

HL6501MG



### Description

This 658 nm, 30 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 leveler, laser scanner, and a light source for optical equipment. It is packaged in a standard Ø5.6 mm TO can package and has a C 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	35 mW
LD Reverse Voltage	2 V
PD Reverse Voltage	30 V
Operating Temperature	-10 °C to 60 °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.

HL6501MG Specifications <sup>a</sup>				
	Symbol	Min	Typical	Max
Center Wavelength @ P <sub>op</sub>	$\lambda_o$	645 nm	658 nm	665 nm
Optical Output Power, CW	P <sub>op</sub>	-	30 mW	-
Threshold Current	I <sub>TH</sub>	30 mA	45 mA	70 mA
Operating Current, CW @ P <sub>op</sub>	I <sub>op</sub>	-	75 mA	120 mA
Operating Voltage @ P <sub>op</sub>	V <sub>op</sub>	2.1 V	2.6 V	3.0 V
Slope Efficiency	$\eta$	0.5 mW/mA	0.75 mW/mA	1.0 mW/mA
Beam Divergence (FWHM) @ P <sub>op</sub>	Parallel	$\theta_{//}$	7°	8.5°
	Perpendicular	$\theta_{\perp}$	18°	22°
Monitor Current @ P <sub>op</sub>	I <sub>PD</sub>	0.05 mA	0.2 mA	1.5 mA

a. T<sub>CASE</sub> = 25 °C if not specified.

## Drawing

