

HL6312G



### Description

This 635 nm, 5 mW TO packaged laser diode is a compact light source that outputs a single transverse mode and is suited for a variety of applications such as a laser level, bar code reader, distance meter, or a light source for optical equipment. It is packaged in a standard Ø9 mm TO can package and has an A pin configuration. This laser diode is compatible with our line of laser diode and TEC controllers as well as our selection of collimation solutions and TO can laser diode mounts.

### Specifications

Absolute Maximum Ratings <sup>a</sup>	
Specification	Maximum
Optical Output Power, CW	5 mW
LD Reverse Voltage	2 V
PD Reverse Voltage	30 V
Operating Temperature	-10 °C to 50 °C
Storage Temperature	-40 °C to 85 °C



- a. Absolute Maximum Rating specifications should never be exceeded. Operating at or beyond these conditions can permanently damage the laser.

HL6312G Specifications <sup>a</sup>				
	Symbol	Min	Typical	Max
Center Wavelength @ P <sub>op</sub> <sup>b</sup>	λ <sub>o</sub>	625 nm	635 nm	640 nm
Threshold Current	I <sub>TH</sub>	-	40 mA	70 mA
Operating Current, CW @ P <sub>op</sub> <sup>b</sup>	I <sub>op</sub>	-	50 mA	85 mA
Operating Voltage @ P <sub>op</sub> <sup>b</sup>	V <sub>op</sub>	-	-	2.7 V
Slope Efficiency	η	-	0.4 mW/mA	-
Astigmatism @ P <sub>op</sub> <sup>b</sup>	A <sub>s</sub>	-	8 μm	-
Beam Divergence (FWHM) @ P <sub>op</sub> <sup>b</sup>	Parallel	θ <sub>//</sub>	5°	8°
	Perpendicular	θ <sub>⊥</sub>	25°	31°
Monitor Current @ P <sub>op</sub> <sup>b</sup>	I <sub>PD</sub>	0.15 mA	0.25 mA	0.8 mA

- a. T<sub>CASE</sub> = 25 °C if not specified.  
b. P<sub>op</sub> = 5 mW

## Drawing

