



**DOMI Co., Ltd.**

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**DMP20S**  
**LASER Product Specification**

**Features:**

- TO56 CAN Package
- 405nm Laser
- Calibrated Laser



**Applications:**

- LASER module
- Lidar
- General application



## Absolute Maximum Ratings

| Parameter                          | Symbol           | Values             |
|------------------------------------|------------------|--------------------|
| Operation temperature <sup>1</sup> | T <sub>OPR</sub> | -20°C to 70°C      |
| Storage temperature                | T <sub>stg</sub> | -40°C to 85°C      |
| Max Reverse voltage                | V <sub>RL</sub>  | 2V                 |
| Soldering temperature              | T <sub>sg</sub>  | 260°C less than 5s |

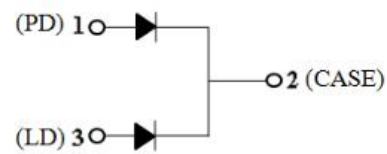
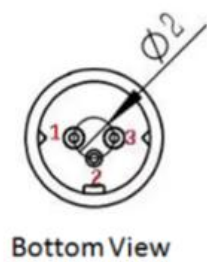
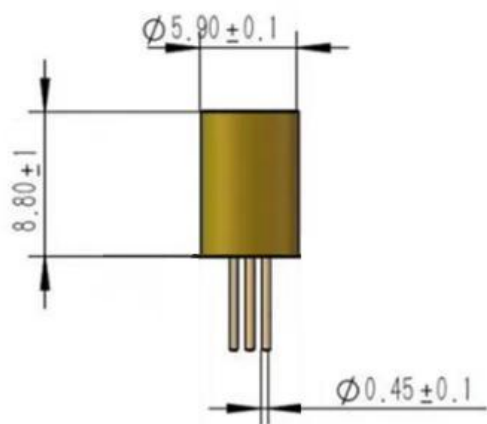
Note: 1. Case Temperature

## Electro-Optical Characteristics

| Electro-optical characteristics (Tc = 25°C) |                 |                |     |     |     |      |
|---------------------------------------------|-----------------|----------------|-----|-----|-----|------|
| Parameter                                   | Symbol          | Test Condition | Min | Typ | Max | Unit |
| Peak Wavelength                             | $\lambda_p$     | If=40mA,CW     | 400 | 405 | 410 | nm   |
| Threshold Current                           | I <sub>th</sub> | -              | -   | 15  | -   | mA   |
| Operating Voltage                           | V <sub>op</sub> | If=40mA,CW     | -   | 4.8 | 5.6 | V    |
| Laser Power                                 | L <sub>p</sub>  | If=40mA,CW     | -   | 18  | -   | mW   |
| Slope efficiency                            | SE              | If=40mA,CW     | -   | 1.0 | -   | W/A  |
| Beam divergence(D86)                        | $\theta$        | If=40mA,CW     | -   | 3   | -   | Deg  |
| Monitor Current                             | I <sub>m</sub>  | If=40mA,CW     | 0.1 | 0.2 | 0.5 | mA   |



Package Outline



Note: Unit: mm, Unmarked tolerances:  $\pm 0.1$ mm,

**Other Caution:**

- LASER is very sensitive to Electrostatic discharge (ESD) and Electrical overstress (EOS), excessive ESD/EOS have damage the chip and result in performance degradation. Please make sure during the whole usage and installation process does not exist to affect the LASER.
- LASER can also be damaged by electrical surge, please make sure any driving electrical circuits are equipped with surge protection.
- During the installation process, please make sure all the equipment and personnel are grounded properly and production environment should make use of ion-blowers, ESD protection equipment such as anti-static gloves, anti-static wrist bands, anti-static mats, anti-static clothes, anti-static shoes and anti-static containers.

