# Quarton inc.

# **TTL Modulation Red Dot Laser Module**

## VLM-635-32 Series



### **FEATURES:**

- TTL Modulation Red Dot Laser Module.
- CW to 10K HZ stable power output for demanding power and speed are of important.
- This module has integrated optic, laser diode, and APC with TTL control driver circuit.
- APC Driver Circuit enables the Laser output power safe and constant.
- Dimensions : Ø8.5 x 30.5 mm (Ø0.334" x 1.2")
- Wavelength : 630~645nm
- Laser power output : LPA Class IIIa less than 4mW.

LPT - Class II – less than 1mW.

- Beam Divergence (Half Angle) : < 0.4 mRad
- 3~6 VDC operation.
- Connection type : Lead wire

### **APPLICATIONS:**

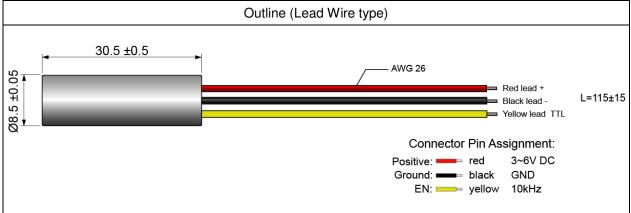
- Free space low frequency optical communication.
- Laser base measurement.
- 2D, 3D position, sampling.
- Medical application.
- Optical lighting.
- Counting.
- Scanning.
- I2C and Can Bus application.
- Medical science.

@Copyright 2021 Quarton inc.All Rights Reserved. www.quarton.com

# Quarton inc.

## VLM-635-32 Series

## **OUTLINE DIMENSIONS (UNITS: mm)**



### **SPECIFICATIONS**

SPECIFICATIONS		VLM-635-32		
		LPT	LPA	
1	Dimensions	Ø8.5 x 30.5 mm (Ø0.334" x 1.2")		
2	Weight	4.3g		
3	Operating voltage (Vop)	3~6 VDC		
4	Operating current (lop)	Less than 40mA	Less than 60mA	
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)	630~645nm		
8	Collimating lens	Aspherical Glass lens		
9	Output aperture	5mm		
10	Beam shape	Ellipse		
11	Spot size at 10M	5±1mm		
12	Divergence(Half angle)	Less than 0.4mRad		
13	Operating temp. range*	-20°C ~ +60°C		
14	Storage temp. range	-40°C ~ +85°C		
15	Housing material	Stainless steel		
16	Potential of housing	Insulated		
17	Mod. Frequency range	0-10kHz		
18	Operation mode**	TTL (High on)***		
19	EN input current	1 to 20mA		
20	Electrostatic discharge (ESD)	30KV		

@Copyright 2021 Quarton inc.All Rights Reserved. www.quarton.com

# Quarton inc.

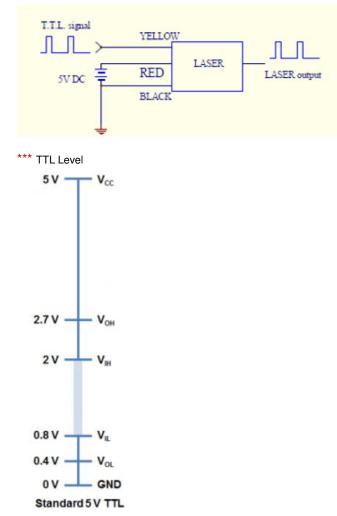
## VLM-635-32 Series

21	Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	
22	Wire type	1007-26AWG	
23	Cable length	115±15mm	
24	Mean time to failure(MTTF) 25°C	10000hrs	
25	Application	Modulation	
26	Suggestion work distance	1~10 meters / 3~40 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.







## VLM-635-32 Series

### **ORDER CODE**

Order Code	Wavelength	Laser Power Output	Laser Class	Connection Type
VLM-635-32 LPA	635 nm	Less than 4mW	Class IIIa	Lead Wire
VLM-635-32 LPT	635 nm	Less than 1mW	Class II	Lead Wire



