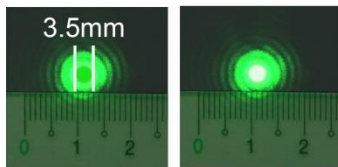
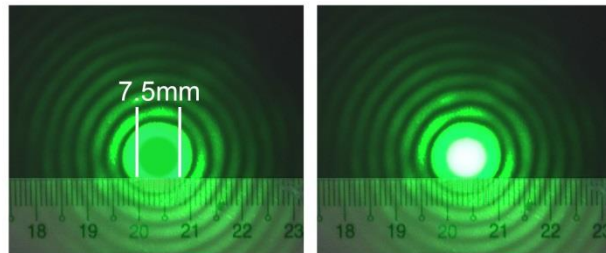


Ultra-Far Range Laser

VLM-520-17-Series



Spot size at 20M



Spot size at 40M

FEATURES:

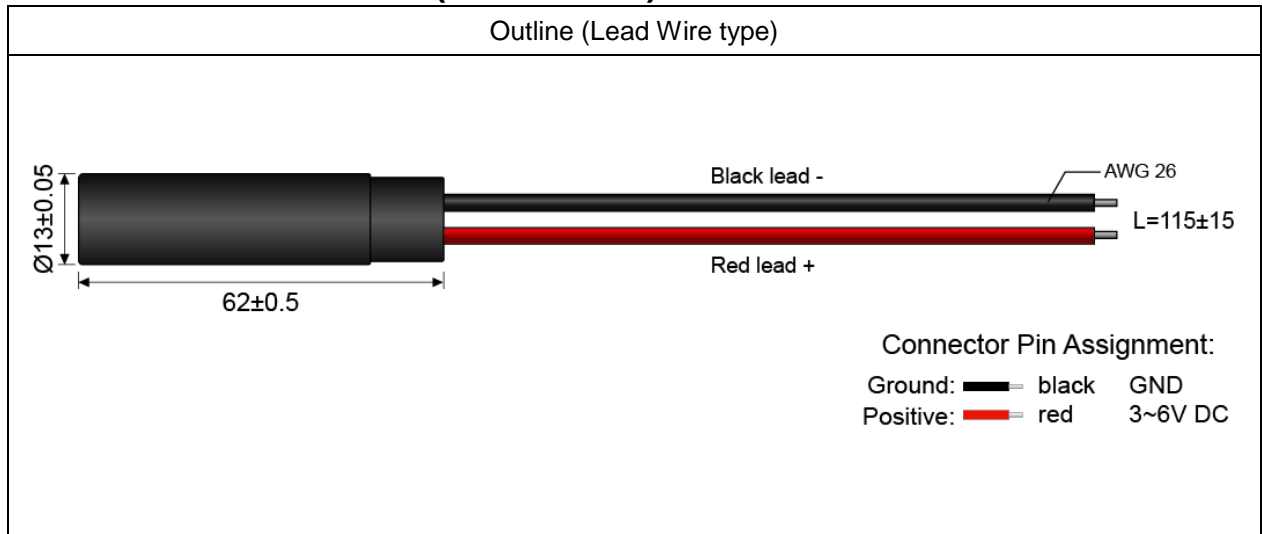
- Ultra-Far Range Round Dot Laser for long range alignment, positioning, measuring and pointing.
- Diffraction Limited Lens to achieve a near-collimated Laser system, which can be sighted Ultra-Far distance range.
- Perfect Round Dot less than 3/4 inch at 100 yards / 22mm at 100 meters.
- Anodized aluminum housing provides insulated housing.
- This module has integrated optic, laser diode, and APC driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Glass-base hybrid lens provides Ultra-Far range Round Dot Laser.
- Dimensions : $\text{Ø}13 \times 62 \text{ mm}$ ($\text{Ø}0.511" \times 1.96"$).
- Wavelength : 510~530 nm
- Laser power output : LPT - Class II – 0.7~0.9mW.
LPA - Class IIIa – 2~3mW
LPB - Class IIIb – 5~6mW
- Beam Divergence (Half Angle) : $<0.1 \text{ mRad}$
- 3~6 VDC operation.
- Connection type: Lead wire.

APPLICATIONS:

- Green Round Dot Laser-glass aspherical lens with long back focus length function to generate smallest spot at long distances. Ideal use for long distance alignment position, surveying instruments, targeting, professional laser sight and security monitor.

VLM-520-17-Series

OUTLINE DIMENSIONS (UNITS: mm)



SPECIFICATIONS

| SPECIFICATIONS | | VLM-520-17 | | |
|----------------|----------------------------------|------------------------------------|------------|-----------------|
| | | LPT | LPA | LPB |
| 1 | Dimensions | Ø13 x 62 mm (Ø0.511" x 1.96") | | |
| 2 | Weight | 16±1 g | | |
| 3 | Operating voltage (Vop) | 3~6 VDC | | |
| 4 | Operating current (Iop) | Less than 100mA | | Less than 150mA |
| 5 | Laser power output | 0.7~0.9mW | 2~3mW | 5~6mW |
| 6 | Laser class | Class II | Class IIIa | Class IIIb |
| 7 | Wavelength at peak emission (λp) | 510~530nm | | |
| 8 | Collimating lens | Aspherical glass lens | | |
| 9 | Output aperture | 8mm | | |
| 10 | Beam shape | Circular | | |
| 11 | Spot size at 40M / 100M | Less than 9 mm / Less than 22mm | | |
| 12 | Beam divergence(Half angle) | Less than 0.1 mRad | | |
| 13 | Beam alignment | Less than 3° | | |
| 14 | Operating temp. range* | -10°C ~+50°C | | |
| 15 | Storage temp. range | -20°C ~+80°C | | |
| 16 | Housing material | Aluminum | | |
| 17 | Potential of housing | Insulated | | |
| 18 | Electrostatic discharge (ESD) | 30KV | | |
| 19 | Moisture sensitivity level (MSL) | Level 1 - acc to JEDEC J-STD-020E. | | |

VLM-520-17-Series

| | | |
|----|----------------------------------|------------------------------|
| 20 | Wire type | 1007-26AWG |
| 21 | Cable length | 115±15mm |
| 22 | Mean time to failure (MTTF) 25°C | 10000hrs |
| 23 | Application | Long range application |
| 24 | Suggestion work distance | 10~500 meters / 40~2000 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-520-17 LPT | 520 nm | 0.7~0.9mW | Class II | Lead Wire |
| VLM-520-17 LPA | 520 nm | 2~3mW | Class IIIa | Lead Wire |
| VLM-520-17 LPB | 520 nm | 5~6mW | Class IIIb | Lead Wire |

SAFETY LABEL

LPT:



LPA:



LPB:

