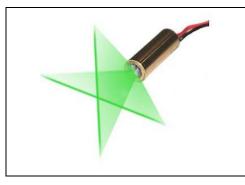
Quarton inc.

Green Cross-Line Laser

VLM-520-29 Series



FEATURES:

- Direct Green Laser Diode for large temperature operation range.
- Line-width optimize at short distance(40cm) for consumer grade Laser Cross-Line generator applications.
- This module has integrated wavy lens, collimating lens, laser diode, and APC driver circuit.
- APC driver circuit enables the laser power output safe and constant.
- Includes patented solid brass structure for the best shock resistance and better heat transfer consideration.
- Aspherical Plastic Lens and Plastic Wavy Lens provides tight Cross-Line Laser.
- Dimensions : Ø9 x 26 mm (Ø0.354" x 1.024")
- Wavelength : 505~530 nm
- Laser power output : LPT Class 1M less than 0.39mW

LPA - Class 2M - less than 1mW

- Emitting Angle : >60°
- 7~10 VDC operation.
- Connection type : Lead wire

APPLICATIONS:

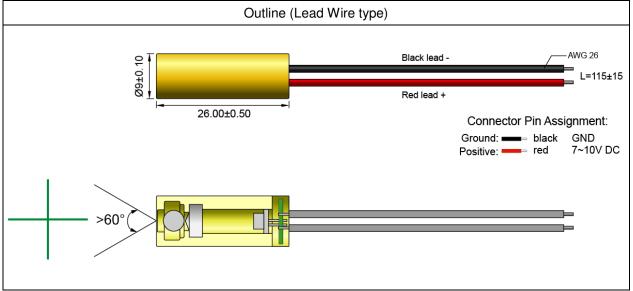
- Green Cross-Line Laser Module, Line-width optimize at short distance(40cm) for consumer grade barcode reader, leveling, alignment, adjusting, positioning, measuring, targeting and sighting device.
- Wood processing.
- Metal processing.
- Stone processing.
- Textile industry.
- Food industry.
- Automotive industry.
- Medical science.

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VLM-520-29 Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

| SPECIFICATIONS | | VLM-520-29 | | |
|----------------|----------------------------------|-------------------------------|-----------------|--|
| | | LPT | LPA | |
| 1 | Dimensions | Ø9 x 26 mm (Ø0.354" x 1.024") | | |
| 2 | Operating voltage (Vop) | 7~10 VDC | | |
| 3 | Operating current (lop) | Less than 80mA | Less than 100mA | |
| 4 | Optical power* | 4~5mW | 9~10mW | |
| 5 | Laser power output** | Less than 0.39mW | Less than 1mW | |
| 6 | Laser class | Class 1M | Class 2M | |
| 7 | Wavelength at peak emission (λp) | 505~530nm | | |
| 8 | Collimating lens | Plastic Lens | | |
| 9 | Crosshairs lens | Plastic Lens | | |
| 10 | Beam shape | Crosshairs | | |
| 11 | Laser Line width | 1mm@40cm | | |
| 12 | Laser line accuracy | 80" (+/- 2mm @5M) | | |
| 13 | Emitting angle | More than 60° | | |
| 14 | Operating temp. range*** | +15°C ~+30°C | | |
| 15 | Storage temp. range | -20°C ~+65°C | | |
| 16 | Housing material | Brass | | |
| 17 | Potential of housing**** | VDD(+) | | |
| 18 | Electrostatic discharge (ESD) | 30KV | | |

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VLM-520-29 Series

| 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 | 5000hrs | | |
| 23 | Application | Economic application | | |
| 24 | Suggestion work distance | 0~1 meter / 0~3 feet | | |

* Optical power is total power output measured at the aperture of the laser.

** According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

- *** Operation temperature 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.
- **** 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.

ORDER CODE

| Order Code | Wavelength | Optical power* | Laser power | Laser Class | Connection |
|----------------|------------|----------------|-------------|-------------|------------|
| | | | output** | | Туре |
| VLM-520-29 LPT | 520 nm | 4~5mW | Less than | Class 1M | Lead Wire |
| | | | 0.39mW | | |
| VLM-520-29 LPA | 520 nm | 9~10mW | Less than | Class 2M | Lead Wire |
| | | | 0.9mW | | |

* Optical power is total power output measured at the aperture of the laser.

** According to FDA 1040.10 & IEC 60825-1 regulations, laser power output is measured by 7mm aperture stop from a 10 cm distance of the laser.

SAFETY LABEL

CLASS I LASER PRODUCT



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