

638 nm Multimode Laser Diode, 700 mW

L638P700M



Description

Thorlabs' Ø5.6 mm, TO-can package, discrete laser diode is a compact light source suited to many applications. This diode is manufactured by Oclaro as Item # HL63193MG. This laser is fully compatible with our line of Laser diode and TEC Controllers as well as our selection of Laser Diode Mounts and Collimation Solutions.

Specifications



Absolute Max Ratings		
LD Reverse Voltage	2 V	
Pulsed Optical Power ^a	1000 mW	
Optical Output Power (CW)	700 mW	
Operating Temperature	-10 to 40 °C	
Storage Temperature	-40 to 85 °C	

a. Pulse Frequency ≥ 50 Hz, Duty ≤ 33%

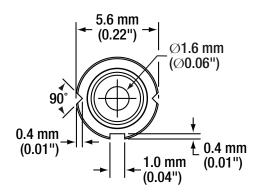
L638P700M					
	Symbol	Min	Typical	Max	
Center Wavelength	λ_{C}	632 nm	638 nm	643 nm	
Output Power (CW)	Po	-	700 mW	-	
Forward Voltage @ P ₀	V_{OP}	-	2.2 V	2.6 V	
Parallel Beam Divergence Angle (FWHM) @ Po	θ _{II}	1°	9°	20°	
Perpendicular Beam Divergence Angle (FWHM) @ P ₀	$ heta_{\perp}$	25°	35°	45°	
Operating Current @ P ₀	I _{OP}	-	820 mA	1000 mA	
Threshold Current	I _{TH}	-	200 mA	250 mA	
Slope Efficiency	η	-	1.2 mW/mA	-	

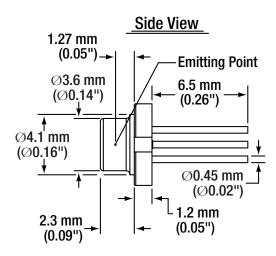
 $T_{CHIP} = 25 \, ^{\circ}C$



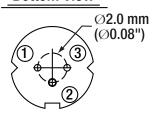
Drawing

Top View





Bottom View



Pin Diagram



case ● ②

Pin Code G

Pin	Description
1	Laser Cathode
2	Case Common
3	Laser Anode