

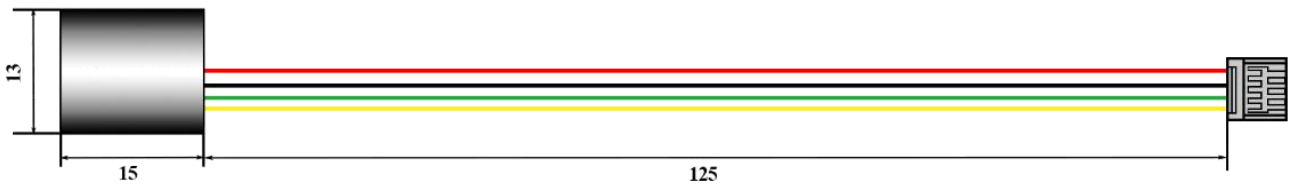


**Dimensions (Unit: mm)**

**B450D1000-13x15-1-(-10-60)-10**

**Features**

- High brightness
- High Reliability
- Isolated Housing
- Small Size



<b>Specifications</b>				
<b>Model Number</b>		<b>B450D1000-13x15-1-(-10-60)-10</b>		
<b>Mechanical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Laser Head	Diameter (mm)	12.95	13	13.05
	Length (mm)	14.5	15	15.5
	Weight (g)	-	13	-
Housing Material		Black Anodized Aluminum		
<b>Optical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Wavelength (nm) <sup>(1)</sup>		436	446	456
Output Power (mW) at 25°C <sup>(1)</sup>		950	1000	-
Power Stability at 25°C (RMS)		-	+/-2%	+/- 5%
Output Power Mode		CW		
Laser Class		4		

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

<b>Beam Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Beam Divergence at fast axis (mrad) <sup>(1)</sup>		-	1.2	1.5
Beam Alignment Tolerance	Position ( $\Delta r$ , mm)	-	-	0.5
	Off-axis Angle (mrad)	-	5	10
Linewidth @ 750mm FWHM ( $\mu\text{m}$ ) <sup>(2)</sup>		-	800	1000
Linewidth @ 1150mm FWHM ( $\mu\text{m}$ ) <sup>(2)</sup>		-	500	600
Linewidth @ 1850mm FWHM ( $\mu\text{m}$ ) <sup>(2)</sup>		-	-	900
M <sup>2</sup> at fast axis		-	-	2.5
Sidelobes <sup>3</sup> from 750mm to 1850mm		-	-	15%
<b>Electrical Specifications</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Power Type		ACC		
LD Operating Voltage (DC, V)		-	4.2	5.9
LD Operating Current (mA) at 4.2V		-	650	1400
Housing Isolation		Yes		
Thermistor Constants		B=3950K		
Thermistor Resistance		6.52K $\Omega$ @35 $^{\circ}\text{C}$ 8.05K $\Omega$ @30 $^{\circ}\text{C}$ 10.0K $\Omega$ @25 $^{\circ}\text{C}$ 12.5K $\Omega$ @20 $^{\circ}\text{C}$ 15.75K $\Omega$ @15 $^{\circ}\text{C}$ 19.98K $\Omega$ @10 $^{\circ}\text{C}$		
ESD protection		No		
Wire Length (mm)		125 $\pm$ 5		
Connector Model		ZER-04-V-S		
<b>Reliability</b>		<b>Min</b>	<b>Typ</b>	<b>Max</b>
Operating Case Temperature Range ( $^{\circ}\text{C}$ )		-10	-	60
Rise Time (Seconds)		-	0.2	-
Storage Temperature ( $^{\circ}\text{C}$ )		-20	-	55
Environmental Humidity (RH, %)		5	-	90
Lifetime (hours) (MTTF at 25 $^{\circ}\text{C}$ )		8,000	-	-
RoHS Compliance Declaration		Yes		

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

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