

Violet Laser Module



Characteristics:

- Wavelength 405nm
- Compact size
- Solid build for industrial use
- Potential-free housing
- Operating Voltage 8.0 - 12.0V_{DC}
- Reverse polarity protected
- ESD protected
- Output Power from 1mW to 45mW
- Adjustable focus

Short description

The Violet Laser Module 0034 series is noted for its low power consumption and solid and compact execution and is therefore ideal for use in an industrial environment where system reliability is essential. The module generates an elliptical laser dot or, on request, a laser line with a wavelength of 405nm. The focusing distance and the optical output power can be set to meet customer needs.

Technical Data

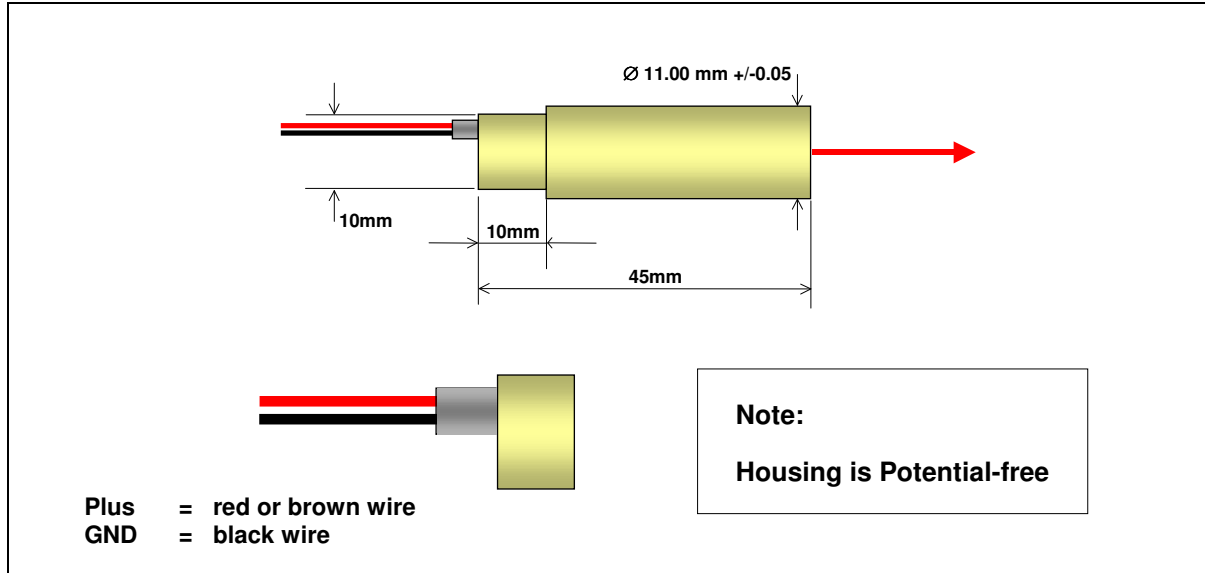
Violet Laser Module 0034-xx-92-01		
Operating Voltage (reverse polarity protected)	8.0 ... 12.0	V _{DC}
Operating Current (@ 9.0V, P _{out,min.} / P _{out,max.})	40 / 170	mA
Driver Electronics	ACC (Automatic Current Control)	
ESD- Protection	2	kV
Wavelength	405 (±5)	nm
Optical Output Power P _{out} (factory-set)	at customer's option, ≤ 1 [#] to 45 [*]	mW
Emission	cw	
Laser Beam Profile	dot (gaussian); line on request	
Beam Diameter (typical collimated beam 1m from aperture, FWHM)	0.8 x 1.3	mm
Beam Divergence (full angle)	0.3 x 0.2	mrad
Focusing Distance	30mm to past collimation	
Laser Class (according IEC 60825-1:2007)	depending on P _{out} , max. 3B	
Operating Temperature	0 ... +40	°C
Outer Housing Material (potential-free)	German Silver	
Wire Gauge	AWG 24, i.e. 0.22	mm ²
Electrical Connector	at customer's option	
Weight	ca. 26	g

Unless otherwise noted, all data given in the table above are typical figures measured at room temperature.

[#] Modules with output power ≤ 5mW use internal neutral density filter.

^{*} Modules with output power > 5mW require passive auxiliary cooling (e.g. a heat dissipating metal mount) to ensure stable operation.

Dimensions and Electrical Connection



Product Range

Product Number	Wavelength [nm]	Optical Output Power [mW]	Laser Class
0034-01-92-01	405	0.5 – ≤ 1.0	2
0034-02-92-01	405	1.0 – ≤ 5.0	3R
0034-03-92-01	405	5.0 – ≤ 45.0	3B

LASER WARNING:

Visible radiation is emitted from front aperture!

Do not stare into the beam.

Max. Laser Class 3B!

