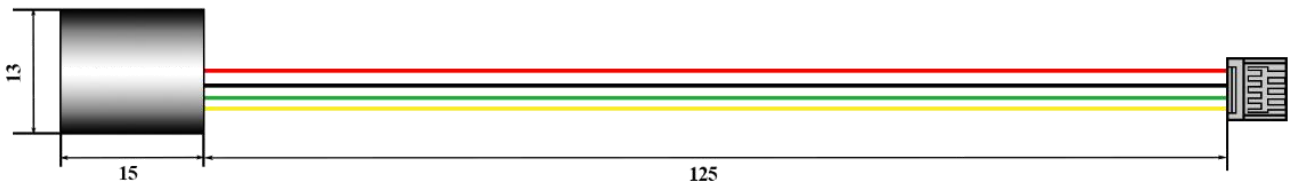


Dimensions (Unit: mm)

R638D1000-13x15-1-(-10-50)-10

Features

- High brightness
- High Reliability
- Reverse Polarity Protected
- Isolated Housing



Specifications

Model Number		R638D1000-13x15-1-(-10-50)-10		
Mechanical Specifications		Min	Typ	Max
Laser Head	Diameter (mm)	12.95	13	13.05
	Length (mm)	14.5	15	15.5
	Weight (g)	-	13	-
Housing Material		Black Anodized Aluminum		
Optical Specifications		Min	Typ	Max
Wavelength (nm) ⁽¹⁾		632	638	644
Output Power (mW) at 25°C ⁽¹⁾		950	1000	-
Power Stability at 25°C (RMS)		-	+/-2%	+/- 5%
Output Power Mode		CW		
Laser Class		4		

⁽¹⁾ 25°C is case temperature. A heat sink with good heat dissipation must be used.

Beam Specifications		Min	Typ	Max
Beam Divergence at fast axis (mrad) ⁽¹⁾		-	1	1.2
Beam Alignment Tolerance	Position (Δr , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	5	10
Beam Diameter at Output Window (mm)		-	3	-
Linewidth @ 750mm FWHM (μm) ⁽²⁾		-	900	1200
Linewidth @ 1150mm FWHM (μm) ⁽²⁾		-	300	500
Linewidth @ 1850mm FWHM (μm) ⁽²⁾		-	700	1000
M ² at fast axis		-	1.4	2
Sidelobes ⁽³⁾ from 750mm to 1850mm		-	-	15%
Electrical Specifications		Min	Typ	Max
Power Type		ACC		
LD Operating Voltage (DC, V)		-	2.4	2.8
LD Operating Current (mA) at 2.4V ⁽³⁾		-	1400	1800
Housing Isolation		Yes		
Thermistor Constants		B=3950K		
Thermistor Resistance		6.52K Ω @35 $^{\circ}\text{C}$ 8.05K Ω @30 $^{\circ}\text{C}$ 10.0K Ω @25 $^{\circ}\text{C}$ 12.5K Ω @20 $^{\circ}\text{C}$ 15.75K Ω @15 $^{\circ}\text{C}$ 19.98K Ω @10 $^{\circ}\text{C}$		
ESD protection		No		
Wire Type		24AWG		
Connector Model		ZER-04-V-S		
Reverse Voltage Protection		Yes		
Reliability		Min	Typ	Max
Operating Case Temperature Range ($^{\circ}\text{C}$)		-10	-	50
Rise Time (Seconds)		-	0.2	-
Storage Temperature ($^{\circ}\text{C}$)		-10	-	60
Environmental Humidity (RH, %)		5	-	90
Lifetime (hours) (MTTF at 25 $^{\circ}\text{C}$)		8,000	-	-
RoHS Compliance Declaration		Yes		

⁽¹⁾ Full Angle ($1/e^2$) ,tested at 25 $^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

⁽²⁾ Tested at 25 $^{\circ}\text{C} \pm 3^{\circ}\text{C}$,fast axis.

⁽³⁾ Gauss Profile from 750-1850mm, side lobes<10% at beam waist position.