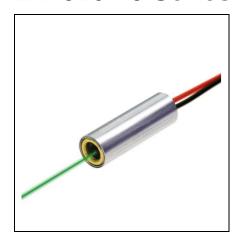
Quarton inc.

Direct Green Laser Diode Module

VLM-520-73 Series



FEATURES:

- Direct Green Laser Diode for large temperature operation range.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Aspherical Glass lens provides tight Dot Laser in large temperature range.
- Dimensions: Ø7 x 26.1 mm (Ø0.275" x 1.03")
- Wavelength: 505~530 nm
- Laser power output: LPA Class IIIa less than 4mW.

LPT - Class II - less than 1mW.

- Beam Divergence (Half Angle): <0.6 mRad
- 3~6 VDC operation.
- Connection type: Lead wire

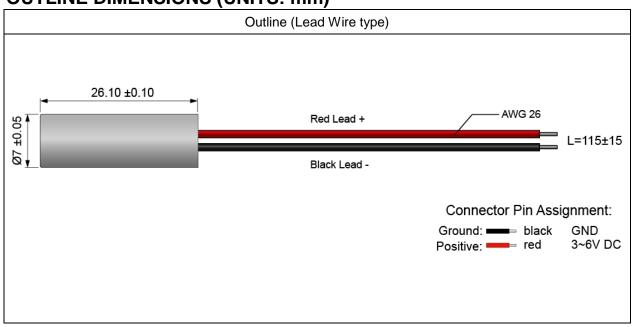
APPLICATIONS:

- Direct Green Dot Laser Module for positioning, measuring, pointing and laser sighting device.
- Automotive industry.
- Medical science.
- Measurement.
- Sensor.

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VLM-520-73 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

| SPECIFICATIONS | | VLM-520-73 | | |
|----------------|-----------------------------------|--------------------------------|-----------------|--|
| | | LPT | LPA | |
| 1 | Dimensions | Ø7 x 26.1 mm (Ø0.275" x 1.03") | | |
| 2 | Weight | 3.8g | | |
| 3 | Operating voltage (Vop) | 3~6 VDC | | |
| 4 | Operating current (lop) | Less than 150mA | Less than 200mA | |
| 5 | Continuous wave output power (Po) | Less than 1mW | Less than 4mW | |
| 6 | Laser class | Class II | Class IIIa | |
| 7 | Wavelength at peak emission (λp) | 505~530nm | | |
| 8 | Collimating lens | Aspherical Glass lens | | |
| 9 | Output aperture | 4.3mm | | |
| 10 | Beam shape | Ellipse | | |
| 11 | Spot size at 10M | Less than 7mm | | |
| 12 | Divergence (Half Angle) | Less than 0.6 mRad | | |
| 13 | Beam alignment | Less than 3° | | |
| 14 | Operating temp. range* | -20°C ~+60°C | | |
| 15 | Storage temp. range | -40°C ~+85°C | | |
| 16 | Housing material | Stainless steel | | |
| 17 | Potential of housing** | VDD(+) | | |
| 18 | Electrostatic discharge (ESD) | 30KV | | |

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| 19 | Moisture sensitivity level (MSL) | Level 1 - acc to JEDEC J-STD-020E. | |
|----|----------------------------------|------------------------------------|--|
| 20 | Wire type | 1007-26AWG | |
| 21 | Cable length | 115±15mm | |
| 22 | Mean time to failure (MTTF) 25°C | 10000hrs | |
| 23 | Application | Economic industrial application | |
| 24 | Suggestion work distance | 1~30 meters / 3~100 feet | |

^{*} Operation temperature: it means within this temperature range, the laser spot/line will not be affected to change the spot size/line width. It can still work over this range, but the laser spot size or laser line width will be larger.

ORDER CODE

| Order Code | Wavelength | Laser Power Output | Laser Class | Connection Type |
|----------------|------------|--------------------|-------------|-----------------|
| VLM-520-73 LPT | 520 nm | Less than 1mW | Class II | Lead Wire |
| VLM-520-73 LPA | 520 nm | Less than 4mW | Class IIIa | Lead Wire |

SAFETY LABEL





^{**} Laser module housing is an electrical positive surface, it is imperative that contact between the laser module and the machine be avoided. This is to prevent damage from the machine electrical leakage. Surge protected power supply to the laser module is strongly recommended.