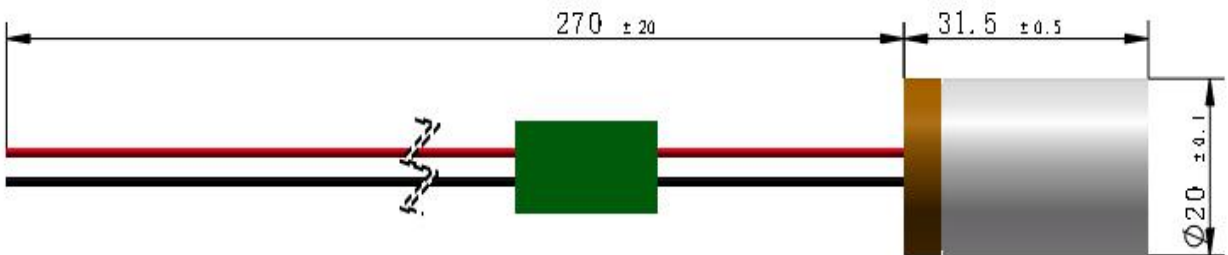


**Y561D020-20x31.5-1-(10-50)-10**

### Features

- Fast Rise Time
- High Reliability
- Yellow Green Laser

### Dimensions (Unit: mm)



### Specifications

| Model Number                                         |               | Y561D020-20x31.5-1-(10-50)-10 |        |         |
|------------------------------------------------------|---------------|-------------------------------|--------|---------|
| Mechanical Specifications                            |               | Min                           | Typ    | Max     |
| Laser Head                                           | Diameter (mm) | -                             | 20     | 20.1    |
|                                                      | Length (mm)   | 31                            | 31.5   | 32      |
|                                                      | Weight (g)    | -                             | -      | 35      |
| Housing Material                                     |               | Brass aluminium alloy         |        |         |
| Optical Specifications                               |               | Min                           | Typ    | Max     |
| Wavelength (nm)                                      |               | 558                           | 560    | 562     |
| Output Power (mW) <sup>(1)</sup>                     |               | 10                            | 20     |         |
| Power Stability at const. Temperature <sup>(2)</sup> |               | -                             | +/- 5% | +/- 10% |
| Output Power Mode                                    |               | CW                            |        |         |
| Laser Class                                          |               | 3B                            |        |         |

<sup>(1)</sup> over Temperature Range of 10 to 50 °C

<sup>(2)</sup> after max. 3 minutes

| <b>Beam Specifications</b>                  |                                            | <b>Min</b>                    | <b>Typ</b> | <b>Max</b> |
|---------------------------------------------|--------------------------------------------|-------------------------------|------------|------------|
| Beam Divergence (mrad) <sup>(1)</sup>       |                                            | -                             | 1          | 1.5        |
| Beam Alignment Tolerance                    | Position ( $\Delta r$ , mm) <sup>(2)</sup> | -                             | 0.3        | 0.5        |
|                                             | Off-axis Angle (mrad) <sup>(3)</sup>       | -                             | 15         | 40         |
| Beam Diameter at Output Window (mm)         |                                            | -                             | -          | 5          |
| Beam Diameter at distance 7m (mm)           |                                            |                               | 7          | 15         |
| Beam Roundness                              |                                            | 50%                           | -          | 100%       |
| Beam Mode Longitude                         |                                            | Multi                         |            |            |
| Beam Mode Transverse                        |                                            | Near TEM00                    |            |            |
| M <sup>2</sup>                              |                                            |                               |            |            |
| Polarization Ratio                          |                                            | -                             | NA         | -          |
| Residual IR (%)                             |                                            | -                             | -          | 1%         |
| <b>Electrical Specifications</b>            |                                            | <b>Min</b>                    | <b>Typ</b> | <b>Max</b> |
| PCB Type                                    |                                            | ACC                           |            |            |
| Voltage (DC, V)                             |                                            | 2.8                           | 3.0        | 3.6        |
| Operating Current (mA) at 3V <sup>(4)</sup> |                                            | -                             | 600        | 650        |
| Housing Isolation                           |                                            | No                            |            |            |
| ESD protection                              |                                            | No                            |            |            |
| Wire Length (mm)                            |                                            | 270 +/- 20                    |            |            |
| Wire Type                                   |                                            | UL 10064 26AWG <sup>(5)</sup> |            |            |
| Connector Model                             |                                            | None <sup>(5)</sup>           |            |            |
| Reverse Voltage Protection                  |                                            | No                            |            |            |
| <b>Reliability</b>                          |                                            | <b>Min</b>                    | <b>Typ</b> | <b>Max</b> |
| Operating Case Temperature Range (°C)       |                                            | 10                            | 25         | 50         |
| Rise Time (Seconds) <sup>(6)</sup>          |                                            | -                             | 0.2        | 0.5        |
| Storage Temperature (°C)                    |                                            | -20                           | -          | 60         |
| Environmental Humidity (RH, %)              |                                            | 5                             | -          | 85         |
| Lifetime (hours) (MTTF at 25°C)             |                                            | 5,000                         | -          | -          |
| RoHS Compliance Declaration                 |                                            | Yes                           |            |            |

(1) Full Angle ( $1/e^2$ )

(2) at Output Window

(3) Full Angle

(4) over Operating Case Temperature

(5) Optional: Alternative Wire Types & Connector Models on demand

(6) to 75% of full Output Power