylic lens, focusable
- With modulation, up to 300 kHz



Description

LDM650/1LJM is a red Diode Laser Modules which has been designed with emphasis on superior beam quality, and reliable operation. The modules body is made of black anodized aluminum, enclosing laser diode, lens, and driving electronics. LJM series features a **focusable acrylic lens optic** and a driver circuit which additional supports **analog and TTL modulation up to 300 kHz**.

Maximum Ratings

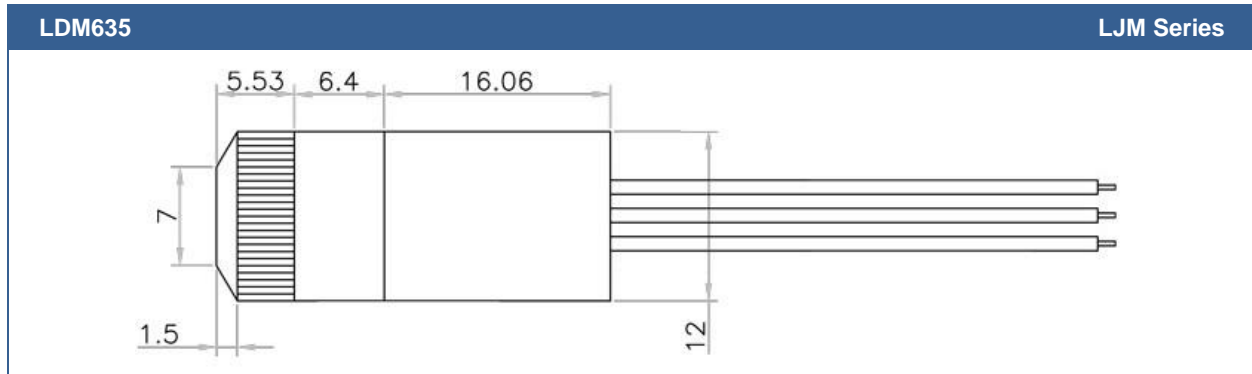
Parameter	Symbol	Values		Unit
		Min.	Max.	
Optical Power	P_O		5	mW
Operating Temperature	T_{CASE}	- 10	+ 40	°C
Storage Temperature	T_{STG}	- 25	+ 85	°C

Electrical and Optical Characteristics ($T_{CASE}=25^{\circ}C$)

Parameter	Symbol	Min.	Values	Max.	Unit
			Typ.		
Peak Wavelength	λ_{Peak}		650		nm
Optical Output Power	P_O			1	mW
Laser Class			2		
Operating Voltage	V_F	3.0		5.0	V
Operating Current	I_F		40		mA
Modulation, analog and TTL				300	kHz
Control			APC		
Focus			Adjustable		
Beam Character			Elliptical		
Output Aperture			Ø4		mm
Beam Divergence (Full Width)	Θ		0.5		mrاد
Material			Black Anodized Aluminum		
Wiring			RED (+) , BLACK (-), YELLOW (modulation)		
MTTF			>10000 hours @ 1 mW, 25 °C		hours
Dimensions			Ø12 x 30.5		mm



Outline Dimensions



All Dimensions in mm

Precautions

Mounting Instruction:

In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. For long time stable operation proper contact between laser module and heat sink is mandatory.

Safety Advice:

This laser module emits highly concentrated visible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 2 laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**. Actual laser light emitted and precautions necessary strongly depend on mode of operation.