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LDM635/1LJM

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

Description

LDM635/1LJM 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 Min.	Values Max.	Unit
Optical Power	P_O		1	mW
Operating Temperature	T_{CASE}	- 10	+ 40	°C
Storage Temperature	T_{STG}	- 25	+ 85	°C

Electrical and Optical Characteristics (T_{CASE}=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_{Peak}		635		nm
Optical Output Power	P_O		0.8		mW
Laser Class			2		
Operating Voltage	V_F	3.0		5.0	V
Operating Current	I_F		25	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		mrad
Material			Black Anodized Aluminum		
Wiring			RED (+) , BLACK (-), YELLOW (modulation)		
MTTF			>10000 hours @ 1 mW, 25 °C		hours
Dimensions			Ø12 x 30.5		mm

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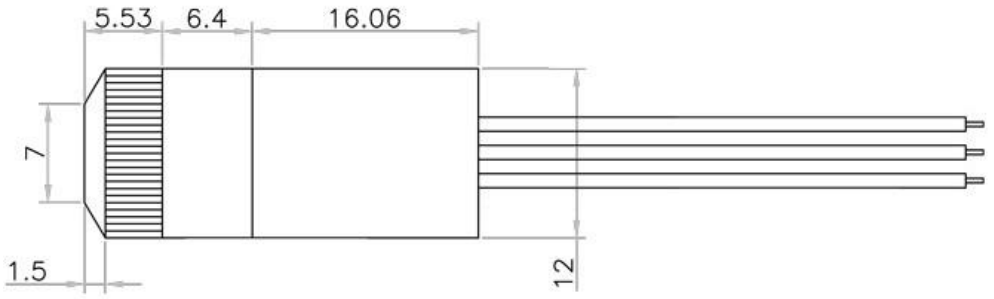
Outline Dimensions

LDM635	LJM Series



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.